



# Extreme SLX-OS REST API Guide, 20.5.1

Supporting ExtremeRouting and ExtremeSwitching  
SLX 9740, SLX 9640, SLX 9540, SLX 9250, SLX 9150,  
Extreme 8820, Extreme 8720, and Extreme 8520

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# Preface

---

Read the following topics to learn about:

- The meanings of text formats used in this document.
- Where you can find additional information and help.
- How to reach us with questions and comments.






## Text Conventions

---

Unless otherwise noted, information in this document applies to all supported environments for the products in question. Exceptions, like command keywords associated with a specific software version, are identified in the text.

When a feature, function, or operation pertains to a specific hardware product, the product name is used. When features, functions, and operations are the same across an entire product family, such as ExtremeSwitching switches or SLX routers, the product is referred to as *the switch* or *the router*.

**Table 1: Notes and warnings**

| Icon  | Notice type | Alerts you to...  |
|---|-------------|---|
|  | Tip         | Helpful tips and notices for using the product          |
|  | Note        | Useful information or instructions                      |
|  | Important   | Important features or instructions                      |
|  | Caution     | Risk of personal injury, system damage, or loss of data |
|  | Warning     | Risk of severe personal injury                          |

**Table 2: Text**

| Convention                             | Description   |
|--|---|
| screen displays                        | This typeface indicates command syntax, or represents information as it is displayed on the screen.   |
| The words <i>enter</i> and <i>type</i> | When you see the word <i>enter</i> in this guide, you must type something, and then press the Return or Enter key. Do not press the Return or Enter key when an instruction simply says <i>type</i> .           |
| <b>Key names</b>                       | Key names are written in boldface, for example <b>Ctrl</b> or <b>Esc</b> . If you must press two or more keys simultaneously, the key names are linked with a plus sign (+). Example: Press <b>Ctrl+Alt+Del</b> |
| <i>Words in italicized type</i>        | Italics emphasize a point or denote new terms at the place where they are defined in the text. Italics are also used when referring to publication titles.  |
| <b>NEW!</b>                            | New information. In a PDF, this is searchable text.   |

**Table 3: Command syntax**

| Convention                         | Description  |
|------------------------------------|--|
| <b>bold text</b>                   | Bold text indicates command names, keywords, and command options.  |
| <i>italic text</i>                 | Italic text indicates variable content.  |
| [ ]                                | Syntax components displayed within square brackets are optional. Default responses to system prompts are enclosed in square brackets.  |
| { <b>x</b>   <b>y</b>   <b>z</b> } | A choice of required parameters is enclosed in curly brackets separated by vertical bars. You must select one of the options.  |
| <b>x</b>   <b>y</b>                | A vertical bar separates mutually exclusive elements.  |
| < >                                | Nonprinting characters, such as passwords, are enclosed in angle brackets.   |
| ...                                | Repeat the previous element, for example, <i>member[member...]</i> .   |
| \                                  | In command examples, the backslash indicates a “soft” line break. When a backslash separates two lines of a command input, enter the entire command at the prompt without the backslash. |

## Documentation and Training

Find Extreme Networks product information at the following locations:

[Current Product Documentation](#)

[Release Notes](#)

[Hardware and software compatibility](#) for Extreme Networks products  
[Extreme Optics Compatibility](#)  
[Other resources](#) such as white papers, data sheets, and case studies

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

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## Help and Support

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If you require assistance, contact Extreme Networks using one of the following methods:

### Extreme Portal

Search the GTAC (Global Technical Assistance Center) knowledge base; manage support cases and service contracts; download software; and obtain product licensing, training, and certifications.

### The Hub

A forum for Extreme Networks customers to connect with one another, answer questions, and share ideas and feedback. This community is monitored by Extreme Networks employees, but is not intended to replace specific guidance from GTAC.

### Call GTAC

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

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

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

## Subscribe to Product Announcements

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

1. Go to [The Hub](#).
2. In the list of categories, expand the **Product Announcements** list.
3. Select a product for which you would like to receive notifications.



4. Select **Subscribe**.
5. To select additional products, return to the **Product Announcements** list and repeat steps 3 and 4.

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

## Send Feedback

---

The Information Development team at Extreme Networks has made every effort to ensure that this document is accurate, complete, and easy to use. We strive to improve our documentation to help you in your work, so we want to hear from you. We welcome all feedback, but we especially want to know about:

- Content errors, or confusing or conflicting information.
- Improvements that would help you find relevant information.
- Broken links or usability issues.

To send feedback, do either of the following:

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

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



# About This Document

---

[What's New in this Document](#) on page 34

[Supported Hardware](#) on page 34

## What's New in this Document

---

This document is released with the SLX-OS 20.5.1 software release. No changes were made to this document for this release.

For additional information, refer to the *Extreme SLX-OS Release Notes* for this version.

## Supported Hardware

---

SLX-OS 20.5.1 supports the following hardware platforms.

- Extreme 8820
- Extreme 8720
- Extreme 8520
- ExtremeSwitching SLX 9540
- ExtremeSwitching SLX 9250
- ExtremeSwitching SLX 9150
- ExtremeRouting SLX 9740
- ExtremeRouting SLX 9640



### Note

All configurations and software features that are applicable to SLX 9150 and SLX 9250 devices are also applicable for the Extreme 8520 and Extreme 8720 devices respectively.

All configurations and software features that are applicable to SLX 9740 devices are also applicable for the Extreme 8820 devices.

The "Measured Boot with Remote Attestation" feature is only applicable to the Extreme 8520, Extreme 8720, and Extreme 8820 devices. It is not supported on the SLX 9150 and SLX 9250 devices.

**Note**

Although many software and hardware configurations are tested and supported for this release, documenting all possible configurations and scenarios is beyond this document's scope.

For information about other releases, see the documentation for those releases.



# Using the Extreme SLX-OS REST API

---

- [Before you begin](#) on page 36
- [Transport protocol requirements](#) on page 36
- [Logging in and out](#) on page 37
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- [Media types](#) on page 43
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- [HTTP header](#) on page 44
- [HTTP status code and messages](#) on page 48

## 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 and HTTPS 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 cert-type https directory /root/<directory>/certs file
ca.cert.pem
host <server ip> protocol
SCP user root password pass
crypto ca enroll myca cert-type https 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
-infiles <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

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: d0xaUUUp4cTx2dzlyfD9HaX09SC9yZEA/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

### GET

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

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

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

The following response contains XML representation of the target resource.

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

```
</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 YWRtaW46cGFzc3dvcnQ=
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 2016 10:38:15 GMT
Server: SLX-OS Wave WWW
Location: http://192.168.10.2/rest/config/running/ldap-server/host/test_API
Cache-control: private, no-cache, must-revalidate, proxy-revalidate
Content-Length: 0
Content-Type: text/html
```

**Note**

A request payload is required for a POST operation.

## PUT

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

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

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

### Request header

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

### Request message body

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

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

### Response

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



#### Note

A request payload is required for a PUT operation.

## PATCH

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

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

### Request header

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



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

### Request message body

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

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

### Response

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



#### Note

A request payload is required for a PATCH operation.

## DELETE

The DELETE method is used to delete the known resource.

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

### Request header

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

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

### Response

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



#### Note

An authorization header is required to perform a DELETE operation.



#### Note

A request payload is not required for a DELETE operation.

## HEAD

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

### Request header

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

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

### Response

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



#### Note

A request payload is not required for a HEAD operation.

## OPTIONS

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

### Request header

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

### Response

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



#### Note

A request payload is not required for an OPTIONS operation.

## Media types

Media 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 4: 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.yang.operation+json             | Represents the defined YANG-RPC operations.  |

## XML resource representation

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

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 5: 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/<br>vnd.configuration.resource+xml<br>application/vnd.operations.resource+xml<br>application/<br>vnd.configuration.resource+json<br>application/vnd.yang.operation+json |
| PUT     | application/<br>vnd.configuration.resource+xml<br>application/<br>vnd.configuration.resource+json   |
| PATCH   | application/<br>vnd.configuration.resource+xml<br>application/<br>vnd.configuration.resource+json   |
| DELETE  | application/<br>vnd.configuration.resource+xml<br>application/<br>vnd.configuration.resource+json   |

For more information about the media types, refer to the [Media types](#) 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 data. | Header value: <1 - 64><br>Methods: GET<br>Media types: All<br>Default value: 3 |

## Request Body with Resource-Depth =1

```
curl -k -X GET -H 'Accept: application/vnd.operational-state.resource+xml'
-H 'Resource-Depth: 1' -u "admin:password" http://10.20.100.32:80/rest/operational-
state/mem-state
```

## Response Body

```
<data xmlns="http://brocade.com/ns/rest" xmlns:y="http://brocade.com/ns/rest" y:self="/
rest/operational-state">
<mem-state xmlns="urn:brocade.com:mgmt:brocade-RAS-operational" y:self="/rest/operational-
state/mem-state">
  <summary y:self="/rest/operational-state/mem-state/summary">
    <memory-used-percentage>14.58</memory-used-percentage>
    <memory-total>32306696</memory-total>
    <memory-total-used>4709260</memory-total-used>
    <memory-total-free>27597436</memory-total-free>
    <memory-low-free>26803128</memory-low-free>
    <memory-high-free>0</memory-high-free>
    <memory-cached>794012</memory-cached>
  </summary>
  <mem-list y:self="/rest/operational-state/mem-state/mem-list">
    <memory-used-percentage>14.58</memory-used-percentage>
    <memory-total>32306696</memory-total>
    <memory-total-used>4710040</memory-total-used>
    <memory-total-free>27596656</memory-total-free>
    <memory-low-free>26802564</memory-low-free>
    <memory-high-free>0</memory-high-free>
    <memory-cached>794012</memory-cached>
    <memory-per-process y:self="/rest/operational-state/mem-state/mem-list/memory-per-
process/5923">
      <memory-process-id>5923</memory-process-id>
    </memory-per-process>
    <memory-per-process y:self="/rest/operational-state/mem-state/mem-list/memory-per-
process/3872">
```

```
<memory-process-id>3872</memory-process-id>
</memory-per-process>
```



### Note

The `<memory-per-process>` section only shows the `<memory-process-id>` for each process. However, by using the Resource-Depth header and specifying a deeper depth, it is possible to get all the information for the processes in a single call.

## Request Body with Resource-Depth =2

```
curl -k -X GET -H 'Accept: application/vnd.operational-state.resource+xml'
  -H 'Resource-Depth: 2' -u "admin:password" http://10.20.100.32:80/rest/operational-
state/mem-state
```

### Response Body

```
<data xmlns="http://brocade.com/ns/rest" xmlns:y="http://brocade.com/ns/rest" y:self="/
rest/operational-state">
<mem-state xmlns="urn:brocade.com:mgmt:brocade-RAS-operational" y:self="/rest/operational-
state/mem-state">
  <summary y:self="/rest/operational-state/mem-state/summary">
    <memory-used-percentage>14.58</memory-used-percentage>
    <memory-total>32306696</memory-total>
    <memory-total-used>4710940</memory-total-used>
    <memory-total-free>27595756</memory-total-free>
    <memory-low-free>26801120</memory-low-free>
    <memory-high-free>0</memory-high-free>
    <memory-cached>794388</memory-cached>
  </summary>
  <mem-list y:self="/rest/operational-state/mem-state/mem-list">
    <memory-used-percentage>14.59</memory-used-percentage>
    <memory-total>32306696</memory-total>
    <memory-total-used>4712088</memory-total-used>
    <memory-total-free>27594608</memory-total-free>
    <memory-low-free>26800176</memory-low-free>
    <memory-high-free>0</memory-high-free>
    <memory-cached>794400</memory-cached>
    <memory-per-process y:self="/rest/operational-state/mem-state/mem-list/memory-per-
process/5923">
      <memory-process-id>5923</memory-process-id>
      <memory-process-name>hslagtd</memory-process-name>
      <memory-utilized>4.30</memory-utilized>
      <memory-utilized-vsize>5856768</memory-utilized-vsize>
      <memory-utilized-rss>1393072</memory-utilized-rss>
      <memory-utilized-pss>1388459</memory-utilized-pss>
    </memory-per-process>
    <memory-per-process y:self="/rest/operational-state/mem-state/mem-list/memory-per-
process/3872">
      <memory-process-id>3872</memory-process-id>
      <memory-process-name>Dcmd</memory-process-name>
      <memory-utilized>1.40</memory-utilized>
      <memory-utilized-vsize>5139944</memory-utilized-vsize>
      <memory-utilized-rss>480824</memory-utilized-rss>
```

```
<memory-utilized-pss>432956</memory-utilized-pss>
</memory-per-process>
```

**Note**

The response data has all the information present in the CLI command `show process memory` for each process.

## 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>
</mp1s>
```

## HTTP status code and messages

**Table 6: 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

---

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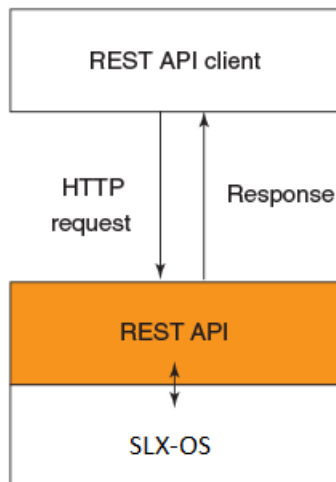
## REST API

---

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.



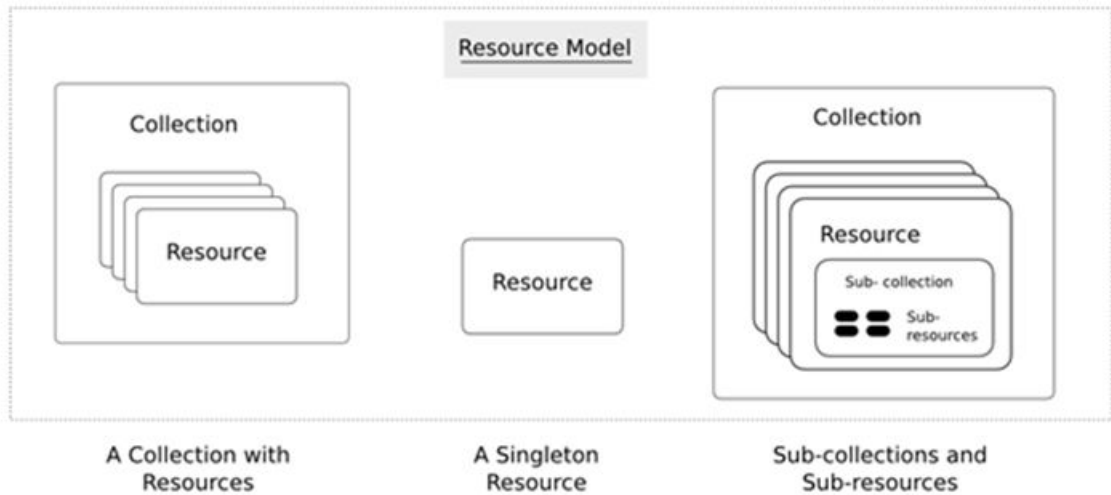
**Figure 1: SLX-OS REST API architecture**

## Resources

---

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

## Protocol support

The SLX-OS REST API supports HTTP and HTTPS.

By default, the HTTP port number is 80.

## URIs

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

URIs consists of two parts:

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

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

**http://10.20.234.122:80/rest**/config/running/fabric



#### Note

URIs are case-sensitive.

## URI structure

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

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

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

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

### *URI encoding*

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

### *Base URI*

The base URI (`http://host:port/rest/`) is the entry point to access and manage all the resources defined in the system. The port is the default HTTP port (80). It is used

to identify the base resource, and retrieves its first-level child resources of the base resource.

**Note**

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

*Top-level URIs*

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

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



# Configuration APIs

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## aaa/accounting

### 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 : tacacs+ 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>
```

## aaa/authentication

### 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

## acl-policy

### 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 |
|-------------|
|-------------|

| 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

## alias-config

### 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>
```



## arp

## Resource URIs

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

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

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

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

## Parameters

*arp-ip-address*

Specifies the IP address of the ARP entry.

*mac-address-value*

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

*interfacename*

Specifies the interface to use.

## Usage Guidelines

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

## Examples

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

## URI

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

## Request Body

None

## Response Body

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

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

## URI

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

## Request Body

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

## Response Body

None

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

**URI**

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

**Request Body**

None

**Response Body**

None

---

## banner

---

### 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

## 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/%Ve%/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- | <peer><peer-ip>{req_val}</peer-ip></peer>   | Configures bridge domain peer. |

| POST URIs   | Payload   | Description   |
|---|---|---|
| domain-id},{bridge-domain-type}   |   |   |
| <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/%Ve%/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. |

| PUT URIs  | Payload              | Description                      |
|---|----------------------|----------------------------------|
| <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} |



| DELETE URIs  |
|--|
| /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}        |
| /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
-interface">
  </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

## chassis

### 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-ipv4*

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

## clock

### Resource URIs

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

| GET URIs                            |   |
|-------------------------------------|---|
| /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>
```



## delete configuration

---

### Resource URIs

| URI   | Description                                 |
|---|---|
| <base_URI>/config/running/cluster/no-prefix-independent-convergence | Deletes the prefix-independent-convergence. |

### Parameters

*delete configuration*

Deletes prefix-independent-convergence.

### 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/prefix-independent-convergence`

### Request Body

None

### Response Body

```
http://<srvrip>:80/rest/config/running/prefix-independent-convergence
```

## display running-configuration

---

### Resource URIs

| URI  | Description  |
|--|--|
| <base_URI>/config/running/cluster/do<br>show running-config prefix-independent-<br>convergence | Displays running configuration for prefix-independent-convergence. |

### Parameters

*display running-configuration*

Displays running configuration for prefix-independent-convergence.

### 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/prefix-independent-convergence`

### Request Body

None

### Response Body

```
http://<srvrip>:80/rest/config/running/prefix-independent-convergence
```

## dot1x

### 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/<br>timeout | Configures timeout for dot1x readiness<br>check |

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

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

## filter-change-update-delay

### 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

## hardware

### 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/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                     |
|------------|--|---------------------------------|
|            | <breakout><mode>(mode)</mode></breakout> | Configures a breakout connector |



| PATCH URIs   | Payload                                      | Description                                 |
|--|--|---|
| /rest/config/running/hardware/connector/(connectorName)/breakout |  |   |
| /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.

*port-group*

Configures a port group.

## Usage Guidelines

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

## Examples

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

## URI

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

## Request Body

None

## Response Body

```
<hardware xmlns="urn:brocade.com:mgmt:brocade-hardware" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/hardware">
  <profile y:self="/rest/config/running/hardware/profile">
    <tcam y:self="/rest/config/running/hardware/profile/tcam">
      <tcam_profiletype>default</tcam_profiletype>
    </tcam>
    <lag y:self="/rest/config/running/hardware/profile/lag">
      <lag_profiletype>default</lag_profiletype>
    </lag>
  </profile>
</hardware>
```

```
<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>
```

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

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

### 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.  |

| GET URIs   | Description   |
|--|---|
| <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.  |
| <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.  |

| PATCH URIs  | Payload   | Description   |
|---|---|---|
| <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. |

| PUT URIs   | Payload  | Description   |
|--|--|---|
| <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.                      |
| <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>
```

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

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

### 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

## interface/{interface-type}/{interface-name}/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. |

### 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

### Request Body

None

### Response Body

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

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

## URI

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

## Request Body

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

## Response Body

None

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

## URI

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

## Request Body

None

## Response Body

None

## interface/{interface-type}/{interface-name}/ip/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: **E**thernet and **V**e.

*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



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

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

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

| PATCH URIs  | Payload  | Description   |
|---|--|---|
| <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.                            |
| <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            |

| DELETE URIs  |
|--|
| <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

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

### 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. |
| <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/Ethernet/%221/1%22/ip/policy

## Request Body

None

## Response Body

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

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

## URI

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

## Request Body

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

## Response Body

None

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

## URI

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

## Request Body

None

## Response Body

None

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

### 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: **E**thernet and **V**e.

*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

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

### 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

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

### 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 |



**DELETE URIs**

```
<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

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

| 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/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" 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/Ethernet/%222/2%22/ipv6

## Request Body

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

## Response Body

None

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

## URI

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

## Request Body

None

## Response Body

None

## interface/{interface-type}/{interface-name}/ipv6/dhcp/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- | Configures DHCPv6 server interface. Valid interface types: Ethernet, Ve.      |

| POST URIs | Payload                     | Description |
|-----------|-----------------------------|-------------|
|           | name></interface></servers> |             |

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

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

## Parameters

*interface-type*

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

*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

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

### 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.                          |



| GET URIs   | Description  |
|--|--|
| <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.          |
| <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.               |

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

| PATCH URIs  | Payload   | Description  |
|---|---|--|
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/ipv6/nd/<br>suppress-ra/mtu   | <mtu></mtu>   | Disables sending MTU in Router-Advertisement messages. Valid interface types: Ethernet, Ve.          |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/ipv6/nd/<br>suppress-ra/all   | <all></all>   | Suppresses response to RS in addition to not sending RAS. Valid interface types: Ethernet, Ve.       |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/<br>ipv6/nd/ra-interval/max-<br>interval                                | <max-interval>{decimal}</<br>max-interval>                      | Sets maximum interval in seconds between router advertisements. Valid interface types: Ethernet, Ve. |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/<br>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/<br>interface/{interface-type}/<br>{interface-name}/ipv6/nd/<br>send-ra   | <send-ra></send-ra>   | Sets to send router advertisement. Valid interface types: Ethernet, Ve.                              |
| <base_URI>/config/running/<br>interface/{interface-<br>type}/{interface-name}/<br>ipv6/nd/ns-interval   | <ns-interval>{decimal}</ns-<br>interval>                        | Sets neighbor solicitation interval in seconds. Valid interface types: Ethernet, Ve.                 |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/ipv6/nd/<br>address/suppress  | <suppress></suppress>   | Suppresses all IPv6 addresses in router advertisement. Valid interface types: Ethernet, Ve.          |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/ipv6/nd/<br>broadcast-mac-trap  | <broadcast-mac-trap></<br>broadcast-mac-trap>                   | Enables the trap for all the ipv6 packets with broadcast MAC. Valid interface types: Ethernet, Ve.   |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/ipv6/nd/<br>address/suppressing-<br>address/(suppress-ipv6-<br>address) | <suppressing-<br>address><suppress /></<br>suppressing-address> | Suppresses the specified IPv6 address in router advertisement. Valid interface types: Ethernet, Ve.  |

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

| PUT URIs   | Payload  | Description  |
|--|--|--|
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/ipv6/nd/<br>managed-config-flag    | <managed-config-flag />                                      | Sets managed config flag in<br>router advertisement. Valid<br>interface types: Ethernet,<br>Ve.      |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/ipv6/nd/<br>other-config-flag      | <other-config-<br>flag>{enumeration}</other-<br>config-flag> | Sets other config flag in<br>router advertisement. Valid<br>interface types: Ethernet,<br>Ve.        |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/<br>ipv6/nd/ra-lifetime            | <ra-lifetime>{decimal}</ra-<br>lifetime>                     | Sets RA lifetime period<br>in seconds. Valid interface<br>types: Ethernet, Ve.                       |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/ipv6/nd/<br>reachable-time         | <reachable-<br>time>{decimal}</reachable-<br>time>           | Sets reachable period in<br>milliseconds. Valid interface<br>types: Ethernet, Ve.                    |
| <base_URI>/config/running/<br>interface/{interface-<br>type}/{interface-name}/<br>ipv6/nd/mtu                    | <mtu>{decimal}</mtu>   | Sets IP MTU in bytes. Valid<br>interface types: Ethernet,<br>Ve.                                     |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/ipv6/nd/<br>retrans-timer          | <retrans-timer>{decimal}</<br>retrans-timer>                 | Sets retransmit interval<br>time. Valid interface types:<br>Ethernet, Ve.                            |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/ipv6/nd/<br>hoplimit               | <hoplimit>{decimal}</<br>hoplimit>                           | Sets the hop limit. Valid<br>interface types: Ethernet,<br>Ve.                                       |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/ipv6/nd/<br>router-preference/high | <high>{enumeration}</<br>high>                               | Sets router-preference<br>value as high on the<br>interface. Valid interface<br>types: Ethernet, Ve. |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/ipv6/nd/<br>router-preference/low  | <low>{enumeration}</low>                                     | Sets router-preference<br>value as low on the<br>interface. Valid interface<br>types: Ethernet, Ve.  |

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

| PUT URIs   | Payload                                       | Description  |
|--|---|--|
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/ipv6/nd/<br>address/suppress                           | <suppress></suppress>                         | Suppresses all IPv6 addresses in router advertisement. Valid interface types: Ethernet, Ve.        |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/ipv6/nd/<br>broadcast-mac-trap                         | <broadcast-mac-trap></<br>broadcast-mac-trap> | Enables the trap for all the ipv6 packets with broadcast MAC. Valid interface types: Ethernet, Ve. |
| <base_URI>/config/running/<br>interface/{interface-<br>type}/{interface-name}/<br>ipv6/nd/prefix/{prefix-ipv6-<br>address}/no-onlink | <prefix><no-onlink></no-<br>onlink></prefix>  | Specifies to not use prefix for onlink determination. Valid interface types: Ethernet, Ve.         |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/ipv6/nd/<br>prefix/{prefix-ipv6-address}/<br>off-link  | <prefix><off-link></off-<br>link></prefix>    | Prefix is offlink. Valid interface types: Ethernet, Ve.  |

| DELETE URIs  |
|--|
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/<br>managed-config-flag            |
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/other-<br>config-flag              |
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/ra-<br>lifetime                    |
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/<br>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/<br>retrans-timer                  |
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/<br>hoplimit                       |
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/router-<br>preference/high         |
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/router-<br>preference/low          |
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/router-<br>preference/medium       |
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/router-<br>preference/dad/attempts |
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/dad/<br>time                       |

| DELETE URIs   |
|---|
| <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: **E**thernet and **V**e.

### *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

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

### Resource URIs

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

| GET URIs   | Description   |
|--|---|
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/ospf/authentication/ipsec                         | Displays IPSEC authentication for the interface.<br>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.<br>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.<br>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.<br>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.<br>Valid interface types: Ethernet, Ve, Loopback.  |
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/ospf/retransmit-interval                          | Displays the retransmit interval.<br>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.<br>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.<br>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.<br>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.<br>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.<br>Valid interface types: Ethernet, Ve, Loopback. |

| PUT URIs   | Payload   | Description   |
|--|---|---|
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/ipv6/ospf/<br>mtu-ignore                                       | <mtu-<br>ignore>{enumeration}</<br>mtu-ignore>  | Enables or disables<br>maximum transmission<br>unit (MTU) match checking.<br>Valid interface types:<br>Ethernet, Ve, Loopback.  |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/ipv6/ospf/<br>network  | <network>{enumeration}</<br>network>  | Configures network type.<br>Valid interface types:<br>Ethernet, Ve, Loopback.   |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/ipv6/ospf/<br>priority   | <priority>{uint32}</priority>   | Configures priority for<br>designated router (DR)<br>election and backup<br>designated routers (BDRs)<br>on the interface you are<br>connected to.<br>Valid interface types:<br>Ethernet, Ve, Loopback. |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/ipv6/ospf/<br>suppress-linklsa                                 | <suppress-<br>linklsa>{enumeration}</<br>suppress-linklsa>                                    | Suppresses link LSA<br>advertisements.<br>Valid interface types:<br>Ethernet, Ve, Loopback.   |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/ipv6/ospf/<br>authentication/ipsec/key-<br>add-remove-interval | <key-add-remove-<br>interval>{common-<br>def:time-interval-sec}</key-<br>add-remove-interval> | Key add or remove interval<br>in seconds.<br>Valid interface types:<br>Ethernet, Ve, Loopback.  |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/ipv6/ospf/<br>hello-interval                                   | <hello-interval>{common-<br>def:time-interval-sec}</<br>hello-interval>                       | Sets the length of time<br>between the transmission<br>of hello packets that an<br>interface sends to neighbor<br>routers.<br>Valid interface types:<br>Ethernet, Ve, Loopback.                         |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/ipv6/ospf/<br>dead-interval                                    | <dead-interval>{common-<br>def:time-interval-sec}</<br>dead-interval>                         | Specifies the time period<br>for which a neighbor router<br>waits for a hello packet<br>from the device before<br>declaring the router down.<br>Valid interface types:<br>Ethernet, Ve, Loopback.       |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/ipv6/ospf/<br>hello-jitter                                     | <hello-jitter>{uint32}</hello-<br>jitter>   | Sets the allowed jitter<br>between HELLO packets.<br>Valid interface types:<br>Ethernet, Ve, Loopback.  |

| PUT URIs  | Payload   | Description   |
|---|---|---|
| <code>&lt;base_URI&gt;/config/running/<br/>interface/{interface-type}/<br/>{interface-name}/ipv6/ospf/<br/>retransmit-interval</code> | <code>&lt;retransmit-<br/>interval&gt;{common-<br/>def:time-interval-sec}&lt;/<br/>retransmit-interval&gt;</code> | Configures the retransmit interval. The retransmit interval is the time between Link-State Advertisement (LSA) retransmissions to adjacent routers for a given interface.<br>Valid interface types: Ethernet, Ve, Loopback.                     |
| <code>&lt;base_URI&gt;/config/running/<br/>interface/{interface-type}/<br/>{interface-name}/ipv6/ospf/<br/>transmit-delay</code>      | <code>&lt;transmit-delay&gt;{common-<br/>def:time-interval-sec}&lt;/<br/>transmit-delay&gt;</code>                | 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.<br>Valid interface types: Ethernet, Ve, Loopback. |

| PATCH URIs   | Payload   | Description   |
|--|---|---|
| <code>&lt;base_URI&gt;/config/running/<br/>interface/{interface-<br/>type}/{name}/ipv6/ospf/<br/>authentication/ipsec</code> | <code>&lt;authentication&gt;&lt;spi&gt;{spi-<br/>value-type}&lt;/<br/>spi&gt;&lt;ah&gt;{algorithm-type-<br/>ah}&lt;/<br/>ah&gt;&lt;disable&gt;{enumeration<br <br="" disable&gt;&lt;="" }&lt;=""/>authentication&gt;</code>                         | Security Parameter Index specifying the authentication algorithm to use.<br>Valid interface types: Ethernet, Ve, Loopback.  |
| <code>&lt;base_URI&gt;/config/running/<br/>interface/{interface-<br/>type}/{name}/ipv6/ospf/<br/>authentication/ipsec</code> | <code>&lt;authentication&gt;&lt;spi&gt;{spi-<br/>value-type}&lt;/spi&gt;&lt;no-<br/>encrypt&gt;{enumeration}&lt;/no-<br/>encrypt&gt;&lt;disable&gt;{enumer-<br/>ation}&lt;/disable&gt;&lt;/<br/>authentication&gt;</code>                           | Security Parameter Index without encrypting the key.<br>Valid interface types: Ethernet, Ve, Loopback.                      |
| <code>&lt;base_URI&gt;/config/running/<br/>interface/{interface-<br/>type}/{name}/ipv6/ospf/<br/>authentication/ipsec</code> | <code>&lt;authentication&gt;&lt;spi&gt;{spi-<br/>value-type}&lt;/<br/>spi&gt;&lt;key&gt;{ipsec-<br/>authentication-hexkey-<br/>string}&lt;/<br/>key&gt;&lt;disable&gt;{enumeration<br <br="" disable&gt;&lt;="" }&lt;=""/>authentication&gt;</code> | Security Parameter Index with Key used for ah.<br>Valid interface types: Ethernet, Ve, Loopback.                            |
| <code>&lt;base_URI&gt;/config/running/<br/>interface/{interface-<br/>type}/{name}/ipv6/ospf/<br/>authentication/ipsec</code> | <code>&lt;authentication&gt;&lt;spi&gt;{spi-<br/>value-type}&lt;/<br/>spi&gt;&lt;esp&gt;{algorithm-type-<br/>esp}&lt;/<br/>esp&gt;&lt;disable&gt;{enumeration<br <br="" disable&gt;&lt;="" }&lt;=""/>authentication&gt;</code>                      | Security Parameter Index specifying Encapsulating Security Payload (ESP).<br>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><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%22/ipv6/ospf/active

## Request Body

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

## Response Body

None



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

### Resource URIs

| URI   | Description   |
|---|---|
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/policy | Configures PBR (IPv6).<br>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/router/isis

### 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

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

### 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 |

**DELETE URIs**

```
<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

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

### 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. |
| <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.   |

| GET URI   | Description   |
|---|---|
| <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.                           |
| <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.  |



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

| PUT URIs   | Payload  | Description   |
|--|--|---|
| <base_URI>/rest<base_URI>/<br>config/running/interface/<br>{interface-type}/{interface-<br>name}/isis/auth-check/<br>level-1/disable   | <disable>{enumeration}</<br>disable>                 | Disables authentication<br>of incoming PDUs for<br>Level-1 LSPs, CSNP, and<br>PSNP. Valid interface types:<br>Ethernet, Ve, Loopback. |
| <base_URI>/rest<base_URI>/<br>config/running/interface/<br>{interface-type}/{interface-<br>name}/isis/auth-check/<br>level-2/disable   | <disable>{enumeration}</<br>disable>                 | Disables authentication<br>of incoming PDUs for<br>Level-2 LSPs, CSNP, and<br>PSNP. Valid interface types:<br>Ethernet, Ve, Loopback. |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/isis/<br>reverse-metric/rev-metric-<br>val   | <rev-metric-val>{unit32}</<br>rev-metric-val>        | Configures IS-IS reverse<br>metric value. Valid interface<br>types: Ethernet, Ve,<br>Loopback.  |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/isis/<br>reverse-metric/whole-lan  | <whole-<br>lan>{enumeration}</whole-<br>lan>         | Changes metric for whole<br>LAN. Valid interface types:<br>Ethernet, Ve, Loopback.  |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/isis/<br>reverse-metric/te-def-<br>metric  | <te-def-<br>metric>{enumeration}</te-<br>def-metric> | Updates TE default metric<br>sub-tlv. Valid interface<br>types: Ethernet, Ve,<br>Loopback.  |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/isis/auth-<br>mode/md5/level-1   | <level-1>{enumeration}</<br>level-1>                 | Authentication mode for<br>Level-1 LSPs, CSNP, and<br>PSNP. Valid interface types:<br>Ethernet, Ve, Loopback.                         |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/isis/<br><base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/auth-<br>mode/md5/level-2 | <level-2>{enumeration}</<br>level-2>                 | Authentication mode for<br>Level-2 LSPs, CSNP, PSNP.<br>Valid interface types:<br>Ethernet, Ve, Loopback.                             |

| PUT URIs   | Payload  | Description   |
|--|--|---|
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/isis/hello/<br>padding/disable | <disable>{enumeration}</<br>disable>                   | Disables padding hello<br>packets on this interface.<br>Valid interface types:<br>Ethernet, Ve, Loopback. |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/isis/circuit-<br>type          | <circuit-type>level-1</<br>circuit-type>               | Defines inter-area/intra area<br>operation mode. Valid<br>interface types: Ethernet,<br>Ve, Loopback.     |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/isis/point-<br>to-point        | <point-to-<br>point>{enumeration}</<br>point-to-point> | Point-to-point interface<br>for ISIS operation. Valid<br>interface types: Ethernet,<br>Ve, Loopback.      |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/isis/<br>passive               | <passive>{enumeration}</<br>passive>                   | Passive interface for ISIS<br>operation. Valid interface<br>types: Ethernet, Ve,<br>Loopback.             |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/isis/<br>priority/level-1      | <level-1>{unit32}</level-1>                            | Priority for Level-1 ISIS<br>Router. Valid interface<br>types: Ethernet, Ve,<br>Loopback.                 |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/isis/<br>priority/level-2      | <level-2>{unit32}</level-2>                            | Priority for Level-2 ISIS<br>Router. Valid interface<br>types: Ethernet, Ve,<br>Loopback.                 |

| PATCH URIs   | Payload   | Description   |
|--|---|---|
| <base_URI>/rest<base_URI>/<br>config/running/interface/<br>{interface-type}/{interface-<br>name}/isis/auth-check/<br>level-1 | <level-1><disable>{enumera-<br>tion}</disable></level-1>                                  | Disables authentication<br>of incoming PDUs for<br>Level-1 LSPs, CSNP, and<br>PSNP. Valid interface types:<br>Ethernet, Ve, Loopback. |
| <base_URI>/rest<base_URI>/<br>config/running/interface/<br>{interface-type}/{interface-<br>name}/isis/auth-check/<br>level-2 | <level-2><disable>{enumera-<br>tion}</disable></level-2>                                  | Disables authentication<br>of incoming PDUs for<br>Level-2 LSPs, CSNP, and<br>PSNP. Valid interface types:<br>Ethernet, Ve, Loopback. |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/isis/<br>reverse-metric                        | <reverse-metric><rev-<br>metric-val>{string}</rev-<br>metric-val></reverse-<br>metric>    | Configures IS-IS reverse<br>metric value. Valid interface<br>types: Ethernet, Ve,<br>Loopback.  |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/isis/<br>reverse-metric                        | <reverse-metric><whole-<br>lan>{enumeration}</whole-<br>lan></reverse-metric>             | Changes metric for whole<br>LAN. Valid interface types:<br>Ethernet, Ve, Loopback.  |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/isis/<br>reverse-metric                        | <reverse-metric><te-def-<br>metric>{enumeration}</te-<br>def-metric></reverse-<br>metric> | Updates TE default metric<br>sub-tlv. Valid interface<br>types: Ethernet, Ve,<br>Loopback.  |

| PATCH URIs  | Payload  | Description  |
|---|--|--|
| <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.                               |

| PATCH URIs  | Payload  | Description  |
|---|--|--|
| <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                    |
| <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                  |

| DELETE URIs  |
|--|
| <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/%24/10%22/isis">
  <auth-check y:self="/rest/config/running/interface/Ethernet/%24/10%22/isis/auth-check">
    <level-1 y:self="/rest/config/running/interface/Ethernet/%24/10%22/isis/auth-check/
level-1">
      <disable>true</disable>
    </level-1>
    <level-2 y:self="/rest/config/running/interface/Ethernet/%24/10%22/isis/auth-check/
level-2">
      <disable>true</disable>
    </level-2>
  </auth-check>
  <reverse-metric y:self="/rest/config/running/interface/Ethernet/%24/10%22/isis/reverse-
metric">
    <rev-metric-val>2000</rev-metric-val>
  </reverse-metric>
</isis>
```

```

    <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>
  <priority y:self="/rest/config/running/interface/Ethernet/%224/10%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



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

### 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

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

### 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

|           |                  |
|-----------|------------------|
| <i>rx</i> | Specifies RX LFS |
| <i>tx</i> | 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

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

### 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  |
|------------|---|--|
|            | <link-oam><enable>{enumeration}</enable></link-oam> | Enables / Disables Link-OAM. Valid interface type: Ethernet. |

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

| DELETE URIs  |
|--|
| <base_URI>/config/running/interface/{interface-type}/<br>{interface-name}/link-oam/<br>enable                        |
| <base_URI>/config/running/interface/{interface-type}/<br>{interface-name}/link-oam/allow-<br>loopback                |
| <base_URI>/config/running/interface/{interface-type}/<br>{interface-name}/link-oam/<br>remote-failure                |
| <base_URI>/config/running/interface/{interface-type}/<br>{interface-name}/link-oam/<br>dying-gasp                    |
| <base_URI>/config/running/interface/{interface-type}/<br>{interface-name}/link-oam/<br>remote-failure/link-fault     |
| <base_URI>/config/running/interface/{interface-type}/<br>{interface-name}/link-oam/<br>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.



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

### 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

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

### 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 |
|-------------|
|-------------|

| 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

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

### 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.                                 |

| GET URIs  | Description   |
|---|---|
| <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.   |
| <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-                                | Configure unicast queue size. Supported interface type: Ethernet.                   |

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

| PATCH URIs  | Payload   | Description  |
|---|---|--|
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/qos | <qos><dscp-cos>{map-<br>name-type}</dscp-cos></<br>qos>                     | Apply DSCP-to-CoS map.<br>Supported interface type:<br>Ethernet, Port-channel, VE.               |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/qos | <qos><dscp-traffic-<br>class>{map-name-type}</<br>dscp-traffic-class></qos> | Apply DSCP-to-Traffic-Class<br>map. Supported interface<br>type: Ethernet, Port-<br>channel, VE. |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/qos | <qos><dscp-<br>mutation>{map-name-<br>type}</dscp-mutation></<br>qos>       | Apply DSCP-Mutation map.<br>Supported interface type:<br>Ethernet, Port-channel, VE.             |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/qos | <qos><cos>{cos-id-type}</<br>cos></qos>                                     | Configure Default CoS.<br>Supported interface type:<br>Ethernet, Port-channel.                   |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/qos | <qos><traffic-class>{traffic-<br>class-id-type}</traffic-<br>class></qos>   | Configure Default Traffic<br>Class. Supported interface<br>type: Ethernet, Port-<br>channel.     |

| PATCH URIs  | Payload   | Description   |
|---|---|---|
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/qos/trust   | <trust><cos>>true</cos></<br>trust>   | Trust L2 CoS field<br>in incoming packets<br>for deriving internal<br>Traffic Class. Supported<br>interface type: Ethernet,<br>Port-channel.      |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/qos/trust   | <trust><dscp>>true</dscp></<br>trust>   | Trust L3 DSCP field<br>in incoming packets<br>for deriving internal<br>Traffic Class. Supported<br>interface type: Ethernet,<br>Port-channel.     |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/qos   | <qos><cos-mutation>{map-<br>name-type}</cos-<br>mutation></qos>   | Apply CoS-Mutation<br>mapSupported interface<br>type: Ethernet, Port-<br>channel.   |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/qos   | <qos><traffic-class-<br>cos>{map-name-type}</<br>traffic-class-cos></qos>   | Apply Traffic-Class-to-CoS<br>mapSupported interface<br>type: Ethernet, Port-<br>channel.   |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/qos   | <qos><cos-traffic-<br>class>{map-name-type}</<br>cos-traffic-class></qos>   | Apply CoS-to-Traffic-Class<br>map. Supported interface<br>type: Ethernet, Port-<br>channel.   |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/qos/<br>random-detect/traffic-class/<br>{red-tc-value}  | <traffic-class><red-profile-<br>id>{uint32}</red-profile-<br>id></traffic-class>  | Configure RED on a<br>traffic class. Supported<br>interface type: Ethernet,<br>Port-channel.  |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/qos/drop-<br>monitor                                    | <drop-<br>monitor><enable>>true</<br>enable></drop-monitor>   | Enable drop monitor<br>polling on ingress and<br>egress queue drops on<br>this interface. Supported<br>interface type: Ethernet,<br>Port-channel. |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/qos/<br>flowcontrol                                     | <flowcontrol><tx>{enumera-<br>tion}</<br>tx><rx>{enumeration}</rx></<br>flowcontrol>  | Configure IEEE 802.3x<br>Flow Control. Supported<br>interface type: Ethernet,<br>Port-channel.  |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/qos/rx-<br>queue/unicast/queue-size/<br>{traffic-class} | <queue-size><min-<br>queue-size>{min-queue-<br>size-type}</min-queue-<br>size><max-queue-<br>size>{max-queue-size-<br>type}</max-queue-size></<br>queue-size> | Configure unicast queue<br>size. Supported interface<br>type: Ethernet.   |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/qos/rx-<br>queue/multicast                              | <multicast><guarantee-<br>rate>{guarantee-rate-<br>type}</guarantee-rate></<br>multicast>   | Configure multicast data<br>guarantee rate. Supported<br>interface type: Ethernet.  |

| PATCH URIs  | Payload   | Description  |
|---|---|--|
| <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. |
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/trust   | <trust><dscp/></trust>  | Configure QoS trust DSCP for an specific interface.                            |
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/remark  | <remark><dscp/></remark>  | Configure QoS remark DSCP for an specific interface.                           |

| 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           |

**DELETE URIs**

```
<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.

## Example

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

## URI

`http://host:80/rest/config/running/interface/Ethernet/%22/10%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/%22/10%22/qos">
  <trust y:self="/rest/config/running/interface/Ethernet/%22/10%22/qos/trust">
    <cos>false</cos>
    <dscp>false</dscp>
  </trust>
  <random-detect y:self="/rest/config/running/interface/Ethernet/%22/10%22/qos/random-
detect">
  </random-detect>
  <drop-monitor y:self="/rest/config/running/interface/Ethernet/%22/10%22/qos/drop-
monitor">
    <enable>false</enable>
  </drop-monitor>
  <flowcontrol y:self="/rest/config/running/interface/Ethernet/%22/10%22/qos/
flowcontrol">
  </flowcontrol>
</qos>
```

## Example

The following example uses the PATCH option to configure QoS.

## URI

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

## Request Body

```
<qos><cos>0</cos></qos>
```

## Response Body

None

## Example

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

## Example

The following example uses the PATCH option to configure QoS trust DSCP on a specific ethernet interface.

## URI

`http://host:80/rest/config/running/interface/ethernet/0/2/qos`

## Request Body

```
<trust><dscp/></trust>
```

## Response Body

None

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

### 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::1/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

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::1/lifetime-multiplier

## Request Body

None

## Response Body

None



## interface/{interface-type}/{interface-name}/rmon/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. |

| PUT URIs   | Payload                       | Description   |
|--|-------------------------------|---|
| <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}                |
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/rmon/collection/stats/{ether-stats-index}/owner          |
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/rmon/collection/history/{history-control-index}          |
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/rmon/collection/history/{history-control-index}/buckets  |
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/rmon/collection/history/{history-control-index}/interval |
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/rmon/collection/history/{history-control-index}/owner    |

## Parameters

*interface-type*

Valid interface type: **Ethernet** only.

*ether-stats-index*

Specifies ethernet statistics index. Valid range is from 1 to 65535.

*history-control-index*

Specifies history control index. Valid range is from 1 to 65535.

*owner*

Specifies the owner.

*bucket*

Specifies the history control buckets. Valid range is from 1 to 65535. The default value is 50.

*interval*

Specifies the history control interval. Valid range is from 1 to 3600. The default value is 1800.

## Usage Guidelines

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

## Examples

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

## URI

```
http://host:80/rest/config/running/rmon/interface/Ethernet/%222/13%22/rmon/collection/
stats/65535/owner
```

## Request Body

None

## Response Body

```
<owner xmlns="urn:brocade.com:mgmt:brocade-rmon" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/interface/Ethernet/%222/13%22/rmon/collection/stats/65535/
owner">sk</owner>
```

The following example uses the POST option to configure RMON collection history.

## URI

```
http://host:80/rest/config/running/rmon/interface/Ethernet/%222/13%22/rmon/collection
```

## Request Body

```
<history><history-control-index>40</history-control-index></history>
```

## Response Body

None

The following example uses the DELETE option to remove owner identity.

## URI

```
http://host:80/rest/config/running/rmon/interface/Ethernet/%222/13%22/rmon/collection/
stats/{ether-stats-index}/owner
```

## Request Body

None

## Response Body

None

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

### 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 |
|-------------|
|-------------|

| 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>
```

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

## interface/{interface-type}/{interface-name}/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.          |



| POST URIs  | Payload  | Description  |
|--|--|--|
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/spanning-<br>tree/instance/{instance-id}/<br>restricted-role | <restricted-role>(empty)</<br>restricted-role> | Configures restricted role<br>for a particular instance.<br>Valid interface types:<br>Ethernet, Port-channel.              |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/spanning-<br>tree/instance/{instance-id}/<br>restricted-tcn  | <restricted-tcn>(empty)</<br>restricted-tcn>   | Configures restricted TCN<br>for a particular instance.<br>Valid interface types:<br>Ethernet, Port-channel.               |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/spanning-<br>tree/restricted-role                            | <restricted-role>(empty)</<br>restricted-role> | Configures restricted role.<br>Valid interface types:<br>Ethernet, Port-channel.   |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/spanning-<br>tree/restricted-tcn                             | <restricted-tcn>(empty)</<br>restricted-tcn>   | Configures restricted TCN.<br>Valid interface types:<br>Ethernet, Port-channel.  |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/spanning-<br>tree/portfast                                   | <portfastbasic></<br>portfastbasic>            | Enables an interface<br>to move directly to<br>forwarding on link up. Valid<br>interface types: Ethernet,<br>Port-channel. |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/spanning-<br>tree/portfast                                   | <bpdu-guard>(empty)</<br>bpdu-guard>           | Guards the port against<br>reception of BPDUs. Valid<br>interface types: Ethernet,<br>Port-channel.                        |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/spanning-<br>tree/portfast                                   | <bpdu-filter>(empty)</<br>bpdu-filter>         | Sets the portfast bpdu-<br>filter for the port. Valid<br>interface types: Ethernet,<br>Port-channel.                       |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/spanning-<br>tree  | <link-type>(enumeration)</<br>link-type>       | Point-to-point - enable<br>rapid transition. Valid<br>interface types: Ethernet,<br>Port-channel.                          |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/spanning-<br>tree  | <priority>(unit32)</priority>                  | Sets the priority. Valid<br>interface types: Ethernet,<br>Port-channel.  |

| POST URIs   | Payload                          | Description  |
|---|----------------------------------|--|
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/spanning-<br>tree       | <shutdown>(empty)</<br>shutdown> | Turns off STP. Valid<br>interface types: Ethernet,<br>Port-channel. Valid<br>interface types: Ethernet,<br>Port-channel. |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/spanning-<br>tree/guard | <root>(empty)</root>             | Disables reception of<br>superior BPDUs. Valid<br>interface types: Ethernet,<br>Port-channel.                            |

| PATCH URIs   | Payload                                     | Description  |
|--|---|--|
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/spanning-<br>tree/cost                   | <cost>(unit32)</cost>                       | Configures the cost. Valid<br>interface types: Ethernet,<br>Port-channel.  |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/spanning-<br>tree/portfast/portfastbasic | <portfastbasic>(string)</<br>portfastbasic> | Enables an interface<br>to move directly to<br>forwarding on link up. Valid<br>interface types: Ethernet,<br>Port-channel. |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/spanning-<br>tree/portfast/bpdu-guard    | <bpdu-guard>(empty)</<br>bpdu-guard>        | Guards the port against<br>reception of BPDUs. Valid<br>interface types: Ethernet,<br>Port-channel.                        |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/spanning-<br>tree/portfast/bpdu-filter   | <bpdu-filter>(empty)</<br>bpdu-filter>      | Sets the portfast bpdu-<br>filter for the port. Valid<br>interface types: Ethernet,<br>Port-channel.                       |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/spanning-<br>tree/link-type              | <link-type>(enumeration)</<br>link-type>    | Point-to-point - enable<br>rapid transition. Valid<br>interface types: Ethernet,<br>Port-channel.                          |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/spanning-<br>tree/priority               | <priority>(unit32)</priority>               | Sets the priority. Valid<br>interface types: Ethernet,<br>Port-channel.  |

| PATCH URIs   | Payload                          | Description   |
|--|----------------------------------|---|
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/spanning-<br>tree/shutdown   | <shutdown>(empty)</<br>shutdown> | Turns off STP. Valid<br>interface types: Ethernet,<br>Port-channel.                           |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/spanning-<br>tree/guard/root | <root>(empty)</root>             | Disables reception of<br>superior BPDUs. Valid<br>interface types: Ethernet,<br>Port-channel. |

| PUT URIs   | Payload                                     | Description  |
|--|---|--|
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/spanning-<br>tree/cost                   | <cost>(unit32)</cost>                       | Configures the cost. Valid<br>interface types: Ethernet,<br>Port-channel.  |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/spanning-<br>tree/portfast/portfastbasic | <portfastbasic>(string)</<br>portfastbasic> | Enables an interface<br>to move directly to<br>forwarding on link up. Valid<br>interface types: Ethernet,<br>Port-channel. |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/spanning-<br>tree/portfast/bpdu-guard    | <bpdu-guard>(empty)</<br>bpdu-guard>        | Guards the port against<br>reception of BPDUs. Valid<br>interface types: Ethernet,<br>Port-channel.                        |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/spanning-<br>tree/portfast/bpdu-filter   | <bpdu-filter>(empty)</<br>bpdu-filter>      | Sets the portfast bpdu-<br>filter for the port. Valid<br>interface types: Ethernet,<br>Port-channel.                       |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/spanning-<br>tree/link-type              | <link-type>(enumeration)</<br>link-type>    | Point-to-point - enable<br>rapid transition. Valid<br>interface types: Ethernet,<br>Port-channel.                          |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/spanning-<br>tree/priority               | <priority>(unit32)</priority>               | Sets the priority. Valid<br>interface types: Ethernet,<br>Port-channel.  |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/spanning-<br>tree/shutdown               | <shutdown>(empty)</<br>shutdown>            | Turns off STP. Valid<br>interface types: Ethernet,<br>Port-channel.  |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/spanning-<br>tree/guard/root             | <root>(empty)</root>                        | Disables reception of<br>superior BPDUs. Valid<br>interface types: Ethernet,<br>Port-channel.                              |

## DELETE URIs

| DELETE URIs  |
|--|
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree  |
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree/portfast                               |
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree/guard                                  |
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree/autoedge                               |
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree/cost                                   |
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree/edgeport/edgeportbasic                 |
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree/edgeport/bpdu-guard                    |
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree/edgeport/bpdu-filter                   |
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree/instance/{instance-id}/cost            |
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree/instance/{instance-id}/restricted-role |
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree/instance/{instance-id}/restricted-tcn  |
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree/restricted-role                        |
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree/restricted-tcn                         |

## Parameters

*interface-type*

Valid interface types: Ethernet, Port-channel.

*priority*

Specifies the priority.

*cost*

Path cost (lower path cost indicates greater likelihood of becoming root port).  
The range is from 1 to 200000000.

## Usage Guidelines

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

## Examples

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

## URI

http://host:80/rest/config/running/interface/ethernet/%222/13%22/spanning-tree

## Request Body

None

## Response Body

```
<spanning-tree xmlns="urn:brocade.com:mgmt:brocade-xstp" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/interface/Ethernet/%222/13%22/spanning-tree">
  <cost>100</cost>
  <portfast y:self="/rest/config/running/interface/Ethernet/%222/13%22/spanning-tree/portfast">
    <portfastbasic>true</portfastbasic>
    <bpdu-guard>true</bpdu-guard>
    <bpdu-filter>true</bpdu-filter>
  </portfast>
  <guard y:self="/rest/config/running/interface/Ethernet/%222/13%22/spanning-tree/guard">
    </guard>
  <priority>32</priority>
</spanning-tree>
```

The following example uses the POST option to configure STP BPDU guard.

## URI

http://host:80/rest/config/running/interface/ethernet/%222/13%22/spanning-tree/portfast

## Request Body

```
<bpdu-guard> (empty) </bpdu-guard>
```

## Response Body

None

The following example uses the DELETE option to remove STP.

## URI

http://host:80/rest/config/running/interface/ethernet/%222/13%22/spanning-tree

## Request Body

None

## Response Body

None

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

### 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-   | <bum-action>{enumeration}</bum-action>                    | Configures bum action. Allowed values: monitor or shutdown. Valid interface type: Ethernet. |

| PUT URIs                                   | Payload | Description |
|--|---------|-------------|
| control/ingress/{protocol-type}/bum-action |         |             |

| 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-pps>{rate-limit-pps-type}</rate-pps></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-mps</rate-format><rate-mps>(rate-limit-mps-type)
</rate-mps>
</ingress>
```

## Response Body

None

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

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

### Resource URIs

| URI  | Description   |
|--|---|
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport | Sets the switching characteristics of the Layer 2 interface. Supported interface types: Ethernet, Port-Channel. |

| GET URIs   | Description   |
|--|---|
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport                           | Sets the switching characteristics of the Layer 2 interface. Supported interface types: Ethernet, Port-Channel. |
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/mode                      | Sets mode of the Layer 2 interface. Supported interface types: Ethernet, Port-Channel.                          |
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/mode/vlan-mode            | Sets mode of the Layer 2 interface. Supported interface types: Ethernet, Port-Channel.                          |
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/access                    | Sets the interface as access. Supported interface types: Ethernet, Port-Channel.                                |
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/access/vlan               | Set the default VLAN for the interface. Supported interface types: Ethernet, Port-Channel.                      |
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/trunk                     | Sets the Layer 2 interface as trunk. Supported interface types: Ethernet, Port-Channel.                         |
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/trunk/allowed             | Set the VLANs that will Xmit/Rx through Layer2. Supported interface types: Ethernet, Port-Channel.              |
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/trunk/allowed/vlan        | Allow Dot1Q VLANs to Xmit/Rx through Layer2. Supported interface types: Ethernet, Port-Channel.                 |
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/trunk/allowed/vlan/all    | Allow all Dot1Q VLANs to Xmit/Rx through Layer2. Supported interface types: Ethernet, Port-Channel.             |
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/trunk/allowed/vlan/add    | Allow the specified VLANs to Xmit/Rx. Supported interface types: Ethernet, Port-Channel.                        |
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/trunk/allowed/vlan/except | Allow all VLANs except the specified VLAN. Supported interface types: Ethernet, Port-Channel.                   |
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/trunk/allowed/vlan/remove | Remove a VLAN range that Xmit/Rx. Supported interface types: Ethernet, Port-Channel.                            |

| GET URIs   | Description   |
|--|---|
| <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.          |

| PUT URIs   | Payload  | Description   |
|--|--|---|
| <base_URI>/config/running/<br>interface/{interface-<br>type}/{interface-name}/<br>switchport/trunk/tag                 | <tag />  | Enable tagging. Supported interface types: Ethernet, Port-Channel.                      |
| <base_URI>/config/running/<br>interface/{interface-<br>type}/{interface-name}/<br>switchport/trunk/tag/<br>native-vlan | <native-<br>vlan>{enumeration}</<br>native-vlan> | Set the native VLAN characteristics. Supported interface types: Ethernet, Port-Channel. |
| <base_URI>/config/running/<br>interface/{interface-<br>type}/{interface-name}/<br>switchport/trunk/native-<br>vlan     | <native-vlan>(unit32)</<br>native-vlan>          | Set the native VLAN characteristics. Supported interface types: Ethernet, Port-Channel. |

| PATCH URIs  | Payload   | Description   |
|---|---|---|
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/switchport                            | <switchport>true</<br>switchport>                 | Make an interface a switchport. Supported interface types: Ethernet, Port-Channel.            |
| <base_URI>/config/running/<br>interface/{interface-<br>type}/{interface-name}/<br>switchport/mode                   | <mode><vlan-<br>mode>trunk</vlan-<br>mode></mode> | Make interface mode to trunk. Supported interface types: Ethernet, Port-Channel.              |
| <base_URI>/config/running/<br>interface/{interface-<br>type}/{interface-name}/<br>switchport/access                 | <access><vlan>101</vlan></<br>access>             | Set the default VLAN for the interface. Supported interface types: Ethernet, Port-Channel.    |
| <base_URI>/config/running/<br>interface/{interface-<br>type}/{interface-name}/<br>switchport/trunk/allowed/<br>vlan | <vlan><all>true</all></vlan>                      | Make interface part of all VLAN. Supported interface types: Ethernet, Port-Channel.           |
| <base_URI>/config/running/<br>interface/{interface-<br>type}/{interface-name}/<br>switchport/trunk/allowed/<br>vlan | <vlan><none>true</none></<br>vlan>                | Remove interface membership from all VLAN. Supported interface types: Ethernet, Port-Channel. |
| <base_URI>/config/running/<br>interface/{interface-<br>type}/{interface-name}/<br>switchport/trunk/allowed/<br>vlan | <vlan><add>601-700</<br>add></vlan>               | Allow the specified VLANs to Xmit/Rx. Supported interface types: Ethernet, Port-Channel.      |
| <base_URI>/config/running/<br>interface/{interface-<br>type}/{interface-name}/<br>switchport/trunk/allowed/<br>vlan | <vlan><except>651-700</<br>except></vlan>         | Allow all VLANs except the specified VLAN. Supported interface types: Ethernet, Port-Channel. |

| PATCH URIs  | Payload                                       | Description   |
|---|---|---|
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/trunk/allowed/vlan | <vlan><remove>601-650</remove></vlan>         | Remove a VLAN range that Xmit/Rx. Supported interface types: Ethernet, Port-Channel.    |
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/trunk/tag          | <tag><native-vlan>true</native-vlan></tag>    | Enable tagging. Supported interface types: Ethernet, Port-Channel.                      |
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/trunk              | <trunk><native-vlan>601</native-vlan></trunk> | Set the native VLAN characteristics. Supported interface types: Ethernet, Port-Channel. |

| DELETE URIs  |
|--|
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport                   |
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/mode/vlan-mode    |
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/access/vlan       |
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/trunk/native-vlan |

## Usage Guidelines

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

## Examples

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

## URI

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

## Request Body

None

## Response Body

```
<switchport xmlns="urn:brocade.com:mgmt:brocade-interface" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/interface/Port-channel/101/switchport">true</switchport>
<switchport xmlns="urn:brocade.com:mgmt:brocade-interface" xmlns:y="http://brocade.com/ns/rest"
```

```
y:self="/rest/config/running/interface/Port-channel/101/switchport">
  <mode y:self="/rest/config/running/interface/Port-channel/101/switchport/mode">
    <vlan-mode>access</vlan-mode>
  </mode>
  <access y:self="/rest/config/running/interface/Port-channel/101/switchport/access">
    <vlan>1</vlan>
  </access>
  <trunk y:self="/rest/config/running/interface/Port-channel/101/switchport/trunk">
    <allowed y:self="/rest/config/running/interface/Port-channel/101/switchport/trunk/
allowed">
      <vlan y:self="/rest/config/running/interface/Port-channel/101/switchport/trunk/
allowed/vlan">
        </vlan>
      </allowed>
    </trunk>
  </switchport>
```

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

## URI

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

## Request Body

```
<switchport>true</switchport>
```

## Response Body

None

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

## URI

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

## Request Body

None

## Response Body

None

## interface/{interface-type}/{interface-name}/switchport/port-security

### 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.   |



| GET URIs   | Description  |
|--|--|
| <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   |

| PATCH URIs | Payload | Description                       |
|------------|---------|-----------------------------------|
|            |         | 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

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

## interface/{interface-type}/{interface-name}/vrrp-extended-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. |

| GET URI  | Description  |
|--|--|
| <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}/            | <priority>{uint8}</priority>             | Track priority for the network to be tracked. Supported interface type: Ve. |

| PUT URIs  | Payload   | Description   |
|---|---|---|
| track/network/{network-address}/priority  |   |   |
| <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.  |

| PUT URIs   | Payload   | Description   |
|--|---|---|
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/vrrp-<br>extended-group/{vrid}/<br>short-path-forwarding/<br>basic           | <basic>{enumeration}</<br>basic>  | Enable backup router to<br>send traffic. Supported<br>interface type: Ve.                                     |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/vrrp-<br>extended-group/{vrid}/<br>short-path-forwarding/<br>revert-priority | <revert-priority>{uint8}</<br>revert-priority>                                    | Sets the revert priority while<br>enabling backup router<br>to send traffic. Supported<br>interface type: Ve. |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/vrrp-<br>extended-group/{vrid}/<br>advertisement-interval-<br>scale          | <advertisement-<br>interval-scale>{uint32}</<br>advertisement-interval-<br>scale> | Ipv4 session advertisement<br>interval scale factor.<br>Supported interface type:<br>Ve.                      |

| PATCH URIs   | Payload   | Description  |
|--|---|--|
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/vrrp-<br>extended-group/{vrid}                         | <vrrp-extended-<br>group><virtual-<br>mac>{enumeration}</<br>virtual-mac></vrrp-<br>extended-group>                               | Virtual MAC. Supported<br>interface type: Ve.  |
| interface/Ve/{name}/vrrp-<br>extended-group/{vrid}/<br>track/network/{network-<br>address}   | <network><priority>{uint8}</<br>priority></network>   | Track priority for the<br>network to be tracked.<br>Supported interface type:<br>Ve.   |
| interface/Ve/{name}/vrrp-<br>extended-group/{vrid}/<br>track/interface/{interface-<br>type},{interface-name}                         | <interface><priority>{uint8<br><td>Track priority for the<br/>interface to be tracked.<br/>Supported interface type:<br/>Ve.</td> | Track priority for the<br>interface to be tracked.<br>Supported interface type:<br>Ve. |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/vrrp-<br>extended-group/{vrid}                         | <vrrp-extended-<br>group><preempt-<br>mode>{enumeration}</<br>preempt-mode></vrrp-<br>extended-group>                             | Set preempt mode for<br>the session. Supported<br>interface type: Ve.                  |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/vrrp-<br>extended-group/{vrid}/arp/<br>unicast-request | <unicast-<br>request><receive>{enumera<br>tion}</receive></unicast-<br>request>   | Receive unicast ARP<br>requests. Supported<br>interface type: Ve.                      |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/vrrp-<br>extended-group/{vrid}                         | <vrrp-extended-<br>group><priority>{uint8}</<br>priority></vrrp-extended-<br>group>   | Configures the priority.<br>Supported interface type:<br>Ve.                           |



| PATCH URIs   | Payload  | Description  |
|--|--|--|
| <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

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

### Resource URIs

| URI  | Description   |
|--|---|
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-group | Configures a Virtual Router Redundancy Protocol (VRRP) group.. Supported interface types: Ethernet, Ve. |

| GET URI  | Description   |
|--|---|
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-group/{vrid},{version}/track/interface/{interface-type}/{interface-name}/priority | Trackport Priority. Supported interface types: Ethernet, Ve.                  |
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-group/{vrid},{version}/advertisement-interval                                     | Advertisement interval. Supported interface types: Ethernet, Ve.              |
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-group/{vrid},{version}/enable   | Enable Session. Supported interface types: Ethernet, Ve.                      |
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-group/{vrid},{version}/hold-time  | Hold-time.Supported interface types: Ethernet, Ve.                            |
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-group/{vrid},{version}/preempt-mode   | Set preempt mode for the session. Supported interface types: Ethernet, Ve.    |
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-group/{vrid},{version}/arp/unicast-request/receive                                | Receive unicast ARP requests. Supported interface types: Ethernet, Ve.        |
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-group/{vrid},{version}/priority   | Configures the priority. Supported interface types: Ethernet, Ve.             |
| <base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-group/{vrid},{version}/description  | Characters describing the interface. Supported interface types: Ethernet, Ve. |

| POST URIs   | Payload  | Description  |
|---|--|--|
| <base_URI>/config/running/interface/{interface-type}/{interface-name} | <vrrp-group><vrid>{vrid-type}</vrid></vrrp-group>                      | Configures a virtual router group (VRRP). Supported interface types: Ethernet, Ve. |
| <base_URI>/config/running/interface/{interface-type}/                 | <virtual-ip><virtual-ipaddr>{ip-address}</virtual-ipaddr></virtual-ip> | Virtual IPv4 address in dotted decimal. Supported                                  |

| POST URIs   | Payload   | Description   |
|---|---|---|
| {interface-name}/vrrp-group/{vrid},{version}  |   | 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.           |
| <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.          |

| PUT URIs  | Payload  | Description   |
|---|--|---|
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/vrrp-<br>group/{vrid},{version}/<br>description     | <description>vrrpedescrptio<br>n</description> | Characters describing<br>the interface. Supported<br>interface types: Ethernet,<br>Ve.                          |
| <base_URI>/config/running/<br>interface/{interface-type}/<br>{interface-name}/vrrp-<br>group/{vrid},{version}/use-<br>v2-checksum | <use-v2-checksum>true</<br>use-v2-checksum>    | Enables v2 checksum<br>computation method for<br>VRRPv3 session. Supported<br>interface types: Ethernet,<br>Ve. |

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

| PATCH URIs  | Payload  | Description   |
|---|--|---|
| <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/%221^41%22/vrrp-group/10/2

## Request Body

```
<virtual-ip><virtual-ipaddr>10.1.1.100</virtual-ipaddr></virtual-ip>
```

## Response Body

None

## interface/Port-channel

### 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          |



| PUT URIs  | Payload                          | Description                         |
|---|----------------------------------|-------------------------------------|
| <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

## interface/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/interface/tunnel/{identifier}/source/source-address | <source-address>{inet:ipv4-address}</source-address> | Configures the source IP address.  |

| PUT URIs  | Payload   | Description                                   |
|---|---|---|
| <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.

*ttl*

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

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

---

### 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>
```

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

---

### 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>
```



## ip/access-list

### 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.

*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.

*src-mask*

Configures the source IP address mask.

*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*

Specifies the VLAN interface number.

*dscp*

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

## ip/as-path

### 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

## 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- | <standard><ip-action>{action-t}</ip-action><std-community- | Configures standard community list. |

| PATCH URIs   | Payload  | Description                         |
|--|--|-------------------------------------|
| list/standard/{name},{seq-keyword},{instance}  | expr>{ip-std-community-expr-t}</std-community-expr></standard>   |                                     |
| <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

## ip/extcommunity-list

### 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

## ip/dhcp/relay

### 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

## ip/dhcp/snooping

### Resource URIs

| URI   | Description               |
|---|---------------------------|
| <base_URI>/config/running/ip/dhcp/snooping/ | Configures DHCP snooping. |

| GET URI                                    | Description  |
|--|--|
| <base_URI>/config/running/ip/dhcp/snooping | Retrieves DHCP snooping configuration information. |

| PATCH URI  | Payload   | Description  |
|--|---|--|
| <base_URI>/config/running/ip/dhcp/snooping             | <snooping><snoop-enable>true</snoop-enable></snooping>                              | Enables DHCP snooping.                                   |
| <base_URI>/config/running/ip/dhcp/snooping/information | <information><option><allow-untrusted>true</allow-untrusted></option></information> | Enables untrusted ports to accept incoming DHCP packets. |

| DELETE URI  |
|---|
| <base_URI>/config/running/ip/dhcp/snooping/snoop-enable |
| <base_URI>/config/running/ip/dhcp/snooping              |

### Parameters

#### information

Configures DHCP snooping information, such as enabling untrusted ports to accept incoming DHCP packets.

### Usage Guidelines

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

### Examples

This example uses the GET option to retrieve configuration details.

```
<snooping xmlns="urn:brocade.com:mgmt:brocade-dhcp"
xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/ip/dhcp/snooping">
  <snoop-enable>true</snoop-enable>
  <information y:self="/rest/config/running/ip/dhcp/snooping/information">
    <option y:self="/rest/config/running/ip/dhcp/snooping/information/option">
      <allow-untrusted>true</allow-untrusted>
    </option>
  </information>
</snooping>
```

```
</information>  
</snooping>
```



## ip/dhcp/snooping/trust

### Resource URIs

| URI  | Description   |
|--|---|
| <base_URI>/config/running/interface/Ethernet/%22/3%22/ip/dhcp/snooping/trust | Configures IP DHCP snooping trust under an interface. |

| GET URI  | Description   |
|--|---|
| <base_URI>/config/running/interface/Ethernet/%22/3%22/ip/dhcp/snooping/trust | Retrieves IP DHCP snooping trust configuration information. |

| PATCH URI   | Payload                                   | Description   |
|---|---|---|
| <base_URI>/config/running/interface/Ethernet/%22/3%22/ip/dhcp/snooping/ | <snooping><trust>>true</trust></snooping> | Configures IP DHCP snooping trust under an interface. |

| DELETE URI   |
|--|
| <base_URI>/config/running/interface/Ethernet/%22/3%22/ip/dhcp/snooping/trust |

### Parameters

#### **trust**

Configures IP DHCP snooping trust.

### Usage Guidelines

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

### Examples

This example uses the GET option to retrieve configuration details.

```
<trust xmlns="urn:brocade.com:mgmt:brocade-dhcp" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/interface/Ethernet/%22/3%22/ip/dhcp/snooping/trust">true</
trust>
```

## ip/igmp

## Resource URIs

| URI                               | Description      |
|-----------------------------------|------------------|
| <base_URI>/config/running/ip/igmp | Configures IGMP. |

| GET URIs                                      | Description  |
|---|--|
| <base_URI>/config/running/ip/igmp             | Retrieves IGMP.  |
| <base_URI>/ip/igmp/router-alert-check-disable | Disables the snooping check for the presence of the router alert option. |
| <base_URI>/ip/igmp/ssm-map                    | Retrieves the IGMPv2 Source Specific Multicast mapping.                  |
| <base_URI>/ip/igmp/ssm-map/enable             | Enables the IGMPv2 Source Specific Multicast mapping.                    |
| <base_URI>/ip/igmp/snooping                   | Retrieves IGMP snooping.   |
| <base_URI>/ip/igmp/snooping/enable            | Enables IGMP snooping.   |

| POST URIs                                 | Payload   | Description                            |
|---|---|--|
| <base_URI>/config/running/ip/igmp/ssm-map | <igmps-prefix-list><igmps-prefix-list-name>{string}</igmps-prefix-list-name><igmps-prefix-src-addr>{source-address}</igmps-prefix-src-addr></igmps-prefix-list> | Configures prefix list for an SSM map. |

| PUT URIs   | Payload  | Description  |
|--|--|--|
| <base_URI>/config/running/ip/igmp/router-alert-check-disable | <router-alert-check-disable>{enumeration}</router-alert-check-disable> | Disables the snooping check for the presence of the router alert option. |
| <base_URI>/config/running/ip/igmp/ssm-map/enable             | <enable>{enumeration}</enable>   | Enables the IGMPv2 Source Specific Multicast mapping.                    |
| <base_URI>/config/running/ip/igmp/snooping/enable            | <enable>{enumeration}</enable>   | Enables IGMP snooping.   |

| PATCH URIs                        | Payload  | Description  |
|-----------------------------------|--|--|
| <base_URI>/config/running/ip/igmp | <igmp><router-alert-check-disable>{enumeration}</igmp> | Disables the snooping check for the presence of the router alert option. |

| PATCH URIs                                 | Payload   | Description   |
|--|---|---|
|  | router-alert-check-disable></igmp>                  |   |
| <base_URI>/config/running/ip/igmp/ssm-map  | <ssm-map><enable>{enumeration}</enable></ssm-map>   | Enables the IGMPv2 Source Specific Multicast mapping. |
| <base_URI>/config/running/ip/igmp/snooping | <snooping><enable>{enumeration}</enable></snooping> | Enables IGMP snooping.                                |

| DELETE URIs  |
|--|
| <base_URI>/config/running/ip/igmp/router-alert-check-disable   |
| <base_URI>/config/running/ip/igmp/ssm-map/enable   |
| <base_URI>/config/running/ip/igmp/ssm-map/igmps-prefix-list/{igmps-prefix-list-name},{igmps-prefix-src-addr} |
| <base_URI>/config/running/ip/igmp/snooping/enable  |

## Parameters

*igmps-prefix-list-name*

Specifies the prefix list name.

*igmps-prefix-src-addr*

Specifies the source IP Address.

## Usage Guidelines

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

## Examples

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

## URI

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

## Request Body

None

## Response Body

```
<igmp xmlns="urn:brocade.com:mgmt:brocade-igmp-snooping" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/ip/igmp">
```

```
<ssm-map y:self="/rest/config/running/ip/igmp/ssm-map">
  <enable>true</enable>
  <igmps-prefix-list y:self="/rest/config/running/ip/igmp/ssm-map/igmps-prefix-list/ssm-
map-1%2C203.0.0.10">
    <igmps-prefix-list-name>ssm-map-1</igmps-prefix-list-name>
    <igmps-prefix-src-addr>203.0.0.10</igmps-prefix-src-addr>
  </igmps-prefix-list>
</ssm-map>
</igmp>
```

The following example uses the POST option to configure prefix list for an SSM map.

## URI

<http://host:80/rest/config/running/ip/igmp/ssm-map>

## Request Body

```
<igmps-prefix-list><igmps-prefix-list-name>ssm-map-230-to-239-1</igmps-prefix-list-
name><igmps-prefix-src-addr>
203.0.0.10</igmps-prefix-src-addr></igmps-prefix-list>
```

## Response Body

None

The following example uses the DELETE option to remove IGMPv2 Source Specific Multicast mapping.

## URI

<http://host:80/rest/config/running/ip/igmp/ssm-map/enable>

## Request Body

None

## Response Body

None

## ip/irdp

### Resource URIs

| URI   | Description  |
|---|--|
| <base_URI>/config/running/interface/Ethernet/%20/3%22/ip/ | Configures the IPv4 router advertisement protocol. |

| GET URI   | Description  |
|---|--|
| <base_URI>/config/running/interface/Ethernet/%20/3%22/ip/ | Retrieves the IPv4 router advertisement configuration information. |

| PATCH URI   | Payload                      | Description                                     |
|---|------------------------------|---|
| <base_URI>/config/running/interface/Ethernet/%20/3%22/ip/ | + <ip><irdp>true</irdp></ip> | Enables the IPv4 router advertisement protocol. |

| DELETE URI  |
|---|
| <base_URI>/config/running/interface/Ethernet/%20/3%22/ip/irdp |

### Parameters

#### **irdp**

Enables the IPv4 router advertisement protocol.

### Usage Guidelines

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

### Examples

This example uses the GET option to retrieve configuration details.

```
<irdp xmlns="urn:brocade.com:mgmt:brocade-ip-config" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/interface/Ethernet/%20/4%22/ip/irdp">true</irdp>
```

## ip/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



## ip/route

## 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.   |

| PUT URIs   | Payload                       | Description   |
|--|-------------------------------|---|
| <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.                      |

| PATCH URIs  | Payload  | Description   |
|---|--|---|
| <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

## ip/source-guard

### Resource URIs

| URI   | Description                 |
|---|-----------------------------|
| <base_URI>/config/running/interface/Ethernet/%20/3%22/ip/source-guard | Configures IP source guard. |

| GET URI   | Description  |
|---|--|
| <base_URI>/config/running/interface/Ethernet/%20/3%22/ip/source-guard | Retrieves IP source guard configuration information. |

| PATCH URI   | Payload  | Description              |
|---|--|--------------------------|
| <base_URI>/config/running/interface/Ethernet/%20/3%22/ip/source-guard | <source-guard><enable>true</enable></source-guard> | Enables IP source guard. |

| DELETE URI  |
|---|
| <base_URI>/config/running/interface/Ethernet/%20/3%22/ip/source-guard |

### Parameters

#### **enable**

Enables IP source guard.

### Usage Guidelines

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

### Examples

#### Response Body

This example uses the GET option to retrieve configuration details.

```
<source-guard xmlns="urn:brocade.com:mgmt:brocade-interface"
xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/interface/
Ethernet/%20/4%22/ip/source-guard">
  <enable>true</enable>
</source-guard>
```

This example shows the CLI for enabling IP source guard.

```
root@ubuntu:~# curl -v -X PATCH -d "<source-guard><enable>true</enable></source-guard>"
-u admin:password http://10.20.163.63:80///rest/config/running/interface/Ethernet/
%20/4%22/ip/source-guard
-H "Accept: application/vnd.configuration.resource+xml" -k -v
* Trying 10.20.163.63...
```

```

* TCP_NODELAY set
* Connected to 10.20.163.63 (10.20.163.63) port 80 (#0)
* Server auth using Basic with user 'admin'
> PATCH ///rest/config/running/interface/Ethernet/%220/4%22/ip/source-guard HTTP/1.1
> Host: 10.20.163.63
> Authorization: Basic YWRtaW46cGFzc3dvcmQ=
> User-Agent: curl/7.58.0
> Accept: application/vnd.configuration.resource+xml
> Content-Length: 50
> Content-Type: application/x-www-form-urlencoded
>
* upload completely sent off: 50 out of 50 bytes
< HTTP/1.1 204 No Content
< Date: Mon, 22 Jun 2020 10:49:46 GMT
< Server: SLX-OS WWW
< Authentication-Token: Q09IdTB9XTRtdjdEekZ0avZbNWJHdVpdfGt6SEQ3YjA=
< Cache-Control: private, no-cache, must-revalidate, proxy-revalidate
< Etag: 1592-822986-907509
< Content-Type: text/html
< Pragma: no-cache
< X-Forwarded-Proto: http
<
* Connection #0 to host 10.20.163.63 left intact
root@ubuntu:~#

```

This example shows the CLI for **show running-config interface Ethernet 0/4 ip source-guard enable**.

```

root@ubuntu:~# curl -v -X GET -u admin:password http://10.20.163.63:80
///rest/config/running/interface/Ethernet/%220/4%22/ip/source-guard -H "Accept:
application/vnd.configuration.resource+xml" -k -v
Note: Unnecessary use of -X or --request, GET is already inferred.
* Trying 10.20.163.63...
* TCP_NODELAY set
* Connected to 10.20.163.63 (10.20.163.63) port 80 (#0)
* Server auth using Basic with user 'admin'
> GET ///rest/config/running/interface/Ethernet/%220/4%22/ip/source-guard HTTP/1.1
> Host: 10.20.163.63
> Authorization: Basic YWRtaW46cGFzc3dvcmQ=
> User-Agent: curl/7.58.0
> Accept: application/vnd.configuration.resource+xml
>
< HTTP/1.1 200 OK
< Date: 2020-06-22 10:50:18
< Server: SLX-OS Wave WWW
< Authentication-Token: Q1ZkY1lkPXtgTntBX2x3akt9NVlYVC8403ZTZ3pqYj0=
< Cache-control: private, no-cache, must-revalidate, proxy-revalidate
< Content-Type: application/vnd.configuration.resource+xml
< X-Forwarded-Proto: http
< Transfer-Encoding: chunked
<
<source-guard xmlns="urn:brocade.com:mgmt:brocade-interface" xmlns:y="http://
brocade.com/ns/rest"
y:self="/rest/config/running/interface/Ethernet/%220/4%22/ip/source-guard">
  <enable>true</enable>
</source-guard>
* Connection #0 to host 10.20.163.63 left intact
root@ubuntu:~#

```

This example shows the CLI for the **no** form of the command.

```

root@ubuntu:~# curl -v -X DELETE -u admin:password http://10.20.163.63:80///
rest/config/running/interface/Ethernet/%220/4%22/ip/source-guard/enable -H "Accept:
application/vnd.configuration.resource+xml" -k -v
* Trying 10.20.163.63...

```

```
* TCP_NODELAY set
* Connected to 10.20.163.63 (10.20.163.63) port 80 (#0)
* Server auth using Basic with user 'admin'
> DELETE ///rest/config/running/interface/Ethernet/%22/4%22/ip/source-guard/enable
HTTP/1.1
> Host: 10.20.163.63
> Authorization: Basic YWRtaW46cGFzc3dvcmQ=
> User-Agent: curl/7.58.0
> Accept: application/vnd.configuration.resource+xml
>
< HTTP/1.1 204 No Content
< Date: Mon, 22 Jun 2020 10:50:54 GMT
< Server: SLX-OS WWW
< Authentication-Token: dEk+Z0FePmFzNFNaYns3eUxmZ2JFXWpTUDJuX2EySGM=
< Cache-Control: private, no-cache, must-revalidate, proxy-revalidate
< Etag: 1592-823054-358045
< Content-Type: text/html
< Pragma: no-cache
< X-Forwarded-Proto: http
<
* Connection #0 to host 10.20.163.63 left intact
root@ubuntu:~#
```

## ipv6/access-list

### 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.                         |



| GET URIs   | Description   |
|--|---|
| <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.                   |
| <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.

## Usage Guidelines

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

## Examples

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

## ipv6/nd

### 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/ | <lifetime-multiplier>(decimal)</lifetime-multiplier> | Lifetime multiplier for the DNS Server option |

| PUT URIs  | Payload  | Description                                     |
|---|--|---|
| {ipv6_address_of_name_server}/lifetime-multiplier                           |  |   |
| <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

## ipv6/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

## ipv6/router/ospf

### 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.   |

| GET URIs   | Description  |
|--|--|
| <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.   |
| <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.   |

| GET URIs   | Description  |
|--|--|
| <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.  |
| <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.   |

| GET URIs  | Description  |
|---|--|
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/log/adjacency                      | Enables logging adjacency changes.                                       |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/log/adjacency/dr-only              | Enables logging adjacency changes for Designated Router interfaces only. |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/log/all                            | Enables logging everything.  |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/log/bad-packet                     | Enables logging Bad packets.   |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/log/bad-packet/checksum            | Enables logging bad checksum packets.                                    |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/log/database                       | Enables logging LSA activity.  |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/log/retransmit                     | Enables logging retransmit activity.                                     |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/metric-type                        | OSPF metric type for redistributed routes.                               |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute                       | Enables logging route redistribution.                                    |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/connected             | Displays Connected routes.   |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/connected/route-map   | Displays Route map reference.  |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/connected/metric      | Displays OSPF metric.  |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/connected/metric-type | Displays OSPF Metric type.   |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/static                | Displays Static routes.  |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/static/route-map      | Displays Route map reference.  |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/static/metric         | Displays OSPF metric.  |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/static/metric-type    | Displays OSPF Metric type.   |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/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.   |

| GET URIs   | Description  |
|--|--|
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/bgp                        | Displays BGP Routes.   |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/bgp/route-map              | Displays Route map reference.  |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/bgp/metric                 | Displays OSPF metric.  |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/bgp/metric-type            | Displays OSPF Metric type.   |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/ospf                       | Displays OSPF routes.  |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/ospf/route-map             | Displays Route map reference.  |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/ospf/metric                | Displays OSPF metric.  |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/ospf/metric-type           | Displays OSPF Metric type.   |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/summary-address/{summary-address-value} | Displays IP address summaries.   |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/timers                                  | Adjusts routing timers.  |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/timers/lsa-group-pacing                 | Interval between group of LSA being refreshed or maxaged. Range 10-1800. Default is 240. |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/timers/spf                              | Displays OSPF SPF timers.  |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/timers/spf/spf-hold-time                | Displays hold time (0-65535 sec) between consecutive SPF calculations.                   |
| <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.                                   |

| GET URIs   | Description   |
|--|---|
| <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.          |
| <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.                |

| GET URIs   | Description   |
|--|---|
| <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.    |



| POST URIs  | Payload  | Description   |
|--|--|---|
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}        | <range><range-address>{common-def:ipv6-address-prefix}</range-address></range>                                     | Defines or undefines a type-3 address range (ABR only). |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}                       | <default-information-originate />  | Controls distribution of default information.           |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}                       | <distance><route-type>{ospf:route-type-enum}</route-type><distance-value>{uint32}</distance-value></distance>      | Defines an administrative distance                      |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/log                   | <adjacency />  | Logging adjacency changes                               |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/log                   | <bad-packet />   | Logging Bad packets                                     |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute          | <connected />  | Connected routes  |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute          | <static />   | Static routes   |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute          | <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     |

| POST URIs                 | Payload   | Description   |
|---------------------------|---|---|
| <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                         |

| POST URIs                 | Payload   | Description   |
|---------------------------|---|---|
| <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 |

| POST URIs                 | Payload   | Description  |
|---------------------------|---|--|
| <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                  |

| POST URIs                 | Payload   | Description   |
|---------------------------|---|---|
| <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       |

| PUT URIs  | Payload  | Description  |
|---|--|--|
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/stub/stub-area-metric                               | <stub-area-metric>{uint32}</stub-area-metric>                      | Stub area's advertised route metric  |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/authentication/virtual-link                         | <spi><ah>{algorithm-type-ah}</ah></spi>                            | Security Parameter Index specifying the authentication algorithm to use.   |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/authentication/virtual-link                         | <spi><no-encrypt>{enumeration}</no-encrypt></spi>                  | Security Parameter Index without encrypting the key.   |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/authentication/virtual-link                         | <spi><key>{ipsec-authentication-hexkey-string}</key></spi>         | Security Parameter Index with Key used for ah.   |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/authentication/virtual-link                         | <spi><esp>{algorithm-type-esp}</esp></spi>                         | Security Parameter Index specifying Encapsulating Security Payload (ESP)   |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/authentication/virtual-link                         | <spi><esp-no-encrypt>{enumeration}</esp-no-encrypt></spi>          | Security Parameter Index without encrypting the key  |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/authentication/virtual-link                         | <spi><esp-key>{ipsec-authentication-hexkey-string}</esp-key></spi> | Security Parameter Index with Hexadecimal key string for ESP   |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/authentication/virtual-link                         | <spi><esp-auth>{algorithm-type-ah}</esp-auth></spi>                | Security Parameter Index using Authentication Algorithm  |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/authentication/virtual-link                         | <spi><no-encrypt>{enumeration}</no-encrypt></spi>                  | Security Parameter Index without encrypting the key  |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/authentication/virtual-link                         | <spi><key>{ipsec-authentication-hexkey-string}</key></spi>         | Security Parameter Index with Hexadecimal key string for authentication algorithm  |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/virtual-link/{virtual-link-neighbor}/hello-interval | <hello-interval>{common-def:time-interval-sec}</hello-interval>    | Configures the time between hello packets that the router sends on an interface.   |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/virtual-link/{virtual-link-neighbor}/dead-interval  | <dead-interval>{common-def:time-interval-sec}</dead-interval>      | Configures the time a neighbor router waits for a hello packet from the current router before declaring the router down. |

| PUT URIs  | Payload   | Description   |
|---|---|---|
| <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   |

| PUT URIs  | Payload   | Description   |
|---|---|---|
| <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:bandwidth}</reference-bandwidth>                             | Reference-bandwidth in Mbits per second   |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/database-overflow-interval   | <database-overflow-interval>{common-def:time-interval-sec}</database-overflow-interval> | Poll Interval in Seconds  |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/default-information-originate/always                                     | <always>{enumeration}</always>  | Always advertise default route  |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/default-information-originate/metric                                     | <metric>{uint32}</metric>   | Type of the metric  |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/default-information-originate/metric-type                                | <metric-type>{ospf:metric-type}</metric-type>   | OSPF metric type for default route  |
| <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  |



| PUT URIs   | Payload  | Description  |
|--|--|--|
| <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                  |

| PUT URIs  | Payload   | Description  |
|---|---|--|
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/connected/route-map   | <route-map>{common-def:name-string63}</route-map> | Route map reference                                |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/connected/metric      | <metric>{uint32}</metric>                         | OSPF metric  |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/connected/metric-type | <metric-type>{ospf:metric-type}</metric-type>     | Type of the metric                                 |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/static/route-map      | <route-map>{common-def:name-string63}</route-map> | Route map reference                                |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/static/metric         | <metric>{uint32}</metric>                         | OSPF metric  |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/static/metric-type    | <metric-type>{ospf:metric-type}</metric-type>     | Type of the metric                                 |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/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  |

| PUT URIs   | Payload   | Description   |
|--|---|---|
| <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                                  |
| <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   |

| PUT URIs  | Payload                                     | Description   |
|---|---|---|
| <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          |

| PATCH URIs   | Payload   | Description   |
|--|---|---|
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/authentication/virtual-link          | <authentication><spi>{spi-value-type}</spi><ah>{algorithm-type-ah}</ah></authentication>                            | Security Parameter Index specifying the authentication algorithm to use.          |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/authentication/virtual-link          | <authentication><spi>{spi-value-type}</spi><no-encrypt>{enumeration}</no-encrypt></authentication>                  | Security Parameter Index without encrypting the key.                              |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/authentication/virtual-link          | <authentication><spi>{spi-value-type}</spi><key>{ipsec-authentication-hexkey-string}</key></authentication>         | Security Parameter Index with Key used for ah.                                    |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/authentication/virtual-link          | <authentication><spi>{spi-value-type}</spi><esp>{algorithm-type-esp}</esp></authentication>                         | Security Parameter Index specifying Encapsulating Security Payload (ESP)          |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/authentication/virtual-link          | <authentication><spi>{spi-value-type}</spi><esp-no-encrypt>{enumeration}</esp-no-encrypt></authentication>          | Security Parameter Index without encrypting the key                               |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/authentication/virtual-link          | <authentication><spi>{spi-value-type}</spi><esp-key>{ipsec-authentication-hexkey-string}</esp-key></authentication> | Security Parameter Index with Hexadecimal key string for ESP                      |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/authentication/virtual-link          | <authentication><spi>{spi-value-type}</spi><esp-auth>{algorithm-type-ah}</esp-auth></authentication>                | Security Parameter Index using Authentication Algorithm                           |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/authentication/virtual-link          | <authentication><spi>{spi-value-type}</spi><no-encrypt>{enumeration}</no-encrypt></authentication>                  | Security Parameter Index without encrypting the key                               |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/authentication/virtual-link          | <authentication><spi>{spi-value-type}</spi><key>{ipsec-authentication-hexkey-string}</key></authentication>         | Security Parameter Index with Hexadecimal key string for authentication algorithm |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/virtual-link/{virtual-link-neighbor} | <virtual-link><hello-interval>{common-def:time-interval-sec}</hello-interval></virtual-link>                        | Configures the time between hello packets that the router sends on an interface.  |

| PATCH URIs  | Payload   | Description  |
|---|---|--|
| <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   |

| PATCH URIs  | Payload  | Description   |
|---|--|---|
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/virtual-link/{virtual-link-neighbor}/authentication/range | <authentication><spi>{spi-value-type}</spi><esp-auth>{algorithm-type-ah}</esp-auth></authentication>         | Security Parameter Index using Authentication Algorithm                           |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/virtual-link/{virtual-link-neighbor}/authentication/range | <authentication><spi>{spi-value-type}</spi><no-encrypt>{enumeration}</no-encrypt></authentication>           | Security Parameter Index without encrypting the key                               |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/virtual-link/{virtual-link-neighbor}/authentication/range | <authentication><spi>{spi-value-type}</spi><key>{ipsec-authentication-hexkey-string}</key></authentication>  | Security Parameter Index with Hexadecimal key string for authentication algorithm |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/range/{range-address}                                     | <range><range-effect>{enumeration}</range-effect></range>  | Advertise this type-3 summarization   |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/range/{range-address}                                     | <range><cost>{ospf:range-metric}</cost></range>  | Configure area range cost   |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/auto-cost  | <auto-cost><reference-bandwidth>{ospf:bandwidth}</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  |

| PATCH URIs   | Payload  | Description  |
|--|--|--|
| <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   |
| <base_URI>/config/running/ipv6/router/ospf/{vrf}/log/bad-packet              | <bad-packet><checksum>{enumeration}</checksum></bad-packet>  | Logging bad checksum packets                                 |



| PATCH URIs   | Payload  | Description  |
|--|--|--|
| <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                                 |

| PATCH URIs  | Payload   | Description   |
|---|---|---|
| <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   |
| <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                                  |

| PATCH URIs  | Payload  | Description   |
|---|--|---|
| <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>
    <distributed-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>
    </distributed-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>
    <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

## ldap-server

---

### 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/ns/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>
```

## ldap-server/host

---

### 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

## ldap-server/maprole

---

### 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

## link-fault-signaling

### 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

## lvtep/broadcast-local-bias

### Resource URIs

| URI                             | Description    |
|---------------------------------|----------------|
| <base_URI>/config/running/lvtep | LVTEP settings |

**Table 7: Get URI**

| Get URI                         | Description            |
|---------------------------------|------------------------|
| <base_URI>/config/running/lvtep | Retries LVTEP settings |

**Table 8: Patch/PUT URI**

| PATCH/PUT URI                   | Payload                                | Description                            |
|---------------------------------|--|--|
| <base_URI>/config/running/lvtep | <lvtep></broadcast-local-bias></lvtep> | Enables broadcast-local-bias for LVTEP |

| DELETE URI                      |
|---------------------------------|
| <base_URI>/config/running/lvtep |

### Parameters

#### **broadcast-local-bias**

Specifies Broadcast-Unknown Unicast-Multicast Traffic.

### Usage Guidelines

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

### Example

The following example uses the PUT option to enable Local Bias on LVTEP.

### URI

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

### Request Body

```
<lvtep>
<broadcast-local-bias>
</lvtep>
```

## Response Body

None

## Example

The following is an example of using the DELETE operation to remove Local Bias on LVTEP.

## URI

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

## Request Body

None

## Response Body

None

## mac

## 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.   |

| GET URIs   | Description  |
|--|--|
| <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-address-mask>{src-dst-mac-address-mask-type}</src-mac-address-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.

*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>
      </seq>
    </extended>
  </access-list>
</mac>
```

```

    <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

## monitor/session

### 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-   | Adds source interface, destination port-channel number, and direction information to an existing mirroring session created using POST command. |

| PATCH URIs | Payload  | Description |
|------------|--|-------------|
|            | <pre>ethernet&gt;ethernet&lt;/dest-ethernet&gt;&lt;dest-port-channel-val&gt;{port-channel number}&lt;/dest-port-channel-val&gt;&lt;direction&gt;{rx tx both}&lt;/direction&gt;&lt;/session&gt;</pre> |             |

| PUT URIs  | Payload  | Description  |
|---|--|--|
| <pre>&lt;base_URI&gt;/config/running/monitor/session/{session-number}/description</pre> | <pre>&lt;description&gt;{string}&lt;/description&gt;</pre> | Adds description information to an existing mirroring session. |

| DELETE URIs   |
|---|
| <pre>&lt;base_URI&gt;/config/running/monitor/session/{session-number}</pre> |

## 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

## ntp

## 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. |



| POST URIs                                 | Payload                             | Description   |
|---|-------------------------------------|---|
| <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 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

## overlay

### 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.           |

| POST URIs  | Payload  | Description                 |
|--|--|-----------------------------|
| <code>&lt;base_URI&gt;/config/running/overlay/access-list/type/vxlan/standard/{acl-name}/</code>         | <code>&lt;seq&gt;&lt;seq-num&gt;{uint32}&lt;/seq-num&gt;&lt;permit-deny&gt;{enumeration}&lt;/permit-deny&gt;&lt;dst-vtep-ip-host&gt;{ip-address}&lt;/dst-vtep-ip-host&gt;&lt;src-vtep-ip-host&gt;{ip-address}&lt;/src-vtep-ip-host&gt;&lt;vni&gt;{uint32}&lt;/vni&gt;&lt;vni-mask&gt;{uint32}&lt;/vni-mask&gt;&lt;/seq&gt;</code>  | Creates standard ACL rules. |
| <code>&lt;base_URI&gt;/config/running/overlay/access-list/type/vxlan/extended/{ext-user-acl-name}</code> | <code>&lt;seq&gt;&lt;ext-seq-num&gt;{uint32}&lt;/ext-seq-num&gt;&lt;ext-permit-deny&gt;{enumeration}&lt;/ext-permit-deny&gt;&lt;dst-vtep-ip-host&gt;{ip-address}&lt;/dst-vtep-ip-host&gt;&lt;src-vtep-ip-host&gt;{{ip-address}&lt;/src-vtep-ip-host&gt;&lt;vni&gt;{uint32}&lt;/vni&gt;&lt;vni-mask&gt;{string}&lt;/vni-mask&gt;&lt;count&gt;{enumeration}&lt;/count&gt;&lt;/seq&gt;</code> | Creates extended ACL rules. |

| DELETE URIs  |
|--|
| <code>&lt;base_URI&gt;/config/running/overlay/access-list/type/vxlan/extended/{acl-name}/seq/{seq-id}</code> |
| <code>&lt;base_URI&gt;/config/running/{user-transit-name}</code>   |

## Parameters

*acl-name*

Specifies the ACL name.

*seq-num*

Specifies the sequence ID.

*dst-vtep-ip-host*

Specifies the destination host IP address.

*src-vtep-ip-host*

Specifies the source host IP address.

*vni*

Specifies VNI.

*vni-mask*

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

## 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

## password-attributes/character-restriction

---

### 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

## prefix-independent-convergence

---

### Resource URIs

| URI  | Description                                |
|--|--|
| <base_URI>/config/running/prefix-independent-convergence | Configures prefix-independent-convergence. |

### Parameters

*prefix-independent-convergence*

Configures prefix-independent-convergence.

### 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://<srvrip>:80/rest/config/running/prefix-independent-convergence`

### Request Body

None

### Response Body

```
http://<srvrip>:80/rest/config/running/prefix-independent-convergence
```

## protocol/cfm

### 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. |

| POST URIs   | Payload   | Description  |
|---|---|--|
| <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).                          |
| <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). |

| PATCH URIs  | Payload   | Description  |
|---|---|--|
| <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>{uint32}</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}                   |
| <base_URI>/config/running/protocol/cfm/domain-name/{domain-name}/ma-name/{ma-name} |

| DELETE URIs  |
|--|
| <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

## protocol/cfm/y1731

### 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.   |

| GET URIs   | Description  |
|--|--|
| <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.            |
| <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.                        |

| GET URIs  | Description                                     |
|---|---|
| <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.                              |
| <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.                                      |

| PUT URIs   | Payload  | Description   |
|--|--|---|
| <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.                             |

| PUT URIs  | Payload                                    | Description                                 |
|---|--|---|
| <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>{string}</test-profile>   | Configures test profile.     |
| <base_URI>/config/running/protocol/cfm/y1731  | <action-profile>{string}</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>{string}</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>{string}</test-profile>   | Configures test profile.  |
| base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile} | <test-profile>{string}</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>{string}</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>{string}</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>{string}</test-profile><tx-frame-count>{uint32}</tx-frame-count></test-profile>             | Sets the number of packets to be sent for measurements.                   |

| PATCH URIs   | Payload  | Description  |
|--|--|--|
| 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.  |



| PATCH URIs  | Payload   | Description                                 |
|---|---|---|
| <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.

## protocol/link-oam

### 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                           |
|------------|---|---------------------------------------|
|            | <link-oam><shutdown>{enumerate}</shutdown></link-oam> | Disables or enables protocol link-oam |

| PATCH URIs                                  | Payload  | Description                |
|---|--|----------------------------|
| <base_URI>/config/running/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.

## protocol/lldp

### 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.                        |

| GET URIs   | Description   |
|--|---|
| <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. |
| <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.  |

| PATCH URIs  | Payload  | Description                              |
|---|--|--|
| <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.   |
| <base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/advertise | <advertise><dot3-tlv>(string)</dot3-tlv></advertise>                             | Configures LLDP profile advertisement.   |

| PATCH URIs   | Payload  | Description                              |
|--|--|--|
| <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 LLDP 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. |



| PUT URIs  | Payload   | Description                              |
|---|---|--|
| <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.     |
| <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. |

| PUT URIs   | Payload   | Description                              |
|--|---|--|
| <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         |
| <base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/advertise/dot1-tlv |

| DELETE URIs  |
|--|
| <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

## protocol/loop-detection

### 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 milliseconds, 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



## protocol/spanning-tree/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.      |

| PUT URIs   | Payload  | Description                                     |
|--|--|---|
| <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.                         |
| <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                     |

| DELETE URIs  |
|--|
| <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

## protocol/spanning-tree/pvst

### Resource URIs

| URI   | Description      |
|---|------------------|
| <base_URI>/config/running/protocol/spanning-tree/pvst | Configures PVST. |

| GET URIs   | Description  |
|--|--|
| <base_URI>/config/running/protocol/spanning-tree/pvst                                | Retrieves PVST configuration information.                  |
| <base_URI>/config/running/protocol/spanning-tree/pvst/description                    | Retrieves PVST description.                                |
| <base_URI>/config/running/protocol/spanning-tree/pvst/bridge-priority                | Retrieves bridge priority for the common instance          |
| <base_URI>/config/running/protocol/spanning-tree/pvst/error-disable-timeout/enable   | Retrieves error disable timeout information.               |
| <base_URI>/config/running/protocol/spanning-tree/pvst/error-disable-timeout/interval | Retrieves error disable timeout interval details.          |
| <base_URI>/config/running/protocol/spanning-tree/pvst/forward-delay                  | Retrieves forward delay information.                       |
| <base_URI>/config/running/protocol/spanning-tree/pvst/max-age                        | Retrieves max age information.                             |
| <base_URI>/config/running/protocol/spanning-tree/pvst/port-channel/path-cost         | Retrieves path cost.                                       |
| <base_URI>/config/running/protocol/spanning-tree/pvst/shutdown                       | Disables PVST.   |
| <base_URI>/config/running/protocol/spanning-tree/pvst/hello-time                     | Retrieves hello time.                                      |
| <base_URI>/config/running/protocol/spanning-tree/pvst/vlan/(id)/forward-delay        | Retrieves forward delay information for a particular VLAN. |
| <base_URI>/config/running/protocol/spanning-tree/pvst/vlan/(id)/max-age              | Retrieves max age information for a particular VLAN.       |
| <base_URI>/config/running/protocol/spanning-tree/pvst/vlan/(id)/hello-time           | Retrieves hello time information for a particular VLAN.    |

| POST URIs | Payload  | Description      |
|-----------|----------|------------------|
|           | <pvst /> | Configures PVST. |

| POST URIs   | Payload  | Description               |
|---|--|---------------------------|
| <base_URI>/config/running/protocol/spanning-tree      |  |                           |
| <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.             |
| <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.       |

| PATCH URIs  | Payload  | Description                       |
|---|--|-----------------------------------|
| <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

| 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

## protocol/spanning-tree/rpvst

### Resource URIs

| URI  | Description       |
|--|-------------------|
| <base_URI>/config/running/protocol/spanning-tree/rpvst | Configures RPVST. |

| GET URIs  | Description  |
|---|--|
| <base_URI>/config/running/protocol/spanning-tree/rpvst                                | Retrieves RPVST configuration information.                 |
| <base_URI>/config/running/protocol/spanning-tree/rpvst/description                    | Retrieves RPVST description.                               |
| <base_URI>/config/running/protocol/spanning-tree/rpvst/bridge-priority                | Retrieves bridge priority for the common instance          |
| <base_URI>/config/running/protocol/spanning-tree/rpvst/error-disable-timeout/enable   | Retrieves error disable timeout information.               |
| <base_URI>/config/running/protocol/spanning-tree/rpvst/error-disable-timeout/interval | Retrieves error disable timeout interval details.          |
| <base_URI>/config/running/protocol/spanning-tree/rpvst/forward-delay                  | Retrieves forward delay information.                       |
| <base_URI>/config/running/protocol/spanning-tree/rpvst/max-age                        | Retrieves max age information.                             |
| <base_URI>/config/running/protocol/spanning-tree/rpvst/port-channel/path-cost         | Retrieves path cost.                                       |
| <base_URI>/config/running/protocol/spanning-tree/rpvst/shutdown                       | Disables RPVST.  |
| <base_URI>/config/running/protocol/spanning-tree/rpvst/hello-time                     | Retrieves hello time.                                      |
| <base_URI>/config/running/protocol/spanning-tree/rpvst/vlan/(id)/forward-delay        | Retrieves forward delay information for a particular VLAN. |
| <base_URI>/config/running/protocol/spanning-tree/rpvst/vlan/(id)/max-age              | Retrieves max age information for a particular VLAN.       |
| <base_URI>/config/running/protocol/spanning-tree/rpvst/vlan/(id)/hello-time           | Retrieves hello time information for a particular VLAN.    |

| POST URIs | Payload   | Description       |
|-----------|-----------|-------------------|
|           | <rpvst /> | Configures RPVST. |

| POST URIs  | Payload  | Description                |
|--|--|----------------------------|
| <base_URI>/config/running/protocol/spanning-tree       |  |                            |
| <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.             |
| <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 VALN.            |
| <base_URI>/config/running/protocol/spanning-tree/rpvst/vlan/(id)                      | <vlan><forward-delay>(uint32)</forward-delay></vlan> | Configures forward delay for a VALN.       |
| <base_URI>/config/running/protocol/spanning-tree/rpvst/vlan/(id)                      | <vlan><max-age>(uint32)</max-age></vlan>             | Configures max age for a VALN.             |

| PATCH URIs  | Payload  | Description                       |
|---|--|-----------------------------------|
| <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



## protocol/spanning-tree/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.                  |

| PATCH URIs   | Payload   | Description                     |
|--|---|---------------------------------|
| <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.                                |

| PUT URIs   | Payload   | Description                     |
|--|---|---------------------------------|
| <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

## protocol/spanning-tree/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.                        |

| PATCH URIs  | Payload                              | Description            |
|---|--------------------------------------|------------------------|
| <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.                |
| <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 |

| DELETE URIs   |
|---|
| <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

## 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

## protocol/vrrp-extended

### 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

## qos-mpls

### 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.                              |

| GET URIs   | Description  |
|--|--|
| <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. |
| <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}</> | Configures EXP traffic class |

| POST URIs   | Payload  | Description                             |
|---|--|---|
|   | exp-traffic-class-map-name></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/         | <to><exp>{uint32}</exp></to>  | Updates the configured exp value in traffic-class-exp map specified.                                   |



| PATCH URIs   | Payload                        | Description  |
|--|--------------------------------|--|
| {priority-in-values},{drop-precedence}/to  |                                |  |
| <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.  |
| <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.          |

| PUT URIs  | Payload   | Description   |
|---|---|---|
| <code>&lt;base_URI&gt;/config/running/qos-mpls/map-apply/exp-dscp</code>          | <code>&lt;exp-dscp&gt;&lt;all-zero-map&gt;{enumeration}&lt;/all-zero-map&gt;&lt;All&gt;{enumeration}&lt;/All&gt;&lt;/exp-dscp&gt;</code>              | Applies the qos-mpls all-zero-map of type exp-dscp globally.                          |
| <code>&lt;base_URI&gt;/config/running/qos-mpls/map-apply/exp-dscp</code>          | <code>&lt;exp-dscp&gt;&lt;default-map&gt;{enumeration}&lt;/default-map&gt;&lt;All&gt;{enumeration}&lt;/All&gt;&lt;/exp-dscp&gt;</code>                | Applies the qos-mpls default-map of type exp-dscp globally.                           |
| <code>&lt;base_URI&gt;/config/running/qos-mpls/map-apply/exp-traffic-class</code> | <code>&lt;exp-traffic-class&gt;&lt;map-name-cmd1&gt;[map-name-type]&lt;/map-name-cmd1&gt;&lt;All&gt;true&lt;/All&gt;&lt;/exp-traffic-class&gt;</code> | Applies the qos-mpls map name provided in payload of type exp-traffic-class globally. |
| <code>&lt;base_URI&gt;/config/running/qos-mpls/map-apply/exp-traffic-class</code> | <code>&lt;exp-traffic-class&gt;&lt;all-zero-map&gt;true&lt;/all-zero-map&gt;&lt;All&gt;true&lt;/All&gt;&lt;/exp-traffic-class&gt;</code>              | Applies the qos-mpls all-zero-map of type exp-traffic-class globally.                 |
| <code>&lt;base_URI&gt;/config/running/qos-mpls/map-apply/exp-traffic-class</code> | <code>&lt;exp-traffic-class&gt;&lt;default-map&gt;true&lt;/default-map&gt;&lt;All&gt;true&lt;/All&gt;&lt;/exp-traffic-class&gt;</code>                | Applies the qos-mpls default-map of type exp-traffic-class globally.                  |

| DELETE URIs  |
|--|
| <code>&lt;base_URI&gt;/config/running/qos-mpls/map/exp-traffic-class/{exp-traffic-class-map-name}</code>                     |
| <code>&lt;base_URI&gt;/config/running/qos-mpls/map/exp-traffic-class/{exp-traffic-class-map-name}/exp/{exp-in-values}</code> |
| <code>&lt;base_URI&gt;/config/running/qos-mpls/map/traffic-class-exp/{traffic-class-exp-map-name}</code>                     |
| <code>&lt;base_URI&gt;/config/running/qos-mpls/map-apply</code>  |
| <code>&lt;base_URI&gt;/config/running/qos-mpls/map-apply/exp-traffic-class</code>  |
| <code>&lt;base_URI&gt;/config/running/qos-mpls/map-apply/traffic-class-exp</code>  |
| <code>&lt;base_URI&gt;/config/running/qos-mpls/map-apply/dscp-exp</code>   |
| <code>&lt;base_URI&gt;/config/running/qos-mpls/map-apply/exp-dscp</code>   |

## 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

## 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. |

| PATCH URIs   | Payload   | Description   |
|--|---|---|
| <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-iftype}</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-iftype}</source-interface-name><source-interface-value>{track-ifname}</source-interface-value></source-interface> | Sets source-interface for the RADIUS packets.  |

#### DELETE URIs

| 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

## role

---

### 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>
```

```
</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

## route-map

### Resource URIs

| URI   | Description                    |
|---|--------------------------------|
| <base_URI>/config/running/route-map/{name},{action-rm},{instance} | Configures route-map instance. |

| GET URIs   | Description   |
|--|---|
| <base_URI>/config/running/route-map/{name},{action-rm},{instance}                          | Configures a route-map instance.  |
| <base_URI>/config/running/route-map/{name},{action-rm},{instance}/match                    | Matches conditions.   |
| <base_URI>/config/running/route-map/{name},{action-rm},{instance}/match/vrf                | Match condition specified as a non-default VRF. Valid values range from 0 through 4294967295. |
| <base_URI>/config/running/route-map/{name},{action-rm},{instance}/match/interface          | Matches interface conditions in a route-map instance.   |
| <base_URI>/config/running/route-map/{name},{action-rm},{instance}/match/interface/ethernet | Specifies an ethernet interface.  |
| <base_URI>/config/running/route-map/{name},{action-rm},{instance}/match/interface/loopback | Specifies a loopback interface.   |
| <base_URI>/config/running/route-map/{name},{action-rm},{instance}/match/interface/ve       | Specifies a virtual Ethernet VLAN interface   |
| <base_URI>/config/running/route-map/{name},{action-rm},{instance}/match/ipv6               | Matches Internet Protocol (IPv6).   |
| <base_URI>/config/running/route-map/{name},{action-rm},{instance}/match/ipv6/address       | Matches an IPv6 address in a route-map instance.  |
| <base_URI>/config/running/route-map/{name},{action-rm},{instance}/match/ipv6/address/acl   | Matches an IP address in a route-map instance and specifies access list.                      |
| <base_URI>/config/running/route-map/{name},{action-rm},{instance}/match/ip                 | Internet Protocol (IP).   |
| <base_URI>/config/running/route-map/{name},{action-rm},{instance}/match/ip/address         | Matches an IP address in a route-map instance   |
| <base_URI>/config/running/route-map/{name},{action-rm},{instance}/match/ip/address/acl     | Specifies the name of the access list   |

| GET URIs  | Description  |
|---|--|
| <base_URI>/config/running/route-map/{name},{action-rm},{instance}/match/ip/next-hop                             | Matches IP next-hop match conditions in a route-map instance   |
| <base_URI>/config/running/route-map/{name},{action-rm},{instance}/set   | Set values.  |
| <base_URI>/config/running/route-map/{name},{action-rm},{instance}/set/ip  | Internet Protocol (IP).  |
| <base_URI>/config/running/route-map/{name},{action-rm},{instance}/set/ip/dscp                                   | DSCP   |
| <base_URI>/config/running/route-map/{name},{action-rm},{instance}/set/ip/dscp/dscp-rms                          | DSCP   |
| <base_URI>/config/running/route-map/{name},{action-rm},{instance}/set/ip/interface                              | Interface  |
| <base_URI>/config/running/route-map/{name},{action-rm},{instance}/set/ip/interface/null0                        | Sends traffic to a Null0 Interface.                            |
| <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   |

| GET URIs   | Description  |
|--|--|
| <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. |

| POST URIs  | Payload  | Description   |
|--|--|---|
| <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.                                       |
| <base_URI>/config/running/route-map/{name},{action-rm},{instance}/         | <next-hop-recursion>true</next-hop-recursion>  | Enables recursive next hop resolution for PBR route-maps. |

| 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.   |

| PATCH URIs   | Payload   | Description                        |
|--|---|------------------------------------|
| <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 |



| DELETE URIs   |
|---|
| <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}       |
| <base_URI>/config/running/route-map/{name},{action-rm},{instance}/next-hop-recursion                            |

## 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>
                      <global y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1/set/ip/global">
                        </global>
                      </ip>
                      <ipv6 y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1/set/ipv6">
                        <interface y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1/set/ipv6/
interface">
                          </interface>

```

```

    <global y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1/set/ipv6/global">
    </global>
  </ipv6>
  <extcommunity y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1/set/
extcommunity">
    <rt y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1/set/extcommunity/rt">
    </rt>
    <soo y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1/set/extcommunity/soo">
    </soo>
  </extcommunity>
  <community y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1/set/community">
  </community>
  <metric y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1/set/metric">
  </metric>
  <distance y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1/set/distance">
  </distance>
  <tag y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1/set/tag">
  </tag>
  <weight y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1/set/weight">
  </weight>
  <as-path y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1/set/as-path">
  </as-path>
  <automatic-tag y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1/set/automatic-
tag">
  </automatic-tag>
  <comm-list y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1/set/comm-list">
  </comm-list>
  <dampening y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1/set/dampening">
  </dampening>
  <local-preference y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1/set/local-
preference">
  </local-preference>
  <origin y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1/set/origin">
  </origin>
  <metric-type y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1/set/metric-type">
  </metric-type>
  </set>
</route-map>

```

The following example uses the POST option to configure an IPv4 next hop address.

## URI

http://host:80/rest/config/running/config/running/route-map/rm1,permit,1/set/ip/next-hop

## Request Body

```
<next-hop-list><next-hop-addr>{24.24.24.2}</next-hop-addr></next-hop-list>
```

## Response Body

None

The following example uses the DELETE option to remove a route map instance.

## URI

http://host:80/rest/config/running/route-map/rm1,permit,1

## Request Body

None

## Response Body

None

The following example uses the POST option to enable recursive next hop resolution for PBR route-maps.

## URI

http://host:80/rest/config/running/route-map/rm1,permit,1/next-hop-recursion

## Request Body

```
<next-hop-recursion>true</next-hop-recursion>
```

## Response Body

None

## router/bgp

### 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-asp-path    | 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.   |

| GET URIs  | Description  |
|---|--|
| <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.   |
| <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.   |

| GET URIs   | Description                        |
|--|------------------------------------|
| <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.                                  |

| POST URIs   | Payload  | Description                                    |
|---|--|--|
| <base_URI>/config/running/<br>router/bgp/neighbor/<br>neighbor-addr/{ip-address}/<br>update-source  | <loopback>{unit32}</<br>loopback>  | Configures loopback.                           |
| <base_URI>/config/running/<br>router/bgp/neighbor/<br>neighbor-addr/{ip-address}/<br>next-hop-self  | <next-hop-self-<br>status>{enumeration}</<br>next-hop-self-status>   | Configures next hop self<br>status.            |
| <base_URI>/config/running/<br>router/bgp/neighbor/<br>neighbor-addr/{ip-address}/<br>ebgp-multihop  | <ebgp-multihop-<br>count>{unit32}</ebgp-<br>multihop-count>  | Configures EBGp multi-hop<br>count.            |
| <base_URI>/config/running/<br>router/bgp/neighbor/<br>neighbor-addr/{ip-address}/<br>update-source  | <loopback>{unit32}</<br>loopback>  | Configures loopback.                           |
| <base_URI>/config/running/<br>router/bgp/address-family/<br>ipv4/unicast/redistribute/<br>ospf  | <redistribute-<br>ospf>{enumeration}</<br>redistribute-ospf>   | Configures OSPF<br>redistribution.             |
| <base_URI>/config/running/<br>router/bgp/address-family/<br>ipv4/unicast/redistribute   | <isis></isis>  | Configures ISIS<br>redistribution.             |
| <base_URI>/config/running/<br>router/bgp/address-family/<br>ipv4/unicast/redistribute/<br>static  | <redistribute-<br>static>{enumeration}</<br>redistribute-static>   | Configures static<br>redistribution.           |
| <base_URI>/config/running/<br>router/bgp/address-family/<br>ipv4/unicast/redistribute/<br>connected   | <redistribute-<br>connected>{enumeration}<<br>/redistribute-connected>   | Configures connected<br>redistribution.        |
| <base_URI>/config/running/<br>router/bgp/address-family/<br>ipv4/unicast  | <vrf><vrf-name>{string}</<br>vrf-name></vrf>   | Configures VRF for address-<br>family unicast. |
| <base_URI>/config/running/<br>router/bgp/address-family/<br>ipv4/unicast/vrf/{vrf-name}/<br>neighbor  | <af-ipv4-neighbor-<br>addr><address>{ip-<br>address}</<br>address><remote-<br>as>{unit32}</remote-<br>as><peer-group>{group-<br>name}</peer-group></af-<br>ipv4-neighbor-addr> | Configures neighbor.                           |
| <base_URI>/config/running/<br>router/bgp/address-family/<br>ipv4/unicast/vrf/{vrf-name}/<br>neighbor/af-ipv4-neighbor-<br>addr/{ip-address}/update-<br>source | <loopback>{unit32}</<br>loopback>  | Configures loopback.                           |



| POST URIs   | Payload  | Description                             |
|---|--|---|
| <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            |
|------------|-------------|------------------------|
|            | <bgp></bgp> | Configures Router BGP. |

| PATCH URIs   | Payload  | Description                      |
|--|--|----------------------------------|
| <base_URI>/config/running/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} | <peerGroup><remote-as>{enumeration}</remote-as></peerGroup>  | 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                   |

| DELETE URIs  |
|--|
| <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 **a11**.

*Ibgp*

Specifies the number of IBGP paths for load sharing. The value can range from 1 through 32. The default value is **a11**.

*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 IGPs.

*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>
          <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/
%22fd80:122:122:105:105:0:122/128%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

## router/isis

### 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                    |



| GET URIs  | Description  |
|---|--|
| <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   |
| <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.   |

| GET URIs   | Description  |
|--|--|
| <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   |

| GET URIs   | Description  |
|--|--|
| <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.  |
| <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.                                       |

| GET URIs   | Description                                 |
|--|---|
| <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.                        |
| <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             |

| GET URIs   | Description   |
|--|---|
| <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.                                      |

| GET URIs   | Description  |
|--|--|
| <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.                      |
| <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.  |

| GET URIs   | Description                                 |
|--|---|
| <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.                        |

| GET URIs   | Description                                 |
|--|---|
| <base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/static/metric-type                    | IS-IS metric type for redistributed routes. |
| <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               |



| POST URIs  | Payload  | Description  |
|--|--|--|
| <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-mask><Level-1>{enumeration}</Level-1></summary-address>  | Configures Integrated IS-IS address summaries.   |
| <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.  |

| POST URIs  | Payload  | Description   |
|--|--|---|
| <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. |

| POST URIs   | Payload             | Description  |
|---|---------------------|--|
| <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.                          |
| <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   |

| PUT URIs   | Payload   | Description  |
|--|---|--|
| <base_URI>/config/running/router/isis/hostname/disable                         | <disable>{enumeration}</disable>                            | Disables integrated IS-IS dynamic hostname   |
| <base_URI>/config/running/router/isis/isis-type                                | <isis-type>level-1</isis-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.  |
| <base_URI>/config/running/router/isis/set-overload-bit/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.   |

| PUT URIs   | Payload  | Description   |
|--|--|---|
| <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}</route-map>  | Uses route map.   |
| <base_URI>/config/running/router/isis/address-family/ipv4/unicast/default-metric   | <default-metric>{unit32}</default-metric>  | Metric for route redistribution.                          |

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

| PUT URIs  | Payload                                 | Description                                 |
|---|---|---|
| <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                   |
| <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             |

| PUT URIs   | Payload   | Description   |
|--|---|---|
| <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-l2tol1</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 |



| PUT URIs   | Payload  | Description   |
|--|--|---|
| <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.                                  |
| <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.                             |

| PUT URIs  | Payload  | Description                                 |
|---|--|---|
| <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                   |
| <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                 |

| PUT URIs  | Payload                                 | Description                                 |
|---|---|---|
| <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                   |

| PUT URIs   | Payload                                      | Description                       |
|--|--|-----------------------------------|
| <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-l2to1</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.                          |
| <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                        |

| PATCH URIs   | Payload  | Description  |
|--|--|--|
| <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.  |

| PATCH URIs  | Payload  | Description   |
|---|--|---|
| <base_URI>/config/running/router/isis/set-debug   | <set-debug><nsr>{enumeration}</nsr></set-debug>  | Sets nsr debug.   |
| <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.                          |

| PATCH URIs   | Payload   | Description                                 |
|--|---|---|
| <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</routemap></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. |
| <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                      |

| PATCH URIs  | Payload  | Description                                 |
|---|--|---|
| <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                         |



| PATCH URIs   | Payload  | Description  |
|--|--|--|
| <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                                  |
| <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. |

| PATCH URIs  | Payload  | Description   |
|---|--|---|
| <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 |
| <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.  |

| PATCH URIs   | Payload  | Description                                 |
|--|--|---|
| <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             |

| PATCH URIs  | Payload  | Description                                 |
|---|--|---|
| <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. |
| <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             |

| PATCH URIs   | Payload  | Description                                 |
|--|--|---|
| <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           |
| <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/is-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                |

| DELETE URIs  |
|--|
| <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 |

| DELETE URIs  |
|--|
| <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   |
| <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                               |



| DELETE URIs  |
|--|
| <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         |

**DELETE URIs**

```
<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>
      <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>
      </redistribute>
    </unicast>
  </ipv4>
</address-family>

```

```

        <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

## router/mpls

### 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                              |

| POST URIs  | Payload  | Description                          |
|--|--|--------------------------------------|
| <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                   |
| <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                    |



| PUT URIs   | Payload                           | Description   |
|--|-----------------------------------|---|
| <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

## router/mpls/autobw-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}</autobw-template> | Configures the time interval after which the LSP bandwidth should be adjusted. |

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

| PUT URIs  | Payload   | Description   |
|---|---|---|
| <base_URI>/config/<br>running/router/mppls/<br>autobw-template/<br>{autobw-template-name}/<br>adjustment-interval | <adjustment-<br>interval>{uint32}</<br>adjustment-interval>   | Configures the time interval<br>after which the LSP<br>bandwidth should be<br>adjusted. |
| <base_URI>/config/<br>running/router/mppls/<br>autobw-template/<br>{autobw-template-name}/                        | <threshold-<br>percentage>{uint32}</<br>threshold-percentage> | Configures the adjustment<br>threshold.   |

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

| DELETE URIs  |
|--|
| <base_URI>/config/running/router/mps/autobw-template/{autobw-template-name}                          |
| <base_URI>/config/running/router/mps/autobw-template/{autobw-template-name}/<br>adjustment-interval  |
| <base_URI>/config/running/router/mps/autobw-template/{autobw-template-name}/<br>adjustment-threshold |
| <base_URI>/config/running/router/mps/autobw-template/{autobw-template-name}/<br>max-bandwidth        |

| DELETE URIs   |
|---|
| <base_URI>/config/running/router/mpls/autobw-template/{autobw-template-name}/min-bandwidth    |
| <base_URI>/config/running/router/mpls/autobw-template/{autobw-template-name}/mode             |
| <base_URI>/config/running/router/mpls/autobw-template/{autobw-template-name}/overflow-limit   |
| <base_URI>/config/running/router/mpls/autobw-template/{autobw-template-name}/sample-recording |
| <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/mpls/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/mpls/autobw-template/aaa">
  <autobw-template-name>aaa</autobw-template-name>
  <adjustment-interval>1800</adjustment-interval>
  <adjustment-threshold y:self="/rest/config/running/router/mpls/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/mpls`

## 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/mpls/autobw-template/aaa`

## Request Body

None

## Response Body

None



## router/mpls/autobw-threshold-table

### Resource URIs

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

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

| POST URIs   | Payload  | Description   |
|---|--|---|
| <base_URI>/config/running/router/mpls   | <autobw-threshold-table />                                   | Configures an autobandwidth threshold table.  |
| <bandwidth><bandwidth-value>{uint32}</bandwidth-value><threshold>{uint32}</threshold></bandwidth> | <base_URI>/config/running/router/mpls/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/mpls/autobw-threshold-table/bandwidth/{bandwidth-value} | <bandwidth><threshold>{uint32}</threshold></bandwidth>             | Modifies a threshold change point   |
| <base_URI>/config/running/router/mpls/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/mpls/autobw-  | <max-bw-threshold><percentage>{ui                                  | This command will set the percentage threshold for                          |

| PATCH URIs                       | Payload                               | Description                               |
|----------------------------------|---------------------------------------|---|
| threshold-table/max-bw-threshold | nt32}</percentage></max-bw-threshold> | any traffic-rate above the max bandwidth. |

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

| DELETE URIs  |
|--|
| <base_URI>/config/running/router/mpls/autobw-threshold-table                             |
| <base_URI>/config/running/router/mpls/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

## router/mpls/bypass-lsp

### 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.       |

| GET URIs  | Descriptions   |
|---|--|
| <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                   |
| <base_URI>/config/running/router/mpls/bypass-lsp/{bypass-lsp-name}/include-all  | Include all of the administrative groups                   |
| <base_URI>/config/running/router/mpls/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/mpls/bypass-lsp/{bypass-lsp-name}/primary-path   | Displays primary explicit path.                            |
| <base_URI>/config/running/router/mpls/bypass-lsp/{bypass-lsp-name}/enable   | Enables a bypass lsp.                                      |

| POST URIs  | Payload  | Description                       |
|--|--|-----------------------------------|
| <base_URI>/config/running/router/mpls                              | <bypass-lsp><bypass-lsp-name>{string}</bypass-lsp-name></bypass-lsp>   | Creates bypass LSP configuration. |
| <base_URI>/config/running/router/mpls/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/mpls/bypass-lsp/{bypass-lsp-name} | <bypass-lsp><to>{inet:ipv4-address}</to></bypass-lsp>     | Configures LSP destination address. |
| <base_URI>/config/running/router/mpls/bypass-lsp/{bypass-lsp-name} | <bypass-lsp><from>{inet:ipv4-address}</from></bypass-lsp> | Configures LSP source address.      |

| PATCH URIs  | Payload   | Description   |
|---|---|---|
| <base_URI>/config/running/router/mps/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/mps/bypass-lsp/{bypass-lsp-name}                     | <bypass-lsp><adaptive>true</adaptive></bypass-lsp>  | Modifies the LSP adaptive configuration.                                    |
| <base_URI>/config/running/router/mps/bypass-lsp/{bypass-lsp-name}                     | <bypass-lsp><reoptimize-timer>{uint32}</reoptimize-timer></bypass-lsp>  | Modifies eeoptimization timer configuration.                                |
| <base_URI>/config/running/router/mps/bypass-lsp/{bypass-lsp-name}                     | <bypass-lsp><commit>true</commit></bypass-lsp>  | Commit the changes to adaptive LSP.   |
| <base_URI>/config/running/router/mps/bypass-lsp/{bypass-lsp-name}                     | <bypass-lsp><record>{enable-disable}</record></bypass-lsp>  | Enables/disables recording path routes.                                     |
| <base_URI>/config/running/router/mps/bypass-lsp/{bypass-lsp-name}                     | <bypass-lsp><cos>{uint32}</cos></bypass-lsp>  | Updates class of service.   |
| <base_URI>/config/running/router/mps/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/mps/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/mps/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/mps/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.                            |
| <base_URI>/config/running/router/mps/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/mps/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/mps/bypass-lsp/{bypass-lsp-name}                     | <bypass-lsp><exclude-any>{string}</exclude-any></bypass-lsp>  | Excludes any of the administrative groups.                                  |

| PATCH URIs   | Payload  | Description                               |
|--|--|---|
| <base_URI>/config/running/router/mpls/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/mpls/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/mpls/bypass-lsp/{bypass-lsp-name} | <bypass-lsp><primary-path>{string}</primary-path></bypass-lsp> | Updates a primary explicit path.          |
| <base_URI>/config/running/router/mpls/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/mpls/bypass-lsp/{bypass-lsp-name}/to               | <to>{inet:ipv4-address}</to>                  | Configures bypass LSP destination address.     |
| <base_URI>/config/running/router/mpls/bypass-lsp/{bypass-lsp-name}/from             | <from>{inet:ipv4-address}</from>              | Configures bypass LSP source address.          |
| <base_URI>/config/running/router/mpls/bypass-lsp/{bypass-lsp-name}/tie-breaking     | <tie-breaking>{tie-breaking}</tie-breaking>   | Updates the tie breaking mode.                 |
| <base_URI>/config/running/router/mpls/bypass-lsp/{bypass-lsp-name}/adaptive         | <adaptive>true</adaptive>                     | Configures bypass LSP adaptive configuration.  |
| <base_URI>/config/running/router/mpls/bypass-lsp/{bypass-lsp-name}/reoptimize-timer | <reoptimize-timer>{uint32}</reoptimize-timer> | Configures reoptimization timer.               |
| <base_URI>/config/running/router/mpls/bypass-lsp/{bypass-lsp-name}/commit           | <commit>true</commit>                         | Commit the changes to adaptive LSP.            |
| <base_URI>/config/running/router/mpls/bypass-lsp/{bypass-lsp-name}/record           | <record>{enable-disable}</record>             | Enable/disable recording path routes.          |
| <base_URI>/config/running/router/mpls/bypass-lsp/{bypass-lsp-name}/cos              | <cos>{uint32}</cos>                           | Configure class of service.                    |
| <base_URI>/config/running/router/mpls/bypass-lsp/{bypass-lsp-name}/hop-limit        | <hop-limit>{uint16}</hop-limit>               | Configures limit of hops the LSP can traverse. |

| PUT URIs   | PAYLOAD   | Descriptions  |
|--|---|---|
| <base_URI>/config/running/router/mpls/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/mpls/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/mpls/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/mpls/bypass-lsp/{bypass-lsp-name}/traffic-engineering/max-burst | <max-burst>{uint32}</max-burst>   | Sets Max-burst-rate in kbps. Range is 0-2147483647. |
| <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 |



| DELETE URIs  |
|--|
| <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

## router/mpls/dynamic-bypass

### 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.   |

| PATCH URIs   | Payload  | Description                 |
|--|--|-----------------------------|
| <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.      |
| <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

## router/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.                                   |



| GET URIs   | Description                                     |
|--|---|
| <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.                   |
| <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. |

| POST URIs                                 | Payload              | Description                     |
|---|----------------------|---------------------------------|
| <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. 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}    | <session><filter-fec-out>{string}</filter-fec-out></session> | Apply filtering on outbound FECs.                                |

| PATCH URIs  | Payload   | Description                                     |
|---|---|---|
| <base_URI>/config/running/router/mps/ldp/session/{ldp-session-ip}                     | <session><key>{string}</key></session>                              | 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.                     |

| PUT URIs   | Payload   | Description  |
|--|---|--|
| <base_URI>/config/running/router/mps/ldp/load-sharing          | <load-sharing>{uint32}</load-sharing>                   | Number of load-sharing paths.                                |
| <base_URI>/config/running/router/mps/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/mps/ldp/hello-interval-target | <hello-interval-target>{uint32}</hello-interval-target> | Target interval in seconds. Range is 1-32767. Default is 15. |

| PUT URIs   | Payload   | Description  |
|--|---|--|
| <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.                              |
| <base_URI>/config/running/router/mpls/ldp/session/{ldp-session-ip}/key                 | <key>{string}</key>   | 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.                                    |
| <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.                |

| PUT URIs   | Payload   | Description                                   |
|--|---|---|
| <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            |

| DELETE URIs  |
|--|
| <base_URI>/config/running/router/mpls/ldp/targeted-peer/{ldp-targeted-peer-ip}         |
| <base_URI>/config/running/router/mpls/ldp/rx-label-silence-timer                       |
| <base_URI>/config/running/router/mpls/ldp/graceful-restart                             |
| <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*

Define 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



## router/mpls/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.      |

| GET URIs  | Description  |
|---|--|
| <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 the 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.                   |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}/frr/revertive/global                           | Retrieves global revertive mode.                             |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}/standby          | Retrieves the secondary-path hot standby configuration.      |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}/cspf             | Retrieves cspf status (Enable/Disable).                      |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}/ipmtu            | Retrieves IP Packet Maximum Transmission Unit configuration. |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}/adaptive         | Retrieves LSP/secpath to be adaptive.                        |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}/reoptimize-timer | Retrieves Reoptimization timer.                              |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}/commit           | Retrieves the changes to adaptive LSP.                       |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}/record           | Retrieves recording path route status (Enable or disable).   |

| GET URIs   | Description  |
|--|--|
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}/cos                           | Retrieves class of service.                              |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}/hop-limit                     | Retrieves the hop limit which the LSP can traverse.      |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}/cspf-computation-mode         | Retrieves cspf-computation-mode.                         |
| <base_URI>/config/running/router/mpls/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/mpls/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/mpls/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/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}/priority/include-all          | Retrieves the administrative groups.                     |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}/soft-preemption               | Retrieves LSP soft preemption capability configuration.  |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}/enable  | Retrieves LSP configuration.                             |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}/frr   | Displays Fast Reroute FRR configuration for an LSP.      |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}/frr/bandwidth   | Displays FRR bandwidth.                                  |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}/frr/hop-limit   | Displays hop limit for FRR.                              |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}/frr/facility-backup   | Displays FRR facility backup protection status.          |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}/frr/priority  | Displays priority for fast reroute.                      |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}/frr/priority/lsp-frr-hold-priority                          | Displays FRR LSP hold priority value.                    |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}/autobw  | Displays auto-bandwidth information                      |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}/autobw/template   | Displays auto-bandwidth template information.            |

| GET URIs   | Description  |
|--|--|
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}/autobw/adjustment-interval                                | Displays the configured adjustment-timer value.  |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}/autobw/adjustment-threshold                               | Displays the configured adjustment-threshold value.  |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}/autobw/min-bandwidth                                      | Displays the configured minimum bandwidth.   |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}/autobw/max-bandwidth                                      | Displays the configured maximum bandwidth.   |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}/autobw/overflow-limit                                     | Displays the configured overflow-limit value.  |
| <base_URI>/config/running/router/mpls/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/mpls/lsp/{lsp-name}/autobw/mode   | Displays auto-bandwidth mode.  |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}/autobw/sample-recording                                   | Displays whether the template is set to record the sample history.                                 |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}/autobw                      | Displays auto-bandwidth information for secondary path.  |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}/autobw/template             | Displays auto-bandwidth template information for secondary path.                                   |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}/autobw/adjustment-interval  | Displays the configured adjustment-timer value for secondary path.                                 |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}/autobw/adjustment-threshold | Displays the configured adjustment-threshold value for secondary path.                             |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}/autobw/min-bandwidth        | The configured minimum bandwidth for secondary path.   |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}/autobw/max-bandwidth        | The configured maximum bandwidth for secondary path.   |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}/autobw/overflow-limit       | Displays the configured overflow-limit value for secondary path.                                   |

| GET URIs   | Description   |
|--|---|
| <base_URI>/config/running/router/mpls/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/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}/autobw/mode             | Displays auto-bandwidth mode for secondary path for secondary path.   |
| <base_URI>/config/running/router/mpls/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/mpls  | <lsp><lsp-name>(req_val)</lsp-name></lsp>                               | Creates LSP configuration.                                      |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}                               | <frr />   | Creates LSP name.   |
| <base_URI>/config/running/router/mpls/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/mpls/lsp/{lsp-name}                               | <autobw />  | Configures auto-bandwidth for an LSP.                           |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name} | <autobw />  | Configures auto-bandwidth for a secondary path.                 |

| PATCH URIs   | Payload  | Description                                  |
|--|--|--|
| <base_URI>/config/running/router/mpls/lsp/{lsp-name} | <lsp><to>{inet:ipv4-address}</to></lsp>                | Updates lsp name.                            |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name} | <lsp><cspf>{enable-disable}</cspf></lsp>               | Enables or disables cspf.                    |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name} | <lsp><ipmtu>{uint32}</ipmtu></lsp>                     | Updates IP Packet Maximum Transmission Unit. |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name} | <lsp><metric>{uint32}</metric></lsp>                   | Updates the LSP metric.                      |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name} | <lsp><revert-timer>{uint32}</revert-timer></lsp>       | Updates lsp revert timer.                    |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name} | <lsp><tie-breaking>(tie-breaking)</tie-breaking></lsp> | Updates the tie breaking mode for cspf       |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name} | <lsp><from>{inet:ipv4-address}</from></lsp>            | Updates LSP source address.                  |

| PATCH URIs   | Payload   | Description   |
|--|---|---|
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}                               | <lsp><primary-path>{string}</primary-path></lsp>                                  | Updates primary explicit path.  |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}                               | <lsp><adaptive /></lsp>   | Updates LSP/secpath adaptive configuration.                                 |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}                               | <lsp><reoptimize-timer>{uint32}</reoptimize-timer></lsp>                          | Updates reoptimization timer configuration.                                 |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}                               | <lsp><commit /></lsp>   | Commit the changes to adaptive LSP.   |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}                               | <lsp><record>{enable-disable}</record></lsp>                                      | Enable/disable recording path routes  |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}                               | <lsp><cos>{uint32}</cos></lsp>  | Updates class of service.   |
| <base_URI>/config/running/router/mpls/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/mpls/lsp/{lsp-name}                               | <lsp><cspf-computation-mode>{cspf-computation-mode}</cspf-computation-mode></lsp> | Updates cspf-computation-mode.  |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}/traffic-engineering/mean-rate | <mean-rate>{uint32}</mean-rate>   | Updates mean rate in kbps.  |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}/traffic-engineering/max-rate  | <max-rate>{uint32}</max-rate>   | Updates max rate in kbps.   |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}/traffic-engineering/max-burst | <max-burst>{uint32}</max-burst>   | Updates Max-burst in bytes.   |
| <base_URI>/config/running/router/mpls/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/mpls/lsp/{lsp-name}                               | <lsp><soft-preemption /></lsp>  | Updates 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>             | Updates the max bandwidth (in kbits/sec) for Detour/Backup LSP.             |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}/frr/hop-limit                 | <include-all><hop-limit>{uint8}</hop-limit></include-all>                         | Updates the administrative groups.  |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}/frr/link-protection           | <link-protection />   | Updates link protection for LSP.  |

| PATCH URIs   | Payload  | Description   |
|--|--|---|
| <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> | Updates the lsp-frr-hold-priority number.                                   |
| <base_URI>/config/running/router/mps/lsp/{lsp-name}/frr/revertive/holdtime             | <holdtime>{uint8}</holdtime>   | Updates revertive hold time for the LSP.                                    |
| <base_URI>/config/running/router/mps/lsp/{lsp-name}/frr/revertive/global               | <global>{enable-disable}</global>  | Updates global revertive mode.  |
| <base_URI>/config/running/router/mps/lsp/{lsp-name}/secondary-path/{secpath-name}      | <secondary-path><standby /></secondary-path>   | Updates secondary Path for the LSP.   |
| <base_URI>/config/running/router/mps/lsp/{lsp-name}/secondary-path/{secpath-name}      | <secondary-path><cspf>{enable-disable}</cspf></secondary-path>   | Updates secondary Path name for the LSP.                                    |
| <base_URI>/config/running/router/mps/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/mps/lsp/{lsp-name}/secondary-path/{secpath-name}      | <secondary-path><adaptive /></secondary-path>  | Updates LSP/secpath adaptive configuration.                                 |
| <base_URI>/config/running/router/mps/lsp/{lsp-name}/secondary-path/{secpath-name}      | <secondary-path><reoptimize-timer>{uint32}</reoptimize-timer></secondary-path>                           | Updates reoptimization timer.   |
| <base_URI>/config/running/router/mps/lsp/{lsp-name}/secondary-path/{secpath-name}      | <secondary-path><commit /></secondary-path>  | Commit the changes to adaptive LSP.   |
| rest/config/running/router/mps/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/mps/lsp/{lsp-name}/secondary-path/{secpath-name}      | <secondary-path><cos>{uint32}</cos></secondary-path>   | Updates class of service.   |
| <base_URI>/config/running/router/mps/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.                           |

| PATCH URIs  | Payload   | Description   |
|---|---|---|
| <base_URI>/config/running/router/mppls/lsp/{lsp-name}/secondary-path/{secpath-name}                               | <secondary-path><cspf-computation-mode>(cspf-computation-mode)</cspf-computation-mode></secondary-path> | Updates cspf-computation-mode.                      |
| <base_URI>/config/running/router/mppls/lsp/{lsp-name}/secondary-path/{secpath-name}/traffic-engineering/mean-rate | <mean-rate>{uint32}</mean-rate>   | Updates mean rate.                                  |
| <base_URI>/config/running/router/mppls/lsp/{lsp-name}/secondary-path/{secpath-name}/traffic-engineering/max-rate  | <max-rate>{uint32}</max-rate>   | Updates max rate.                                   |
| <base_URI>/config/running/router/mppls/lsp/{lsp-name}/secondary-path/{secpath-name}/traffic-engineering/max-burst | <max-burst>{uint32}</max-burst>   | Updates max-burst.                                  |
| <base_URI>/config/running/router/mppls/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/mppls/lsp/{lsp-name}/secondary-path/{secpath-name}                               | <secondary-path><soft-preemption /></secondary-path>  | Updates LSP soft preemption capability.             |
| <base_URI>/config/running/router/mppls/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/mppls/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/mppls/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/mppls/lsp/{lsp-name}/frr/bandwidth   | <bandwidth><inherit>true</inherit></bandwidth>  | Add bandwidth to an FRR path.                       |
| <base_URI>/config/running/router/mppls/lsp/{lsp-name}/frr   | <frr><hop-limit>{uint8}</hop-limit></frr>   | Configures the number of hops the LSP can traverse. |



| PATCH URIs   | Payload   | Description  |
|--|---|--|
| <base_URI>/config/running/router/mppls/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 |
| <base_URI>/config/running/router/mppls/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/mppls/lsp/{lsp-name}/to               | <to>{inet:ipv4-address}</to>                  | Configures LSP destination address.                           |
| <base_URI>/config/running/router/mppls/lsp/{lsp-name}/cspf             | <cspf>{enable-disable}</cspf>                 | Configures cspf.  |
| <base_URI>/config/running/router/mppls/lsp/{lsp-name}/ipmtu            | <ipmtu>{uint32}</ipmtu>                       | Configures IP Packet Maximum Transmission Unit configuration. |
| <base_URI>/config/running/router/mppls/lsp/{lsp-name}/metric           | <metric>{uint32}</metric>                     | Configures the LSP metric.                                    |
| <base_URI>/config/running/router/mppls/lsp/{lsp-name}/revert-timer     | <revert-timer>{uint32}</revert-timer>         | Configures lsp revert timer configuration.                    |
| <base_URI>/config/running/router/mppls/lsp/{lsp-name}/tie-breaking     | <tie-breaking>(tie-breaking)</tie-breaking>   | Configures the tie breaking mode for cspf.                    |
| <base_URI>/config/running/router/mppls/lsp/{lsp-name}/from             | <from>{inet:ipv4-address}</from>              | Configures LSP source address.                                |
| <base_URI>/config/running/router/mppls/lsp/{lsp-name}/primary-path     | <primary-path>{string}</primary-path>         | Configures primary explicit path.                             |
| <base_URI>/config/running/router/mppls/lsp/{lsp-name}/adaptive         | <adaptive />                                  | Configures LSP/secpath adaptive configuration.                |
| <base_URI>/config/running/router/mppls/lsp/{lsp-name}/reoptimize-timer | <reoptimize-timer>{uint32}</reoptimize-timer> | Configures reoptimization timer configuration.                |
| <base_URI>/config/running/router/mppls/lsp/{lsp-name}/commit           | <commit />                                    | Commit the changes to adaptive LSP.                           |
| <base_URI>/config/running/router/mppls/lsp/{lsp-name}/record           | <record>{enable-disable}</record>             | Enable/disable recording path routes.                         |

| PUT URIs  | Payload  | Description                                |
|---|--|--|
| <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.                  |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}/frr/hop-limit                      | <include-all><hop-limit>{uint8}</hop-limit></include-all>  | Set hop limit.                             |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}/frr/link-protection                | <link-protection />  | Configures link protection for LSP.        |
| <base_URI>/config/running/router/mpls/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/mpls/lsp/{lsp-name}/frr/revertive/holdtime             | <holdtime>{uint8}</holdtime>   | Configure revertive hold time for the LSP. |

| PUT URIs  | Payload  | Description  |
|---|--|--|
| <base_URI>/config/running/router/mppls/lsp/{lsp-name}/frr/revertive/global  | <global>{enable-disable}</global>                                      | Configures global revertive mode.                    |
| <base_URI>/config/running/router/mppls/lsp/{lsp-name}/secondary-path/{secpath-name}/standby                       | <standby />  | Make secondary-path hot standby.                     |
| <base_URI>/config/running/router/mppls/lsp/{lsp-name}/secondary-path/{secpath-name}/cspf                          | <cspf>{enable-disable}</cspf>  | Enable/Disable cspf.                                 |
| <base_URI>/config/running/router/mppls/lsp/{lsp-name}/secondary-path/{secpath-name}/ipmtu                         | <ipmtu>{uint32}</ipmtu>  | Enables IP Packet Maximum Transmission Unit.         |
| <base_URI>/config/running/router/mppls/lsp/{lsp-name}/secondary-path/{secpath-name}/adaptive                      | <adaptive />   | Configure LSP/secpath to be adaptive.                |
| <base_URI>/config/running/router/mppls/lsp/{lsp-name}/secondary-path/{secpath-name}/reoptimize-timer              | <reoptimize-timer>{uint32}</reoptimize-timer>                          | Configure Reoptimization timer.                      |
| <base_URI>/config/running/router/mppls/lsp/{lsp-name}/secondary-path/{secpath-name}/commit                        | <commit />   | Commit the changes to adaptive LSP.                  |
| <base_URI>/config/running/router/mppls/lsp/{lsp-name}/secondary-path/{secpath-name}/record                        | <record>{enable-disable}</record>                                      | Enable or disable recording path routes.             |
| <base_URI>/config/running/router/mppls/lsp/{lsp-name}/secondary-path/{secpath-name}/cos                           | <cos>{uint32}</cos>  | Configure class of service.                          |
| <base_URI>/config/running/router/mppls/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/mppls/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/mppls/lsp/{lsp-name}/secondary-path/{secpath-name}/traffic-engineering/mean-rate | <mean-rate>{uint32}</mean-rate>  | Mean rate in kbps. Range is 0-2147483647.            |

| PUT URIs   | Payload  | Description  |
|--|--|--|
| <base_URI>/config/running/router/mpls/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/mpls/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/mpls/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.   |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}/soft-preemption               | <soft-preemption />  | Configures LSP soft preemption capability.   |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}/enable  | <lsp-select-path-mode><primary />><enable /></lsp-select-path-mode>                      | Configures LSP.  |
| <base_URI>/config/running/router/mpls/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/mpls/lsp/{lsp-name}/frr/facility-backup   | <facility-backup>true</facility-backup>  | Enables facility backup  |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}/autobw  | <autobw />   | Configures autobandwidth   |
| <base_URI>/config/running/router/mpls/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/mpls/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/mpls/lsp/{lsp-name}/autobw/adjustment-threshold/use-threshold-table             | <use-threshold-table>true</use-threshold-table>  | Configures an LSP to use a threshold table.  |

| PUT URIs   | Payload   | Description  |
|--|---|--|
| <base_URI>/config/running/<br>router/mppls/lsp/{lsp-name}/<br>autobw/max-bandwidth   | <max-bandwidth>{uint32}</<br>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/<br>router/mppls/lsp/{lsp-name}/<br>autobw/min-bandwidth   | <min-bandwidth>{uint32}</<br>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/<br>router/mppls/lsp/{lsp-name}/<br>autobw/mode  | <mode>{autobw-mode}</<br>mode>                                    | Sets autobandwidth to either monitor-only or monitor-and-signal.   |
| <base_URI>/config/running/<br>router/mppls/lsp/{lsp-name}/<br>autobw/overflow-limit  | <overflow-limit>{uint32}</<br>overflow-limit>                     | Setsthe 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/<br>router/mppls/lsp/{lsp-name}/<br>autobw/sample-recording  | <sample-<br>recording>{enable-<br>disable}</sample-<br>recording> | Disables or enables sample recording.  |
| <base_URI>/config/running/<br>router/mppls/lsp/{lsp-name}/<br>autobw/template  | <template>{leafref}</<br>template>                                | Configures a primary LSP path to use an auto-bandwidth template.   |
| <base_URI>/config/running/<br>router/mppls/lsp/{lsp-name}/<br>autobw/underflow-limit   | <underflow-limit>{uint32}</<br>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/<br>router/mppls/lsp/{lsp-name}/<br>secondary-path/{secpath-<br>name}/autobw                         | <autobw />  | Configures a secondary LSP path to use an auto-bandwidth template.   |
| <base_URI>/config/running/<br>router/mppls/lsp/{lsp-name}/<br>secondary-path/{secpath-<br>name}/autobw/adjustment-<br>interval | <adjustment-<br>interval>{uint32}</<br>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.  |

| PUT URIs  | Payload                                     | Description   |
|---|---|---|
| <base_URI>/config/running/router/mpls/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/mpls/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/mpls/lsp/{lsp-name}                                    |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}/to                                 |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}/cspf                               |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}/ipmtu                              |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}/metric                             |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}/revert-timer                       |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}/tie-breaking                       |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}/from                               |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}/primary-path                       |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}/adaptive                           |
| <base_URI>/config/running/router/mpls/lsp/{lsp-name}/reoptimize-timer                   |
| <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               |

| DELETE URIs  |
|--|
| <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                   |



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

## Request Body

None

## Response Body

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

## router/mpls/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.                                       |

| GET URIs   | Descriptions   |
|--|--|
| <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. |
| <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.                               |

| GET URIs   | Descriptions  |
|--|---|
| <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 dyanmic 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.             |

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

| POST URIs   | Payload   | Description                                 |
|---|---|---|
| <base_URI>/config/running/router/mpls   | <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/mpls/mpls-interface/{interface-type},{interface-name}                        | <ldp-params />  | Configure LDP parameters.                   |
| <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                   | <hello />   | Enable RSVP Hello on the 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 | <bundle-message />  | Refresh Reduction bundle messaging feature. |

| POST URIs   | Payload                | Description  |
|---|------------------------|--|
| <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}      | <dynamic-bypass />     | Configures dynamic bypass for this interface.        |

| PATCH URIs   | Payload  | Description  |
|--|--|--|
| <base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}                           | <mpls-interface><ldp-enable /></mpls-interface>                  | 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.                    |
| <base_URI>/config/running/router/mpls/mpls-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/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/authentication/key   | <percentage><key>(string)</key></percentage>                     | 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.                         |

| PATCH URIs   | Payload   | Description  |
|--|---|--|
| <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.  |



| PATCH URIs  | Payload  | Description   |
|---|--|---|
| <base_URI>/config/running/router/mps/mps-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/mps/mps-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/mps/mps-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/mps/mps-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/mps/mps-interface/{interface-type},{interface-name}/dynamic-bypass | <dynamic-bypass><from>{inet:ip-address}</from></dynamic-bypass>                      | Configures LSP source address for an interface.   |
| <base_URI>/config/running/router/mps/mps-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/mps/mps-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/mps/mps-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/mps/mps-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/mps/mps-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/mps/mps-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.   |

| PATCH URIs  | Payload   | Description  |
|---|---|--|
| <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/ | <ldp-enable /> | Enable LDP on Interface. |

| PUT URIs   | Payload  | Description  |
|--|--|--|
| {interface-type},{interface-name}/ldp-enable   |  |  |
| <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.                    |
| <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.            |

| PUT URIs  | Payload   | Description   |
|---|---|---|
| <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.       |
| <base_URI>/config/running/router/mpls/mpls-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/mpls/mpls-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.  |

| PUT URIs   | Payload                                       | Description   |
|--|---|---|
| <base_URI>/config/running/router/mpls/mpls-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/mpls/mpls-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/mpls/mpls-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/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass/hop-limit    | <hop-limit>{uint8}</hop-limit>                | Configures interface level hop-limit.   |
| <base_URI>/config/running/router/mpls/mpls-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/mpls/mpls-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/mpls/mpls-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/mpls/mpls-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/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass/name-prefix  | <name-prefix>{string}</name-prefix>           | Sets a name prefix for the dynamic bypass LSPs.                                   |

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

| DELETE URIs  |
|--|
| <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                                      |

| DELETE URIs   |
|---|
| <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          |
| <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.

*from*

Interface level from address for dynamic bypasses.

*adaptive*

Interface level adaptiveness of dynamic bypasses.

*record-route*

Interface level record route for dynamic bypasses.

*hop-limit*

Interface level hop limit value for dynamic bypasses.

*exclude-any*

Exclude any of the administrative groups

*include-any*

Include any of the administrative groups

*include-all*

Include all of the administrative groups.

*primary-path*

The primary explicit path.

*name-prefix*

Interface level dynamic bypass name prefix.

*tie-breaking*

Interface level dynamic bypass cspf tie breaking mechanism.

*cspf-computation-mode*

Interface level dynamic bypass cspf cspf computation mode.

*nterface-dynamic-bypass-holding-priority*

Holding priority for the dynamic bypass LSPs. Range 0-7.

*max-burst*

Traffic maximum burst rate. Range 0-2147483647 Bytes

*max-rate*

Traffic maximum rate. Range 0-2147483647 kbps

*mean-rate*

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

## router/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.                |

| GET URI   | Description   |
|---|---|
| <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.    |
| <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. |

| PATCH URIs  | Payload  | Description  |
|---|--|--|
| <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.                 |
| <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. |

| PATCH URIs  | Payload   | Description   |
|---|---|---|
| <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.                   |

| PUT URIs  | Payload   | Description   |
|---|---|---|
| <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.          |
| <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.             |



| PUT URIs   | Payload   | Description   |
|--|---|---|
| <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                           |
| <base_URI>/config/running/router/mpls/policy/transit-session-accounting                          |

| DELETE URIs   |
|---|
| <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**.

*retryp-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

## router/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.   |

| GET URIs  | Description   |
|---|---|
| <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/mpls/rsvp/refresh-interval                                   | <refresh-interval>{uint32}</refresh-interval>             | RSVP Refresh interval.   |
| <BASE_URI>/config/running/router/mpls/rsvp/refresh-multiple                                   | <refresh-multiple>{uint32}</refresh-multiple>             | RSVP Refresh multiple.   |
| <BASE_URI>/config/running/router/mpls/rsvp/refresh-reduction/summary-refresh                  | <summary-refresh />                                       | Refresh Reduction Summary Refresh feature.   |
| <BASE_URI>/config/running/router/mpls/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/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/rsvp/reliable-messaging/rapid-retrans-interval          | <rapid-retrans-interval>{uint32}</rapid-retrans-interval> | Interval for an unacknowledged message to be resent.   |

| PATCH URIs   | Payload   | Description   |
|--|---|---|
| <BASE_URI>/config/running/router/mppls/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/mppls/rsvp/hello/interval                       | <interval>{uint32}</interval>                   | Interval between two RSVP Hello requests.   |
| <BASE_URI>/config/running/router/mppls/rsvp/hello/tolerance                      | <tolerance>{uint32}</tolerance>                 | Number of unacknowledged RSVP Hello requests before timeout.                              |
| <BASE_URI>/config/running/router/mppls/rsvp/hello-acknowledgements               | <hello-acknowledgements />                      | Acknowledge RSVP Hellos on interfaces supporting RSVP Hello and not having RSVP sessions. |
| <BASE_URI>/config/running/router/mppls/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/mppls/rsvp/refresh-interval                          | <refresh-interval>{uint32}</refresh-interval>             | Configure RSVP Refresh interval.   |
| <BASE_URI>/config/running/router/mppls/rsvp/refresh-multiple                          | <refresh-multiple>{uint32}</refresh-multiple>             | Configure RSVP Refresh multiple.   |
| <BASE_URI>/config/running/router/mppls/rsvp/refresh-reduction/summary-refresh         | <summary-refresh />                                       | Refresh Reduction Summary Refresh feature.   |
| <BASE_URI>/config/running/router/mppls/rsvp/refresh-reduction/bundle-send-delay       | <bundle-send-delay>{uint32}</bundle-send-delay>           | Configure bundle send delay value.   |
| <BASE_URI>/config/running/router/mppls/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/mppls/rsvp/reliable-messaging/rapid-retrans-interval | <rapid-retrans-interval>{uint32}</rapid-retrans-interval> | Interval for an unacknowledged message to be resent.   |

| PUT URIs  | Payload   | Description   |
|---|---|---|
| <BASE_URI>/config/running/router/mpls/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/rsvp/hello/interval                       | <interval>{uint32}</interval>                   | Interval between two RSVP Hello requests.   |
| <BASE_URI>/config/running/router/mpls/rsvp/hello/tolerance                      | <tolerance>{uint32}</tolerance>                 | Number of unacknowledged RSVP Hello requests before timeout.                              |
| <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

## router/ospf

### 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.   |

| GET URIs  | Description   |
|---|---|
| <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.  |
| <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                            |
|-----------|---|--|
|           | <database-overflow-interval>(unit32)</database-overflow-interval> | Configures database overflow interval. |

| POST URIs   | Payload  | Description                           |
|---|--|---------------------------------------|
| <base_URI>/config/running/router/ospf/(vrf-name)/database-overflow-interval |  |                                       |
| <base_URI>/config/running/router/ospf/(vrf-name)/default-passive-interface  | <default-passive-interface>(enumeration)</default-passive-interface> | Configures default passive interface. |
| <base_URI>/config/running/router/ospf/(vrf-name)/default-metric             | <default-metric>(unit32)</default-metric>                            | Configures default metric value.      |
| <base_URI>/config/running/router/ospf/(vrf-name)/neighbor                   | <neighbor><neighbor-addr>(ip-address)</neighbor-addr></neighbor>     | Configures neighbor.                  |

| PATCH URIs   | Payload  | Description   |
|--|--|---|
| <base_URI>/config/running/router/ospf/(vrf-name)/default-information-originate | <default-information-originate><metric>(unit32)</metric><metric-type>(string)</metric-type><route-map>(string)</route-map></default-information-originate> | Originates default-information.   |
| <base_URI>/config/running/router/ospf/(vrf-name)/database-overflow-interval    | <database-overflow-interval>(unit32)</database-overflow-interval>  | Configures the time interval at which the device checks to see if the overflow condition has been eliminated. |
| <base_URI>/config/running/router/ospf/default-vrf/default-passive-interface    | <default-passive-interface>(enumeration)</default-passive-interface>   | Marks all OSPF interfaces passive by default.   |
| <base_URI>/config/running/router/ospf/(vrf-name)/external-lsdb-limit           | <external-lsdb-limit>(unit32)</external-lsdb-limit>  | Configures the maximum size of the external LSDB.   |
| <base_URI>/config/running/router/ospf/default-vrf/neighbor/                    | <neighbor><neighbor-addr>(ip-address)</neighbor-addr></neighbor>   | Configures the IPv4 address of the neighbor.  |
| <base_URI>/config/running/router/ospf/default-vrf/redistribute                 | <redistribute><connected></connected></redistribute>   | Redistributes directly connected routes.  |
| <base_URI>/config/running/router/ospf/default-vrf/redistribute                 | <redistribute><static></static></redistribute>   | Enables Static routes.  |
| <base_URI>/config/running/router/ospf/(vrf-name)/redistribute                  | <redistribute><bgp></bgp></redistribute>   | Enables BGP routes.   |

| PATCH URIs  | Payload  | Description   |
|---|--|---|
| <base_URI>/config/running/router/ospf/(vrf-name)/redistribute     | <redistribute><isis><level-1></level-1></isis></redistribute>  | Enables ISIS routes   |
| <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- | Originates default-information. |

| PUT URIs  | Payload  | Description   |
|---|--|---|
|   | map></default-information-originate>                                 |   |
| <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.  |
| <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.  |

| PUT URIs   | Payload  | Description   |
|--|--|---|
| <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>
    </area>
  </ospf>
</rest>
```

```

    </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>
    </router-lsa>
  </max-metric>

```

```

    <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](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

## router/pim

### 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-mcache         | 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.  |

| GET URIs   | Description   |
|--|---|
| <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>
```

## rmon

## 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.             |

| PATCH URIs   | Payload  | Description                         |
|--|--|-------------------------------------|
| <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>(uint32)</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}             |

| DELETE URIs  |
|--|
| <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

## rule/{rule-name}/action

---

### 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

## Response Body

None

## rule/{rule-name}/command/show running-config

---

### 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

## sflow

## 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}</ | Configures sFlow source interface. |

| PATCH URIs                      | Payload  | Description                        |
|---------------------------------|--|------------------------------------|
|                                 | interface-name></source-interface>                           |                                    |
| <base_URI>/config/running/sflow | <sflow><polling-interval>{uint32}</polling-interval></sflow> | Configures sFlow polling interval. |
| <base_URI>/config/running/sflow | <sflow><sample-rate>{uint32}</sample-rate></sflow>           | Configures sFlow sampling rate.    |

| PUT URIs   | Payload  | Description                        |
|--|--|------------------------------------|
| <base_URI>/config/running/sflow                  | <sflow><enable>true</enable></sflow>   | Enables sFlow.                     |
| <base_URI>/config/running/sflow/source-interface | <source-interface><interface-type>{source-interface-type}</interface-type><interface-name>{loopback:intf-loopback-port-type}</interface-name></source-interface> | Configures sFlow source interface. |
| <base_URI>/config/running/sflow/polling-interval | <sflow><polling-interval>{uint32}</polling-interval></sflow>   | Configures sFlow polling interval. |
| <base_URI>/config/running/sflow/sample-rate      | <sflow><sample-rate>{uint32}</sample-rate></sflow>   | Configures sFlow sampling rate.    |

| DELETE URIs  |
|--|
| <base_URI>/config/running/sflow  |
| <base_URI>/config/running/sflow/source-interface   |
| <base_URI>/config/running/sflow/collector/{collector-ip-address}/{collector-port-number}/{use-vrf} |
| <base_URI>/config/running/sflow/polling-interval   |
| <base_URI>/config/running/sflow/sample-rate  |

## Parameters

*collector-ip-address*

Specifies the IP address of the sFlow collector.

*collector-port-number*

Specifies the port number used by the sFlow collector. The value can range from 1 through 65535.

*use-vrf*

VRF to use for sending data to the collector (default = mgmt-vrf).

*source-ip*

Specifies the source IP address to use.

*polling-interval*

Specifies polling interval value. The value can range from 1 through 65535. The default value is 20.

*sample-rate*

Specifies sampling rate value. The value can range from 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

## system-monitor

### 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.  |

| PUT URIs  | Payload   | Description  |
|---|---|--|
| <base_URI>/config/running/system-monitor/power/threshold/marginal-threshold         | <marginal-threshold>(unit32)</marginal-threshold> | Configures minimum number contributing to MARGINAL state of the Power component.       |
| <base_URI>/config/running/system-monitor/power/threshold/down-threshold             | <down-threshold>(unit32)</down-threshold>         | Configures minimum number contributing to DOWN state of the Power component.           |
| <base_URI>/config/running/system-monitor/power/alert/state                          | <state>removed</state>                            | Configures alerts for Power state.   |
| <base_URI>/config/running/system-monitor/power/alert/action                         | <action>raslog</action>                           | Configure action to be taken.  |
| <base_URI>/config/running/system-monitor/temp/threshold/marginal-threshold          | <marginal-threshold>(unit32)</marginal-threshold> | Configures minimum number contributing to MARGINAL state of the Temperature component. |
| <base_URI>/config/running/system-monitor/temp/threshold/down-threshold              | <down-threshold>(unit32)</down-threshold>         | Configures minimum number contributing to DOWN state of the Temperature component.     |
| <base_URI>/config/running/system-monitor/cid-card/threshold/marginal-threshold      | <marginal-threshold>(unit32)</marginal-threshold> | Configures minimum number contributing to MARGINAL state of the CID crash.             |
| <base_URI>/config/running/system-monitor/cid-card/threshold/down-threshold          | <down-threshold>(unit32)</down-threshold>         | Configures minimum number contributing to DOWN state of the CID crash.                 |
| <base_URI>/config/running/system-monitor/cid-card/alert/state                       | <state>removed</state>                            | Configures alerts for CID crash state.   |
| <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.                        |

| PUT URIs   | Payload   | Description   |
|--|---|---|
| <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

## system-monitor/tm

### 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>{uint32} | Sets threshold for Traffic Manager discard packet monitoring. |

| PATCH URIs   | Payload  | Description  |
|--|--|--|
|  | }</threshold></discard-packet>   |  |
| <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

## system-monitor-mail

### 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>
```



## system-monitor-mail/fru

### 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>
```

## system-monitor-mail/interface

### 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>
```

## system-monitor-mail/relay

---

### 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

## system-monitor-mail/security

### 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



## system-monitor-mail/sfp

### 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>
```

## tacacs-server

---

### 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.

#### *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></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

## topology-group

### 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             |
|----------|-------------------------------------|-------------------------|
|          | <master-vlan>(unit32)</master-vlan> | Configures master VLAN. |

| PUT URIs   | Payload  | Description          |
|--|--|----------------------|
| <base_URI>/config/running/topology-group/{group-id}/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)    |
| <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



## username

---

### 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

## 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.  |

| GET URIs  | Description   |
|---|---|
| <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.             |

| PUT URIs   | Payload   | Description  |
|--|---|--|
| <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. |

| PATCH URIs   | Payload   | Description  |
|--|---|--|
| <base_URI>/config/running/vlan/{vlan-num}/ip/igmp/snooping | <snooping><enable>{enumeration}</enable></snooping>         | Enables IGMP snooping on a VLAN.   |
| <base_URI>/config/running/vlan/{vlan-num}/ip/igmp/snooping | <snooping><fast-leave>{enumeration}</fast-leave></snooping> | Enables IGMP snooping fast-leave processing for a VLAN. This allows the removal of an interface from the forwarding table without sending out group-specific queries to the interface. |

| 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/{igmp13-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



## vlan/dot1q

### 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

## vlan/{vlan-name}/loop-detection

### 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

## vlan/{vlan-name}/mac

---

### 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

## vrf

## 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}/             | <max-route>(unit32)</max-route>     | Configures unicast IPv4 address family max-route. |

| PUT URIs   | Payload                             | Description  |
|--|-------------------------------------|--|
| address-family/ipv4/unicast/<br>max-route  |                                     |  |
| <base_URI>/config/<br>running/vrf/{vrf-name}/<br>address-family/ipv6/unicast/<br>max-route | <max-route>(unit32)</max-<br>route> | Configures unicast IPv6<br>address family max route. |
| <base_URI>/config/<br>running/vrf/{vrf-name}   | <rd>(ASN:NN)</rd>                   | Configures the route<br>distinguisher.               |

| DELETE URIs  |
|--|
| <base_URI>/config/running/vrf/{vrf-name}/ip/router-id                          |
| <base_URI>/config/running/vrf/{vrf-name}/address-family/ipv4/unicast/max-route |
| <base_URI>/config/running/vrf/{vrf-name}/address-family/ipv6/unicast/max-route |
| <base_URI>/config/running/vrf/{vrf-name}                                       |

## Parameters

*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



# Operational-state APIs

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## adj-neighbor-entries-state

### 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.                     |

| URI  | Description   |
|--|---|
| <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.                              |
| <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.

Use of the Resource-Depth request header is recommended.

## 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>  
</adj-neighbor-entries-state>
```

## app-telemetry-acl-list-state

### Resource URIs

| URI   | Description                       |
|---|-----------------------------------|
| <base_URI>/operational-state/app-telemetry-acl-list-state | Displays access list information. |

### Usage Guidelines

Only GET operation is supported.

Use of the Resource-Depth header in the request is recommended.

### Examples

The following example shows the complete cURL command and server response for the app-telemetry-acl-list-state GET operation.

### URI

http://host:80/rest/operational-state/app-telemetry-acl-list-state

### Request Body

```
curl -H "Accept: application/vnd.operational-state.resource+xml" -H "Resource-Depth: 6"
-u "lab:Tester**" http://10.20.229.40:80/rest/operational-state/app-telemetry-acl-list-
state
```

### Response Body

```
<data xmlns="http://brocade.com/ns/rest" xmlns:y="http://brocade.com/ns/rest" y:self="/
rest/operational-state">
<app-telemetry-acl-list-state xmlns="urn:brocade.com:mgmt:brocade-ssm-operational"
y:self="/rest/operational-state/
app-telemetry-acl-list-state">
</app-telemetry-acl-list-state>
</data>
```

### History

| Release version | History                       |
|-----------------|-------------------------------|
| 18r2.00         | This API call was introduced. |



## app-telemetry-counters-state

### Resource URIs

| URI   | Description                     |
|---|---------------------------------|
| <base_URI>/operational-state/app-telemetry-counters-state | Displays counters per protocol. |

### Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

### Examples

The following example shows the complete cURL command and server response for the app-telemetry-counters-state GET operation.

### URI

http://host:80/rest/operational-state/app-telemetry-counters-state

### Request Body

```
curl -H "Accept: application/vnd.operational-state.resource+xml" -H "Resource-Depth: 6"
-u "lab:Tester**" http://10.20.229.40:80/rest/operational-state/app-telemetry-counters-
state
```

### Response Body

```
<data xmlns="http://brocade.com/ns/rest" xmlns:y="http://brocade.com/ns/rest" y:self="/
rest/operational-state">
<app-telemetry-counters-state xmlns="urn:brocade.com:mgmt:brocade-ssm-operational"
y:self="/rest/operational-state/
app-telemetry-counters-state">
</app-telemetry-counters-state>
</data>
```

### History

| Release version | History                       |
|-----------------|-------------------------------|
| 18r.2.00        | This API call was introduced. |

## bd-mac-br-state

### Resource URIs

| URI  | Description                                   |
|--|---|
| <base_URI>/operational-state/bd-mac-br-state | Displays brief mac bridge-domain information. |

### Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

### Examples

The following example shows the complete cURL command and server response for the bd-mac-br-state GET operation.

### URI

http://host:80/rest/operational-state/bd-mac-br-state

### Request Body

```
curl -H "Accept: application/vnd.operational-state.resource+xml" -H "Resource-Depth: 6"
-u "lab:Tester**" http://10.20.229.40:80/rest/operational-state/bd-mac-br-state
```

### Response Body

```
<data xmlns="http://brocade.com/ns/rest" xmlns:y="http://brocade.com/ns/rest" y:self="/
rest/operational-state">
<bd-mac-br-state xmlns="urn:brocade.com:mgmt:brocade-l2sys-operational" y:self="/rest/
operational-state/bd-mac-br-state">
  <static-mac-count>0</static-mac-count>
  <dyn-mac-count>1800</dyn-mac-count>
  <evpn-mac-count>900</evpn-mac-count>
</bd-mac-br-state>
</data>
```

### History

| Release version | History                       |
|-----------------|-------------------------------|
| 18r.2.00        | This API call was introduced. |

## bd-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. Use of the Resource-Depth request header is recommended.

### 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>&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-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>
  <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>

```

## 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. Use of the Resource-Depth request header is recommended.

### 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>
```

## 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. Use of the Resource-Depth request header is recommended.

### 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>
```

## bridge-domain-state/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. Use of the Resource-Depth request header is recommended.

### 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>
```

## cfm-state

### 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.                            |

| URI   | Description                         |
|---|-------------------------------------|
| <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 RMEP 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.       |
| <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>/rest/operational-state/cfm-state/cfm-detail/domain/{md-name}/ma/{ma-name}/mep/{mep-id}/inner-vlan-id                 | Retrieves inner VLAN ID.            |

| URI   | Description                      |
|---|----------------------------------|
| <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. Use of the Resource-Depth request header is recommended.

## 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>
```

```
</cfm-connectivity>  
</cfm-state>
```

## cluster-ext-state

---

### Resource URIs

| URI  | Description                    |
|--|--------------------------------|
| <base_URI>/operational-state/cluster-ext-state | Displays cluster client state. |

### Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

### Examples

The following example shows the complete cURL command and server response for the `cluster-ext-state` GET operation.

### URI

`http://host:80/rest/operational-state/cluster-ext-state`

### Request Body

```
curl -H "Accept: application/vnd.operational-state.resource+xml" -H "Resource-Depth: 6"
-u "lab:Tester**" http://10.20.229.40:80/rest/operational-state/cluster-ext-state
```

### Response Body

```
<data xmlns="http://brocade.com/ns/rest" xmlns:y="http://brocade.com/ns/rest" y:self="/
rest/operational-state">
<cluster-ext-state xmlns="urn:brocade.com:mgmt:brocade-mct-operational" y:self="/rest/
operational-state/cluster-ext-state">
  <num-clients>3</num-clients>
  <keep-alive y:self="/rest/operational-state/cluster-ext-state/keep-alive">
    <ip-addr>172.19.1.1</ip-addr>
    <state>true</state>
    <reason>&quot; &quot;</reason>
    <interface>&quot;Ethernet 0/1&quot;</interface>
    <source-ip-addr>172.19.1.0</source-ip-addr>
    <vrf>keepalive-vrf</vrf>
    <interval>0</interval>
    <primary>>false</primary>
  </keep-alive>
  <clients y:self="/rest/operational-state/cluster-ext-state/clients/1001">
    <client-id>1001</client-id>
    <local-state>5</local-state>
    <remote-state>5</remote-state>
    <exceptions>&quot; &quot;</exceptions>
  </clients>
  <clients y:self="/rest/operational-state/cluster-ext-state/clients/1002">
    <client-id>1002</client-id>
```

```
<local-state>5</local-state>
<remote-state>5</remote-state>
<exceptions>&quot; &quot;</exceptions>
</clients>
<clients y:self="/rest/operational-state/cluster-ext-state/clients/34816">
  <client-id>34816</client-id>
  <local-state>5</local-state>
  <remote-state>5</remote-state>
  <exceptions>&quot; &quot;</exceptions>
</clients>
</cluster-ext-state>
</data>
```

## History

| Release version | History                       |
|-----------------|-------------------------------|
| 18r.2.00        | This API call was introduced. |



## cluster-member-bd-state

### Resource URIs

| URI  | Description                                |
|--|--|
| <base_URI>/operational-state/cluster-member-bd-state | Displays cluster bridge state information. |

### Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

### Examples

The following example shows the complete cURL command and server response for the `cluster-member-bd-state` GET operation.

### URI

`http://host:80/rest/operational-state/cluster-member-bd-state`

### Request Body

```
curl -H "Accept: application/vnd.operational-state.resource+xml" -H "Resource-Depth: 6"
-u "lab:Tester**" http://10.20.229.40:80/rest/operational-state/cluster-member-bd-state
```

### Response Body

```
<data xmlns="http://brocade.com/ns/rest" xmlns:y="http://brocade.com/ns/rest" y:self="/
rest/operational-state">
<cluster-member-bd-state xmlns="urn:brocade.com:mgmt:brocade-mct-operational" y:self="/
rest/operational-state/
cluster-member-bd-state">
  <num-bds>1100</num-bds>
  <bd-vxlan-info y:self="/rest/operational-state/cluster-member-bd-state/bd-vxlan-info/
700">
    <bd-id>700</bd-id>
    <vni>4796</vni>
    <fw-state>true</fw-state>
  </bd-vxlan-info>
  <bd-vxlan-info y:self="/rest/operational-state/cluster-member-bd-state/bd-vxlan-info/
701">
    <bd-id>701</bd-id>
    <vni>4797</vni>
    <fw-state>true</fw-state>
  </bd-vxlan-info>
  <bd-vxlan-info y:self="/rest/operational-state/cluster-member-bd-state/bd-vxlan-info/
702">
    <bd-id>702</bd-id>
    <vni>4798</vni>
    <fw-state>true</fw-state>
```

```
</bd-vxlan-info>
<bd-vxlan-info y:self="/rest/operational-state/cluster-member-bd-state/bd-vxlan-info/
703">
  <bd-id>703</bd-id>
  <vni>4799</vni>
  <fw-state>true</fw-state>
</bd-vxlan-info>
<bd-vxlan-info y:self="/rest/operational-state/cluster-member-bd-state/bd-vxlan-info/
704">
  <bd-id>704</bd-id>
  <vni>4800</vni>
  <fw-state>true</fw-state>
</bd-vxlan-info>
<bd-vxlan-info y:self="/rest/operational-state/cluster-member-bd-state/bd-vxlan-info/
705">
  <bd-id>705</bd-id>
  <vni>4801</vni>
  <fw-state>true</fw-state>
</bd-vxlan-info>
<bd-vxlan-info y:self="/rest/operational-state/cluster-member-bd-state/bd-vxlan-info/
706">
  <bd-id>706</bd-id>
  <vni>4802</vni>
  <fw-state>true</fw-state>
</bd-vxlan-info>
<bd-vxlan-info y:self="/rest/operational-state/cluster-member-bd-state/bd-vxlan-info/
707">
  <bd-id>707</bd-id>
  <vni>4803</vni>
  <fw-state>true</fw-state>
</bd-vxlan-info>
<bd-vxlan-info y:self="/rest/operational-state/cluster-member-bd-state/bd-vxlan-info/
708">
  <bd-id>708</bd-id>
  <vni>4804</vni>
  <fw-state>true</fw-state>
</bd-vxlan-info>
<bd-vxlan-info y:self="/rest/operational-state/cluster-member-bd-state/bd-vxlan-info/
709">
  <bd-id>709</bd-id>
  <vni>4805</vni>
  <fw-state>true</fw-state>
</bd-vxlan-info>
<bd-vxlan-info y:self="/rest/operational-state/cluster-member-bd-state/bd-vxlan-info/
710">
  <bd-id>710</bd-id>
  <vni>4806</vni>
  <fw-state>true</fw-state>
</bd-vxlan-info>
<bd-vxlan-info y:self="/rest/operational-state/cluster-member-bd-state/bd-vxlan-info/
711">
  <bd-id>711</bd-id>
  <vni>4807</vni>
  <fw-state>true</fw-state>
</bd-vxlan-info>
<bd-vxlan-info y:self="/rest/operational-state/cluster-member-bd-state/bd-vxlan-info/
712">
  <bd-id>712</bd-id>
  <vni>4808</vni>
  <fw-state>true</fw-state>
</bd-vxlan-info>
...
</cluster-member-bd-state>
</data>
```

## History

| Release version | History                       |
|-----------------|-------------------------------|
| 18r.2.00        | This API call was introduced. |

## cluster-member-vlan-state

### Resource URIs

| URI  | Description                          |
|--|--------------------------------------|
| <base_URI>/operational-state/cluster-member-vlan-state | Displays VLAN and VxLAN information. |

### Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

### Examples

The following example shows the complete cURL command and server response for the cluster-member-vlan-state GET operation.

### URI

http://host:80/rest/operational-state/cluster-member-vlan-state

### Request Body

```
curl -H "Accept: application/vnd.operational-state.resource+xml" -H "Resource-Depth: 6"
-u "lab:Tester**" http://10.20.229.40:80/rest/operational-state/cluster-member-vlan-state
```

### Response Body

```
<data xmlns="http://brocade.com/ns/rest" xmlns:y="http://brocade.com/ns/rest" y:self="/
rest/operational-state">
<cluster-member-vlan-state xmlns="urn:brocade.com:mgmt:brocade-mct-operational" y:self="/
rest/operational-state/
cluster-member-vlan-state">
  <num-vlans>61</num-vlans>
  <vlan-vxlan-info y:self="/rest/operational-state/cluster-member-vlan-state/vlan-vxlan-
info/1">
    <vlan-id>1</vlan-id>
    <vni>1</vni>
    <fw-state>true</fw-state>
  </vlan-vxlan-info>
  <vlan-vxlan-info y:self="/rest/operational-state/cluster-member-vlan-state/vlan-vxlan-
info/456">
    <vlan-id>456</vlan-id>
    <vni>456</vni>
    <fw-state>true</fw-state>
  </vlan-vxlan-info>
  <vlan-vxlan-info y:self="/rest/operational-state/cluster-member-vlan-state/vlan-vxlan-
info/471">
    <vlan-id>471</vlan-id>
    <vni>471</vni>
    <fw-state>true</fw-state>
```

```
</vlan-vxlan-info>
<vlan-vxlan-info y:self="/rest/operational-state/cluster-member-vlan-state/vlan-vxlan-
info/472">
  <vlan-id>472</vlan-id>
  <vni>472</vni>
  <fw-state>true</fw-state>
</vlan-vxlan-info>
<vlan-vxlan-info y:self="/rest/operational-state/cluster-member-vlan-state/vlan-vxlan-
info/473">
  <vlan-id>473</vlan-id>
  <vni>473</vni>
  <fw-state>true</fw-state>
</vlan-vxlan-info>
<vlan-vxlan-info y:self="/rest/operational-state/cluster-member-vlan-state/vlan-vxlan-
info/474">
  <vlan-id>474</vlan-id>
  <vni>474</vni>
  <fw-state>true</fw-state>
</vlan-vxlan-info>
<vlan-vxlan-info y:self="/rest/operational-state/cluster-member-vlan-state/vlan-vxlan-
info/475">
  <vlan-id>475</vlan-id>
  <vni>475</vni>
  <fw-state>true</fw-state>
</vlan-vxlan-info>
<vlan-vxlan-info y:self="/rest/operational-state/cluster-member-vlan-state/vlan-vxlan-
info/3100">
  <vlan-id>3100</vlan-id>
  <vni>3100</vni>
  <fw-state>true</fw-state>
</vlan-vxlan-info>
<vlan-vxlan-info y:self="/rest/operational-state/cluster-member-vlan-state/vlan-vxlan-
info/3101">
  <vlan-id>3101</vlan-id>
  <vni>3101</vni>
  <fw-state>true</fw-state>
</vlan-vxlan-info>
<vlan-vxlan-info y:self="/rest/operational-state/cluster-member-vlan-state/vlan-vxlan-
info/3102">
  <vlan-id>3102</vlan-id>
  <vni>3102</vni>
  <fw-state>true</fw-state>
</vlan-vxlan-info>
<vlan-vxlan-info y:self="/rest/operational-state/cluster-member-vlan-state/vlan-vxlan-
info/3103">
  <vlan-id>3103</vlan-id>
  <vni>3103</vni>
  <fw-state>true</fw-state>
</vlan-vxlan-info>
<vlan-vxlan-info y:self="/rest/operational-state/cluster-member-vlan-state/vlan-vxlan-
info/3104">
  <vlan-id>3104</vlan-id>
  <vni>3104</vni>
  <fw-state>true</fw-state>
</vlan-vxlan-info>
...
</cluster-member-vlan-state>
</data>
```

## History

| Release version | History                       |
|-----------------|-------------------------------|
| 18r.2.00        | This API call was introduced. |

## cluster-state

### Resource URIs

| URI  | Description             |
|--|-------------------------|
| <base_URI>/operational-state/cluster-state | Displays cluster state. |

### Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

### Examples

The following example shows the complete cURL command and server response for the `cluster-state` GET operation.

### URI

`http://host:80/rest/operational-state/cluster-state`

### Request Body

```
curl -H "Accept: application/vnd.operational-state.resource+xml" -H "Resource-Depth: 6"
-u "lab:Tester**" http://10.20.229.40:80/rest/operational-state/cluster-state
```

### Response Body

```
<data xmlns="http://brocade.com/ns/rest" xmlns:y="http://brocade.com/ns/rest" y:self="/
rest/operational-state">
  <cluster-state xmlns="urn:brocade.com:mgmt:brocade-mct-operational" y:self="/rest/
operational-state/cluster-state">
    <cluster-name>RC40-RC42</cluster-name>
    <status>true</status>
    <num-clients>3</num-clients>
    <is-all-vlan-configured>true</is-all-vlan-configured>
    <is-all-bd-configured>true</is-all-bd-configured>
    <reload-delay>90</reload-delay>
    <active-vlans>1 456 471 472 473 474 475 3100 3101 3102 3103 3104 3105 3106 3107 3108
3109 3110 3111 3112 3113 3114 3115
3116 3117 3118 3119 3120 3121 3122 3123 3124 3125 3126 3127 3128 3129 3130 3131 3132 3133
3134 3135 3136 3137 3138 3139
3140 3141 3142 3143 3144 3145 3146 3147 3148 3149 3250 4000 4077 4078</active-vlans>
    <removed-vlans>500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517
518 519 520 521 522 523 524 525
526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547
548 549 550 551 552 553 554 555
556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577
578 579 580 581 582 583 584 585
586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607
608 609 610 611 612 613 614 615
616 617 618 619 620 621 622 623 624 625 626 627 4009 4010 4042</removed-vlans>
```

```
<active-bds>700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718
719 720 721 722 723 724 725
726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747
748 749 750 751 752 753 754
755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776
777 778 779 780 781 782 783
784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805
806 807 808 809 810 811 812
813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834
835 836 837 838 839 840 841
842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863
864 865 866 867 868 869 870
871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892
893 894 895 896 897 898 899
1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011 1012 1013 1014 1015 1016 1017
1018 1019 1020 1021 1022
1023 1024 1025 1026 1027 1028 1029 1030 1031 1032 1033 1034 1035 1036 1037 1038 1039 1040
1041 1042 1043 1044 1045
1046 1047 1048 1049 1050 1051 1052 1053 1054 1055 1056 1057 1058 1059 1060 1061 1062 1063
1064 1065 1066 1067 1068
1069 1070 1071 1072 1073 1074 1075 1076 1077 1078 1079 1080 1081 1082 1083 1084 1085 1086
1087 1088 1089 1090 1091
1092 1093 1094 1095 1096 1097 1098 1099 1100 1101 1102 1103 1104 1105 1106 1107 1108 1109
1110 1111 1112 1113 1114
1115 1116 1117 1118 1119 1120 1121 1122 1123 1124 1125 1126 1127 1128 1129 1130 1131 1132
1133 1134 1135 1136 1137
1138 1139 1140 1141 1142 1143 1144 1145 1146 1147 1148 1149 1150 1151 1152 1153 1154 1155
1156 1157 1158 1159 1160
1161 1162 1163 1164 1165 1166 1167 1168 1169 1170 1171 1172 1173 1174 1175 1176 1177 1178
1179 1180 1181 1182 1183
1184 1185 1186 1187 1188 1189 1190 1191 1192 1193 1194 1195 1196 1197 1198 1199 1200 1201
1202 1203 1204 1205 1206
1207 1208 1209 1210 1211 1212 1213 1214 1215 1216 1217 1218 1219 1220 1221 1222 1223 1224
1225 1226 1227 1228 1229
1230 1231 1232 1233 1234 1235 1236 1237 1238 1239 1240 1241 1242 1243 1244 1245 1246 1247
1248 1249 1250 1251 1252
1253 1254 1255 1256 1257 1258 1259 1260 1261 1262 1263 1264 1265 1266 1267 1268 1269 1270
1271 1272 1273 1274 1275
1276 1277 1278 1279 1280 1281 1282 1283 1284 1285 1286 1287 1288 1289 1290 1291 1292 1293
1294 1295 1296 1297 1298
1299 1300 1301 1302 1303 1304 1305 1306 1307 1308 1309 1310 1311 1312 1313 1314 1315 1316
1317 1318 1319 1320 1321
1322 1323 1324 1325 1326 1327 1328 1329 1330 1331 1332 1333 1334 1335 1336 1337 1338 1339
1340 1341 1342 1343 1344
1345 1346 1347 1348 1349 1350 1351 1352 1353 1354 1355 1356 1357 1358 1359 1360 1361 1362
1363 1364 1365 1366 1367
1368 1369 1370 1371 1372 1373 1374 1375 1376 1377 1378 1379 1380 1381 1382 1383 1384 1385
1386 1387 1388 1389 1390
1391 1392 1393 1394 1395 1396 1397 1398 1399 1400 1401 1402 1403 1404 1405 1406 1407 1408
1409 1410 1411 1412 1413
1414 1415 1416 1417 1418 1419 1420 1421 1422 1423 1424 1425 1426 1427 1428 1429 1430 1431
1432 1433 1434 1435 1436
1437 1438 1439 1440 1441 1442 1443 1444 1445 1446 1447 1448 1449 1450 1451 1452 1453 1454
1455 1456 1457 1458 1459
1460 1461 1462 1463 1464 1465 1466 1467 1468 1469 1470 1471 1472 1473 1474 1475 1476 1477
1478 1479 1480 1481 1482
1483 1484 1485 1486 1487 1488 1489 1490 1491 1492 1493 1494 1495 1496 1497 1498 1499 1500
1501 1502 1503 1504 1505
1506 1507 1508 1509 1510 1511 1512 1513 1514 1515 1516 1517 1518 1519 1520 1521 1522 1523
1524 1525 1526 1527 1528
1529 1530 1531 1532 1533 1534 1535 1536 1537 1538 1539 1540 1541 1542 1543 1544 1545 1546
1547 1548 1549 1550 1551
1552 1553 1554 1555 1556 1557 1558 1559 1560 1561 1562 1563 1564 1565 1566 1567 1568 1569
1570 1571 1572 1573 1574
```



```

1575 1576 1577 1578 1579 1580 1581 1582 1583 1584 1585 1586 1587 1588 1589 1590 1591 1592
1593 1594 1595 1596 1597
1598 1599 1600 1601 1602 1603 1604 1605 1606 1607 1608 1609 1610 1611 1612 1613 1614 1615
1616 1617 1618 1619 1620
1621 1622 1623 1624 1625 1626 1627 1628 1629 1630 1631 1632 1633 1634 1635 1636 1637 1638
1639 1640 1641 1642 1643
1644 1645 1646 1647 1648 1649 1650 1651 1652 1653 1654 1655 1656 1657 1658 1659 1660 1661
1662 1663 1664 1665 1666
1667 1668 1669 1670 1671 1672 1673 1674 1675 1676 1677 1678 1679 1680 1681 1682 1683 1684
1685 1686 1687 1688 1689
1690 1691 1692 1693 1694 1695 1696 1697 1698 1699 1700 1701 1702 1703 1704 1705 1706 1707
1708 1709 1710 1711 1712
1713 1714 1715 1716 1717 1718 1719 1720 1721 1722 1723 1724 1725 1726 1727 1728 1729 1730
1731 1732 1733 1734 1735
1736 1737 1738 1739 1740 1741 1742 1743 1744 1745 1746 1747 1748 1749 1750 1751 1752 1753
1754 1755 1756 1757 1758
1759 1760 1761 1762 1763 1764 1765 1766 1767 1768 1769 1770 1771 1772 1773 1774 1775 1776
1777 1778 1779 1780 1781
1782 1783 1784 1785 1786 1787 1788 1789 1790 1791 1792 1793 1794 1795 1796 1797 1798 1799
1800 1801 1802 1803 1804
1805 1806 1807 1808 1809 1810 1811 1812 1813 1814 1815 1816 1817 1818 1819 1820 1821 1822
1823 1824 1825 1826 1827
1828 1829 1830 1831 1832 1833 1834 1835 1836 1837 1838 1839 1840 1841 1842 1843 1844 1845
1846 1847 1848 1849 1850
1851 1852 1853 1854 1855 1856 1857 1858 1859 1860 1861 1862 1863 1864 1865 1866 1867 1868
1869 1870 1871 1872 1873
1874 1875 1876 1877 1878 1879 1880 1881 1882 1883 1884 1885 1886 1887 1888 1889 1890 1891
1892 1893 1894 1895 1896
1897 1898 1899</active-bds>
  <peer-info y:self="/rest/operational-state/cluster-state/peer-info">
    <ip-addr>172.31.40.10</ip-addr>
    <state>true</state>
    <reason>&quot; &quot;</reason>
    <interface>&quot;Ethernet 0/50&quot;</interface>
    <source-ip-addr>172.31.40.9</source-ip-addr>
  </peer-info>
  <clients y:self="/rest/operational-state/cluster-state/clients/1001">
    <client-id>1001</client-id>
    <name>&quot;Port-channel 1&quot;</name>
    <interface>&quot;Port-channel 1&quot;</interface>
    <state>true</state>
    <description>RC28_1</description>
  </clients>
  <clients y:self="/rest/operational-state/cluster-state/clients/1002">
    <client-id>1002</client-id>
    <name>&quot;Port-channel 2&quot;</name>
    <interface>&quot;Port-channel 2&quot;</interface>
    <state>true</state>
    <description>RC28_2</description>
  </clients>
  <clients y:self="/rest/operational-state/cluster-state/clients/34816">
    <client-id>34816</client-id>
    <name>Client-PW</name>
    <interface>PW</interface>
    <state>true</state>
    <description>&quot; &quot;</description>
  </clients>
</cluster-state>
</data>

```

## History

| Release version | History                       |
|-----------------|-------------------------------|
| 18r.2.00        | This API call was introduced. |

## counts-state

### 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/csnpl1authfail                      | Displays CSNP Level-1 Auth Failures count  |
| <base_URI>/operational-state/counts-state/csnpl2authfail                      | Displays CSNP Level-2 Auth Failures count  |
| <base_URI>/operational-state/counts-state/psnpl1authfail                      | Displays PSNP Level-1 Auth Failures count  |
| <base_URI>/operational-state/counts-state/psnpl2authfail                      | 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. Use of the Resource-Depth request header is recommended.

## 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-l1authfail>0</csnp-l1authfail>
  <csnp-l2authfail>0</csnp-l2authfail>
  <psnp-l1authfail>0</psnp-l1authfail>
  <psnp-l2authfail>0</psnp-l2authfail>
  <circ-l1authfail>0</circ-l1authfail>
  <circ-l2authfail>0</circ-l2authfail>
  <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>
</counts-state>
```

```
</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>
<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>
```

## cpu-state

### Resource URIs

| URI                                    | Description  |
|--|--|
| <base_URI>/operational-state/cpu-state | Displays CPU utilization statistics of the overall system. |

### Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

### Examples

The following example shows the complete cURL command and server response for the `cpu-state` GET operation.

### URI

`http://host:80/rest/operational-state/cpu-state`

### Request Body

```
curl -H "Accept: application/vnd.operational-state.resource+xml" -H "Resource-Depth: 6"
-u "lab:Tester**" http://10.20.229.40:80/rest/operational-state/cpu-state
```

### Response Body

```
<data xmlns="http://brocade.com/ns/rest" xmlns:y="http://brocade.com/ns/rest" y:self="/
rest/operational-state">
<cpu-state xmlns="urn:brocade.com:mgmt:brocade-RAS-operational" y:self="/rest/operational-
state/cpu-state">
  <summary y:self="/rest/operational-state/cpu-state/summary">
    <summary-cpu-load-average-one-min>2.54</summary-cpu-load-average-one-min>
    <summary-cpu-load-average-five-min>2.24</summary-cpu-load-average-five-min>
    <summary-cpu-load-average-fifteen-min>2.13</summary-cpu-load-average-fifteen-min>
    <summary-cpu-util-current>11.00</summary-cpu-util-current>
    <summary-cpu-util-current-user>6.00</summary-cpu-util-current-user>
    <summary-cpu-util-current-kernel>5.00</summary-cpu-util-current-kernel>
    <summary-cpu-util-current-iowait>.00</summary-cpu-util-current-iowait>
  </summary>
  <history y:self="/rest/operational-state/cpu-state/history">
    <cpu-load-average-one-min>2.54</cpu-load-average-one-min>
    <cpu-load-average-five-min>2.24</cpu-load-average-five-min>
    <cpu-load-average-fifteen-min>2.13</cpu-load-average-fifteen-min>
    <cpu-util-current>13.00</cpu-util-current>
    <cpu-util-current-user>6.00</cpu-util-current-user>
    <cpu-util-current-kernel>7.00</cpu-util-current-kernel>
    <cpu-util-current-iowait>.00</cpu-util-current-iowait>
    <cpu-util-1min>23.50</cpu-util-1min>
    <cpu-util-1min-user>10.50</cpu-util-1min-user>
```

```

<cpu-util-1min-kernel>13.00</cpu-util-1min-kernel>
<cpu-util-1min-iowait>.00</cpu-util-1min-iowait>
<cpu-util-5min>16.20</cpu-util-5min>
<cpu-util-5min-user>8.40</cpu-util-5min-user>
<cpu-util-5min-kernel>7.80</cpu-util-5min-kernel>
<cpu-util-5min-iowait>.00</cpu-util-5min-iowait>
<cpu-util-15min>14.33</cpu-util-15min>
<cpu-util-15min-user>7.30</cpu-util-15min-user>
<cpu-util-15min-kernel>7.00</cpu-util-15min-kernel>
<cpu-util-15min-iowait>.03</cpu-util-15min-iowait>
<cpu-util-1hour>13.18</cpu-util-1hour>
<cpu-util-1hour-user>6.38</cpu-util-1hour-user>
<cpu-util-1hour-kernel>6.78</cpu-util-1hour-kernel>
<cpu-util-1hour-iowait>.01</cpu-util-1hour-iowait>
<cpu-util-5hour>11.60</cpu-util-5hour>
<cpu-util-5hour-user>5.64</cpu-util-5hour-user>
<cpu-util-5hour-kernel>5.96</cpu-util-5hour-kernel>
<cpu-util-5hour-iowait>.00</cpu-util-5hour-iowait>
<cpu-util-24hour>10.40</cpu-util-24hour>
<cpu-util-24hour-user>5.14</cpu-util-24hour-user>
<cpu-util-24hour-kernel>5.27</cpu-util-24hour-kernel>
<cpu-util-24hour-iowait>.00</cpu-util-24hour-iowait>
<cpu-util-72hour>.00</cpu-util-72hour>
<cpu-util-72hour-user>.00</cpu-util-72hour-user>
<cpu-util-72hour-kernel>.00</cpu-util-72hour-kernel>
<cpu-util-72hour-iowait>.00</cpu-util-72hour-iowait>
<cpu-util-process-history y:self="/rest/operational-state/cpu-state/history/cpu-util-
process-history/5178">
  <cpu-process-id>5178</cpu-process-id>
  <cpu-process-name>hslagtd</cpu-process-name>
  <cpu-util-current>5.48</cpu-util-current>
  <cpu-util-1m>5.48</cpu-util-1m>
  <cpu-util-5m>5.48</cpu-util-5m>
  <cpu-util-15m>5.48</cpu-util-15m>
  <cpu-util-1h>5.48</cpu-util-1h>
  <cpu-util-5h>5.47</cpu-util-5h>
  <cpu-util-24h>5.46</cpu-util-24h>
  <cpu-util-72h>.00</cpu-util-72h>
</cpu-util-process-history>
<cpu-util-process-history y:self="/rest/operational-state/cpu-state/history/cpu-util-
process-history/3890">
  <cpu-process-id>3890</cpu-process-id>
  <cpu-process-name>vrrpd</cpu-process-name>
  <cpu-util-current>2.58</cpu-util-current>
  <cpu-util-1m>2.58</cpu-util-1m>
  <cpu-util-5m>2.58</cpu-util-5m>
  <cpu-util-15m>2.58</cpu-util-15m>
  <cpu-util-1h>2.58</cpu-util-1h>
  <cpu-util-5h>2.58</cpu-util-5h>
  <cpu-util-24h>2.58</cpu-util-24h>
  <cpu-util-72h>.00</cpu-util-72h>
</cpu-util-process-history>
<cpu-util-process-history y:self="/rest/operational-state/cpu-state/history/cpu-util-
process-history/3348">
  <cpu-process-id>3348</cpu-process-id>
  <cpu-process-name>emd</cpu-process-name>
  <cpu-util-current>.74</cpu-util-current>
  <cpu-util-1m>.74</cpu-util-1m>
  <cpu-util-5m>.74</cpu-util-5m>
  <cpu-util-15m>.74</cpu-util-15m>
  <cpu-util-1h>.74</cpu-util-1h>
  <cpu-util-5h>.74</cpu-util-5h>
  <cpu-util-24h>.74</cpu-util-24h>
  <cpu-util-72h>.00</cpu-util-72h>

```

```

    </cpu-util-process-history>
    <cpu-util-process-history y:self="/rest/operational-state/cpu-state/history/cpu-util-
process-history/3870">
      <cpu-process-id>3870</cpu-process-id>
      <cpu-process-name>bgsd</cpu-process-name>
      <cpu-util-current>.34</cpu-util-current>
      <cpu-util-1m>.34</cpu-util-1m>
      <cpu-util-5m>.34</cpu-util-5m>
      <cpu-util-15m>.34</cpu-util-15m>
      <cpu-util-1h>.34</cpu-util-1h>
      <cpu-util-5h>.34</cpu-util-5h>
      <cpu-util-24h>.34</cpu-util-24h>
      <cpu-util-72h>.00</cpu-util-72h>
    </cpu-util-process-history>
    ...
  </history>
  <top y:self="/rest/operational-state/cpu-state/top">
    <cpu-curr-time>15:44:18</cpu-curr-time>
    <cpu-system-uptime>"2 days"</cpu-system-uptime>
    <cpu-no-of-users>22</cpu-no-of-users>
    <cpu-load-average-one-min>0.</cpu-load-average-one-min>
    <cpu-load-average-five-min>2.42</cpu-load-average-five-min>
    <cpu-load-average-fifteen-min>2.22</cpu-load-average-fifteen-min>
    <cpu-total-task>231</cpu-total-task>
    <cpu-running-task>2</cpu-running-task>
    <cpu-sleeping-task>163</cpu-sleeping-task>
    <cpu-stopped-task>0</cpu-stopped-task>
    <cpu-zombie-task>1</cpu-zombie-task>
    <cpu-util-user>5.10</cpu-util-user>
    <cpu-util-kernel>5.10</cpu-util-kernel>
    <cpu-util-nice>.00</cpu-util-nice>
    <cpu-util-idle>89.70</cpu-util-idle>
    <cpu-util-iowait>.00</cpu-util-iowait>
    <cpu-util-hi>.00</cpu-util-hi>
    <cpu-util-si>.10</cpu-util-si>
    <cpu-util-st>.00</cpu-util-st>
    <cpu-total-mem>12071784</cpu-total-mem>
    <cpu-used-mem>5023680</cpu-used-mem>
    <cpu-free-mem>6187584</cpu-free-mem>
    <cpu-buffer-mem>860520</cpu-buffer-mem>
    <cpu-total-mem-swap>0</cpu-total-mem-swap>
    <cpu-used-mem-swap>0</cpu-used-mem-swap>
    <cpu-free-mem-swap>0</cpu-free-mem-swap>
    <cpu-cache-mem-swap>6608940</cpu-cache-mem-swap>
    <cpu-top-process-information y:self="/rest/operational-state/cpu-state/top/cpu-top-
process-information/5178">
      <cpu-process-id>5178</cpu-process-id>
      <cpu-process-user>root</cpu-process-user>
      <cpu-process-priority>20</cpu-process-priority>
      <cpu-process-ni>0</cpu-process-ni>
      <cpu-process-virtual-mem>5352432</cpu-process-virtual-mem>
      <cpu-process-resident-mem>0.987g</cpu-process-resident-mem>
      <cpu-process-shared-mem>91220</cpu-process-shared-mem>
      <cpu-process-state>S</cpu-process-state>
      <cpu-process-cpuutil>6.60</cpu-process-cpuutil>
      <cpu-process-memutil>8.60</cpu-process-memutil>
      <cpu-process-running-time>1806:52</cpu-process-running-time>
      <cpu-process-cmd>hslagtd</cpu-process-cmd>
    </cpu-top-process-information>
    <cpu-top-process-information y:self="/rest/operational-state/cpu-state/top/cpu-top-
process-information/3890">
      <cpu-process-id>3890</cpu-process-id>
      <cpu-process-user>root</cpu-process-user>
      <cpu-process-priority>20</cpu-process-priority>

```



```

    <cpu-process-ni>0</cpu-process-ni>
    <cpu-process-virtual-mem>1494004</cpu-process-virtual-mem>
    <cpu-process-resident-mem>111244</cpu-process-resident-mem>
    <cpu-process-shared-mem>71488</cpu-process-shared-mem>
    <cpu-process-state>S</cpu-process-state>
    <cpu-process-cpuutil>2.20</cpu-process-cpuutil>
    <cpu-process-memutil>.90</cpu-process-memutil>
    <cpu-process-running-time>852:20.52</cpu-process-running-time>
    <cpu-process-cmd>vrrpd</cpu-process-cmd>
  </cpu-top-process-information>
  <cpu-top-process-information y:self="/rest/operational-state/cpu-state/top/cpu-top-
process-information/21973">
    <cpu-process-id>21973</cpu-process-id>
    <cpu-process-user>root</cpu-process-user>
    <cpu-process-priority>20</cpu-process-priority>
    <cpu-process-ni>0</cpu-process-ni>
    <cpu-process-virtual-mem>21428</cpu-process-virtual-mem>
    <cpu-process-resident-mem>2740</cpu-process-resident-mem>
    <cpu-process-shared-mem>2224</cpu-process-shared-mem>
    <cpu-process-state>R</cpu-process-state>
    <cpu-process-cpuutil>2.20</cpu-process-cpuutil>
    <cpu-process-memutil>.00</cpu-process-memutil>
    <cpu-process-running-time>0:00.04</cpu-process-running-time>
    <cpu-process-cmd>top</cpu-process-cmd>
  </cpu-top-process-information>
</cpu-top-process-information>
...
</top>
<all-partition y:self="/rest/operational-state/cpu-state/all-partition">
  <cpu-allpart-load y:self="/rest/operational-state/cpu-state/all-partition/cpu-allpart-
load/%22SW/0:%22">
    <cpu-blade-name>SW/0:</cpu-blade-name>
    <cpu-load-average-1min>2.38</cpu-load-average-1min>
    <cpu-load-average-5min>2.22</cpu-load-average-5min>
    <cpu-load-average-15min>2.12</cpu-load-average-15min>
  </cpu-allpart-load>
  <cpu-allpart-util y:self="/rest/operational-state/cpu-state/all-partition/cpu-allpart-
util/%22SW/0:%22">
    <cpu-blade-name>SW/0:</cpu-blade-name>
    <cpu-util-current>10.29</cpu-util-current>
    <cpu-util-user>5.10</cpu-util-user>
    <cpu-util-kernel>5.18</cpu-util-kernel>
    <cpu-util-iowait>.01</cpu-util-iowait>
  </cpu-allpart-util>
</all-partition>
<process-list y:self="/rest/operational-state/cpu-state/process-list">
  <list-cpu-load-average-one-min>2.38</list-cpu-load-average-one-min>
  <list-cpu-load-average-five-min>2.22</list-cpu-load-average-five-min>
  <list-cpu-load-average-fifteen-min>2.12</list-cpu-load-average-fifteen-min>
  <list-cpu-util-current>9.00</list-cpu-util-current>
  <list-cpu-util-current-user>5.00</list-cpu-util-current-user>
  <list-cpu-util-current-kernel>4.00</list-cpu-util-current-kernel>
  <list-cpu-util-current-iowait>.00</list-cpu-util-current-iowait>
  <cpu-process-list y:self="/rest/operational-state/cpu-state/process-list/cpu-process-
list/5178">
    <cpu-process-id>5178</cpu-process-id>
    <cpu-process-name>"hslogtd" </cpu-process-name>
    <cpu-process-util>5.35</cpu-process-util>
    <cpu-process-state>S</cpu-process-state>
    <cpu-process-start-time>"17:26:54 Nov 19, 2019"</cpu-process-start-time>
  </cpu-process-list>
  <cpu-process-list y:self="/rest/operational-state/cpu-state/process-list/cpu-process-
list/3890">
    <cpu-process-id>3890</cpu-process-id>

```

```

    <cpu-process-name>&quot;vrrpd          &quot;</cpu-process-name>
    <cpu-process-util>2.52</cpu-process-util>
    <cpu-process-state>S</cpu-process-state>
    <cpu-process-start-time>&quot;17:26:39 Nov 19, 2019&quot;</cpu-process-start-time>
  </cpu-process-list>
  <cpu-process-list y:self="/rest/operational-state/cpu-state/process-list/cpu-process-
list/3348">
    <cpu-process-id>3348</cpu-process-id>
    <cpu-process-name>&quot;emd          &quot;</cpu-process-name>
    <cpu-process-util>.72</cpu-process-util>
    <cpu-process-state>S</cpu-process-state>
    <cpu-process-start-time>&quot;17:26:31 Nov 19, 2019&quot;</cpu-process-start-time>
  </cpu-process-list>
  <cpu-process-list y:self="/rest/operational-state/cpu-state/process-list/cpu-process-
list/3870">
    <cpu-process-id>3870</cpu-process-id>
    <cpu-process-name>&quot;bgpd          &quot;</cpu-process-name>
    <cpu-process-util>.33</cpu-process-util>
    <cpu-process-state>S</cpu-process-state>
    <cpu-process-start-time>&quot;17:26:39 Nov 19, 2019&quot;</cpu-process-start-time>
  </cpu-process-list>
  <cpu-process-list y:self="/rest/operational-state/cpu-state/process-list/cpu-process-
list/5183">
    <cpu-process-id>5183</cpu-process-id>
    <cpu-process-name>&quot;mcagtd        &quot;</cpu-process-name>
    <cpu-process-util>.24</cpu-process-util>
    <cpu-process-state>S</cpu-process-state>
    <cpu-process-start-time>&quot;17:26:54 Nov 19, 2019&quot;</cpu-process-start-time>
  </cpu-process-list>
  ...
</process-list>
</cpu-state>
</data>

```

## History

| Release version | History                       |
|-----------------|-------------------------------|
| 18r.2.00        | This API call was introduced. |

## debug-isis-info-state

### Resource URIs

| URI  | Description                       |
|--|-----------------------------------|
| <base_URI>/operational-state/cluster-state | Displays IS-IS debug information. |

### Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

### Examples

The following example shows the complete cURL command and server response for the debug-isis-info-state GET operation.

### URI

http://host:80/rest/operational-state/debug-isis-info-state

### Request Body

```
curl -H "Accept: application/vnd.operational-state.resource+xml" -H "Resource-Depth: 6"
-u "lab:Tester**" http://10.20.229.40:80/rest/operational-state/debug-isis-info-state
```

### Response Body

```
<data xmlns="http://brocade.com/ns/rest" xmlns:y="http://brocade.com/ns/rest" y:self="/
rest/operational-state">
<debug-isis-info-state xmlns="urn:brocade.com:mgmt:brocade-isis-operational" y:self="/
rest/operational-state/debug-isis-info-state">
  <global>false</global>
  <adj>false</adj>
  <error>false</error>
  <interface>false</interface>
  <l1-csnp>false</l1-csnp>
  <l2-csnp>false</l2-csnp>
  <l1-hello>false</l1-hello>
  <l2-hello>false</l2-hello>
  <l1-lsp>false</l1-lsp>
  <l2-lsp>false</l2-lsp>
  <l1-psnp>false</l1-psnp>
  <l2-psnp>false</l2-psnp>
  <lspdump>false</lspdump>
  <lspflood>false</lspflood>
  <memory>false</memory>
  <nsr>false</nsr>
  <pp-hello>false</pp-hello>
  <pspf>false</pspf>
  <pspf-detail>false</pspf-detail>
  <redist>false</redist>
```

```
<route-table>>false</route-table>
<spf>>false</spf>
<spf-log>>false</spf-log>
<spf-stct>>false</spf-stct>
<te>>false</te>
<trace>>false</trace>
</debug-isis-info-state>
</data>
```

## History

| Release version | History                       |
|-----------------|-------------------------------|
| 18r.2.00        | This API call was introduced. |

## dhcp-snooping-option-state

### Resource URIs

| URI   | Description   |
|---|---|
| <base_URI>/operational-state/dhcp-snooping-option-state | Displays the status of dhcp snooping option and interface specific information like Circuit and Remote IDs. |

### Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

### Examples

The following example shows the complete cURL command and server response for the dhcp-snooping-option-state GET operation.

### URI

http://host:80/rest/operational-state/dhcp-snooping-option-state

### Request Body

```
curl -H "Accept: application/vnd.operational-state.resource+xml" -H "Resource-Depth: 6"
-u "lab:Tester**" http://10.20.229.40:80/rest/operational-state/dhcp-snooping-option-
state
```

### Response Body

```
<data xmlns="http://brocade.com/ns/rest" xmlns:y="http://brocade.com/ns/rest" y:self="/
rest/operational-state">
<dhcp-snooping-option-state xmlns="urn:brocade.com:mgmt:brocade-dhcp-operational"
y:self="/rest/operational-state/
dhcp-snooping-option-state">
  <option82>false</option82>
</dhcp-snooping-option-state>
</data>
```

### History

| Release version | History                       |
|-----------------|-------------------------------|
| 18r.2.00        | This API call was introduced. |

## dhcp-snooping-state

### Resource URIs

| URI  | Description  |
|--|--|
| <base_URI>/operational-state/dhcp-snooping-state | Displays dhcp snooping information including status of dhcp snooping on device, status of dhcp snooping information option, dhcp snooping enabled VLANs, and trusted interfaces. |

### Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

### Examples

The following example shows the complete cURL command and server response for the dhcp-snooping-state GET operation.

### URI

```
http://host:80/rest/operational-state/dhcp-snooping-state
```

### Request Body

```
curl -H "Accept: application/vnd.operational-state.resource+xml" -H "Resource-Depth: 6" -u "lab:Tester**" http://10.20.229.40:80/rest/operational-state/dhcp-snooping-state
```

### Response Body

```
<data xmlns="http://brocade.com/ns/rest" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/operational-state">
<dhcp-snooping-state xmlns="urn:brocade.com:mgmt:brocade-dhcp-operational" y:self="/rest/operational-state/dhcp-snooping-state">
  <dhcp-snooping>false</dhcp-snooping>
  <information-option>false</information-option>
  <allowed-untrusted>false</allowed-untrusted>
  <enabled-vlans>&quot; NONE&quot;</enabled-vlans>
  <trusted-interfaces>&quot; NONE&quot;</trusted-interfaces>
</dhcp-snooping-state>
</data>
```

### History

| Release version | History                       |
|-----------------|-------------------------------|
| 18r.2.00        | This API call was introduced. |

## erp-clear-state

---

### Resource URIs

| URI  | Description            |
|--|------------------------|
| <base_URI>/operational-state/erp-clear-state | Clears ERP statistics. |

### Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

### Examples

The following example shows the complete cURL command and server response for the `erp-clear-state` GET operation.

### URI

`http://host:80/rest/operational-state/erp-clear-state`

### Request Body

```
curl -H "Accept: application/vnd.operational-state.resource+xml" -H "Resource-Depth: 6"
-u "lab:Tester**" http://10.20.229.40:80/rest/operational-state/erp-clear-state
```

### Response Body

```
<data xmlns="http://brocade.com/ns/rest" xmlns:y="http://brocade.com/ns/rest" y:self="/
rest/operational-state">
<erp-clear-state xmlns="urn:brocade.com:mgmt:brocade-erp-operational" y:self="/rest/
operational-state/erp-clear-state">
</erp-clear-state>
</data>
```

### History

| Release version | History                       |
|-----------------|-------------------------------|
| 18r.2.00        | This API call was introduced. |

## erp-debug-state

---

### Resource URIs

| URI  | Description       |
|--|-------------------|
| <base_URI>/operational-state/erp-debug-state | Debug ERP module. |

### Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

### Examples

The following example shows the complete cURL command and server response for the erp-debug-state GET operation.

### URI

http://host:80/rest/operational-state/erp-debug-state

### Request Body

```
curl -H "Accept: application/vnd.operational-state.resource+xml" -H "Resource-Depth: 6"
-u "lab:Tester**" http://10.20.229.40:80/rest/operational-state/erp-debug-state
```

### Response Body

```
<data xmlns="http://brocade.com/ns/rest" xmlns:y="http://brocade.com/ns/rest" y:self="/
rest/operational-state">
<erp-debug-state xmlns="urn:brocade.com:mgmt:brocade-erp-operational" y:self="/rest/
operational-state/erp-debug-state">
</erp-debug-state>
</data>
```

### History

| Release version | History                       |
|-----------------|-------------------------------|
| 18r.2.00        | This API call was introduced. |



## erp-show-debug-state

### Resource URIs

| URI   | Description                                |
|---|--|
| <base_URI>/operational-state/erp-show-debug-state | Displays debug information for ERP module. |

### Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

### Examples

The following example shows the complete cURL command and server response for the `erp-show-debug-state` GET operation.

### URI

`http://host:80/rest/operational-state/erp-show-debug-state`

### Request Body

```
curl -H "Accept: application/vnd.operational-state.resource+xml" -H "Resource-Depth: 6"
-u "lab:Tester**" http://10.20.229.40:80/rest/operational-state/erp-show-debug-state
```

### Response Body

```
<data xmlns="http://brocade.com/ns/rest" xmlns:y="http://brocade.com/ns/rest" y:self="/
rest/operational-state">
<erp-show-debug-state xmlns="urn:brocade.com:mgmt:brocade-erp-operational" y:self="/rest/
operational-state/erp-show-debug-state">
  <erp-enable>false</erp-enable>
  <debug-bpdu-type>erp-debug-none</debug-bpdu-type>
  <erp-event>false</erp-event>
  <erp-state>false</erp-state>
</erp-show-debug-state>
</data>
```

### History

| Release version | History                       |
|-----------------|-------------------------------|
| 18r.2.00        | This API call was introduced. |

## erp-state

---

### Resource URIs

| URI                                    | Description                                  |
|--|--|
| <base_URI>/operational-state/erp-state | Displays ERP module operational information. |

### Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

### Examples

The following example shows the complete cURL command and server response for the `erp-state` GET operation.

### URI

`http://host:80/rest/operational-state/erp-state`

### Request Body

```
curl -H "Accept: application/vnd.operational-state.resource+xml" -H "Resource-Depth: 6"
-u "lab:Tester**" http://10.20.229.40:80/rest/operational-state/erp-state
```

### Response Body

```
<data xmlns="http://brocade.com/ns/rest" xmlns:y="http://brocade.com/ns/rest" y:self="/
rest/operational-state">
<erp-state xmlns="urn:brocade.com:mgmt:brocade-erp-operational" y:self="/rest/operational-
state/erp-state">
</erp-state>
</data>
```

### History

| Release version | History                       |
|-----------------|-------------------------------|
| 18r.2.00        | This API call was introduced. |

## hw-state

---

### Resource URIs

| URI                                   | Description                          |
|---------------------------------------|--------------------------------------|
| <base_URI>/operational-state/hw-state | Displays hardware route information. |

### Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

### Examples

The following example shows the complete cURL command and server response for the hw-state GET operation.

### URI

http://host:80/rest/operational-state/hw-state

### Request Body

```
curl -H "Accept: application/vnd.operational-state.resource+xml" -H "Resource-Depth: 6"
-u "lab:Tester**" http://10.20.229.40:80/rest/operational-state/hw-state
```

### Response Body

```
<data xmlns="http://brocade.com/ns/rest" xmlns:y="http://brocade.com/ns/rest" y:self="/
rest/operational-state">
  <hw-state xmlns="urn:brocade.com:mgmt:brocade-sysdiag-operational" y:self="/rest/
operational-state/hw-state">
    <hw-route-info y:self="/rest/operational-state/hw-state/hw-route-info/
65535%2C0%2C0%2C0">
      <slot>65535</slot>
      <tower>0</tower>
      <etcam-profile>0</etcam-profile>
      <snowball>0</snowball>
      <lpm-percent>23.000000</lpm-percent>
      <lem-percent>.000000</lem-percent>
      <tcam-percent>.000000</tcam-percent>
      <lpm-ipv4>47673</lpm-ipv4>
      <lpm-ipv6>8524</lpm-ipv6>
      <lpm-other>0</lpm-other>
      <lem-ipv4>732</lem-ipv4>
      <lem-ipv6>0</lem-ipv6>
      <lem-other>0</lem-other>
      <lpm-total>81769</lpm-total>
      <lem-total>0</lem-total>
      <tcam-ipv4>0</tcam-ipv4>
      <tcam-ipv6>0</tcam-ipv6>
      <tcam-total>0</tcam-total>
```

```
</hw-route-info>  
</hw-state>  
</data>
```

## History

| Release version | History                       |
|-----------------|-------------------------------|
| 18r.2.00        | This API call was introduced. |

## igmp-snooping-state

---

### Resource URIs

| URI  | Description   |
|--|---|
| <base_URI>/operational-state/igmp-snooping-state | Displays IGMP snooping enabled broadcast domain information |

### Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

### Examples

The following example shows the complete cURL command and server response for the `igmp-snooping-state` GET operation.

### URI

`http://host:80/rest/operational-state/igmp-snooping-state`

### Request Body

```
curl -H "Accept: application/vnd.operational-state.resource+xml" -H "Resource-Depth: 6"
-u "lab:Tester**" http://10.20.229.40:80/rest/operational-state/igmp-snooping-state
```

### Response Body

```
<data xmlns="http://brocade.com/ns/rest" xmlns:y="http://brocade.com/ns/rest" y:self="/
rest/operational-state">
<igmp-snooping-state xmlns="urn:brocade.com:mgmt:brocade-mc-hms-operational" y:self="/
rest/operational-state/igmp-snooping-state">
  <multicast-ssm-mapping y:self="/rest/operational-state/igmp-snooping-state/multicast-
ssm-mapping">
    </multicast-ssm-mapping>
  <igmp-statistics y:self="/rest/operational-state/igmp-snooping-state/igmp-statistics">
    </igmp-statistics>
  <debug-igmp y:self="/rest/operational-state/igmp-snooping-state/debug-igmp">
    <enable-any>0</enable-any>
    <error>0</error>
    <packets>0</packets>
    <query>0</query>
    <vl-report>0</vl-report>
    <direction>none</direction>
    <phy-port-name>none</phy-port-name>
    <io-port-name>none</io-port-name>
  </debug-igmp>
  <igmp-snooping-vlans y:self="/rest/operational-state/igmp-snooping-state/igmp-snooping-
vlans/3758098488">
    <vlan-id>3758098488</vlan-id>
    <igmp-snooping-vlans y:self="/rest/operational-state/igmp-snooping-state/igmp-
```

```

snooping-vlans/3758098488/igmp-snooping-vlans/3100">
  <vlan-id>3100</vlan-id>
  <multicast-router-ports>&quot; ICL, &quot;</multicast-router-ports>
  <is-querier>0</is-querier>
  <igmp-operation-mode>2</igmp-operation-mode>
  <fast-leave>0</fast-leave>
  <qmrt>10</qmrt>
  <lmqi>1000</lmqi>
  <qi>125</qi>
  <restrict-unknown-mcast>0</restrict-unknown-mcast>
  <num-of-mcast-grps>1</num-of-mcast-grps>
</igmp-snooping-vlans>
<igmp-snooping-vlans y:self="/rest/operational-state/igmp-snooping-state/igmp-
snooping-vlans/3758098488/igmp-snooping-vlans/3101">
  <vlan-id>3101</vlan-id>
  <multicast-router-ports>&quot; ICL, &quot;</multicast-router-ports>
  <is-querier>0</is-querier>
  <igmp-operation-mode>2</igmp-operation-mode>
  <fast-leave>0</fast-leave>
  <qmrt>10</qmrt>
  <lmqi>1000</lmqi>
  <qi>125</qi>
  <restrict-unknown-mcast>0</restrict-unknown-mcast>
  <num-of-mcast-grps>0</num-of-mcast-grps>
</igmp-snooping-vlans>
<igmp-snooping-vlans y:self="/rest/operational-state/igmp-snooping-state/igmp-
snooping-vlans/3758098488/igmp-snooping-vlans/3102">
  <vlan-id>3102</vlan-id>
  <multicast-router-ports>&quot; ICL, &quot;</multicast-router-ports>
  <is-querier>0</is-querier>
  <igmp-operation-mode>2</igmp-operation-mode>
  <fast-leave>0</fast-leave>
  <qmrt>10</qmrt>
  <lmqi>1000</lmqi>
  <qi>125</qi>
  <restrict-unknown-mcast>0</restrict-unknown-mcast>
  <num-of-mcast-grps>1</num-of-mcast-grps>
</igmp-snooping-vlans>
<igmp-snooping-vlans y:self="/rest/operational-state/igmp-snooping-state/igmp-
snooping-vlans/3758098488/igmp-snooping-vlans/3103">
  <vlan-id>3103</vlan-id>
  <multicast-router-ports>&quot; ICL, &quot;</multicast-router-ports>
  <is-querier>0</is-querier>
  <igmp-operation-mode>2</igmp-operation-mode>
  <fast-leave>0</fast-leave>
  <qmrt>10</qmrt>
  <lmqi>1000</lmqi>
  <qi>125</qi>
  <restrict-unknown-mcast>0</restrict-unknown-mcast>
  <num-of-mcast-grps>0</num-of-mcast-grps>
</igmp-snooping-vlans>
<igmp-snooping-vlans y:self="/rest/operational-state/igmp-snooping-state/igmp-
snooping-vlans/3758098488/igmp-snooping-vlans/3104">
  <vlan-id>3104</vlan-id>
  <multicast-router-ports>&quot; ICL, &quot;</multicast-router-ports>
  <is-querier>0</is-querier>
  <igmp-operation-mode>2</igmp-operation-mode>
  <fast-leave>0</fast-leave>
  <qmrt>10</qmrt>
  <lmqi>1000</lmqi>
  <qi>125</qi>
  <restrict-unknown-mcast>0</restrict-unknown-mcast>
  <num-of-mcast-grps>1</num-of-mcast-grps>
</igmp-snooping-vlans>

```

```

    <igmp-snooping-vlans y:self="/rest/operational-state/igmp-snooping-state/igmp-
snooping-vlans/3758098488/igmp-snooping-vlans/3105">
      <vlan-id>3105</vlan-id>
      <multicast-router-ports>&quot; ICL, &quot;</multicast-router-ports>
      <is-querier>0</is-querier>
      <igmp-operation-mode>2</igmp-operation-mode>
      <fast-leave>0</fast-leave>
      <qmrt>10</qmrt>
      <lmqi>1000</lmqi>
      <qi>125</qi>
      <restrict-unknown-mcast>0</restrict-unknown-mcast>
      <num-of-mcast-grps>0</num-of-mcast-grps>
    </igmp-snooping-vlans>
    <igmp-snooping-vlans y:self="/rest/operational-state/igmp-snooping-state/igmp-
snooping-vlans/3758098488/igmp-snooping-vlans/3106">
      <vlan-id>3106</vlan-id>
      <multicast-router-ports>&quot; ICL, &quot;</multicast-router-ports>
      <is-querier>0</is-querier>
      <igmp-operation-mode>2</igmp-operation-mode>
      <fast-leave>0</fast-leave>
      <qmrt>10</qmrt>
      <lmqi>1000</lmqi>
      <qi>125</qi>
      <restrict-unknown-mcast>0</restrict-unknown-mcast>
      <num-of-mcast-grps>1</num-of-mcast-grps>
    </igmp-snooping-vlans>
    <igmp-snooping-vlans y:self="/rest/operational-state/igmp-snooping-state/igmp-
snooping-vlans/3758098488/igmp-snooping-vlans/3107">
      <vlan-id>3107</vlan-id>
      <multicast-router-ports>&quot; ICL, &quot;</multicast-router-ports>
      <is-querier>0</is-querier>
      <igmp-operation-mode>2</igmp-operation-mode>
      <fast-leave>0</fast-leave>
      <qmrt>10</qmrt>
      <lmqi>1000</lmqi>
      <qi>125</qi>
      <restrict-unknown-mcast>0</restrict-unknown-mcast>
      <num-of-mcast-grps>0</num-of-mcast-grps>
    </igmp-snooping-vlans>
    <igmp-snooping-vlans y:self="/rest/operational-state/igmp-snooping-state/igmp-
snooping-vlans/3758098488/igmp-snooping-vlans/3108">
      <vlan-id>3108</vlan-id>
      <multicast-router-ports>&quot; ICL, &quot;</multicast-router-ports>
      <is-querier>0</is-querier>
      <igmp-operation-mode>2</igmp-operation-mode>
      <fast-leave>0</fast-leave>
      <qmrt>10</qmrt>
      <lmqi>1000</lmqi>
      <qi>125</qi>
      <restrict-unknown-mcast>0</restrict-unknown-mcast>
      <num-of-mcast-grps>1</num-of-mcast-grps>
    </igmp-snooping-vlans>
    ...
  </igmp-snooping-vlans>
  <igmp-snooping-mrouters y:self="/rest/operational-state/igmp-snooping-state/igmp-snooping-
mrouters/3758098344">
    <vlan-id>3758098344</vlan-id>
    <igmp-snooping-mrouters y:self="/rest/operational-state/igmp-snooping-state/igmp-
snooping-mrouters/3758098344/igmp-snooping-mrouters/4009">
      <vlan-id>4009</vlan-id>
      <interface-name>po40</interface-name>
      <expiry-time>243</expiry-time>
    </igmp-snooping-mrouters>
  </igmp-snooping-mrouters y:self="/rest/operational-state/igmp-snooping-state/igmp-

```

```
snooping-mrouters/3758098344/igmp-snooping-mrouters/3250">
  <vlan-id>3250</vlan-id>
  <interface-name>ICL</interface-name>
  <expiry-time>273</expiry-time>
</igmp-snooping-mrouters>
<igmp-snooping-mrouters y:self="/rest/operational-state/igmp-snooping-state/igmp-
snooping-mrouters/3758098344/igmp-snooping-mrouters/4042">
  <vlan-id>4042</vlan-id>
  <interface-name>po30</interface-name>
  <expiry-time>258</expiry-time>
</igmp-snooping-mrouters>
<igmp-snooping-mrouters y:self="/rest/operational-state/igmp-snooping-state/igmp-
snooping-mrouters/3758098344/igmp-snooping-mrouters/4010">
  <vlan-id>4010</vlan-id>
  <interface-name>po41</interface-name>
  <expiry-time>192</expiry-time>
</igmp-snooping-mrouters>
<igmp-snooping-mrouters y:self="/rest/operational-state/igmp-snooping-state/igmp-
snooping-mrouters/3758098344/igmp-snooping-mrouters/3100">
  <vlan-id>3100</vlan-id>
  <interface-name>ICL</interface-name>
  <expiry-time>278</expiry-time>
</igmp-snooping-mrouters>
<igmp-snooping-mrouters y:self="/rest/operational-state/igmp-snooping-state/igmp-
snooping-mrouters/3758098344/igmp-snooping-mrouters/3101">
  <vlan-id>3101</vlan-id>
  <interface-name>ICL</interface-name>
  <expiry-time>278</expiry-time>
</igmp-snooping-mrouters>
<igmp-snooping-mrouters y:self="/rest/operational-state/igmp-snooping-state/igmp-
snooping-mrouters/3758098344/igmp-snooping-mrouters/3102">
  <vlan-id>3102</vlan-id>
  <interface-name>ICL</interface-name>
  <expiry-time>279</expiry-time>
</igmp-snooping-mrouters>
<igmp-snooping-mrouters y:self="/rest/operational-state/igmp-snooping-state/igmp-
snooping-mrouters/3758098344/igmp-snooping-mrouters/3103">
  <vlan-id>3103</vlan-id>
  <interface-name>ICL</interface-name>
  <expiry-time>279</expiry-time>
</igmp-snooping-mrouters>
<igmp-snooping-mrouters y:self="/rest/operational-state/igmp-snooping-state/igmp-
snooping-mrouters/3758098344/igmp-snooping-mrouters/3104">
  <vlan-id>3104</vlan-id>
  <interface-name>ICL</interface-name>
  <expiry-time>280</expiry-time>
</igmp-snooping-mrouters>
<igmp-snooping-mrouters y:self="/rest/operational-state/igmp-snooping-state/igmp-
snooping-mrouters/3758098344/igmp-snooping-mrouters/3105">
  <vlan-id>3105</vlan-id>
  <interface-name>ICL</interface-name>
  <expiry-time>280</expiry-time>
</igmp-snooping-mrouters>
<igmp-snooping-mrouters y:self="/rest/operational-state/igmp-snooping-state/igmp-
snooping-mrouters/3758098344/igmp-snooping-mrouters/3106">
  <vlan-id>3106</vlan-id>
  <interface-name>ICL</interface-name>
  <expiry-time>280</expiry-time>
</igmp-snooping-mrouters>
<igmp-snooping-mrouters y:self="/rest/operational-state/igmp-snooping-state/igmp-
snooping-mrouters/3758098344/igmp-snooping-mrouters/3107">
  <vlan-id>3107</vlan-id>
  <interface-name>ICL</interface-name>
  <expiry-time>281</expiry-time>
```



```

    </igmp-snooping-mrouters>
    <igmp-snooping-mrouters y:self="/rest/operational-state/igmp-snooping-state/igmp-snooping-mrouters/3758098344/igmp-snooping-mrouters/3108">
      <vlan-id>3108</vlan-id>
      <interface-name>ICL</interface-name>
      <expiry-time>281</expiry-time>
    </igmp-snooping-mrouters>
    <igmp-snooping-mrouters y:self="/rest/operational-state/igmp-snooping-state/igmp-snooping-mrouters/3758098344/igmp-snooping-mrouters/3109">
      <vlan-id>3109</vlan-id>
      <interface-name>ICL</interface-name>
      <expiry-time>282</expiry-time>
    </igmp-snooping-mrouters>
    <igmp-snooping-mrouters y:self="/rest/operational-state/igmp-snooping-state/igmp-snooping-mrouters/3758098344/igmp-snooping-mrouters/3110">
      <vlan-id>3110</vlan-id>
      <interface-name>ICL</interface-name>
      <expiry-time>282</expiry-time>
    </igmp-snooping-mrouters>
    <igmp-snooping-mrouters y:self="/rest/operational-state/igmp-snooping-state/igmp-snooping-mrouters/3758098344/igmp-snooping-mrouters/3111">
      <vlan-id>3111</vlan-id>
      <interface-name>ICL</interface-name>
      <expiry-time>282</expiry-time>
    </igmp-snooping-mrouters>
    <igmp-snooping-mrouters y:self="/rest/operational-state/igmp-snooping-state/igmp-snooping-mrouters/3758098344/igmp-snooping-mrouters/3112">
      <vlan-id>3112</vlan-id>
      <interface-name>ICL</interface-name>
      <expiry-time>283</expiry-time>
    </igmp-snooping-mrouters>
    <igmp-snooping-mrouters y:self="/rest/operational-state/igmp-snooping-state/igmp-snooping-mrouters/3758098344/igmp-snooping-mrouters/3113">
      <vlan-id>3113</vlan-id>
      <interface-name>ICL</interface-name>
      <expiry-time>283</expiry-time>
    </igmp-snooping-mrouters>
    <igmp-snooping-mrouters y:self="/rest/operational-state/igmp-snooping-state/igmp-snooping-mrouters/3758098344/igmp-snooping-mrouters/3114">
      <vlan-id>3114</vlan-id>
      <interface-name>ICL</interface-name>
      <expiry-time>284</expiry-time>
    </igmp-snooping-mrouters>
    ...
    <igmp-l3-interfaces y:self="/rest/operational-state/igmp-snooping-state/igmp-l3-interfaces/%22%22">
      <interface-name>"</interface-name>
      <igmp-l3-interfaces y:self="/rest/operational-state/igmp-snooping-state/igmp-l3-interfaces/%22%22/igmp-l3-interfaces/%22Ve 4009%22%2C172.31.12.37">
        <interface-name>"Ve 4009"</interface-name>
        <igmp-querier>172.31.12.37</igmp-querier>
        <is-igmp-enabled>1</is-igmp-enabled>
        <query-interval>125</query-interval>
        <other-querier-interval>255</other-querier-interval>
        <query-reponse-time>10</query-reponse-time>
        <last-member-query-interval>1000</last-member-query-interval>
        <immediate-leave>0</immediate-leave>
        <is-igmp-querier-local>0</is-igmp-querier-local>
        <igmp-version>2</igmp-version>
      </igmp-l3-interfaces>
      <igmp-l3-interfaces y:self="/rest/operational-state/igmp-snooping-state/igmp-l3-interfaces/%22%22/igmp-l3-interfaces/%22Ve 3250%22%2C172.19.40.1">
        <interface-name>"Ve 3250"</interface-name>
        <igmp-querier>172.19.40.1</igmp-querier>

```

```

<is-igmp-enabled>1</is-igmp-enabled>
<query-interval>125</query-interval>
<other-querier-interval>255</other-querier-interval>
<query-reponse-time>10</query-reponse-time>
<last-member-query-interval>1000</last-member-query-interval>
<immediate-leave>0</immediate-leave>
<is-igmp-querier-local>0</is-igmp-querier-local>
<igmp-version>2</igmp-version>
</igmp-l3-interfaces>
<igmp-l3-interfaces y:self="/rest/operational-state/igmp-snooping-state/igmp-l3-
interfaces/%22%22/igmp-l3-interfaces/%22Ve 4042%22%2C172.31.30.9">
  <interface-name>&quot;Ve 4042&quot;</interface-name>
  <igmp-querier>172.31.30.9</igmp-querier>
  <is-igmp-enabled>1</is-igmp-enabled>
  <query-interval>125</query-interval>
  <other-querier-interval>255</other-querier-interval>
  <query-reponse-time>10</query-reponse-time>
  <last-member-query-interval>1000</last-member-query-interval>
  <immediate-leave>0</immediate-leave>
  <is-igmp-querier-local>0</is-igmp-querier-local>
  <igmp-version>2</igmp-version>
</igmp-l3-interfaces>
...
</igmp-l3-interfaces>
<igmp-groups y:self="/rest/operational-state/igmp-snooping-state/igmp-groups/
127.0.0.1%2C%22%22">
  <group-addr>127.0.0.1</group-addr>
  <interface-name>&quot;&quot;</interface-name>
  <igmp-groups y:self="/rest/operational-state/igmp-snooping-state/igmp-groups/
127.0.0.1%2C%22%22/igmp-groups/226.0.0.1%2Cvlan3100">
    <group-addr>226.0.0.1</group-addr>
    <interface-name>vlan3100</interface-name>
    <uptime>03:07:27</uptime>
    <expiry-time>00:03:09</expiry-time>
    <last-reporter>172.20.201.40</last-reporter>
    <filter-mode>1</filter-mode>
    <member-ship>&quot; po1, &quot;</member-ship>
    <oper-version>2</oper-version>
    <igmpv3-sources y:self="/rest/operational-state/igmp-snooping-state/igmp-groups/
127.0.0.1%2C%22%22/igmp-groups/226.0.0.1%2Cvlan3100/igmpv3-sources/po1">
      <interface-name>po1</interface-name>
    </igmpv3-sources>
  </igmp-groups>
  <igmp-groups y:self="/rest/operational-state/igmp-snooping-state/igmp-groups/
127.0.0.1%2C%22%22/igmp-groups/226.0.0.1%2Cvlan3102">
    <group-addr>226.0.0.1</group-addr>
    <interface-name>vlan3102</interface-name>
    <uptime>03:07:27</uptime>
    <expiry-time>00:03:40</expiry-time>
    <last-reporter>172.20.201.42</last-reporter>
    <filter-mode>1</filter-mode>
    <member-ship>&quot; po1, &quot;</member-ship>
    <oper-version>2</oper-version>
    <igmpv3-sources y:self="/rest/operational-state/igmp-snooping-state/igmp-groups/
127.0.0.1%2C%22%22/igmp-groups/226.0.0.1%2Cvlan3102/igmpv3-sources/po1">
      <interface-name>po1</interface-name>
    </igmpv3-sources>
  </igmp-groups>
  <igmp-groups y:self="/rest/operational-state/igmp-snooping-state/igmp-groups/
127.0.0.1%2C%22%22/igmp-groups/226.0.0.1%2Cvlan3104">
    <group-addr>226.0.0.1</group-addr>
    <interface-name>vlan3104</interface-name>
    <uptime>03:07:27</uptime>
    <expiry-time>00:03:12</expiry-time>

```

```

    <last-reporter>172.20.201.44</last-reporter>
    <filter-mode>1</filter-mode>
    <member-ship>&quot; pol, &quot;</member-ship>
    <oper-version>2</oper-version>
    <igmpv3-sources y:self="/rest/operational-state/igmp-snooping-state/igmp-groups/
127.0.0.1%2C%22%22/igmp-groups/226.0.0.1%2Cvlan3104/igmpv3-sources/pol">
      <interface-name>pol</interface-name>
    </igmpv3-sources>
  </igmp-groups>
  <igmp-groups y:self="/rest/operational-state/igmp-snooping-state/igmp-groups/
127.0.0.1%2C%22%22/igmp-groups/226.0.0.1%2Cvlan3106">
    <group-addr>226.0.0.1</group-addr>
    <interface-name>vlan3106</interface-name>
    <uptime>03:07:27</uptime>
    <expiry-time>00:03:42</expiry-time>
    <last-reporter>172.20.201.46</last-reporter>
    <filter-mode>1</filter-mode>
    <member-ship>&quot; pol, &quot;</member-ship>
    <oper-version>2</oper-version>
    <igmpv3-sources y:self="/rest/operational-state/igmp-snooping-state/igmp-groups/
127.0.0.1%2C%22%22/igmp-groups/226.0.0.1%2Cvlan3106/igmpv3-sources/pol">
      <interface-name>pol</interface-name>
    </igmpv3-sources>
  </igmp-groups>
  ...
</igmp-groups>
  <igmp-mct-groups y:self="/rest/operational-state/igmp-snooping-state/igmp-mct-groups/
%22%22">
    <client-id>&quot;&quot;</client-id>
    <igmp-entry y:self="/rest/operational-state/igmp-snooping-state/igmp-mct-groups/
%22%22/igmp-entry/226.0.0.1%2CNil%2C%22Vlan 3100%22%2C%22Po 1%22">
      <grp-addr>226.0.0.1</grp-addr>
      <src-addr>Nil</src-addr>
      <interface-name>&quot;Vlan 3100&quot;</interface-name>
      <member-intf>&quot;Po 1&quot;</member-intf>
      <member-type>CCEP</member-type>
      <filter-mode>EXCLUDE</filter-mode>
      <mcast-df>DF</mcast-df>
      <peer-addr>Local</peer-addr>
    </igmp-entry>
    <igmp-entry y:self="/rest/operational-state/igmp-snooping-state/igmp-mct-groups/
%22%22/igmp-entry/226.0.0.1%2CNil%2C%22Vlan 3101%22%2C%22Po 1%22">
      <grp-addr>226.0.0.1</grp-addr>
      <src-addr>Nil</src-addr>
      <interface-name>&quot;Vlan 3101&quot;</interface-name>
      <member-intf>&quot;Po 1&quot;</member-intf>
      <member-type>CCEP</member-type>
      <filter-mode>EXCLUDE</filter-mode>
      <mcast-df>DF</mcast-df>
      <peer-addr>172.31.40.10</peer-addr>
    </igmp-entry>
    <igmp-entry y:self="/rest/operational-state/igmp-snooping-state/igmp-mct-groups/
%22%22/igmp-entry/226.0.0.1%2CNil%2C%22Vlan 3102%22%2C%22Po 1%22">
      <grp-addr>226.0.0.1</grp-addr>
      <src-addr>Nil</src-addr>
      <interface-name>&quot;Vlan 3102&quot;</interface-name>
      <member-intf>&quot;Po 1&quot;</member-intf>
      <member-type>CCEP</member-type>
      <filter-mode>EXCLUDE</filter-mode>
      <mcast-df>DF</mcast-df>
      <peer-addr>Local</peer-addr>
    </igmp-entry>
    <igmp-entry y:self="/rest/operational-state/igmp-snooping-state/igmp-mct-groups/
%22%22/igmp-entry/226.0.0.1%2CNil%2C%22Vlan 3103%22%2C%22Po 1%22">

```

```

    <grp-addr>226.0.0.1</grp-addr>
    <src-addr>Nil</src-addr>
    <interface-name>&quot;Vlan 3103&quot;</interface-name>
    <member-intf>&quot;Po 1&quot;</member-intf>
    <member-type>CCEP</member-type>
    <filter-mode>EXCLUDE</filter-mode>
    <mcast-df>DF</mcast-df>
    <peer-addr>172.31.40.10</peer-addr>
  </igmp-entry>
  <igmp-entry y:self="/rest/operational-state/igmp-snooping-state/igmp-mct-groups/
%22%22/igmp-entry/226.0.0.1%2CNil%2C%22Vlan 3104%22%2C%22Po 1%22">
    <grp-addr>226.0.0.1</grp-addr>
    <src-addr>Nil</src-addr>
    <interface-name>&quot;Vlan 3104&quot;</interface-name>
    <member-intf>&quot;Po 1&quot;</member-intf>
    <member-type>CCEP</member-type>
    <filter-mode>EXCLUDE</filter-mode>
    <mcast-df>DF</mcast-df>
    <peer-addr>Local</peer-addr>
  </igmp-entry>
  <igmp-entry y:self="/rest/operational-state/igmp-snooping-state/igmp-mct-groups/
%22%22/igmp-entry/226.0.0.1%2CNil%2C%22Vlan 3105%22%2C%22Po 1%22">
    <grp-addr>226.0.0.1</grp-addr>
    <src-addr>Nil</src-addr>
    <interface-name>&quot;Vlan 3105&quot;</interface-name>
    <member-intf>&quot;Po 1&quot;</member-intf>
    <member-type>CCEP</member-type>
    <filter-mode>EXCLUDE</filter-mode>
    <mcast-df>DF</mcast-df>
    <peer-addr>172.31.40.10</peer-addr>
  </igmp-entry>
  <igmp-entry y:self="/rest/operational-state/igmp-snooping-state/igmp-mct-groups/
%22%22/igmp-entry/226.0.0.1%2CNil%2C%22Vlan 3106%22%2C%22Po 1%22">
    <grp-addr>226.0.0.1</grp-addr>
    <src-addr>Nil</src-addr>
    <interface-name>&quot;Vlan 3106&quot;</interface-name>
    <member-intf>&quot;Po 1&quot;</member-intf>
    <member-type>CCEP</member-type>
    <filter-mode>EXCLUDE</filter-mode>
    <mcast-df>DF</mcast-df>
    <peer-addr>Local</peer-addr>
  </igmp-entry>
  ...
</igmp-mct-groups>
  <pim-snp-groups y:self="/rest/operational-state/igmp-snooping-state/pim-snp-groups/
3758098408%2C%22%22">
    <vlan-id>3758098408</vlan-id>
    <type>&quot;&quot;</type>
    <pim-snp-groups y:self="/rest/operational-state/igmp-snooping-state/pim-snp-groups/
3758098408%2C%22%22/pim-snp-groups/226.0.0.1%2C3100">
      <group-addr>226.0.0.1</group-addr>
      <vlan-id>3100</vlan-id>
      <uptime>03:07:27</uptime>
    </pim-snp-groups>
    <pim-snp-groups y:self="/rest/operational-state/igmp-snooping-state/pim-snp-groups/
3758098408%2C%22%22/pim-snp-groups/226.0.0.1%2C3102">
      <group-addr>226.0.0.1</group-addr>
      <vlan-id>3102</vlan-id>
      <uptime>03:07:27</uptime>
    </pim-snp-groups>
    <pim-snp-groups y:self="/rest/operational-state/igmp-snooping-state/pim-snp-groups/
3758098408%2C%22%22/pim-snp-groups/226.0.0.1%2C3104">
      <group-addr>226.0.0.1</group-addr>
      <vlan-id>3104</vlan-id>

```

```

    <uptime>03:07:27</uptime>
  </pim-snp-groups>
  <pim-snp-groups y:self="/rest/operational-state/igmp-snooping-state/pim-snp-groups/3758098408%2C%22%22/pim-snp-groups/226.0.0.1%2C3106">
    <group-addr>226.0.0.1</group-addr>
    <vlan-id>3106</vlan-id>
    <uptime>03:07:27</uptime>
  </pim-snp-groups>
  <pim-snp-groups y:self="/rest/operational-state/igmp-snooping-state/pim-snp-groups/3758098408%2C%22%22/pim-snp-groups/226.0.0.1%2C3108">
    <group-addr>226.0.0.1</group-addr>
    <vlan-id>3108</vlan-id>
    <uptime>03:07:27</uptime>
  </pim-snp-groups>
  ...
</pim-snp-groups>
<igmp-multicast-snooping-vlans y:self="/rest/operational-state/igmp-snooping-state/igmp-multicast-snooping-vlans/3758098296">
  <vlan-id>3758098296</vlan-id>
  <igmp-multicast-snooping-vlans y:self="/rest/operational-state/igmp-snooping-state/igmp-multicast-snooping-vlans/3758098296/igmp-multicast-snooping-vlans/4009">
    <vlan-id>4009</vlan-id>
    <pim-sn-status>1</pim-sn-status>
    <igmp-sn-status>1</igmp-sn-status>
    <igmp-version>2</igmp-version>
  </igmp-multicast-snooping-vlans>
  <igmp-multicast-snooping-vlans y:self="/rest/operational-state/igmp-snooping-state/igmp-multicast-snooping-vlans/3758098296/igmp-multicast-snooping-vlans/3250">
    <vlan-id>3250</vlan-id>
    <pim-sn-status>1</pim-sn-status>
    <igmp-sn-status>1</igmp-sn-status>
    <igmp-version>2</igmp-version>
  </igmp-multicast-snooping-vlans>
  <igmp-multicast-snooping-vlans y:self="/rest/operational-state/igmp-snooping-state/igmp-multicast-snooping-vlans/3758098296/igmp-multicast-snooping-vlans/4042">
    <vlan-id>4042</vlan-id>
    <pim-sn-status>1</pim-sn-status>
    <igmp-sn-status>1</igmp-sn-status>
    <igmp-version>2</igmp-version>
  </igmp-multicast-snooping-vlans>
  <igmp-multicast-snooping-vlans y:self="/rest/operational-state/igmp-snooping-state/igmp-multicast-snooping-vlans/3758098296/igmp-multicast-snooping-vlans/4010">
    <vlan-id>4010</vlan-id>
    <pim-sn-status>1</pim-sn-status>
    <igmp-sn-status>1</igmp-sn-status>
    <igmp-version>2</igmp-version>
  </igmp-multicast-snooping-vlans>
  ...
</igmp-multicast-snooping-vlans>
</igmp-snooping-state>
</data>

```

## History

| Release version | History                       |
|-----------------|-------------------------------|
| 18r.2.00        | This API call was introduced. |

## isis-state

### Resource URIs

| URI   | Description                                     |
|---|---|
| <base_URI>/operational-state/isis-state   | Displays ISIS operational information.          |
| <base_URI>/operational-state/isis-state/global-isis-info                          | Displays Global IS-IS Routing Protocol state.   |
| <base_URI>/operational-state/isis-state/global-isis-info/isis-protocol            | Displays IS-IS Routing Protocol state.          |
| <base_URI>/operational-state/isis-state/global-isis-info/isis-state               | Displays ISIS Routing Protocol Operation State. |
| <base_URI>/operational-state/isis-state/global-isis-info/isis-type                | Displays IS-Type                                |
| <base_URI>/operational-state/isis-state/global-isis-info/system-id                | System ID                                       |
| <base_URI>/operational-state/isis-state/global-isis-info/area-addresses           | ISIS Area addresses                             |
| <base_URI>/operational-state/isis-state/global-isis-info/database-state-level-1   | Database State for Level-1                      |
| <base_URI>/operational-state/isis-state/global-isis-info/database-state-level-2   | Database State for Level-2                      |
| <base_URI>/operational-state/isis-state/global-isis-info/database-state-level-1-2 | Database State for Level-1_2                    |
| <base_URI>/operational-state/isis-state/global-isis-info/overload-reason          | ISIS Overload Reason                            |
| <base_URI>/operational-state/isis-state/global-isis-info/check-alarm              | Database State                                  |
| <base_URI>/operational-state/isis-state/global-isis-info/overload-state-since     | Overload state since                            |
| <base_URI>/operational-state/isis-state/global-isis-info/overload-state-rem-time  | Overload state remaining time                   |
| <base_URI>/operational-state/isis-state/global-isis-info/admin-distance           | Admin Distance                                  |
| <base_URI>/operational-state/isis-state/global-isis-info/v6-admin-distance        | Admin Distance                                  |
| <base_URI>/operational-state/isis-state/global-isis-info/max-paths                | Maximum Paths                                   |
| <base_URI>/operational-state/isis-state/global-isis-info/v6-max-paths             | Maximum Paths                                   |
| <base_URI>/operational-state/isis-state/global-isis-info/default-redis-metric     | Admin Distance                                  |
| <base_URI>/operational-state/isis-state/global-isis-info/v6-default-redis-metric  | Admin Distance                                  |

| URI   | Description                    |
|---|--------------------------------|
| <base_URI>/operational-state/isis-state/global-isis-info/default-link-metric-l1-conf    | Default Link Metric L1         |
| <base_URI>/operational-state/isis-state/global-isis-info/default-link-metric-l1-adv     | Default Link Metric L1         |
| <base_URI>/operational-state/isis-state/global-isis-info/default-link-metric-l2-conf    | Default Link Metric L2         |
| <base_URI>/operational-state/isis-state/global-isis-info/default-link-metric-l2-adv     | Default Link Metric L2         |
| <base_URI>/operational-state/isis-state/global-isis-info/v6-default-link-metric-l1-conf | Default Link Metric L1         |
| <base_URI>/operational-state/isis-state/global-isis-info/v6-default-link-metric-l1-adv  | Default Link Metric L1         |
| <base_URI>/operational-state/isis-state/global-isis-info/v6-default-link-metric-l2-conf | Default Link Metric L2         |
| <base_URI>/operational-state/isis-state/global-isis-info/v6-default-link-metric-l2-adv  | Default Link Metric L2         |
| <base_URI>/operational-state/isis-state/global-isis-info/redis-protocol                 | Redistributed Protocols        |
| <base_URI>/operational-state/isis-state/global-isis-info/no-routes-redis                | Number of redistributed routes |
| <base_URI>/operational-state/isis-state/global-isis-info/v6-redis-protocol              | Redistributed Protocols        |
| <base_URI>/operational-state/isis-state/global-isis-info/v6-no-routes-redis             | Number of redistributed routes |
| <base_URI>/operational-state/isis-state/global-isis-info/auth-mode-l1                   | AuthMode for Level1            |
| <base_URI>/operational-state/isis-state/global-isis-info/auth-mode-l2                   | AuthMode for Level2            |
| <base_URI>/operational-state/isis-state/global-isis-info/auth-key-l1                    | Authkey for Level1             |
| <base_URI>/operational-state/isis-state/global-isis-info/auth-key-l2                    | Authkey for Level2             |
| <base_URI>/operational-state/isis-state/global-isis-info/metric-style-l1                | Metric Style Level1            |
| <base_URI>/operational-state/isis-state/global-isis-info/metric-style-l2                | Metric Style Level2            |
| <base_URI>/operational-state/isis-state/global-isis-info/graceful-restart-helper        | Graceful Restart Helper        |
| <base_URI>/operational-state/isis-state/global-isis-info/pspf-optimization              | PSPF Optimization              |

| URI  | Description            |
|--|------------------------|
| <base_URI>/operational-state/isis-state/global-isis-info/spf-max-wait-l1     | SPF Max Wait Level1    |
| <base_URI>/operational-state/isis-state/global-isis-info/spf-max-wait-l2     | SPF Max Wait Level2    |
| <base_URI>/operational-state/isis-state/global-isis-info/spf-init-wait-l1    | SPF Init Wait Level1   |
| <base_URI>/operational-state/isis-state/global-isis-info/spf-init-wait-l2    | SPF Init Wait Level2   |
| <base_URI>/operational-state/isis-state/global-isis-info/spf-second-wait-l1  | SPF Second Wait Level1 |
| <base_URI>/operational-state/isis-state/global-isis-info/spf-second-wait-l2  | SPF Second Wait Level2 |
| <base_URI>/operational-state/isis-state/global-isis-info/spf-scheduled-l1    | SPF Secheduled Level1  |
| <base_URI>/operational-state/isis-state/global-isis-info/spf-scheduled-l2    | SPF Secheduled Level2  |
| <base_URI>/operational-state/isis-state/global-isis-info/pspf-max-wait       | PSPF Max Wait          |
| <base_URI>/operational-state/isis-state/global-isis-info/pspf-init-wait      | PSPF Init Wait         |
| <base_URI>/operational-state/isis-state/global-isis-info/pspf-second-wait    | PSPF Second Wait       |
| <base_URI>/operational-state/isis-state/global-isis-info/pspf-scheduled      | PSPF Secheduled        |
| <base_URI>/operational-state/isis-state/global-isis-info/spf6-max-wait-l1    | SPF Max Wait Level1    |
| <base_URI>/operational-state/isis-state/global-isis-info/spf6-max-wait-l2    | SPF Max Wait Level2    |
| <base_URI>/operational-state/isis-state/global-isis-info/spf6-init-wait-l1   | SPF Init Wait Level1   |
| <base_URI>/operational-state/isis-state/global-isis-info/spf6-init-wait-l2   | SPF Init Wait Level2   |
| <base_URI>/operational-state/isis-state/global-isis-info/spf6-second-wait-l1 | SPF Second Wait Level1 |
| <base_URI>/operational-state/isis-state/global-isis-info/spf6-second-wait-l2 | SPF Second Wait Level2 |
| <base_URI>/operational-state/isis-state/global-isis-info/spf6-scheduled-l1   | SPF6 Secheduled Level1 |
| <base_URI>/operational-state/isis-state/global-isis-info/spf6-scheduled-l2   | SPF6 Secheduled Level2 |
| <base_URI>/operational-state/isis-state/global-isis-info/pspf6-max-wait      | PSPF Max Wait          |



| URI   | Description                      |
|---|----------------------------------|
| <base_URI>/operational-state/isis-state/global-isis-info/pspf6-init-wait          | PSPF Init Wait                   |
| <base_URI>/operational-state/isis-state/global-isis-info/pspf6-second-wait        | PSPF Second Wait                 |
| <base_URI>/operational-state/isis-state/global-isis-info/pspf6-scheduled          | PSPF Secheduled                  |
| <base_URI>/operational-state/isis-state/global-isis-info/lsp-max-lifetime         | LSP MAX Lifetime                 |
| <base_URI>/operational-state/isis-state/global-isis-info/lsp-refresh-interval     | LSP Refresh Interval             |
| <base_URI>/operational-state/isis-state/global-isis-info/lsp-gen-interval         | LSP Gen Interval                 |
| <base_URI>/operational-state/isis-state/global-isis-info/lsp-retrans-interval     | LSP Retrans Interval             |
| <base_URI>/operational-state/isis-state/global-isis-info/lsp-interval             | LSP Interval                     |
| <base_URI>/operational-state/isis-state/global-isis-info/snp-csnp-interval        | CSNP Interval                    |
| <base_URI>/operational-state/isis-state/global-isis-info/snp-psnp-interval        | PSNP Interval                    |
| <base_URI>/operational-state/isis-state/global-isis-info/hello-padding            | Hello Padding                    |
| <base_URI>/operational-state/isis-state/global-isis-info/hello-padding-ntp        | Hello Padding for Point-to-Point |
| <base_URI>/operational-state/isis-state/global-isis-info/ntp-handshake            | Point to Point Handshake         |
| <base_URI>/operational-state/isis-state/global-isis-info/bgp-ipv4-converged       | IPV4 BGP Converged               |
| <base_URI>/operational-state/isis-state/global-isis-info/bgp-ipv6-converged       | IPV6 BGP Converged               |
| <base_URI>/operational-state/isis-state/global-isis-info/isis-te                  | ISIS Traffic Engineering         |
| <base_URI>/operational-state/isis-state/global-isis-info/isis-shortcuts           | ISIS Shortcuts                   |
| <base_URI>/operational-state/isis-state/global-isis-info/isis-reverse-metric      | ISIS Reverse Metric              |
| <base_URI>/operational-state/isis-state/global-isis-info/isis-reverse-metric-wbit | ISIS Reverse Metric W Flag       |
| <base_URI>/operational-state/isis-state/global-isis-info/isis-reverse-metric-sbit | ISIS Reverse Metric S Flag       |
| <base_URI>/operational-state/isis-state/global-isis-info/nsr-enabled              | NSR Enabled                      |

| URI   | Description            |
|---|------------------------|
| <base_URI>/operational-state/isis-state/global-isis-info/nsr-state              | NSR State              |
| <base_URI>/operational-state/isis-state/global-isis-info/nsr-sync-state         | NSR Sync State         |
| <base_URI>/operational-state/isis-state/global-isis-info/isis-is-mp             | ISIS Active            |
| <base_URI>/operational-state/isis-state/global-isis-info/ldp-sync               | LDP Sync               |
| <base_URI>/operational-state/isis-state/global-isis-info/ldp-sync-holddown-time | LDP Sync Holddown Time |

## Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

## Examples

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

## URI

http://host:80/rest/operational-state/isis-state/global-isis-info

## Request Body

None

## Response Body

```
<global-isis-info xmlns="urn:brocade.com:mgmt:brocade-isis-operational" xmlns:y="http://
brocade.com/ns/rest"
y:self="/rest/operational-state/isis-state/global-isis-info">
  <isis-protocol>true</isis-protocol>
  <isis-state>true</isis-state>
  <is-type>2</is-type>
  <system-id>1111.1111.1111</system-id>
  <area-addresses>01</area-addresses>
  <database-state-level-1></database-state-level-1>
  <database-state-level-2></database-state-level-2>
  <database-state-level-1-2> On</database-state-level-1-2>
  <overload-reason>None</overload-reason>
  <check-alarm>false</check-alarm>
  <overload-state-since>None</overload-state-since>
  <overload-state-rem-time>None</overload-state-rem-time>
  <admin-distance>110</admin-distance>
  <v6-admin-distance>100</v6-admin-distance>
  <max-paths>8</max-paths>
  <v6-max-paths>64</v6-max-paths>
  <default-redis-metric>5000</default-redis-metric>
```

```

<v6-default-redis-metric>60535</v6-default-redis-metric>
<default-link-metric-l1-conf>0</default-link-metric-l1-conf>
<default-link-metric-l1-adv>10</default-link-metric-l1-adv>
<default-link-metric-l2-conf>0</default-link-metric-l2-conf>
<default-link-metric-l2-adv>10</default-link-metric-l2-adv>
<v6-default-link-metric-l1-conf>500</v6-default-link-metric-l1-conf>
<v6-default-link-metric-l1-adv>500</v6-default-link-metric-l1-adv>
<v6-default-link-metric-l2-conf>1100</v6-default-link-metric-l2-conf>
<v6-default-link-metric-l2-adv>1100</v6-default-link-metric-l2-adv>
<redis-protocol> BGP Connected OSPF Static</redis-protocol>
<no-routes-redis>1</no-routes-redis>
<v6-redis-protocol> BGP Connected OSPF Static</v6-redis-protocol>
<v6-no-routes-redis>1</v6-no-routes-redis>
<auth-mode-l1>None</auth-mode-l1>
<auth-mode-l2>None</auth-mode-l2>
<auth-key-l1></auth-key-l1>
<auth-key-l2></auth-key-l2>
<l1-auth-no-check>is-disabled</l1-auth-no-check>
<l2-auth-no-check>is-disabled</l2-auth-no-check>
<metric-style-l1>Wide</metric-style-l1>
<metric-style-l2>Wide</metric-style-l2>
<graceful-restart-helper>true</graceful-restart-helper>
<pspf-optimization>true</pspf-optimization>
<spf-max-wait-l1>5</spf-max-wait-l1>
<spf-max-wait-l2>5</spf-max-wait-l2>
<spf-init-wait-l1>5000</spf-init-wait-l1>
<spf-init-wait-l2>5000</spf-init-wait-l2>
<spf-second-wait-l1>5000</spf-second-wait-l1>
<spf-second-wait-l2>5000</spf-second-wait-l2>
<spf-scheduled-l1> L1 SPF is not scheduled</spf-scheduled-l1>
<spf-scheduled-l2> L2 SPF is not scheduled</spf-scheduled-l2>
<pspf-max-wait>5000</pspf-max-wait>
<pspf-init-wait>2000</pspf-init-wait>
<pspf-second-wait>5000</pspf-second-wait>
<pspf-scheduled> PSPF is not scheduled</pspf-scheduled>
<spf6-max-wait-l1>5</spf6-max-wait-l1>
<spf6-max-wait-l2>5</spf6-max-wait-l2>
<spf6-init-wait-l1>5000</spf6-init-wait-l1>
<spf6-init-wait-l2>5000</spf6-init-wait-l2>
<spf6-second-wait-l1>5000</spf6-second-wait-l1>
<spf6-second-wait-l2>5000</spf6-second-wait-l2>
<spf6-scheduled-l1> L1 SPF is not scheduled</spf6-scheduled-l1>
<spf6-scheduled-l2> L2 SPF is not scheduled</spf6-scheduled-l2>
<pspf6-max-wait>5000</pspf6-max-wait>
<pspf6-init-wait>2000</pspf6-init-wait>
<pspf6-second-wait>5000</pspf6-second-wait>
<pspf6-scheduled> PSPF is not scheduled</pspf6-scheduled>
<lsp-max-lifetime>1200</lsp-max-lifetime>
<lsp-refresh-interval>900</lsp-refresh-interval>
<lsp-gen-interval>10</lsp-gen-interval>
<lsp-retrans-interval>5</lsp-retrans-interval>
<lsp-interval>33</lsp-interval>
<snp-csnp-interval>10</snp-csnp-interval>
<snp-psnp-interval>2</snp-psnp-interval>
<hello-padding>true</hello-padding>
<hello-padding-ptp>1</hello-padding-ptp>
<ptp-handshake>true</ptp-handshake>
<bgp-ipv4-converged>>false</bgp-ipv4-converged>
<bgp-ipv6-converged>>false</bgp-ipv6-converged>
<isis-te>>false</isis-te>
<isis-shortcuts> No ISIS Shortcuts Configured</isis-shortcuts>
<isis-reverse-metric>0</isis-reverse-metric>
<isis-reverse-metric-wbit>0</isis-reverse-metric-wbit>
<isis-reverse-metric-sbit>0</isis-reverse-metric-sbit>

```

```
<bfd-enabled>false</bfd-enabled>
<bfd-hold-interval>0</bfd-hold-interval>
<nsr-enabled>true</nsr-enabled>
<nsr-state>    NSR State: Normal</nsr-state>
<nsr-sync-state>true</nsr-sync-state>
<isis-is-mp>true</isis-is-mp>
<ldp-sync>false</ldp-sync>
<ldp-sync-holddown-time>0</ldp-sync-holddown-time>
</global-isis-info>
```

## isis-state/database

### Resource URIs

| URI   | Description                       |
|---|-----------------------------------|
| <base_URI>/rest/operational-state/isis-state/database                                     | Displays ISIS LSP database.       |
| <base_URI>/rest/operational-state/isis-state/database/{level}/isis-operation              | IS-IS Operational State           |
| <base_URI>/rest/operational-state/isis-state/database/{level}/lsp-level1-count            | LSP Level1 Count                  |
| <base_URI>/rest/operational-state/isis-state/database/{level}/lsp-level2-count            | LSP Level2 Count                  |
| <base_URI>/rest/operational-state/isis-state/database/{level}/lsp-level1-loading          | LSP Level1 Loading Count          |
| <base_URI>/rest/operational-state/isis-state/database/{level}/lsp-level2-loading          | LSP Level2 Loading Count          |
| <base_URI>/rest/operational-state/isis-state/database/{level}/lsp-level1-fragments        | LSP Level1 Fragments Count        |
| <base_URI>/rest/operational-state/isis-state/database/{level}/lsp-level2-fragments        | LSP Level2 Fragments Count        |
| <base_URI>/rest/operational-state/isis-state/database/{level}/lsp-level1-pseudo           | LSP Level1 Pseudo Count           |
| <base_URI>/rest/operational-state/isis-state/database/{level}/lsp-level2-pseudo           | LSP Level2 Pseudo Count           |
| <base_URI>/rest/operational-state/isis-state/database/{level}/lsp-level1-pseudo-fragments | LSP Level1 Pseudo Framgents Count |
| <base_URI>/rest/operational-state/isis-state/database/{level}/lsp-level2-pseudo-fragments | LSP Level2 Pseudo Framgents Count |
| <base_URI>/rest/operational-state/isis-state/database/{level}/lsp-level1-my-count         | LSP Level1 My Count               |
| <base_URI>/rest/operational-state/isis-state/database/{level}/lsp-level2-my-count         | LSP Level2 My Count               |
| <base_URI>/rest/operational-state/isis-state/database/{level}/lsp-level1-my-lsp-fragments | LSP Level1 My Fragments Count     |
| <base_URI>/rest/operational-state/isis-state/database/{level}/lsp-level2-my-lsp-fragments | LSP Level2 My Fragments Count     |
| <base_URI>/rest/operational-state/isis-state/database/{level}/lsp-level1-my-pseudo        | LSP Level1 My Pseudo Count        |

| URI  | Description                          |
|--|--------------------------------------|
| <base_URI>/rest/operational-state/isis-state/database/{level}/lsp-level2-my-pseudo                         | LSP Level2 My Pseudo Count           |
| <base_URI>/rest/operational-state/isis-state/database/{level}/lsp-level1-my-pseudo-fragments               | LSP Level1 My Pseudo Framtents Count |
| <base_URI>/rest/operational-state/isis-state/database/{level}/lsp-level2-my-pseudo-fragments               | LSP Level2 My Pseudo Framtents Count |
| <base_URI>/rest/operational-state/isis-state/database/{level}/lsp-level1-checksum                          | LSP Level1 Sum of Checksum           |
| <base_URI>/rest/operational-state/isis-state/database/{level}/lsp-level2-checksum                          | LSP Level2 Sum of Checksum           |
| <base_URI>/rest/operational-state/isis-state/database/{level}/lsp-entry                                    | ISIS LSP MO                          |
| <base_URI>/rest/operational-state/isis-state/database/{level}/lsp-entry/{lsp-level}, {lsp-id}/lsp-seq-no   | Sequence number                      |
| <base_URI>/rest/operational-state/isis-state/database/{level}/lsp-entry/{lsp-level}, {lsp-id}/lsp-checksum | Checksum                             |
| <base_URI>/rest/operational-state/isis-state/database/{level}/lsp-entry/{lsp-level}, {lsp-id}/lsp-holdtime | HoldTime                             |
| <base_URI>/rest/operational-state/isis-state/database/{level}/lsp-entry/{lsp-level}, {lsp-id}/lsp-att      | ATT                                  |
| <base_URI>/rest/operational-state/isis-state/database/{level}/lsp-entry/{lsp-level}, {lsp-id}/lsp-p        | LSP Flag P                           |
| <base_URI>/rest/operational-state/isis-state/database/{level}/lsp-entry/{lsp-level}, {lsp-id}/lsp-ol       | LSP OL                               |

## Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

## Examples

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

## URI

`http://host:80/rest/operational-state/isis-state/database`

## Request Body

None

## Response Body

```
<database xmlns="urn:brocade.com:mgmt:brocade-isis-operational" xmlns:y="http://
brocade.com/ns/rest"
y:self="/rest/operational-state/isis-state/database/0">
  <level>0</level>
  <isis-operation>true</isis-operation>
  <lsp-level1-count>3</lsp-level1-count>
  <lsp-level2-count>3</lsp-level2-count>
  <lsp-level1-loading>0</lsp-level1-loading>
  <lsp-level2-loading>0</lsp-level2-loading>
  <lsp-level1-fragments>0</lsp-level1-fragments>
  <lsp-level2-fragments>0</lsp-level2-fragments>
  <lsp-level1-pseudo>1</lsp-level1-pseudo>
  <lsp-level2-pseudo>1</lsp-level2-pseudo>
  <lsp-level1-pseudo-fragments>0</lsp-level1-pseudo-fragments>
  <lsp-level2-pseudo-fragments>0</lsp-level2-pseudo-fragments>
  <lsp-level1-my-count>2</lsp-level1-my-count>
  <lsp-level2-my-count>2</lsp-level2-my-count>
  <lsp-level1-my-lsp-fragments>0</lsp-level1-my-lsp-fragments>
  <lsp-level2-my-lsp-fragments>0</lsp-level2-my-lsp-fragments>
  <lsp-level1-my-pseudo>1</lsp-level1-my-pseudo>
  <lsp-level2-my-pseudo>1</lsp-level2-my-pseudo>
  <lsp-level1-my-pseudo-fragments>0</lsp-level1-my-pseudo-fragments>
  <lsp-level2-my-pseudo-fragments>0</lsp-level2-my-pseudo-fragments>
  <lsp-level1-checksum>156061</lsp-level1-checksum>
  <lsp-level2-checksum>108510</lsp-level2-checksum>
</database>
```

## isis-state/host-table

### Resource URIs

| URI  | Description  |
|--|--|
| <base_URI>/operational-state/isis-state/host-table   | Displays IS-IS Dynamic Host Name Mapping.  |
| <base_URI>/operational-state/isis-state/host-table/hostname-enabled                        | Displays true if the IS-IS Routing Protocol Hostname feature support is enabled. |
| <base_URI>/operational-state/isis-state/host-table/isis-router-entry                       | Displays IS-IS Routing Protocol host-table mapping details for an IS-IS Router   |
| <base_URI>/operational-state/isis-state/host-table/isis-router-entry/{system-id}/host-name | Displays the hostname for an IS-IS Router for a specified system-id.             |
| <base_URI>/operational-state/isis-state/host-table/isis-router-entry/{system-id}/is-local  | Displays true if the host is local.  |

### Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

### Examples

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

### URI

http://host:80/rest/operational-state/isis-state/host-table

### Request Body

None

### Response Body

```
<host-table xmlns="urn:brocade.com:mgmt:brocade-isis-operational" xmlns:y="http://
brocade.com/ns/rest"
y:self="/rest/operational-state/isis-state/host-table">
  <hostname-enabled>true</hostname-enabled>
  <isis-router-entry y:self="/rest/operational-state/isis-state/host-table/isis-router-
entry/1111.1111.1111">
    <system-id>1111.1111.1111</system-id>
    <host-name>Fusion1</host-name>
    <is-local>true</is-local>
  </isis-router-entry>
  <isis-router-entry y:self="/rest/operational-state/isis-state/host-table/isis-router-
entry/a9e0.0001.0000">
```



```
<system-id>a9e0.0001.0000</system-id>  
<host-name>IXIA1101</host-name>  
<is-local>>false</is-local>  
</isis-router-entry>  
</host-table>
```

## isis-state/interface-brief

### Resource URIs

| URI  | Description   |
|--|---|
| <base_URI>/operational-state/isis-state/interface-brief  | Displays ISIS interface information in brief mode.                    |
| <base_URI>/operational-state/isis-state/interface-brief/isis-intf-brief  | Displays ISIS interface information for particular interface.         |
| <base_URI>/operational-state/isis-state/interface-brief/isis-intf-brief/val_intf-type_val/val_intf-number_val/circuit-type         | Displays ISIS circuit type.   |
| <base_URI>/operational-state/isis-state/interface-brief/isis-intf-brief/val_intf-type_val/val_intf-number_val/isis-circuit-passive | Displays true if ISIS passive is enabled on the specified interface . |
| <base_URI>/operational-state/isis-state/interface-brief/isis-intf-brief/val_intf-type_val/val_intf-number_val/circuit-mode         | Displays ISIS circuit mode.   |
| <base_URI>/operational-state/isis-state/interface-brief/isis-intf-brief/val_intf-type_val/val_intf-number_val/circ-state           | Displays Circuit state.   |
| <base_URI>/operational-state/isis-state/interface-brief/isis-intf-brief/val_intf-type_val/val_intf-number_val/mtu-size             | Displays mtu size.  |
| <base_URI>/operational-state/isis-state/interface-brief/isis-intf-brief/val_intf-type_val/val_intf-number_val/circ-adj-up          | Displays up no of isis adjacency up.                                  |
| <base_URI>/operational-state/isis-state/interface-brief/isis-intf-brief/val_intf-type_val/val_intf-number_val/circ-changes         | Displays ISIS interface state change.                                 |
| <base_URI>/operational-state/isis-state/interface-brief/isis-intf-brief/val_intf-type_val/val_intf-number_val/adj-changes          | adjacency state change.   |
| <base_URI>/operational-state/isis-state/interface-brief/isis-intf-brief/val_intf-type_val/val_intf-number_val/isis-l1-dis          | Displays true if DIS L1 is enabled on the specified interface.        |
| <base_URI>/operational-state/isis-state/interface-brief/isis-intf-brief/val_intf-type_val/val_intf-number_val/isis-l2-dis          | Displays true if DIS L2 is enabled on the specified interface.        |

### Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

## Examples

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

## URI

http://host:80/rest/operational-state/isis-state/interface-brief

## Request Body

None

## Response Body

```
<interface-brief xmlns="urn:brocade.com:mgmt:brocade-isis-operational" xmlns:y="http://
brocade.com/ns/rest"
y:self="/rest/operational-state/isis-state/interface-brief">
  <isis-intf-brief y:self="/rest/operational-state/isis-state/interface-brief/isis-intf-
brief/eth%2C%221/49%22">
    <intf-type>eth</intf-type>
    <intf-number>1/49</intf-number>
    <circuit-type>is-circ-lan</circuit-type>
    <is-circuit-passive>is-disabled</is-circuit-passive>
    <circuit-mode>isis-level1-2</circuit-mode>
    <circ-state>true</circ-state>
    <mtu-size>1500</mtu-size>
    <circ-adj-up>2</circ-adj-up>
    <circ-changes>1</circ-changes>
    <adj-changes>2</adj-changes>
    <is-l1-dis>true</is-l1-dis>
    <is-l2-dis>true</is-l2-dis>
  </isis-intf-brief>
  <isis-intf-brief y:self="/rest/operational-state/isis-state/interface-brief/isis-intf-
brief/eth%2C%224/10%22">
    <intf-type>eth</intf-type>
    <intf-number>4/10</intf-number>
    <circuit-type>is-circ-lan</circuit-type>
    <is-circuit-passive>is-disabled</is-circuit-passive>
    <circuit-mode>isis-level1-2</circuit-mode>
    <circ-state>true</circ-state>
    <mtu-size>9000</mtu-size>
    <circ-adj-up>0</circ-adj-up>
    <circ-changes>1</circ-changes>
    <adj-changes>0</adj-changes>
    <is-l1-dis>false</is-l1-dis>
    <is-l2-dis>false</is-l2-dis>
  </isis-intf-brief>
  <isis-intf-brief y:self="/rest/operational-state/isis-state/interface-brief/isis-intf-
brief/ve%2C101">
    <intf-type>ve</intf-type>
    <intf-number>101</intf-number>
    <circuit-type>is-circ-ptpt</circuit-type>
    <is-circuit-passive>is-disabled</is-circuit-passive>
    <circuit-mode>isis-level2</circuit-mode>
    <circ-state>true</circ-state>
    <mtu-size>1500</mtu-size>
    <circ-adj-up>0</circ-adj-up>
    <circ-changes>1</circ-changes>
    <adj-changes>0</adj-changes>
    <is-l1-dis>false</is-l1-dis>
```

```
<is-l2-dis>>false</is-l2-dis>
</isis-intf-brief>
<isis-intf-brief y:self="/rest/operational-state/isis-state/interface-brief/isis-intf-
brief/loopback%2C4">
  <intf-type>loopback</intf-type>
  <intf-number>4</intf-number>
  <circuit-type>is-circ-ptpt</circuit-type>
  <is-circuit-passive>is-enabled</is-circuit-passive>
  <circuit-mode>isis-level2</circuit-mode>
  <circ-state>>true</circ-state>
  <mtu-size>0</mtu-size>
  <circ-adj-up>0</circ-adj-up>
  <circ-changes>1</circ-changes>
  <adj-changes>0</adj-changes>
  <is-l1-dis>>false</is-l1-dis>
  <is-l2-dis>>false</is-l2-dis>
</isis-intf-brief>
</interface-brief>
```

## isis-state/interface-detail

### Resource URIs

| URI   | Description   |
|---|---|
| <base_URI>/operational-state/isis-state/interface-detail  | Displays IS-IS Interface information.                           |
| <base_URI>/operational-state/isis-state/interface-detail/isis-intf  | Displays IS-IS interface information for a specified interface. |
| <base_URI>/operational-state/isis-state/interface-detail/isis-intf/val_intf-type_val/val_intf-number_val/v4circuit-enabled  | Displays whether ISISv4 is enabled or not.                      |
| <base_URI>/operational-state/isis-state/interface-detail/isis-intf/val_intf-type_val/val_intf-number_val/v6circuit-enabled  | Displays whether ISISv6 is enabled or not.                      |
| <base_URI>/operational-state/isis-state/interface-detail/isis-intf/val_intf-type_val/val_intf-number_val/circuit-id         | Displays IS-IS circuit ID.                                      |
| <base_URI>/operational-state/isis-state/interface-detail/isis-intf/val_intf-type_val/val_intf-number_val/circuit-ifid       | Displays IS-IS ID   |
| <base_URI>/operational-state/isis-state/interface-detail/isis-intf/val_intf-type_val/val_intf-number_val/circuit-state      | Displays IS-IS circuit state.                                   |
| <base_URI>/operational-state/isis-state/interface-detail/isis-intf/val_intf-type_val/val_intf-number_val/circuit-ip-state   | Displays true if ISISv4 is enabled.                             |
| <base_URI>/operational-state/isis-state/interface-detail/isis-intf/val_intf-type_val/val_intf-number_val/circuit-ipv6-state | Displays true if ISISv6 is enabled.                             |
| <base_URI>/operational-state/isis-state/interface-detail/isis-intf/val_intf-type_val/val_intf-number_val/circuit-mode       | Displays ISIS interface circuit mode.                           |
| <base_URI>/operational-state/isis-state/interface-detail/isis-intf/val_intf-type_val/val_intf-number_val/circuit-type       | Displays ISIS interface circuit type.                           |
| <base_URI>/operational-state/isis-state/interface-detail/isis-intf/val_intf-type_val/val_intf-number_val/is-circuit-passive | Displays whether ISIS passive is enabled or not.                |
| <base_URI>/operational-state/isis-state/interface-detail/isis-intf/val_intf-type_val/val_intf-number_val/mtu-size           | Displays ISIS interface MTU value.                              |
| <base_URI>/operational-state/isis-state/interface-detail/isis-intf/val_intf-type_val/val_intf-number_val/padding-enabled    | Displays whether Hello Padding is enabled or not.               |

| URI  | Description                                    |
|--|--|
| <base_URI>/operational-state/isis-state/<br>interface-detail/isis-intf/val_intf-type_val/<br>val_intf-number_val/circ-chstats                  | Displays Circuit State.                        |
| <base_URI>/operational-state/isis-state/<br>interface-detail/isis-intf/val_intf-type_val/<br>val_intf-number_val/circ-chstats/circ-<br>changes | Displays Circuit State Changes.                |
| <base_URI>/operational-state/isis-state/<br>interface-detail/isis-intf/val_intf-type_val/<br>val_intf-number_val/circ-chstats/adj-<br>changes  | Displays Circuit Adjacencies State<br>Changes. |
| <base_URI>/operational-state/isis-state/<br>interface-detail/isis-intf/val_intf-type_val/<br>val_intf-number_val/circ-chstats/adj-rej          | Displays Rejected Adjacencies.                 |
| <base_URI>/operational-state/isis-state/<br>interface-detail/isis-intf/val_intf-type_val/<br>val_intf-number_val/circ-chstats/l1authfail       | Displays Circuit Authentication L1 failures.   |
| <base_URI>/operational-state/isis-state/<br>interface-detail/isis-intf/val_intf-type_val/<br>val_intf-number_val/circ-chstats/l2authfail       | Displays Circuit Authentication L2 failures.   |
| <base_URI>/operational-state/isis-state/<br>interface-detail/isis-intf/val_intf-type_val/<br>val_intf-number_val/circ-chstats/bad-lsps         | Displays Bad LSPs.                             |
| <base_URI>/operational-state/isis-state/<br>interface-detail/isis-intf/val_intf-type_val/<br>val_intf-number_val/circ-chstats/ctrl-out         | Displays Control Messages Sent.                |
| <base_URI>/operational-state/isis-state/<br>interface-detail/isis-intf/val_intf-type_val/<br>val_intf-number_val/circ-chstats/ctrl-in          | Displays Control Messages Received             |
| <base_URI>/operational-state/isis-state/<br>interface-detail/isis-intf/val_intf-type_val/<br>val_intf-number_val/mpls-info                     | Displays mpls info                             |
| <base_URI>/operational-state/isis-state/<br>interface-detail/isis-intf/val_intf-type_val/<br>val_intf-number_val/mpls-info/te-enabled          | Displays whether MPLS TE is enabled or<br>not  |
| <base_URI>/operational-state/isis-state/<br>interface-detail/isis-intf/val_intf-type_val/<br>val_intf-number_val/mpls-info/admin-<br>group     | Displays admin group information.              |
| <base_URI>/operational-state/isis-state/<br>interface-detail/isis-intf/val_intf-type_val/<br>val_intf-number_val/mpls-info/te-metric           | Displays TE metric value.                      |
| <base_URI>/operational-state/isis-state/<br>interface-detail/isis-intf/val_intf-type_val/<br>val_intf-number_val/mpls-info/max-link-<br>bw     | Displays max link bandwidth.                   |

| URI   | Description  |
|---|--|
| <base_URI>/operational-state/isis-state/<br>interface-detail/isis-intf/val_intf-type_val/<br>val_intf-number_val/mps-info/max-reserv-<br>bw                       | Displays max reserve bandwidth.  |
| <base_URI>/operational-state/isis-state/<br>interface-detail/isis-intf/val_intf-type_val/<br>val_intf-number_val/reverse-metric-info/isis-<br>global-config       | Displays True if reverse metric is enabled<br>at global level.         |
| <base_URI>/operational-state/isis-state/<br>interface-detail/isis-intf/val_intf-type_val/<br>val_intf-number_val/reverse-metric-info/<br>reverse-metric-value     | Displays Reverse Metric value  |
| <base_URI>/operational-state/isis-state/<br>interface-detail/isis-intf/val_intf-type_val/<br>val_intf-number_val/reverse-metric-info/<br>rev-metric-whole-lan     | Displays whether Reverse Metric is<br>enabled for the whole LAN or not |
| <base_URI>/operational-state/isis-state/<br>interface-detail/isis-intf/val_intf-type_val/<br>val_intf-number_val/reverse-metric-info/<br>rev-metric-te-def-metric | Displays TE Default metric sub-TLV.                                    |
| <base_URI>/operational-state/isis-state/<br>interface-detail/isis-intf/val_intf-type_val/<br>val_intf-number_val/ldp-sync-info                                    | Displays LDP sync information.   |
| <base_URI>/operational-state/isis-state/<br>interface-detail/isis-intf/val_intf-type_val/<br>val_intf-number_val/ldp-sync-info/ldp-<br>sync-enabled               | Displays whether LDP sync is enabled or<br>not.                        |
| <base_URI>/operational-state/isis-state/<br>interface-detail/isis-intf/val_intf-type_val/<br>val_intf-number_val/ldp-sync-info/ldp-<br>sync-hold-down             | Displays LDP sync hold-down timer.                                     |
| <base_URI>/operational-state/isis-state/<br>interface-detail/isis-intf/val_intf-type_val/<br>val_intf-number_val/ldp-sync-info/ldp-in-<br>sync                    | Displays LDP sync status.  |
| <base_URI>/operational-state/isis-state/<br>interface-detail/isis-intf/val_intf-type_val/<br>val_intf-number_val/ldp-sync-info/remain-<br>hd-time                 | Displays Remain HD Timer value.  |
| <base_URI>/operational-state/isis-state/<br>interface-detail/isis-intf/val_intf-type_val/<br>val_intf-number_val/ldp-sync-info/ldp-<br>sync-hd-expired            | Displays LDP sync HD expired value.                                    |
| <base_URI>/operational-state/isis-state/<br>interface-detail/isis-intf/val_intf-type_val/<br>val_intf-number_val/circ-metrics                                     | Displays circuit metrics info.   |

| URI   | Description                            |
|---|--|
| <base_URI>/operational-state/isis-state/interface-detail/isis-intf/val_intf-type_val/val_intf-number_val/circ-metrics/val_level_val/auth-check      | Displays Authentication Check status   |
| <base_URI>/operational-state/isis-state/interface-detail/isis-intf/val_intf-type_val/val_intf-number_val/circ-metrics/val_level_val/auth-mode       | Displays Authentication mode.          |
| <base_URI>/operational-state/isis-state/interface-detail/isis-intf/val_intf-type_val/val_intf-number_val/circ-metrics/val_level_val/auth-key        | Displays Authentication key.           |
| <base_URI>/operational-state/isis-state/interface-detail/isis-intf/val_intf-type_val/val_intf-number_val/circ-metrics/val_level_val/circ-metric     | Displays ISIS interface metric.        |
| <base_URI>/operational-state/isis-state/interface-detail/isis-intf/val_intf-type_val/val_intf-number_val/circ-metrics/val_level_val/ip6-circ-metric | Displays ISISv6 interface metric.      |
| <base_URI>/operational-state/isis-state/interface-detail/isis-intf/val_intf-type_val/val_intf-number_val/circ-metrics/val_level_val/circ-priority   | Displays Pr.iority for ISIS            |
| <base_URI>/operational-state/isis-state/interface-detail/isis-intf/val_intf-type_val/val_intf-number_val/circ-metrics/val_level_val/hello-int       | Displays interval between hello PDUs.  |
| <base_URI>/operational-state/isis-state/interface-detail/isis-intf/val_intf-type_val/val_intf-number_val/circ-metrics/val_level_val/hello-mult      | Displays Multiplier of hello interval. |
| <base_URI>/operational-state/isis-state/interface-detail/isis-intf/val_intf-type_val/val_intf-number_val/circ-metrics/val_level_val/dis             | Displays Designated IS                 |
| <base_URI>/operational-state/isis-state/interface-detail/isis-intf/val_intf-type_val/val_intf-number_val/circ-metrics/val_level_val/dis-ch          | Displays Designated IS Changes.        |
| <base_URI>/operational-state/isis-state/interface-detail/isis-intf/val_intf-type_val/val_intf-number_val/circ-metrics/val_level_val/next-hello      | Displays Next hello packet.            |
| <base_URI>/operational-state/isis-state/interface-detail/isis-intf/val_intf-type_val/val_intf-number_val/circ-metrics/val_level_val/active-adj      | Displays number of Active Adjacency.   |



| URI   | Description                                      |
|---|--|
| <base_URI>/operational-state/isis-state/interface-detail/isis-intf/val_intf-type_val/val_intf-number_val/ip-info                                | Displays IP Address information.                 |
| <base_URI>/operational-state/isis-state/interface-detail/isis-intf/val_intf-type_val/val_intf-number_val/ip-info/val_ip-add_val/ip-prefix       | Displays the IP Address Prefix Length value      |
| <base_URI>/operational-state/isis-state/interface-detail/isis-intf/val_intf-type_val/val_intf-number_val/ip6-info                               | Displays IPv6 address information.               |
| <base_URI>/operational-state/isis-state/interface-detail/isis-intf/val_intf-type_val/val_intf-number_val/ip6-info/val_ip6-add_val/ip6-prefix    | Displays the IPv6 Address Prefix Length value.   |
| <base_URI>/operational-state/isis-state/interface-detail/isis-intf/val_intf-type_val/val_intf-number_val/ip6-info/val_ip6-add_val/is-link-local | Displays True if the IPv6 address is link local. |

## Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

## Examples

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

## URI

http://host:80/rest/operational-state/isis-state/interface-detail

## Request Body

None

## Response Body

```
<interface-detail xmlns="urn:brocade.com:mgmt:brocade-isis-operational" xmlns:y="http://
brocade.com/ns/rest"
y:self="/rest/operational-state/isis-state/interface-detail">
  <isis-intf y:self="/rest/operational-state/isis-state/interface-detail/isis-intf/
eth%2C%221/49%22">
    <intf-type>eth</intf-type>
    <intf-number>1/49</intf-number>
    <v4circuit-enabled>is-enabled</v4circuit-enabled>
    <v6circuit-enabled>is-enabled</v6circuit-enabled>
    <circuit-id>3</circuit-id>
    <circuit-ifid>432</circuit-ifid>
```

```

<circuit-state>true</circuit-state>
<circuit-ip-state>true</circuit-ip-state>
<circuit-ipv6-state>true</circuit-ipv6-state>
<circuit-mode>isis-level1-2</circuit-mode>
<circuit-type>is-circ-lan</circuit-type>
<circuit-encap>undef</circuit-encap>
<is-circuit-passive>is-disabled</is-circuit-passive>
<mtu-size>1500</mtu-size>
<padding-enabled>is-enabled</padding-enabled>
<bfd-enabled>is-disabled</bfd-enabled>
  <circ-chstats y:self="/rest/operational-state/isis-state/interface-detail/isis-intf/
eth%2C%221/49%22/circ-chstats">
    <circ-changes>1</circ-changes>
    <adj-changes>2</adj-changes>
    <adj-rej>0</adj-rej>
    <l1authfail>0</l1authfail>
    <l2authfail>0</l2authfail>
    <bad-lsps>0</bad-lsps>
    <ctrl-out>2806</ctrl-out>
    <ctrl-in>1044</ctrl-in>
  </circ-chstats>
  <mpls-info y:self="/rest/operational-state/isis-state/interface-detail/isis-intf/
eth%2C%221/49%22/mps-info">
    <te-enabled>is-disabled</te-enabled>
    <admin-group>0</admin-group>
    <te-metric>0</te-metric>
    <max-link-bw>0</max-link-bw>
    <max-reserv-bw>0</max-reserv-bw>
  </mpls-info>
  <reverse-metric-info y:self="/rest/operational-state/isis-state/interface-detail/isis-
intf/eth%2C%221/49%22/
reverse-metric-info">
    <is-global-config>true</is-global-config>
    <reverse-metric-value>0</reverse-metric-value>
    <rev-metric-whole-lan>is-disabled</rev-metric-whole-lan>
    <rev-metric-te-def-metric>is-disabled</rev-metric-te-def-metric>
  </reverse-metric-info>
  <ldp-sync-info y:self="/rest/operational-state/isis-state/interface-detail/isis-intf/
eth%2C%221/49%22/ldp-sync-info">
    <ldp-sync-enabled>is-disabled</ldp-sync-enabled>
    <ldp-sync-hold-down>0</ldp-sync-hold-down>
    <ldp-in-sync>false</ldp-in-sync>
    <remain-hd-time>0</remain-hd-time>
    <ldp-sync-hd-expired>false</ldp-sync-hd-expired>
  </ldp-sync-info>
  <circ-metrics y:self="/rest/operational-state/isis-state/interface-detail/isis-intf/
eth%2C%221/49%22/circ-metrics/
isis-level1">
    <level>isis-level1</level>
    <auth-check>is-enabled</auth-check>
    <auth-mode>none</auth-mode>
    <auth-key></auth-key>
    <circ-metric>10</circ-metric>
    <ip6-circ-metric>10</ip6-circ-metric>
    <circ-priority>64</circ-priority>
    <hello-int>3</hello-int>
    <hello-mult>3</hello-mult>
    <dis>Fusion1-03</dis>
    <dis-ch>4</dis-ch>
    <next-hello>3</next-hello>
    <active-adj>1</active-adj>
  </circ-metrics>
  <circ-metrics y:self="/rest/operational-state/isis-state/interface-detail/isis-intf/
eth%2C%221/49%22/circ-metrics/

```

```

isis-level2">
  <level>isis-level2</level>
  <auth-check>is-enabled</auth-check>
  <auth-mode>none</auth-mode>
  <auth-key></auth-key>
  <circ-metric>10</circ-metric>
  <ip6-circ-metric>10</ip6-circ-metric>
  <circ-priority>64</circ-priority>
  <hello-int>3</hello-int>
  <hello-mult>3</hello-mult>
  <dis>Fusion1-03</dis>
  <dis-ch>4</dis-ch>
  <next-hello>4</next-hello>
  <active-adj>1</active-adj>
</circ-metrics>
  <ip-info y:self="/rest/operational-state/isis-state/interface-detail/isis-intf/
eth%2C%221/49%22/ip-info/140.140.140.1">
  <ip-add>140.140.140.1</ip-add>
  <ip-prefix>24</ip-prefix>
</ip-info>
  <ip6-info y:self="/rest/operational-state/isis-state/interface-detail/isis-intf/
eth%2C%221/49%22/ip6-info/140:140:140::1">
  <ip6-add>140:140:140::1</ip6-add>
  <ip6-prefix>64</ip6-prefix>
  <is-link-local>false</is-link-local>
</ip6-info>
  <ip6-info y:self="/rest/operational-state/isis-state/interface-detail/isis-intf/
eth%2C%221/49%22/ip6-info/
fe80::748e:f8ff:fe05:4835">
  <ip6-add>fe80::748e:f8ff:fe05:4835</ip6-add>
  <ip6-prefix>128</ip6-prefix>
  <is-link-local>true</is-link-local>
</ip6-info>
</isis-intf>
  <isis-intf y:self="/rest/operational-state/isis-state/interface-detail/isis-intf/
eth%2C%224/10%22">
  <intf-type>eth</intf-type>
  <intf-number>4/10</intf-number>
  <v4circuit-enabled>is-enabled</v4circuit-enabled>
  <v6circuit-enabled>is-enabled</v6circuit-enabled>
  <circuit-id>4</circuit-id>
  <circuit-ifid>1545</circuit-ifid>
  <circuit-state>true</circuit-state>
  <circuit-ip-state>true</circuit-ip-state>
  <circuit-ipv6-state>true</circuit-ipv6-state>
  <circuit-mode>isis-levell1-2</circuit-mode>
  <circuit-type>is-circ-lan</circuit-type>
  <circuit-encap>undef</circuit-encap>
  <is-circuit-passive>is-disabled</is-circuit-passive>
  <mtu-size>9000</mtu-size>
  <padding-enabled>is-disabled</padding-enabled>
  <bfd-enabled>is-disabled</bfd-enabled>
  <circ-chstats y:self="/rest/operational-state/isis-state/interface-detail/isis-intf/
eth%2C%224/10%22/circ-chstats">
  <circ-changes>1</circ-changes>
  <adj-changes>0</adj-changes>
  <adj-rej>0</adj-rej>
  <l1authfail>0</l1authfail>
  <l2authfail>0</l2authfail>
  <bad-lsps>0</bad-lsps>
  <ctrl-out>694</ctrl-out>
  <ctrl-in>0</ctrl-in>
</circ-chstats>
  <mpls-info y:self="/rest/operational-state/isis-state/interface-detail/isis-intf/

```

```

eth%2C%224/10%22/mp1s-info">
  <te-enabled>is-disabled</te-enabled>
  <admin-group>0</admin-group>
  <te-metric>0</te-metric>
  <max-link-bw>0</max-link-bw>
  <max-reserv-bw>0</max-reserv-bw>
</mp1s-info>
  <reverse-metric-info y:self="/rest/operational-state/isis-state/interface-detail/isis-
intf/eth%2C%224/10%22/
reverse-metric-info">
  <is-global-config>>false</is-global-config>
  <reverse-metric-value>555</reverse-metric-value>
  <rev-metric-whole-lan>is-enabled</rev-metric-whole-lan>
  <rev-metric-te-def-metric>is-enabled</rev-metric-te-def-metric>
</reverse-metric-info>
  <ldp-sync-info y:self="/rest/operational-state/isis-state/interface-detail/isis-intf/
eth%2C%224/10%22/ldp-sync-info">
  <ldp-sync-enabled>is-disabled</ldp-sync-enabled>
  <ldp-sync-hold-down>0</ldp-sync-hold-down>
  <ldp-in-sync>>false</ldp-in-sync>
  <remain-hd-time>0</remain-hd-time>
  <ldp-sync-hd-expired>>false</ldp-sync-hd-expired>
</ldp-sync-info>
  <circ-metrics y:self="/rest/operational-state/isis-state/interface-detail/isis-intf/
eth%2C%224/10%22/circ-metrics/
isis-level1">
  <level>isis-level1</level>
  <auth-check>is-disabled</auth-check>
  <auth-mode>md5</auth-mode>
  <auth-key>*****</auth-key>
  <circ-metric>22777</circ-metric>
  <ip6-circ-metric>22777</ip6-circ-metric>
  <circ-priority>100</circ-priority>
  <hello-int>10</hello-int>
  <hello-mult>3</hello-mult>
  <dis>Fusion1-04</dis>
  <dis-ch>2</dis-ch>
  <next-hello>10</next-hello>
  <active-adj>0</active-adj>
</circ-metrics>
  <circ-metrics y:self="/rest/operational-state/isis-state/interface-detail/isis-intf/
eth%2C%224/10%22/circ-metrics/
isis-level2">
  <level>isis-level2</level>
  <auth-check>is-disabled</auth-check>
  <auth-mode>md5</auth-mode>
  <auth-key>*****</auth-key>
  <circ-metric>565</circ-metric>
  <ip6-circ-metric>565</ip6-circ-metric>
  <circ-priority>99</circ-priority>
  <hello-int>18</hello-int>
  <hello-mult>5</hello-mult>
  <dis>Fusion1-04</dis>
  <dis-ch>2</dis-ch>
  <next-hello>14</next-hello>
  <active-adj>0</active-adj>
</circ-metrics>
  <ip-info y:self="/rest/operational-state/isis-state/interface-detail/isis-intf/
eth%2C%224/10%22/ip-info/10.1.1.1">
  <ip-add>10.1.1.1</ip-add>
  <ip-prefix>24</ip-prefix>
</ip-info>
  <ip6-info y:self="/rest/operational-state/isis-state/interface-detail/isis-intf/
eth%2C%224/10%22/ip6-info/10:1:1::1">

```

```

    <ip6-add>10:1:1::1</ip6-add>
    <ip6-prefix>64</ip6-prefix>
    <is-link-local>>false</is-link-local>
  </ip6-info>
  <ip6-info y:self="/rest/operational-state/isis-state/interface-detail/isis-intf/
eth%2C%224/10%22/ip6-info/
fe80::748e:f8ff:fe05:4ade">
    <ip6-add>fe80::748e:f8ff:fe05:4ade</ip6-add>
    <ip6-prefix>128</ip6-prefix>
    <is-link-local>>true</is-link-local>
  </ip6-info>
</isis-intf>
<isis-intf y:self="/rest/operational-state/isis-state/interface-detail/isis-intf/
ve%2C101">
  <intf-type>ve</intf-type>
  <intf-number>101</intf-number>
  <v4circuit-enabled>is-enabled</v4circuit-enabled>
  <v6circuit-enabled>is-enabled</v6circuit-enabled>
  <circuit-id>2</circuit-id>
  <circuit-ifid>8164</circuit-ifid>
  <circuit-state>>true</circuit-state>
  <circuit-ip-state>>true</circuit-ip-state>
  <circuit-ipv6-state>>true</circuit-ipv6-state>
  <circuit-mode>isis-level2</circuit-mode>
  <circuit-type>is-circ-ptpt</circuit-type>
  <circuit-encap>undef</circuit-encap>
  <is-circuit-passive>is-disabled</is-circuit-passive>
  <mtu-size>1500</mtu-size>
  <padding-enabled>is-disabled</padding-enabled>
  <bfd-enabled>is-disabled</bfd-enabled>
  <circ-chstats y:self="/rest/operational-state/isis-state/interface-detail/isis-intf/
ve%2C101/circ-chstats">
    <circ-changes>1</circ-changes>
    <adj-changes>0</adj-changes>
    <adj-rej>0</adj-rej>
    <l1authfail>0</l1authfail>
    <l2authfail>0</l2authfail>
    <bad-lsps>0</bad-lsps>
    <ctrl-out>440</ctrl-out>
    <ctrl-in>441</ctrl-in>
  </circ-chstats>
  <mpls-info y:self="/rest/operational-state/isis-state/interface-detail/isis-intf/
ve%2C101/mppls-info">
    <te-enabled>is-disabled</te-enabled>
    <admin-group>0</admin-group>
    <te-metric>3555</te-metric>
    <max-link-bw>0</max-link-bw>
    <max-reserv-bw>0</max-reserv-bw>
  </mpls-info>
  <reverse-metric-info y:self="/rest/operational-state/isis-state/interface-detail/isis-
intf/ve%2C101/
reverse-metric-info">
    <is-global-config>>false</is-global-config>
    <reverse-metric-value>555</reverse-metric-value>
    <rev-metric-whole-lan>is-enabled</rev-metric-whole-lan>
    <rev-metric-te-def-metric>is-enabled</rev-metric-te-def-metric>
  </reverse-metric-info>
  <ldp-sync-info y:self="/rest/operational-state/isis-state/interface-detail/isis-intf/
ve%2C101/ldp-sync-info">
    <ldp-sync-enabled>is-enabled</ldp-sync-enabled>
    <ldp-sync-hold-down>0</ldp-sync-hold-down>
    <ldp-in-sync>>false</ldp-in-sync>
    <remain-hd-time>0</remain-hd-time>
    <ldp-sync-hd-expired>>false</ldp-sync-hd-expired>

```

```

    </ldp-sync-info>
    <circ-metrics y:self="/rest/operational-state/isis-state/interface-detail/isis-intf/
ve%2C101/circ-metrics/
isis-level1">
      <level>isis-level1</level>
      <auth-check>is-disabled</auth-check>
      <auth-mode>md5</auth-mode>
      <auth-key>*****</auth-key>
      <circ-metric>3555</circ-metric>
      <ip6-circ-metric>3555</ip6-circ-metric>
      <circ-priority>100</circ-priority>
      <hello-int>10</hello-int>
      <hello-mult>3</hello-mult>
      <dis>Fusion1-02</dis>
      <dis-ch>0</dis-ch>
      <next-hello>0</next-hello>
      <active-adj>0</active-adj>
    </circ-metrics>
    <circ-metrics y:self="/rest/operational-state/isis-state/interface-detail/isis-intf/
ve%2C101/circ-metrics/
isis-level2">
      <level>isis-level2</level>
      <auth-check>is-disabled</auth-check>
      <auth-mode>md5</auth-mode>
      <auth-key>*****</auth-key>
      <circ-metric>565</circ-metric>
      <ip6-circ-metric>565</ip6-circ-metric>
      <circ-priority>99</circ-priority>
      <hello-int>18</hello-int>
      <hello-mult>5</hello-mult>
      <dis>Fusion1-02</dis>
      <dis-ch>0</dis-ch>
      <next-hello>0</next-hello>
      <active-adj>0</active-adj>
    </circ-metrics>
    <ip-info y:self="/rest/operational-state/isis-state/interface-detail/isis-intf/
ve%2C101/ip-info/11.11.1.1">
      <ip-add>11.11.1.1</ip-add>
      <ip-prefix>24</ip-prefix>
    </ip-info>
    <ip6-info y:self="/rest/operational-state/isis-state/interface-detail/isis-intf/
ve%2C101/ip6-info/11:11:1::1">
      <ip6-add>11:11:1::1</ip6-add>
      <ip6-prefix>64</ip6-prefix>
      <is-link-local>>false</is-link-local>
    </ip6-info>
    <ip6-info y:self="/rest/operational-state/isis-state/interface-detail/isis-intf/
ve%2C101/ip6-info/
fe80::748e:f8ff:fe05:4801">
      <ip6-add>fe80::748e:f8ff:fe05:4801</ip6-add>
      <ip6-prefix>128</ip6-prefix>
      <is-link-local>>true</is-link-local>
    </ip6-info>
  </isis-intf>
  <isis-intf y:self="/rest/operational-state/isis-state/interface-detail/isis-intf/
loopback%2C4">
    <intf-type>loopback</intf-type>
    <intf-number>4</intf-number>
    <v4circuit-enabled>is-enabled</v4circuit-enabled>
    <v6circuit-enabled>is-enabled</v6circuit-enabled>
    <circuit-id>1</circuit-id>
    <circuit-ifid>16259</circuit-ifid>
    <circuit-state>>true</circuit-state>
    <circuit-ip-state>>true</circuit-ip-state>

```

```

<circuit-ipv6-state>>true</circuit-ipv6-state>
<circuit-mode>isis-level2</circuit-mode>
<circuit-type>is-circ-ptpt</circuit-type>
<circuit-encap>undef</circuit-encap>
<is-circuit-passive>is-enabled</is-circuit-passive>
<mtu-size>0</mtu-size>
<padding-enabled>is-disabled</padding-enabled>
<bfd-enabled>is-disabled</bfd-enabled>
<circ-chstats y:self="/rest/operational-state/isis-state/interface-detail/isis-intf/
loopback%2C4/circ-chstats">
  <circ-changes>1</circ-changes>
  <adj-changes>0</adj-changes>
  <adj-rej>0</adj-rej>
  <l1authfail>0</l1authfail>
  <l2authfail>0</l2authfail>
  <bad-lsps>0</bad-lsps>
  <ctrl-out>0</ctrl-out>
  <ctrl-in>0</ctrl-in>
</circ-chstats>
  <mpls-info y:self="/rest/operational-state/isis-state/interface-detail/isis-intf/
loopback%2C4/mpls-info">
    <te-enabled>is-disabled</te-enabled>
    <admin-group>0</admin-group>
    <te-metric>0</te-metric>
    <max-link-bw>0</max-link-bw>
    <max-reserv-bw>0</max-reserv-bw>
  </mpls-info>
  <reverse-metric-info y:self="/rest/operational-state/isis-state/interface-detail/isis-
intf/loopback%2C4/
reverse-metric-info">
    <is-global-config>false</is-global-config>
    <reverse-metric-value>555</reverse-metric-value>
    <rev-metric-whole-lan>is-enabled</rev-metric-whole-lan>
    <rev-metric-te-def-metric>is-enabled</rev-metric-te-def-metric>
  </reverse-metric-info>
  <ldp-sync-info y:self="/rest/operational-state/isis-state/interface-detail/isis-intf/
loopback%2C4/
ldp-sync-info">
    <ldp-sync-enabled>is-disabled</ldp-sync-enabled>
    <ldp-sync-hold-down>0</ldp-sync-hold-down>
    <ldp-in-sync>false</ldp-in-sync>
    <remain-hd-time>0</remain-hd-time>
    <ldp-sync-hd-expired>false</ldp-sync-hd-expired>
  </ldp-sync-info>
  <circ-metrics y:self="/rest/operational-state/isis-state/interface-detail/isis-intf/
loopback%2C4/
circ-metrics/isis-level1">
    <level>isis-level1</level>
    <auth-check>is-disabled</auth-check>
    <auth-mode>md5</auth-mode>
    <auth-key>*****</auth-key>
    <circ-metric>4555</circ-metric>
    <ip6-circ-metric>4555</ip6-circ-metric>
    <circ-priority>10</circ-priority>
    <hello-int>10</hello-int>
    <hello-mult>3</hello-mult>
    <dis>Fusion1-01</dis>
    <dis-ch>0</dis-ch>
    <next-hello>3</next-hello>
    <active-adj>0</active-adj>
  </circ-metrics>
  <circ-metrics y:self="/rest/operational-state/isis-state/interface-detail/isis-intf/
loopback%2C4/
circ-metrics/isis-level2">

```

```
<level>isis-level2</level>
<auth-check>is-disabled</auth-check>
<auth-mode>md5</auth-mode>
<auth-key>*****</auth-key>
<circ-metric>565</circ-metric>
<ip6-circ-metric>565</ip6-circ-metric>
<circ-priority>99</circ-priority>
<hello-int>20</hello-int>
<hello-mult>5</hello-mult>
<dis>Fusion1-01</dis>
<dis-ch>0</dis-ch>
<next-hello>0</next-hello>
<active-adj>0</active-adj>
</circ-metrics>
<ip-info y:self="/rest/operational-state/isis-state/interface-detail/isis-intf/
loopback%2C4/ip-info/1.1.1.4">
  <ip-add>1.1.1.4</ip-add>
  <ip-prefix>32</ip-prefix>
</ip-info>
<ip6-info y:self="/rest/operational-state/isis-state/interface-detail/isis-intf/
loopback%2C4/
ip6-info/0:0:0:0:0:0:1">
  <ip6-add>0:0:0:0:0:0:1</ip6-add>
</ip6-info>
</isis-intf>
</interface-detail>
```



## isis-state/ipv4-routes

### Resource URIs

| URI   | Description  |
|---|--|
| <base_URI>/operational-state/isis-state/ipv4-routes   | Displays IPv4 ISIS routes  |
| <base_URI>/operational-state/isis-state/ipv4-routes/total-routes-count  | Displays Total number of IPv4 ISIS routes                        |
| <base_URI>/operational-state/isis-state/ipv4-routes/ipv4-route-entry  | Displays IPv4 ISIS route entry                                   |
| <base_URI>/operational-state/isis-state/ipv4-routes/ipv4-route-entry/{ipv4-dest-addr},{ipv4-subnet-mask},{ipv4-prefix-len}/level  | Displays ISIS route type   |
| <base_URI>/operational-state/isis-state/ipv4-routes/ipv4-route-entry/{ipv4-dest-addr},{ipv4-subnet-mask},{ipv4-prefix-len}/cost   | Displays Cost of ISIS route                                      |
| <base_URI>/operational-state/isis-state/ipv4-routes/ipv4-route-entry/{ipv4-dest-addr},{ipv4-subnet-mask},{ipv4-prefix-len}/tag  | Displays Tag value   |
| <base_URI>/operational-state/isis-state/ipv4-routes/ipv4-route-entry/{ipv4-dest-addr},{ipv4-subnet-mask},{ipv4-prefix-len}/flags  | Displays Flags   |
| <base_URI>/operational-state/isis-state/ipv4-routes/ipv4-route-entry/{ipv4-dest-addr},{ipv4-subnet-mask},{ipv4-prefix-len}/is-l1-summarized   | Displays whether L1 route is summarized or not                   |
| <base_URI>/operational-state/isis-state/ipv4-routes/ipv4-route-entry/{ipv4-dest-addr},{ipv4-subnet-mask},{ipv4-prefix-len}/is-l2-summarized   | Displays whether L2 route is summarized or not                   |
| <base_URI>/operational-state/isis-state/ipv4-routes/ipv4-route-entry/{ipv4-dest-addr},{ipv4-subnet-mask},{ipv4-prefix-len}/is-summary   | Displays whether the specified route is the summary route or not |
| <base_URI>/operational-state/isis-state/ipv4-routes/ipv4-route-entry/{ipv4-dest-addr},{ipv4-subnet-mask},{ipv4-prefix-len}/nh-info  | Displays Next hop information                                    |
| <base_URI>/operational-state/isis-state/ipv4-routes/ipv4-route-entry/{ipv4-dest-addr},{ipv4-subnet-mask},{ipv4-prefix-len}/nh-info/{outgoing-intf-type},{outgoing-intf-number}/ipv4-nh-addr | Displays the next hop ip address                                 |

## Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

## Examples

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

## URI

`http://host:80/rest/operational-state/isis-state/ipv4-routes`

## Request Body

None

## Response Body

```
<ipv4-routes xmlns="urn:brocade.com:mgmt:brocade-isis-operational" xmlns:y="http://
brocade.com/ns/rest"
y:self="/rest/operational-state/isis-state/ipv4-routes">
  <total-routes-count>11</total-routes-count>
  <ipv4-route-entry y:self="/rest/operational-state/isis-state/ipv4-routes/ipv4-route-
entry/140.140.140.0%2C255.255.255.
0%2C24">
    <ipv4-dest-addr>140.140.140.0</ipv4-dest-addr>
    <ipv4-subnet-mask>255.255.255.0</ipv4-subnet-mask>
    <ipv4-prefix-len>24</ipv4-prefix-len>
    <level>1</level>
    <cost>20</cost>
    <tag>0</tag>
    <flags>4</flags>
    <is-l1-summarized>>false</is-l1-summarized>
    <is-l2-summarized>>false</is-l2-summarized>
    <is-summary>>false</is-summary>
    <nh-info y:self="/rest/operational-state/isis-state/ipv4-routes/ipv4-route-entry/
140.140.140.0%2C255.255.255.
0%2C24/
nh-info/eth%2C%221/49%22">
      <outgoing-intf-type>eth</outgoing-intf-type>
      <outgoing-intf-number>1/49</outgoing-intf-number>
      <ipv4-nh-addr>140.140.140.2</ipv4-nh-addr>
    </nh-info>
  </ipv4-route-entry>
  <ipv4-route-entry y:self="/rest/operational-state/isis-state/ipv4-routes/ipv4-route-
entry/150.150.150.1%2C255.255.255.
255%2C32">
    <ipv4-dest-addr>150.150.150.1</ipv4-dest-addr>
    <ipv4-subnet-mask>255.255.255.255</ipv4-subnet-mask>
    <ipv4-prefix-len>32</ipv4-prefix-len>
    <level>1</level>
    <cost>10</cost>
    <tag>0</tag>
    <flags>4</flags>
    <is-l1-summarized>>false</is-l1-summarized>
    <is-l2-summarized>>false</is-l2-summarized>
    <is-summary>>false</is-summary>
```

```

    <nh-info y:self="/rest/operational-state/isis-state/ipv4-routes/ipv4-route-entry/
150.150.150.1%2C255.255.255.
255%2C32/
nh-info/eth%2C%221/49%22">
    <outgoing-intf-type>eth</outgoing-intf-type>
    <outgoing-intf-number>1/49</outgoing-intf-number>
    <ipv4-nh-addr>140.140.140.2</ipv4-nh-addr>
    </nh-info>
  </ipv4-route-entry>
  <ipv4-route-entry y:self="/rest/operational-state/isis-state/ipv4-routes/ipv4-route-
entry/150.150.150.2%2C255.255.255.
255%2C32">
    <ipv4-dest-addr>150.150.150.2</ipv4-dest-addr>
    <ipv4-subnet-mask>255.255.255.255</ipv4-subnet-mask>
    <ipv4-prefix-len>32</ipv4-prefix-len>
    <level>1</level>
    <cost>10</cost>
    <tag>0</tag>
    <flags>4</flags>
    <is-l1-summarized>>false</is-l1-summarized>
    <is-l2-summarized>>false</is-l2-summarized>
    <is-summary>>false</is-summary>
    <nh-info y:self="/rest/operational-state/isis-state/ipv4-routes/ipv4-route-entry/
150.150.150.2%2C255.255.255.255%2C32/
nh-info/eth%2C%221/49%22">
    <outgoing-intf-type>eth</outgoing-intf-type>
    <outgoing-intf-number>1/49</outgoing-intf-number>
    <ipv4-nh-addr>140.140.140.2</ipv4-nh-addr>
    </nh-info>
  </ipv4-route-entry>
  <ipv4-route-entry y:self="/rest/operational-state/isis-state/ipv4-routes/ipv4-route-
entry/150.150.150.3%2C255.255.255.
255%2C32">
    <ipv4-dest-addr>150.150.150.3</ipv4-dest-addr>
    <ipv4-subnet-mask>255.255.255.255</ipv4-subnet-mask>
    <ipv4-prefix-len>32</ipv4-prefix-len>
    <level>1</level>
    <cost>10</cost>
    <tag>0</tag>
    <flags>4</flags>
    <is-l1-summarized>>false</is-l1-summarized>
    <is-l2-summarized>>false</is-l2-summarized>
    <is-summary>>false</is-summary>
    <nh-info y:self="/rest/operational-state/isis-state/ipv4-routes/ipv4-route-entry/
150.150.150.3%2C255.255.255.255%2C32/
nh-info/eth%2C%221/49%22">
    <outgoing-intf-type>eth</outgoing-intf-type>
    <outgoing-intf-number>1/49</outgoing-intf-number>
    <ipv4-nh-addr>140.140.140.2</ipv4-nh-addr>
    </nh-info>
  </ipv4-route-entry>
  <ipv4-route-entry y:self="/rest/operational-state/isis-state/ipv4-routes/ipv4-route-
entry/150.150.150.4%2C255.255.255.
255%2C32">
    <ipv4-dest-addr>150.150.150.4</ipv4-dest-addr>
    <ipv4-subnet-mask>255.255.255.255</ipv4-subnet-mask>
    <ipv4-prefix-len>32</ipv4-prefix-len>
    <level>1</level>
    <cost>10</cost>
    <tag>0</tag>
    <flags>4</flags>
    <is-l1-summarized>>false</is-l1-summarized>
    <is-l2-summarized>>false</is-l2-summarized>
    <is-summary>>false</is-summary>

```

```

    <nh-info y:self="/rest/operational-state/isis-state/ipv4-routes/ipv4-route-entry/
150.150.150.4%2C255.255.255.255%2C32/
nh-info/eth%2C%221/49%22">
      <outgoing-intf-type>eth</outgoing-intf-type>
      <outgoing-intf-number>1/49</outgoing-intf-number>
      <ipv4-nh-addr>140.140.140.2</ipv4-nh-addr>
    </nh-info>
  </ipv4-route-entry>
  <ipv4-route-entry y:self="/rest/operational-state/isis-state/ipv4-routes/ipv4-route-
entry/150.150.150.5%2C255.255.255.255.
255%2C32">
    <ipv4-dest-addr>150.150.150.5</ipv4-dest-addr>
    <ipv4-subnet-mask>255.255.255.255</ipv4-subnet-mask>
    <ipv4-prefix-len>32</ipv4-prefix-len>
    <level>1</level>
    <cost>10</cost>
    <tag>0</tag>
    <flags>4</flags>
    <is-l1-summarized>false</is-l1-summarized>
    <is-l2-summarized>false</is-l2-summarized>
    <is-summary>false</is-summary>
    <nh-info y:self="/rest/operational-state/isis-state/ipv4-routes/ipv4-route-entry/
150.150.150.5%2C255.255.255.255%2C32/
nh-info/eth%2C%221/49%22">
      <outgoing-intf-type>eth</outgoing-intf-type>
      <outgoing-intf-number>1/49</outgoing-intf-number>
      <ipv4-nh-addr>140.140.140.2</ipv4-nh-addr>
    </nh-info>
  </ipv4-route-entry>
  <ipv4-route-entry y:self="/rest/operational-state/isis-state/ipv4-routes/ipv4-route-
entry/150.150.150.6%2C255.255.255.255.
255%2C32">
    <ipv4-dest-addr>150.150.150.6</ipv4-dest-addr>
    <ipv4-subnet-mask>255.255.255.255</ipv4-subnet-mask>
    <ipv4-prefix-len>32</ipv4-prefix-len>
    <level>1</level>
    <cost>10</cost>
    <tag>0</tag>
    <flags>4</flags>
    <is-l1-summarized>false</is-l1-summarized>
    <is-l2-summarized>false</is-l2-summarized>
    <is-summary>false</is-summary>
    <nh-info y:self="/rest/operational-state/isis-state/ipv4-routes/ipv4-route-entry/
150.150.150.6%2C255.255.255.255%2C32/
nh-info/eth%2C%221/49%22">
      <outgoing-intf-type>eth</outgoing-intf-type>
      <outgoing-intf-number>1/49</outgoing-intf-number>
      <ipv4-nh-addr>140.140.140.2</ipv4-nh-addr>
    </nh-info>
  </ipv4-route-entry>
  <ipv4-route-entry y:self="/rest/operational-state/isis-state/ipv4-routes/ipv4-route-
entry/150.150.150.7%2C255.255.255.255.
255%2C32">
    <ipv4-dest-addr>150.150.150.7</ipv4-dest-addr>
    <ipv4-subnet-mask>255.255.255.255</ipv4-subnet-mask>
    <ipv4-prefix-len>32</ipv4-prefix-len>
    <level>1</level>
    <cost>10</cost>
    <tag>0</tag>
    <flags>4</flags>
    <is-l1-summarized>false</is-l1-summarized>
    <is-l2-summarized>false</is-l2-summarized>
    <is-summary>false</is-summary>
    <nh-info y:self="/rest/operational-state/isis-state/ipv4-routes/ipv4-route-entry/

```

```

150.150.150.7%2C255.255.255.255%2C32/
nh-info/eth%2C%221/49%22">
  <outgoing-intf-type>eth</outgoing-intf-type>
  <outgoing-intf-number>1/49</outgoing-intf-number>
  <ipv4-nh-addr>140.140.140.2</ipv4-nh-addr>
</nh-info>
</ipv4-route-entry>
<ipv4-route-entry y:self="/rest/operational-state/isis-state/ipv4-routes/ipv4-route-
entry/150.150.150.8%2C255.255.255.
255%2C32">
  <ipv4-dest-addr>150.150.150.8</ipv4-dest-addr>
  <ipv4-subnet-mask>255.255.255.255</ipv4-subnet-mask>
  <ipv4-prefix-len>32</ipv4-prefix-len>
  <level>1</level>
  <cost>10</cost>
  <tag>0</tag>
  <flags>4</flags>
  <is-l1-summarized>>false</is-l1-summarized>
  <is-l2-summarized>>false</is-l2-summarized>
  <is-summary>>false</is-summary>
  <nh-info y:self="/rest/operational-state/isis-state/ipv4-routes/ipv4-route-entry/
150.150.150.8%2C255.255.255.255%2C32/
nh-info/eth%2C%221/49%22">
  <outgoing-intf-type>eth</outgoing-intf-type>
  <outgoing-intf-number>1/49</outgoing-intf-number>
  <ipv4-nh-addr>140.140.140.2</ipv4-nh-addr>
</nh-info>
</ipv4-route-entry>
<ipv4-route-entry y:self="/rest/operational-state/isis-state/ipv4-routes/ipv4-route-
entry/150.150.150.9%2C255.255.255.
255%2C32">
  <ipv4-dest-addr>150.150.150.9</ipv4-dest-addr>
  <ipv4-subnet-mask>255.255.255.255</ipv4-subnet-mask>
  <ipv4-prefix-len>32</ipv4-prefix-len>
  <level>1</level>
  <cost>10</cost>
  <tag>0</tag>
  <flags>4</flags>
  <is-l1-summarized>>false</is-l1-summarized>
  <is-l2-summarized>>false</is-l2-summarized>
  <is-summary>>false</is-summary>
  <nh-info y:self="/rest/operational-state/isis-state/ipv4-routes/ipv4-route-entry/
150.150.150.9%2C255.255.255.255%2C32/
nh-info/eth%2C%221/49%22">
  <outgoing-intf-type>eth</outgoing-intf-type>
  <outgoing-intf-number>1/49</outgoing-intf-number>
  <ipv4-nh-addr>140.140.140.2</ipv4-nh-addr>
</nh-info>
</ipv4-route-entry>
<ipv4-route-entry y:self="/rest/operational-state/isis-state/ipv4-routes/ipv4-route-
entry/150.150.150.10%2C255.255.
255.255%2C32">
  <ipv4-dest-addr>150.150.150.10</ipv4-dest-addr>
  <ipv4-subnet-mask>255.255.255.255</ipv4-subnet-mask>
  <ipv4-prefix-len>32</ipv4-prefix-len>
  <level>1</level>
  <cost>10</cost>
  <tag>0</tag>
  <flags>4</flags>
  <is-l1-summarized>>false</is-l1-summarized>
  <is-l2-summarized>>false</is-l2-summarized>
  <is-summary>>false</is-summary>
  <nh-info y:self="/rest/operational-state/isis-state/ipv4-routes/ipv4-route-entry/
150.150.150.10%2C255.255.255.255%2C32/

```

```
nh-info/eth%2C%221/49%22">
  <outgoing-intf-type>eth</outgoing-intf-type>
  <outgoing-intf-number>1/49</outgoing-intf-number>
  <ipv4-nh-addr>140.140.140.2</ipv4-nh-addr>
</nh-info>
</ipv4-route-entry>
</ipv4-routes>
```

## isis-state/ipv6-routes

### Resource URIs

| URI   | Description   |
|---|---|
| <base_URI>/operational-state/isis-state/ipv6-routes   | Displays IS-ISv6 routes.  |
| <base_URI>/operational-state/isis-state/ipv6-routes/level1-route-count  | Displays Level-1 IS-IS ipv6 route count.                          |
| <base_URI>/operational-state/isis-state/ipv6-routes/level2-route-count  | Displays Level-2 IS-IS ipv6 route count.                          |
| <base_URI>/operational-state/isis-state/ipv6-routes/ecmp-route-count  | Displays ECMP route count.  |
| <base_URI>/operational-state/isis-state/ipv6-routes/total-routes-count  | Displays total number of IS-IS ipv6 routes.                       |
| <base_URI>/operational-state/isis-state/ipv6-routes/ipv6-route-entry  | Displays ISIS route entry.  |
| <base_URI>/operational-state/isis-state/ipv6-routes/ipv6-route-entry/{ipv6-dest-addr},{ipv6-prefix-len}/level                                     | Displays ISIS route type.   |
| <base_URI>/operational-state/isis-state/ipv6-routes/ipv6-route-entry/{ipv6-dest-addr},{ipv6-prefix-len}/cost                                      | Displays Cost of ISIS route.                                      |
| <base_URI>/operational-state/isis-state/ipv6-routes/ipv6-route-entry/{ipv6-dest-addr},{ipv6-prefix-len}/tag                                       | Displays Tag value.   |
| <base_URI>/operational-state/isis-state/ipv6-routes/ipv6-route-entry/{ipv6-dest-addr}/v{ipv6-prefix-len}/flags                                    | Displays Flags.   |
| <base_URI>/operational-state/isis-state/ipv6-routes/ipv6-route-entry/{ipv6-dest-addr},{ipv6-prefix-len}/is-l1-summarized                          | Displays whether L1 route is summarized or not.                   |
| <base_URI>/operational-state/isis-state/ipv6-routes/ipv6-route-entry/{ipv6-dest-addr},{ipv6-prefix-len}/is-l2-summarized                          | Displays whether L2 route is summarized or not.                   |
| <base_URI>/operational-state/isis-state/ipv6-routes/ipv6-route-entry/{ipv6-dest-addr},{ipv6-prefix-len}/is-summary                                | Displays whether the specified route is the summary route or not. |
| <base_URI>/operational-state/isis-state/ipv6-routes/ipv6-route-entry/{ipv6-dest-addr},{ipv6-prefix-len}/nh-info                                   | Displays Next Hop information.                                    |
| <base_URI>/operational-state/isis-state/ipv6-routes/ipv6-route-entry/{ipv6-dest-addr},{ipv6-prefix-len}/nh-info/{outgoing-intf-name}/ipv6-nh-addr | Displays the next hop ipv6 address.                               |

## Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

## Examples

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

## URI

`http://host:80/rest/operational-state/isis-state/ipv6-routes`

## Request Body

None

## Response Body

```
<ipv6-routes xmlns="urn:brocade.com:mgmt:brocade-isis-operational" xmlns:y="http://
brocade.com/ns/rest"
y:self="/rest/operational-state/isis-state/ipv6-routes">
  <level1-route-count>11</level1-route-count>
  <level2-route-count>0</level2-route-count>
  <ecmp-route-count>0</ecmp-route-count>
  <total-routes-count>11</total-routes-count>
  <ipv6-route-entry y:self="/rest/operational-state/isis-state/ipv6-routes/ipv6-route-
entry/140:140:140::%2C64">
    <ipv6-dest-addr>140:140:140::</ipv6-dest-addr>
    <ipv6-prefix-len>64</ipv6-prefix-len>
    <level>1</level>
    <cost>20</cost>
    <tag>0</tag>
    <flags>0</flags>
    <is-l1-summarized>false</is-l1-summarized>
    <is-l2-summarized>false</is-l2-summarized>
    <is-summary>false</is-summary>
    <nh-info y:self="/rest/operational-state/isis-state/ipv6-routes/ipv6-route-entry/
140:140:140::%2C64/nh-info/
eth%2C%221/49%22">
      <outgoing-intf-type>eth</outgoing-intf-type>
      <outgoing-intf-number>1/49</outgoing-intf-number>
      <ipv6-nh-addr>fe80::200:65ff:fedd:c2f7</ipv6-nh-addr>
    </nh-info>
  </ipv6-route-entry>
  <ipv6-route-entry y:self="/rest/operational-state/isis-state/ipv6-routes/ipv6-route-
entry/150:150:150::1%2C128">
    <ipv6-dest-addr>150:150:150::1</ipv6-dest-addr>
    <ipv6-prefix-len>128</ipv6-prefix-len>
    <level>1</level>
    <cost>10</cost>
    <tag>0</tag>
    <flags>0</flags>
    <is-l1-summarized>false</is-l1-summarized>
    <is-l2-summarized>false</is-l2-summarized>
    <is-summary>false</is-summary>
    <nh-info y:self="/rest/operational-state/isis-state/ipv6-routes/ipv6-route-entry/
150:150:150::1%2C128/nh-info/
```



```

eth%2C%221/49%22">
  <outgoing-intf-type>eth</outgoing-intf-type>
  <outgoing-intf-number>1/49</outgoing-intf-number>
  <ipv6-nh-addr>fe80::200:65ff:fedd:c2f7</ipv6-nh-addr>
</nh-info>
</ipv6-route-entry>
<ipv6-route-entry y:self="/rest/operational-state/isis-state/ipv6-routes/ipv6-route-
entry/150:150:150::2%2C128">
  <ipv6-dest-addr>150:150:150::2</ipv6-dest-addr>
  <ipv6-prefix-len>128</ipv6-prefix-len>
  <level>1</level>
  <cost>10</cost>
  <tag>0</tag>
  <flags>0</flags>
  <is-l1-summarized>>false</is-l1-summarized>
  <is-l2-summarized>>false</is-l2-summarized>
  <is-summary>>false</is-summary>
  <nh-info y:self="/rest/operational-state/isis-state/ipv6-routes/ipv6-route-entry/
150:150:150::2%2C128/nh-info/
eth%2C%221/49%22">
  <outgoing-intf-type>eth</outgoing-intf-type>
  <outgoing-intf-number>1/49</outgoing-intf-number>
  <ipv6-nh-addr>fe80::200:65ff:fedd:c2f7</ipv6-nh-addr>
</nh-info>
</ipv6-route-entry>
<ipv6-route-entry y:self="/rest/operational-state/isis-state/ipv6-routes/ipv6-route-
entry/150:150:150::3%2C128">
  <ipv6-dest-addr>150:150:150::3</ipv6-dest-addr>
  <ipv6-prefix-len>128</ipv6-prefix-len>
  <level>1</level>
  <cost>10</cost>
  <tag>0</tag>
  <flags>0</flags>
  <is-l1-summarized>>false</is-l1-summarized>
  <is-l2-summarized>>false</is-l2-summarized>
  <is-summary>>false</is-summary>
  <nh-info y:self="/rest/operational-state/isis-state/ipv6-routes/ipv6-route-entry/
150:150:150::3%2C128/nh-info/
eth%2C%221/49%22">
  <outgoing-intf-type>eth</outgoing-intf-type>
  <outgoing-intf-number>1/49</outgoing-intf-number>
  <ipv6-nh-addr>fe80::200:65ff:fedd:c2f7</ipv6-nh-addr>
</nh-info>
</ipv6-route-entry>
<ipv6-route-entry y:self="/rest/operational-state/isis-state/ipv6-routes/ipv6-route-
entry/150:150:150::4%2C128">
  <ipv6-dest-addr>150:150:150::4</ipv6-dest-addr>
  <ipv6-prefix-len>128</ipv6-prefix-len>
  <level>1</level>
  <cost>10</cost>
  <tag>0</tag>
  <flags>0</flags>
  <is-l1-summarized>>false</is-l1-summarized>
  <is-l2-summarized>>false</is-l2-summarized>
  <is-summary>>false</is-summary>
  <nh-info y:self="/rest/operational-state/isis-state/ipv6-routes/ipv6-route-entry/
150:150:150::4%2C128/nh-info/
eth%2C%221/49%22">
  <outgoing-intf-type>eth</outgoing-intf-type>
  <outgoing-intf-number>1/49</outgoing-intf-number>
  <ipv6-nh-addr>fe80::200:65ff:fedd:c2f7</ipv6-nh-addr>
</nh-info>
</ipv6-route-entry>
<ipv6-route-entry y:self="/rest/operational-state/isis-state/ipv6-routes/ipv6-route-

```

```

entry/150:150:150::5%2C128">
  <ipv6-dest-addr>150:150:150::5</ipv6-dest-addr>
  <ipv6-prefix-len>128</ipv6-prefix-len>
  <level>1</level>
  <cost>10</cost>
  <tag>0</tag>
  <flags>0</flags>
  <is-l1-summarized>>false</is-l1-summarized>
  <is-l2-summarized>>false</is-l2-summarized>
  <is-summary>>false</is-summary>
  <nh-info y:self="/rest/operational-state/isis-state/ipv6-routes/ipv6-route-entry/
150:150:150::5%2C128/nh-info/
eth%2C%221/49%22">
    <outgoing-intf-type>eth</outgoing-intf-type>
    <outgoing-intf-number>1/49</outgoing-intf-number>
    <ipv6-nh-addr>fe80::200:65ff:fedd:c2f7</ipv6-nh-addr>
  </nh-info>
</ipv6-route-entry>
<ipv6-route-entry y:self="/rest/operational-state/isis-state/ipv6-routes/ipv6-route-
entry/150:150:150::6%2C128">
  <ipv6-dest-addr>150:150:150::6</ipv6-dest-addr>
  <ipv6-prefix-len>128</ipv6-prefix-len>
  <level>1</level>
  <cost>10</cost>
  <tag>0</tag>
  <flags>0</flags>
  <is-l1-summarized>>false</is-l1-summarized>
  <is-l2-summarized>>false</is-l2-summarized>
  <is-summary>>false</is-summary>
  <nh-info y:self="/rest/operational-state/isis-state/ipv6-routes/ipv6-route-entry/
150:150:150::6%2C128/nh-info/
eth%2C%221/49%22">
    <outgoing-intf-type>eth</outgoing-intf-type>
    <outgoing-intf-number>1/49</outgoing-intf-number>
    <ipv6-nh-addr>fe80::200:65ff:fedd:c2f7</ipv6-nh-addr>
  </nh-info>
</ipv6-route-entry>
<ipv6-route-entry y:self="/rest/operational-state/isis-state/ipv6-routes/ipv6-route-
entry/150:150:150::7%2C128">
  <ipv6-dest-addr>150:150:150::7</ipv6-dest-addr>
  <ipv6-prefix-len>128</ipv6-prefix-len>
  <level>1</level>
  <cost>10</cost>
  <tag>0</tag>
  <flags>0</flags>
  <is-l1-summarized>>false</is-l1-summarized>
  <is-l2-summarized>>false</is-l2-summarized>
  <is-summary>>false</is-summary>
  <nh-info y:self="/rest/operational-state/isis-state/ipv6-routes/ipv6-route-entry/
150:150:150::7%2C128/nh-info/
eth%2C%221/49%22">
    <outgoing-intf-type>eth</outgoing-intf-type>
    <outgoing-intf-number>1/49</outgoing-intf-number>
    <ipv6-nh-addr>fe80::200:65ff:fedd:c2f7</ipv6-nh-addr>
  </nh-info>
</ipv6-route-entry>
<ipv6-route-entry y:self="/rest/operational-state/isis-state/ipv6-routes/ipv6-route-
entry/150:150:150::8%2C128">
  <ipv6-dest-addr>150:150:150::8</ipv6-dest-addr>
  <ipv6-prefix-len>128</ipv6-prefix-len>
  <level>1</level>
  <cost>10</cost>
  <tag>0</tag>
  <flags>0</flags>

```

```

    <is-l1-summarized>>false</is-l1-summarized>
    <is-l2-summarized>>false</is-l2-summarized>
    <is-summary>>false</is-summary>
    <nh-info y:self="/rest/operational-state/isis-state/ipv6-routes/ipv6-route-entry/
150:150:150::8%2C128/nh-info/
eth%2C%221/49%22">
      <outgoing-intf-type>eth</outgoing-intf-type>
      <outgoing-intf-number>1/49</outgoing-intf-number>
      <ipv6-nh-addr>fe80::200:65ff:fedd:c2f7</ipv6-nh-addr>
    </nh-info>
  </ipv6-route-entry>
  <ipv6-route-entry y:self="/rest/operational-state/isis-state/ipv6-routes/ipv6-route-
entry/150:150:150::9%2C128">
    <ipv6-dest-addr>150:150:150::9</ipv6-dest-addr>
    <ipv6-prefix-len>128</ipv6-prefix-len>
    <level>1</level>
    <cost>10</cost>
    <tag>0</tag>
    <flags>0</flags>
    <is-l1-summarized>>false</is-l1-summarized>
    <is-l2-summarized>>false</is-l2-summarized>
    <is-summary>>false</is-summary>
    <nh-info y:self="/rest/operational-state/isis-state/ipv6-routes/ipv6-route-entry/
150:150:150::9%2C128/nh-info/
eth%2C%221/49%22">
      <outgoing-intf-type>eth</outgoing-intf-type>
      <outgoing-intf-number>1/49</outgoing-intf-number>
      <ipv6-nh-addr>fe80::200:65ff:fedd:c2f7</ipv6-nh-addr>
    </nh-info>
  </ipv6-route-entry>
  <ipv6-route-entry y:self="/rest/operational-state/isis-state/ipv6-routes/ipv6-route-
entry/150:150:150::a%2C128">
    <ipv6-dest-addr>150:150:150::a</ipv6-dest-addr>
    <ipv6-prefix-len>128</ipv6-prefix-len>
    <level>1</level>
    <cost>10</cost>
    <tag>0</tag>
    <flags>0</flags>
    <is-l1-summarized>>false</is-l1-summarized>
    <is-l2-summarized>>false</is-l2-summarized>
    <is-summary>>false</is-summary>
    <nh-info y:self="/rest/operational-state/isis-state/ipv6-routes/ipv6-route-entry/
150:150:150::a%2C128/nh-info/
eth%2C%221/49%22">
      <outgoing-intf-type>eth</outgoing-intf-type>
      <outgoing-intf-number>1/49</outgoing-intf-number>
      <ipv6-nh-addr>fe80::200:65ff:fedd:c2f7</ipv6-nh-addr>
    </nh-info>
  </ipv6-route-entry>
</ipv6-routes>

```

## isis-state/router-isis-config

### Resource URIs

| URI  | Description  |
|--|--|
| <base_URI>/operational-state/isis-state/router-isis-config                       | Displays IS-IS configuration.                                    |
| <base_URI>/operational-state/isis-state/router-isis-config/nsr-state             | Displays NSR state for IS-IS configuration.                      |
| <base_URI>/operational-state/isis-state/router-isis-config/lsp-flood-count       | Displays LSP flood count.  |
| <base_URI>/operational-state/isis-state/router-isis-config/lsp-fast-flood-count  | Displays LSP fast flood count.                                   |
| <base_URI>/operational-state/isis-state/router-isis-config/fast-flood-wait-count | Displays LSP flood wait count.                                   |
| <base_URI>/operational-state/isis-state/router-isis-config/hello-padding         | Displays whether Hello padding is enabled or disabled.           |
| <base_URI>/operational-state/isis-state/router-isis-config/hello-padding-ptp     | Displays Hello padding for ptp                                   |
| <base_URI>/operational-state/isis-state/router-isis-config/csnp-interval         | Displays CSNP interval time                                      |
| <base_URI>/operational-state/isis-state/router-isis-config/lsp-gen-interval      | Displays LSP gen interval.                                       |
| <base_URI>/operational-state/isis-state/router-isis-config/lsp-interval          | Displays LSP interval.   |
| <base_URI>/operational-state/isis-state/router-isis-config/lsp-refresh-interval  | Displays LSP refresh interval.                                   |
| <base_URI>/operational-state/isis-state/router-isis-config/lsp-lifetime          | Displays LSP lifetime.   |
| <base_URI>/operational-state/isis-state/router-isis-config/retransmit-interval   | Displays LSP retransmit interval.                                |
| <base_URI>/operational-state/isis-state/router-isis-config/pspf-enabled          | Displays whether Partial-SPF is enabled or not.                  |
| <base_URI>/operational-state/isis-state/router-isis-config/ispf-enabled          | Displays whether Incremental Shortcut SPF enabled or not.        |
| <base_URI>/operational-state/isis-state/router-isis-config/istct-spf-enabled     | Displays whether Incremental Shortcut SPF is enabled or not.     |
| <base_URI>/operational-state/isis-state/router-isis-config/overload-state        | Displays ISIS overload state.                                    |
| <base_URI>/operational-state/isis-state/router-isis-config/overload-startup-time | Displays ISIS overload startup wait time                         |
| <base_URI>/operational-state/isis-state/router-isis-config/overload-wait-on-bgp  | Displays whether ISIS overload bgp wait timer is enabled or not. |

| URI  | Description   |
|--|---|
| <base_URI>/operational-state/isis-state/router-isis-config/overload-bgp-wait-time                        | Displays ISIS overload bgp wait timer value.                          |
| <base_URI>/operational-state/isis-state/router-isis-config/enable-code-assertions                        | Displays whether ISIS code-assertions are enabled or not.             |
| <base_URI>/operational-state/isis-state/router-isis-config/graceful-restart-helper                       | Displays whether graceful restart helper is enabled or not.           |
| <base_URI>/operational-state/isis-state/router-isis-config/isis-hostname-enabled                         | Displays whether hostname is enabled or not.                          |
| <base_URI>/operational-state/isis-state/router-isis-config/isis-system-info                              | Displays ISIS System Information.                                     |
| <base_URI>/operational-state/isis-state/router-isis-config/isis-system-info/protocol-enabled             | Displays IS-IS Routing Protocol Operation State.                      |
| <base_URI>/operational-state/isis-state/router-isis-config/isis-system-info/operation-mode               | Displays operation mode.  |
| <base_URI>/operational-state/isis-state/router-isis-config/isis-system-info/system-id                    | Displays system ID.   |
| <base_URI>/operational-state/isis-state/router-isis-config/isis-system-info/nsap                         | Displays whether NSAP is enabled or not.                              |
| <base_URI>/operational-state/isis-state/router-isis-config/isis-system-info/nsap/val_net_addr_val/length | Displays NSAP net address length.                                     |
| <base_URI>/operational-state/isis-state/router-isis-config/l1-auth-profile                               | Displays Auth profile for Level-1. Displays Auth profile for Level-1. |
| <base_URI>/operational-state/isis-state/router-isis-config/l1-auth-profile/auth-check                    | Displays Auth Check for Level-1.                                      |
| <base_URI>/operational-state/isis-state/router-isis-config/l1-auth-profile/auth-mode                     | Displays Auth Mode for Level-1.                                       |
| <base_URI>/operational-state/isis-state/router-isis-config/l1-auth-profile/auth-key                      | Displays Auth Key for Level-1.  |
| <base_URI>/operational-state/isis-state/router-isis-config/l2-auth-profile                               | Displays Auth profile for Level-2.                                    |
| <base_URI>/operational-state/isis-state/router-isis-config/l2-auth-profile/auth-check                    | Displays Auth Check for Level-2.                                      |
| <base_URI>/operational-state/isis-state/router-isis-config/l2-auth-profile/auth-mode                     | Displays Auth Mode for Level-2.                                       |
| <base_URI>/operational-state/isis-state/router-isis-config/l1-spf-timer                                  | Displays SPF timer value for Level-1.                                 |

| URI   | Description  |
|---|--|
| <base_URI>/operational-state/isis-state/router-isis-config/l2-auth-profile/auth-key         | Displays Auth Key for Level-2.                       |
| <base_URI>/operational-state/isis-state/router-isis-config/log-handler                      | Displays Displays ISIS log status.                   |
| <base_URI>/operational-state/isis-state/router-isis-config/log-handler/log-adj-state-change | Displays ISIS log status for adjacency state change. |
| <base_URI>/operational-state/isis-state/router-isis-config/log-handler/log-bad-lsp          | Displays ISIS log status for bad LSPs                |
| <base_URI>/operational-state/isis-state/router-isis-config/l1-spf-timer/init-delay-time     | Displays SPF Init Wait time for Level-1.             |
| <base_URI>/operational-state/isis-state/router-isis-config/l1-spf-timer/hold-down-time      | Displays SPF Hold time for Level-1.                  |
| <base_URI>/operational-state/isis-state/router-isis-config/l1-spf-timer/max-time            | Displays SPF Max Wait time for Level-1.              |
| <base_URI>/operational-state/isis-state/router-isis-config/l2-spf-timer                     | SPF timer for Level-2.                               |
| <base_URI>/operational-state/isis-state/router-isis-config/l2-spf-timer/init-delay-time     | Displays SPF Init Wait time for Level-2.             |
| <base_URI>/operational-state/isis-state/router-isis-config/l2-spf-timer/hold-down-time      | Displays SPF Hold time for Level-2.                  |
| <base_URI>/operational-state/isis-state/router-isis-config/l2-spf-timer/max-time            | Displays SPF Max Wait time for Level-2.              |
| <base_URI>/operational-state/isis-state/router-isis-config/l1-spf6-timer                    | Displays SPF6 timer value for Level-1.               |
| <base_URI>/operational-state/isis-state/router-isis-config/l1-spf6-timer/init-delay-time    | Displays SPF6 Init Wait time for Level-1.            |
| <base_URI>/operational-state/isis-state/router-isis-config/l1-spf6-timer/hold-down-time     | Displays SPF6 Hold time for Level-1.                 |
| <base_URI>/operational-state/isis-state/router-isis-config/l1-spf6-timer/max-time           | Displays SPF6 Max Wait time for Level-2.             |
| <base_URI>/operational-state/isis-state/router-isis-config/l2-spf6-timer                    | Displays SPF6 timer value for Level-2.               |
| <base_URI>/operational-state/isis-state/router-isis-config/l2-spf6-timer/init-delay-time    | Displays SPF6 Init Wait time for Level-2.            |
| <base_URI>/operational-state/isis-state/router-isis-config/l2-spf6-timer/hold-down-time     | SPF6 Hold time for Level-2.                          |

| URI   | Description  |
|---|--|
| <base_URI>/operational-state/isis-state/router-isis-config/l2-spf6-timer/max-time                               | SPF6 Max Wait time for Level-2.  |
| <base_URI>/operational-state/isis-state/router-isis-config/pspf-timer   | Displays PSPF timer.   |
| <base_URI>/operational-state/isis-state/router-isis-config/pspf-timer/init-delay-time                           | Displays PSPF Init Wait time.  |
| <base_URI>/operational-state/isis-state/router-isis-config/pspf-timer/hold-down-time                            | Displays PSPF Hold time.   |
| <base_URI>/operational-state/isis-state/router-isis-config/pspf-timer/max-time                                  | Displays PSPF Max Wait time.   |
| <base_URI>/operational-state/isis-state/router-isis-config/pspf6-timer  | Displays PSPF6 Timer.  |
| <base_URI>/operational-state/isis-state/router-isis-config/pspf6-timer/init-delay-time                          | Displays PSPF6 Init Wait time.   |
| <base_URI>/operational-state/isis-state/router-isis-config/pspf6-timer/hold-down-time                           | Displays PSPF6 Hold time.  |
| <base_URI>/operational-state/isis-state/router-isis-config/pspf6-timer/max-time                                 | Displays PSPF6 Max Wait time.  |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v4                                 | Displays ISISv4 address family information.  |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v4/originate-default-route         | Displays whether redistribution of default route is enabled or not.                |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v4/originate-default-routemap-name | Displays route map name if default route redistribution is enabled with route-map. |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v4/default-metric                  | Displays default metric.   |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v4/l1-default-link-metric          | Displays default metric for Level-1.   |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v4/l2-default-link-metric          | Displays default metric for Level-2.   |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v4/administrative-distance         | Displays Administrative Distance.  |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v4/maximum-equal-cost-paths        | Displays ECMP path.  |

| URI   | Description  |
|---|--|
| <base_URI>/operational-state/isis-state/router-isis-config/isis-address-family-v4/redis-static                        | Displays redistribution of static route information.                                 |
| <base_URI>/operational-state/isis-state/router-isis-config/isis-address-family-v4/redis-static/redis-enabled          | Displays whether redistribution of static route is enabled or disabled.              |
| <base_URI>/operational-state/isis-state/router-isis-config/isis-address-family-v4/redis-static/redis-level            | Displays static route redistribution level.  |
| <base_URI>/operational-state/isis-state/router-isis-config/isis-address-family-v4/redis-static/redis-metric           | Displays metric for redistributed static route.                                      |
| <base_URI>/operational-state/isis-state/router-isis-config/isis-address-family-v4/redis-static/redis-metric-type      | Displays IS-IS metric type for redistributed static routes.                          |
| <base_URI>/operational-state/isis-state/router-isis-config/isis-address-family-v4/redis-static/redis-routemap-name    | Displays Route map name if static route redistribution is enabled with route-map.    |
| <base_URI>/operational-state/isis-state/router-isis-config/isis-address-family-v4/redis-connected                     | Displays redistribution of connected route information.                              |
| <base_URI>/operational-state/isis-state/router-isis-config/isis-address-family-v4/redis-connected/redis-enabled       | Displays whether redistribution of connected route is enabled or disabled.           |
| <base_URI>/operational-state/isis-state/router-isis-config/isis-address-family-v4/redis-connected/redis-level         | Displays connected route redistribution level.                                       |
| <base_URI>/operational-state/isis-state/router-isis-config/isis-address-family-v4/redis-connected/redis-metric        | Displays metric for redistributed connected route.                                   |
| <base_URI>/operational-state/isis-state/router-isis-config/isis-address-family-v4/redis-connected/redis-metric-type   | Displays IS-IS metric type for redistributed connected routes.                       |
| <base_URI>/operational-state/isis-state/router-isis-config/isis-address-family-v4/redis-connected/redis-routemap-name | Displays Route map name if connected route redistribution is enabled with route-map. |
| <base_URI>/operational-state/isis-state/router-isis-config/isis-address-family-v4/redis-bgp                           | Displays redistribution of BGP route information.                                    |
| <base_URI>/operational-state/isis-state/router-isis-config/isis-address-family-v4/redis-bgp/redis-enabled             | Displays whether redistribution of BGP route is enabled or disabled.                 |
| <base_URI>/operational-state/isis-state/router-isis-config/isis-address-family-v4/redis-bgp/redis-level               | Displays BGP route redistribution level.   |



| URI   | Description   |
|---|---|
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v4/redist-bgp/redist-metric              | Displays metric for redistributed BGP route.                                    |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v4/redist-bgp/redist-metric-type         | Displays IS-IS metric type for redistributed BGP routes.                        |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v4/redist-bgp/redist-routemap-name       | Displays Route map name if BGP route redistribution is enabled with route-map.  |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v4/redist-isis                           | Displays ISIS redistribution information.                                       |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v4/redist-isis/redist-is-l2-to-l1        | Redistribute ISIS route Level-2 to Level-1 Status.                              |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v4/redist-isis/redist-is-l2-to-l1        | Redistribute ISIS route Level-2 to Level-1 with prefix list.                    |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v4/redist-isis/redist-is-l1-to-l2        | Redistribute ISIS route redistribution Level-1 to Level-2 status.               |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v4/redist-isis/redist-is-l1-to-l2-prefix | Redistribute ISIS route Level-2 to Level-1 with prefix list.                    |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v4/redist-ospf                           | Displays redistribution of OSPF route information.                              |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v4/redist-ospf/redist-enabled            | Displays whether redistribution of OSPF route is enabled or disabled.           |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v4/redist-ospf/redist-level              | Displays OSPF redistribution level.   |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v4/redist-ospf/redist-metric             | Displays IS-IS metric type for redistributed OSPF routes.                       |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v4/redist-ospf/redist-metric-type        | Displays IS-IS metric type for redistributed OSPF routes.                       |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v4/redist-ospf/redist-routemap-name      | Displays Route map name if OSPF route redistribution is enabled with route-map. |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v4/redist-ospf/ospf-internal-enabled     | Displays whether Redistribution of OSPF Internal routes is enabled or disabled. |

| URI  | Description  |
|--|--|
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v4/redist-ospf/ospf-external1-enabled           | Displays whether Redistribution of OSPF External type 1 routes is enabled or disabled. |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v4/redist-ospf/ospf-external2-enabled           | Displays whether Redistribution of OSPF External type 2 routes is enabled or disabled. |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v4/l1-wide-metric-enabled                       | Displays Metric Style for Level-1.   |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v4/l2-wide-metric-enabled                       | Displays Metric Style for Level-2.   |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v4/ldp-sync-enabled                             | Displays LDP sync state.   |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v4/ldp-sync-hold-down                           | Displays LDP sync hold down timer.   |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v4/summary-address-v4                           | Displays summary address information.  |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v4/summary-address-v4/val_address_val/ipv4-mask | Displays summary address mask value.   |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v4/summary-address-v4/val_address_val/level     | Displays summary address level.  |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v6  | Displays ISISv6 address family information.  |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v6/originate-default-route                      | Displays whether redistribution of default route is enabled or not.                    |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v6/originate-default-routemap-name              | Displays route map name if default route redistribution is enabled with route-map.     |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v6/default-metric                               | Displays default metric.   |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v6/l1-default-link-metric                       | Displays default metric for Level-1.   |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v6/l2-default-link-metric                       | Displays default metric for Level-2.   |

| URI   | Description  |
|---|--|
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v6/administrative-distance               | Displays Administrative Distance.  |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v6/maximum-equal-cost-paths              | Displays ECMP path.  |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v6/redist-static                         | Displays redistribution of static route information.                                 |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v6/redist-static/redist-enabled          | Displays whether redistribution of static route is enabled or disabled.              |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v6/redist-static/redist-level            | Displays static route redistribution level.  |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v6/redist-static/redist-metric           | Displays metric for redistributed static route.                                      |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v6/redist-static/redist-metric-type      | Displays IS-IS metric type for redistributed static routes.                          |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v6/redist-static/redist-routemap-name    | Displays Route map name if static route redistribution is enabled with route-map.    |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v6/redist-connected                      | Displays redistribution of connected route information.                              |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v6/redist-connected/redist-enabled       | Displays whether redistribution of connected route is enabled or disabled.           |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v6/redist-connected/redist-level         | Displays connected route redistribution level.                                       |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v6/redist-connected/redist-metric        | Displays metric for redistributed connected route.                                   |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v6/redist-connected/redist-metric-type   | Displays IS-IS metric type for redistributed connected routes.                       |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v6/redist-connected/redist-routemap-name | Displays Route map name if connected route redistribution is enabled with route-map. |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v6/redist-bgp                            | Displays redistribution of BGP route information.                                    |

| URI   | Description   |
|---|---|
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v6/redist-bgp/redist-enabled             | Displays whether redistribution of BGP route is enabled or disabled.            |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v6/redist-bgp/redist-level               | Displays BGP route redistribution level.  |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v6/redist-bgp/redist-metric              | Displays metric for redistributed BGP route.                                    |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v6/redist-bgp/redist-metric-type         | Displays IS-IS metric type for redistributed BGP routes.                        |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v6/redist-bgp/redist-routemap-name       | Displays Route map name if OSPF route redistribution is enabled with route-map. |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v6/redist-isis                           | Displays ISIS redistribution information.                                       |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v6/redist-isis/redist-is-l2-to-l1        | Redistribute ISIS route Level-2 to Level-1 Status.                              |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v6/redist-isis/redist-is-l2-to-l1-prefix | Redistribute ISIS route Level-2 to Level-1 with prefix list.                    |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v6/redist-isis/redist-is-l1-to-l2        | Redistribute ISIS route redistribution Level-1 to Level-2 status.               |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v6/redist-isis/redist-is-l1-to-l2-prefix | Redistribute ISIS route Level-2 to Level-1 with prefix list.                    |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v6/redist-ospf                           | Displays redistribution of OSPF route information.                              |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v6/redist-ospf/redist-enabled            | Displays whether redistribution of OSPF route is enabled or disabled.           |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v6/redist-ospf/redist-level              | Displays OSPF redistribution level.   |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v6/redist-ospf/redist-metric             | Displays IS-IS metric type for redistributed OSPF routes.                       |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v6/redist-ospf/redist-metric-type        | Displays IS-IS metric type for redistributed OSPF routes.                       |

| URI   | Description  |
|---|--|
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v6/redist-ospf/redist-routemap-name        | Displays Route map name if OSPF route redistribution is enabled with route-map.        |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v6/redist-ospf/ospf-internal-enabled       | Displays whether Redistribution of OSPF Internal routes is enabled or disabled.        |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v6/redist-ospf/ospf-external1-enabled      | Displays whether Redistribution of OSPF External type 1 routes is enabled or disabled. |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v6/redist-ospf/ospf-external2-enabled      | Displays whether Redistribution of OSPF External type 2 routes is enabled or disabled. |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v6/adjacency-check                         | Displays ISIS adjacency check status.  |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v6/multi-topology                          | Displays ISIS multi-topology status.   |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v6/mt-transition-state                     | Displays ISIS multi-topology with transition enabled or disabled.                      |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v6/summary-prefix-v6                       | Displays summary prefix information.   |
| <base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v6/summary-prefix-v6/val_address_val/level | Displays summary prefix level.   |
| <base_URI>/operational-state/isis-state/router-isis-config/reverse-metric   | Displays ISIS Reverse Metric.  |
| <base_URI>/operational-state/isis-state/router-isis-config/reverse-metric/reverse-metric-value                          | Displays ISIS Reverse metric value.  |
| <base_URI>/operational-state/isis-state/router-isis-config/reverse-metric/rev-metric-whole-lan                          | Displays ISIS Reverse Metric for whole LAN.  |
| <base_URI>/operational-state/isis-state/router-isis-config/reverse-metric/rev-metric-te-def-metric                      | Displays ISIS Reverse metric TE default metric.  |
| <base_URI>/operational-state/isis-state/router-isis-config/reverse-metric/rev-metric-tlv-type                           | Displays ISIS Reverse metric tlv type  |
| <base_URI>/operational-state/isis-state/router-isis-config/debug-handler  | Displays ISIS debug information.   |
| <base_URI>/operational-state/isis-state/router-isis-config/debug-handler/debug-nsr                                      | Displays debug for NSR   |

## Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

## Examples

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

## URI

http://host:80/rest/operational-state/isis-state/router-isis-config

## Request Body

None

## Response Body

```
<router-isis-config xmlns="urn:brocade.com:mgmt:brocade-isis-operational" xmlns:y="http://
brocade.com/ns/rest"
y:self="/rest/operational-state/isis-state/router-isis-config">
  <nsr-state>is-disabled</nsr-state>
  <lsp-flood-count>25</lsp-flood-count>
  <lsp-fast-flood-count>0</lsp-fast-flood-count>
  <fast-flood-wait-count>10</fast-flood-wait-count>
  <hello-padding>is-enabled</hello-padding>
  <hello-padding-ptp>is-enabled</hello-padding-ptp>
  <csnp-interval>10</csnp-interval>
  <lsp-gen-interval>10</lsp-gen-interval>
  <lsp-interval>33</lsp-interval>
  <lsp-refresh-interval>900</lsp-refresh-interval>
  <lsp-lifetime>1200</lsp-lifetime>
  <retransmit-interval>5</retransmit-interval>
  <pspf-enabled>is-enabled</pspf-enabled>
  <ispf-enabled>is-enabled</ispf-enabled>
  <istct-spf-enabled>is-enabled</istct-spf-enabled>
  <overload-state>is-disabled</overload-state>
  <overload-startup-time>0</overload-startup-time>
  <overload-wait-on-bgp>is-disabled</overload-wait-on-bgp>
  <overload-bgp-wait-time>600</overload-bgp-wait-time>
  <enable-code-assertions>is-enabled</enable-code-assertions>
  <graceful-restart-helper>is-enabled</graceful-restart-helper>
  <isis-hostname-enabled>is-enabled</isis-hostname-enabled>
  <isis-system-info y:self="/rest/operational-state/isis-state/router-isis-config/isis-
system-info">
    <protocol-enabled>is-enabled</protocol-enabled>
    <operation-mode>isis-level1-2</operation-mode>
    <system-id>1111.1111.1111</system-id>
    <nsap y:self="/rest/operational-state/isis-state/router-isis-config/isis-system-info/
nsap/01.1111.1111.1111.00">
      <net-addr>01.1111.1111.1111.00</net-addr>
      <length>8</length>
    </nsap>
  </isis-system-info>
  <log-handler y:self="/rest/operational-state/isis-state/router-isis-config/log-handler">
    <log-adj-state-change>is-enabled</log-adj-state-change>
    <log-bad-lsp>is-disabled</log-bad-lsp>
```

```

</log-handler>
<is-address-family-v4 y:self="/rest/operational-state/isis-state/router-isis-config/is-
address-family-v4">
  <afi>isis-ipv4-afi</afi>
  <safi>isis-ipv4-unicast-safi</safi>
  <originate-default-route>is-enabled</originate-default-route>
  <originate-default-routemap-name></originate-default-routemap-name>
  <default-metric>0</default-metric>
  <l1-default-link-metric>0</l1-default-link-metric>
  <l2-default-link-metric>0</l2-default-link-metric>
  <administrative-distance>100</administrative-distance>
  <maximum-equal-cost-paths>8</maximum-equal-cost-paths>
  <redist-isis y:self="/rest/operational-state/isis-state/router-isis-config/is-address-
family-v4/redist-isis">
    <redist-is-l2-to-l1>is-disabled</redist-is-l2-to-l1>
    <redist-is-l2-to-l1-prefix></redist-is-l2-to-l1-prefix>
    <redist-is-l1-to-l2>is-enabled</redist-is-l1-to-l2>
    <redist-is-l1-to-l2-prefix></redist-is-l1-to-l2-prefix>
  </redist-isis>
  <redist-ospf y:self="/rest/operational-state/isis-state/router-isis-config/is-address-
family-v4/redist-ospf">
    <redist-enabled>is-enabled</redist-enabled>
    <redist-level>isis-level1-2</redist-level>
    <redist-metric>0</redist-metric>
    <redist-metric-type>is-metric-internal</redist-metric-type>
    <redist-routemap-name></redist-routemap-name>
    <ospf-internal-enabled>is-enabled</ospf-internal-enabled>
    <ospf-external1-enabled>is-disabled</ospf-external1-enabled>
    <ospf-external2-enabled>is-disabled</ospf-external2-enabled>
  </redist-ospf>
  <redist-static y:self="/rest/operational-state/isis-state/router-isis-config/is-
address-family-v4/redist-static">
    <redist-enabled>is-enabled</redist-enabled>
    <redist-level>isis-level2</redist-level>
    <redist-metric>0</redist-metric>
    <redist-metric-type>is-metric-internal</redist-metric-type>
    <redist-routemap-name></redist-routemap-name>
  </redist-static>
  <redist-connected y:self="/rest/operational-state/isis-state/router-isis-config/is-
address-family-v4/redist-connected">
    <redist-enabled>is-disabled</redist-enabled>
    <redist-level>isis-level2</redist-level>
    <redist-metric>0</redist-metric>
    <redist-metric-type>is-metric-internal</redist-metric-type>
    <redist-routemap-name></redist-routemap-name>
  </redist-connected>
  <redist-rip y:self="/rest/operational-state/isis-state/router-isis-config/is-address-
family-v4/redist-rip">
    <redist-enabled>is-disabled</redist-enabled>
    <redist-level>isis-level2</redist-level>
    <redist-metric>0</redist-metric>
    <redist-metric-type>is-metric-internal</redist-metric-type>
    <redist-routemap-name></redist-routemap-name>
  </redist-rip>
  <redist-bgp y:self="/rest/operational-state/isis-state/router-isis-config/is-address-
family-v4/redist-bgp">
    <redist-enabled>is-enabled</redist-enabled>
    <redist-level>isis-level1-2</redist-level>
    <redist-metric>0</redist-metric>
    <redist-metric-type>is-metric-internal</redist-metric-type>
    <redist-routemap-name>"test"</redist-routemap-name>
  </redist-bgp>
  <l1-wide-metric-enabled>true</l1-wide-metric-enabled>
  <l2-wide-metric-enabled>true</l2-wide-metric-enabled>

```

```

    <ldp-sync-enabled>is-disabled</ldp-sync-enabled>
    <ldp-sync-hold-down>0</ldp-sync-hold-down>
  </is-address-family-v4>
  <is-address-family-v6 y:self="/rest/operational-state/isis-state/router-isis-config/isis-address-family-v6">
    <afi>isis-ipv6-afi</afi>
    <safi>isis-ipv6-unicast-safi</safi>
    <originate-default-route>is-disabled</originate-default-route>
    <originate-default-routemap-name></originate-default-routemap-name>
    <default-metric>0</default-metric>
    <l1-default-link-metric>0</l1-default-link-metric>
    <l2-default-link-metric>0</l2-default-link-metric>
    <administrative-distance>115</administrative-distance>
    <maximum-equal-cost-paths>8</maximum-equal-cost-paths>
    <redist-isis y:self="/rest/operational-state/isis-state/router-isis-config/isis-address-family-v6/redist-isis">
      <redist-is-l2-to-l1>is-disabled</redist-is-l2-to-l1>
      <redist-is-l2-to-l1-prefix></redist-is-l2-to-l1-prefix>
      <redist-is-l1-to-l2>is-enabled</redist-is-l1-to-l2>
      <redist-is-l1-to-l2-prefix></redist-is-l1-to-l2-prefix>
    </redist-isis>
    <redist-ospf y:self="/rest/operational-state/isis-state/router-isis-config/isis-address-family-v6/redist-ospf">
      <redist-enabled>is-disabled</redist-enabled>
      <redist-level>isis-level2</redist-level>
      <redist-metric>0</redist-metric>
      <redist-metric-type>is-metric-internal</redist-metric-type>
      <redist-routemap-name></redist-routemap-name>
      <ospf-internal-enabled>is-enabled</ospf-internal-enabled>
      <ospf-external1-enabled>is-disabled</ospf-external1-enabled>
      <ospf-external2-enabled>is-disabled</ospf-external2-enabled>
    </redist-ospf>
    <redist-static y:self="/rest/operational-state/isis-state/router-isis-config/isis-address-family-v6/redist-static">
      <redist-enabled>is-disabled</redist-enabled>
      <redist-level>isis-level2</redist-level>
      <redist-metric>0</redist-metric>
      <redist-metric-type>is-metric-internal</redist-metric-type>
      <redist-routemap-name></redist-routemap-name>
    </redist-static>
    <redist-connected y:self="/rest/operational-state/isis-state/router-isis-config/isis-address-family-v6/redist-connected">
      <redist-enabled>is-disabled</redist-enabled>
      <redist-level>isis-level2</redist-level>
      <redist-metric>0</redist-metric>
      <redist-metric-type>is-metric-internal</redist-metric-type>
      <redist-routemap-name></redist-routemap-name>
    </redist-connected>
    <redist-rip y:self="/rest/operational-state/isis-state/router-isis-config/isis-address-family-v6/redist-rip">
      <redist-enabled>is-disabled</redist-enabled>
      <redist-level>isis-level2</redist-level>
      <redist-metric>0</redist-metric>
      <redist-metric-type>is-metric-internal</redist-metric-type>
      <redist-routemap-name></redist-routemap-name>
    </redist-rip>
    <redist-bgp y:self="/rest/operational-state/isis-state/router-isis-config/isis-address-family-v6/redist-bgp">
      <redist-enabled>is-disabled</redist-enabled>
      <redist-level>isis-level2</redist-level>
      <redist-metric>0</redist-metric>
      <redist-metric-type>is-metric-internal</redist-metric-type>
      <redist-routemap-name></redist-routemap-name>
    </redist-bgp>
  </is-address-family-v6>

```



```

    <adjacency-check>is-enabled</adjacency-check>
    <multi-topology>is-disabled</multi-topology>
    <mt-transition-state>>false</mt-transition-state>
  </is-address-family-v6>
  <reverse-metric y:self="/rest/operational-state/isis-state/router-isis-config/reverse-
metric">
    <reverse-metric-value>0</reverse-metric-value>
    <rev-metric-whole-lan>is-disabled</rev-metric-whole-lan>
    <rev-metric-te-def-metric>is-disabled</rev-metric-te-def-metric>
    <rev-metric-tlv-type>254</rev-metric-tlv-type>
  </reverse-metric>
  <debug-handler y:self="/rest/operational-state/isis-state/router-isis-config/debug-
handler">
    <debug-nsr>is-disabled</debug-nsr>
  </debug-handler>
  <l1-auth-profile y:self="/rest/operational-state/isis-state/router-isis-config/l1-auth-
profile">
    <auth-check>is-disabled</auth-check>
    <auth-mode>none</auth-mode>
  </l1-auth-profile>
  <l2-auth-profile y:self="/rest/operational-state/isis-state/router-isis-config/l2-auth-
profile">
    <auth-check>is-disabled</auth-check>
    <auth-mode>none</auth-mode>
  </l2-auth-profile>
  <l1-spf-timer y:self="/rest/operational-state/isis-state/router-isis-config/l1-spf-
timer">
    <init-delay-time>5000</init-delay-time>
    <hold-down-time>5000</hold-down-time>
    <max-time>5000</max-time>
  </l1-spf-timer>
  <l2-spf-timer y:self="/rest/operational-state/isis-state/router-isis-config/l2-spf-
timer">
    <init-delay-time>5000</init-delay-time>
    <hold-down-time>5000</hold-down-time>
    <max-time>5000</max-time>
  </l2-spf-timer>
  <l1-spf6-timer y:self="/rest/operational-state/isis-state/router-isis-config/l1-spf6-
timer">
    <init-delay-time>5000</init-delay-time>
    <hold-down-time>5000</hold-down-time>
    <max-time>5000</max-time>
  </l1-spf6-timer>
  <l2-spf6-timer y:self="/rest/operational-state/isis-state/router-isis-config/l2-spf6-
timer">
    <init-delay-time>5000</init-delay-time>
    <hold-down-time>5000</hold-down-time>
    <max-time>5000</max-time>
  </l2-spf6-timer>
  <pspf-timer y:self="/rest/operational-state/isis-state/router-isis-config/pspf-timer">
    <init-delay-time>2000</init-delay-time>
    <hold-down-time>5000</hold-down-time>
    <max-time>5000</max-time>
  </pspf-timer>
  <pspf6-timer y:self="/rest/operational-state/isis-state/router-isis-config/pspf6-timer">
    <init-delay-time>2000</init-delay-time>
    <hold-down-time>5000</hold-down-time>
    <max-time>5000</max-time>
  </pspf6-timer>
</router-isis-config>

```

## loam-state

---

### Resource URIs

| URI                                     | Description                                |
|---|--|
| <base_URI>/operational-state/loam-state | Displays LINK-OAM operational information. |

### Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

### Examples

The following example shows the complete cURL command and server response for the loam-state GET operation.

### URI

`http://host:80/rest/operational-state/loam-state`

### Request Body

```
curl -H "Accept: application/vnd.operational-state.resource+xml" -H "Resource-Depth: 6"
-u "lab:Tester**" http://10.20.229.40:80/rest/operational-state/loam-state
```

### Response Body

```
<data xmlns="http://brocade.com/ns/rest" xmlns:y="http://brocade.com/ns/rest" y:self="/
rest/operational-state">
<loam-state xmlns="urn:brocade.com:mgmt:brocade-dotlag-operational" y:self="/rest/
operational-state/loam-state">
</loam-state>
</data>
```

### History

| Release version | History                       |
|-----------------|-------------------------------|
| 18r.2.00        | This API call was introduced. |

## logical-interface-state

### Resource URIs

| URI  | Description                             |
|--|---|
| <base_URI>/operational-state/logical-interface-state | Displays logical interface information. |

### Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

### Examples

The following example shows the complete cURL command and server response for the logical-interface-state GET operation.

### URI

http://host:80/rest/operational-state/logical-interface-state

### Request Body

```
curl -H "Accept: application/vnd.operational-state.resource+xml" -H "Resource-Depth: 6"
-u "lab:Tester**" http://10.20.229.40:80/rest/operational-state/logical-interface-state
```

### Response Body

```
<data xmlns="http://brocade.com/ns/rest" xmlns:y="http://brocade.com/ns/rest" y:self="/
rest/operational-state">
<logical-interface-state xmlns="urn:brocade.com:mgmt:brocade-nsm-operational" y:self="/
rest/operational-state/logical-interface-state">
  <main-interface-physical y:self="/rest/operational-state/logical-interface-state/main-
interface-physical/291%2C%22%22">
    <interface-index>291</interface-index>
    <intf-name>"</intf-name>
    <protocol-status>true</protocol-status>
    <admin-status>true</admin-status>
    <counters y:self="/rest/operational-state/logical-interface-state/main-interface-
physical/291%2C%22%22/counters/20%2C24">
      <implicit-lifs>20</implicit-lifs>
      <explicit-lifs>24</explicit-lifs>
      <lif-type>enum=0</lif-type>
      <total-lifs>100</total-lifs>
      <protocol-status-up-lifs>50</protocol-status-up-lifs>
      <binded-lifs>90</binded-lifs>
      <unbinded-lifs>10</unbinded-lifs>
    </counters>
    <intf-type>enum=0</intf-type>
    <is-tagged>true</is-tagged>
    <port-mode>up</port-mode>
```

```

    <logical-interface-physical y:self="/rest/operational-state/logical-interface-state/
main-interface-physical/291%2C%22%22/logical-interface-physical/%220/1.10%22">
    <logical-interface-name>0/1.10</logical-interface-name>
    <source-type>dummy</source-type>
    <protocol-status>true</protocol-status>
    <admin-status>true</admin-status>
    <lif-index>2</lif-index>
    <bridge-domain-index>291</bridge-domain-index>
    <interface-name>phyintf</interface-name>
    <is-binded>false</is-binded>
    <outer-vlan-id>100</outer-vlan-id>
    <inner-vlan-id>200</inner-vlan-id>
    <intf-type>enum=0</intf-type>
    <is-tagged>true</is-tagged>
  </logical-interface-physical>
  <logical-interface-physical y:self="/rest/operational-state/logical-interface-state/
main-interface-physical/291%2C%22%22/logical-interface-physical/%220/1.10%22">
    <logical-interface-name>0/1.10</logical-interface-name>
    <source-type>dummy</source-type>
    <protocol-status>true</protocol-status>
    <admin-status>true</admin-status>
    <lif-index>1</lif-index>
    <bridge-domain-index>291</bridge-domain-index>
    <interface-name>phyintf</interface-name>
    <is-binded>false</is-binded>
    <outer-vlan-id>100</outer-vlan-id>
    <inner-vlan-id>200</inner-vlan-id>
    <intf-type>enum=0</intf-type>
    <is-tagged>true</is-tagged>
  </logical-interface-physical>
</main-interface-physical>
<main-interface-physical y:self="/rest/operational-state/logical-interface-state/main-
interface-physical/291%2C%22%22">
  <interface-index>291</interface-index>
  <intf-name>"</intf-name>
  <protocol-status>true</protocol-status>
  <admin-status>true</admin-status>
  <intf-type>enum=0</intf-type>
  <is-tagged>true</is-tagged>
  <port-mode>up</port-mode>
</main-interface-physical>
<main-interface-pseudo-wire y:self="/rest/operational-state/logical-interface-state/
main-interface-pseudo-wire/4660">
  <interface-index>4660</interface-index>
  <protocol-status>true</protocol-status>
  <admin-status>true</admin-status>
  <counters y:self="/rest/operational-state/logical-interface-state/main-interface-
pseudo-wire/4660/counters/20%2C24">
    <implicit-lifs>20</implicit-lifs>
    <explicit-lifs>24</explicit-lifs>
    <lif-type>enum=0</lif-type>
    <total-lifs>200</total-lifs>
    <protocol-status-up-lifs>50</protocol-status-up-lifs>
    <binded-lifs>90</binded-lifs>
    <unbinded-lifs>10</unbinded-lifs>
  </counters>
  <logical-interface-pseudo-wire y:self="/rest/operational-state/logical-interface-
state/main-interface-pseudo-wire/4660/logical-interface-pseudo-wire/pw1">
    <logical-interface-name>pw1</logical-interface-name>
    <source-type>dummy</source-type>
    <protocol-status>true</protocol-status>
    <admin-status>true</admin-status>
    <lif-index>2</lif-index>
    <bridge-domain-index>4660</bridge-domain-index>

```

```

    <interface-name>pwintf</interface-name>
    <is-binded>false</is-binded>
    <ip-address>10.10.10.10</ip-address>
  </logical-interface-pseudo-wire>
  <logical-interface-pseudo-wire y:self="/rest/operational-state/logical-interface-
state/main-interface-pseudo-wire/4660/logical-interface-pseudo-wire/pw1">
    <logical-interface-name>pw1</logical-interface-name>
    <source-type>dummy</source-type>
    <protocol-status>true</protocol-status>
    <admin-status>true</admin-status>
    <lif-index>1</lif-index>
    <bridge-domain-index>4660</bridge-domain-index>
    <interface-name>pwintf</interface-name>
    <is-binded>false</is-binded>
    <ip-address>10.10.10.10</ip-address>
  </logical-interface-pseudo-wire>
</main-interface-pseudo-wire>
<main-interface-pseudo-wire y:self="/rest/operational-state/logical-interface-state/
main-interface-pseudo-wire/4660">
  <interface-index>4660</interface-index>
  <protocol-status>true</protocol-status>
  <admin-status>true</admin-status>
</main-interface-pseudo-wire>
<main-interface-tunnel y:self="/rest/operational-state/logical-interface-state/main-
interface-tunnel/75828">
  <interface-index>75828</interface-index>
  <protocol-status>true</protocol-status>
  <admin-status>true</admin-status>
  <counters y:self="/rest/operational-state/logical-interface-state/main-interface-
tunnel/75828/counters/20%2C24">
    <implicit-lifs>20</implicit-lifs>
    <explicit-lifs>24</explicit-lifs>
    <lif-type>enum=0</lif-type>
    <total-lifs>300</total-lifs>
    <protocol-status-up-lifs>50</protocol-status-up-lifs>
    <binded-lifs>90</binded-lifs>
    <unbinded-lifs>10</unbinded-lifs>
  </counters>
  <logical-interface-tunnel y:self="/rest/operational-state/logical-interface-state/
main-interface-tunnel/75828/logical-interface-tunnel/tun1">
    <logical-interface-name>tun1</logical-interface-name>
    <source-type>dummy</source-type>
    <protocol-status>true</protocol-status>
    <admin-status>true</admin-status>
    <lif-index>2</lif-index>
    <bridge-domain-index>4643</bridge-domain-index>
    <interface-name>tunintf</interface-name>
    <is-binded>false</is-binded>
    <vni-tni>4000</vni-tni>
  </logical-interface-tunnel>
  <logical-interface-tunnel y:self="/rest/operational-state/logical-interface-state/
main-interface-tunnel/75828/logical-interface-tunnel/tun1">
    <logical-interface-name>tun1</logical-interface-name>
    <source-type>dummy</source-type>
    <protocol-status>true</protocol-status>
    <admin-status>true</admin-status>
    <lif-index>1</lif-index>
    <bridge-domain-index>4643</bridge-domain-index>
    <interface-name>tunintf</interface-name>
    <is-binded>false</is-binded>
    <vni-tni>4000</vni-tni>
  </logical-interface-tunnel>
</main-interface-tunnel>
<main-interface-tunnel y:self="/rest/operational-state/logical-interface-state/main-

```

```
interface-tunnel/75828">  
  <interface-index>75828</interface-index>  
  <protocol-status>true</protocol-status>  
  <admin-status>true</admin-status>  
</main-interface-tunnel>  
</logical-interface-state>  
</data>
```

## History

| Release version | History                       |
|-----------------|-------------------------------|
| 18r.2.00        | This API call was introduced. |

## mem-state

### Resource URIs

| URI                                    | Description   |
|--|---|
| <base_URI>/operational-state/mem-state | Displays memory utilization statistics of the overall system. |

### Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

### Examples

The following example shows the complete cURL command and server response for the mem-state GET operation.

### URI

http://host:80/rest/operational-state/mem-state

### Request Body

```
curl -H "Accept: application/vnd.operational-state.resource+xml" -H "Resource-Depth: 6"
-u "lab:Tester**" http://10.20.229.40:80/rest/operational-state/mem-state
```

### Response Body

```
<data xmlns="http://brocade.com/ns/rest" xmlns:y="http://brocade.com/ns/rest" y:self="/
rest/operational-state">
<mem-state xmlns="urn:brocade.com:mgmt:brocade-RAS-operational" y:self="/rest/operational-
state/mem-state">
  <summary y:self="/rest/operational-state/mem-state/summary">
    <memory-used-percentage>41.61</memory-used-percentage>
    <memory-total>12071784</memory-total>
    <memory-total-used>5023012</memory-total-used>
    <memory-total-free>7048772</memory-total-free>
    <memory-low-free>6187144</memory-low-free>
    <memory-high-free>0</memory-high-free>
    <memory-cached>861292</memory-cached>
  </summary>
  <mem-list y:self="/rest/operational-state/mem-state/mem-list">
    <memory-used-percentage>41.61</memory-used-percentage>
    <memory-total>12071784</memory-total>
    <memory-total-used>5022640</memory-total-used>
    <memory-total-free>7049144</memory-total-free>
    <memory-low-free>6187360</memory-low-free>
    <memory-high-free>0</memory-high-free>
    <memory-cached>861388</memory-cached>
    <memory-per-process y:self="/rest/operational-state/mem-state/mem-list/memory-per-
process/5178">
```

```

    <memory-process-id>5178</memory-process-id>
    <memory-process-name>hslagtd</memory-process-name>
    <memory-utilized>8.50</memory-utilized>
    <memory-utilized-vsize>5352432</memory-utilized-vsize>
    <memory-utilized-rss>1035196</memory-utilized-rss>
    <memory-utilized-pss>1030471</memory-utilized-pss>
  </memory-per-process>
  <memory-per-process y:self="/rest/operational-state/mem-state/mem-list/memory-per-process/2692">
    <memory-process-id>2692</memory-process-id>
    <memory-process-name>Dcmd</memory-process-name>
    <memory-utilized>5.00</memory-utilized>
    <memory-utilized-vsize>5205128</memory-utilized-vsize>
    <memory-utilized-rss>609588</memory-utilized-rss>
    <memory-utilized-pss>560648</memory-utilized-pss>
  </memory-per-process>
  <memory-per-process y:self="/rest/operational-state/mem-state/mem-list/memory-per-process/5185">
    <memory-process-id>5185</memory-process-id>
    <memory-process-name>fibagt</memory-process-name>
    <memory-utilized>3.20</memory-utilized>
    <memory-utilized-vsize>1739144</memory-utilized-vsize>
    <memory-utilized-rss>396060</memory-utilized-rss>
    <memory-utilized-pss>327918</memory-utilized-pss>
  </memory-per-process>
  <memory-per-process y:self="/rest/operational-state/mem-state/mem-list/memory-per-process/3237">
    <memory-process-id>3237</memory-process-id>
    <memory-process-name>postgres</memory-process-name>
    <memory-utilized>3.00</memory-utilized>
    <memory-utilized-vsize>408672</memory-utilized-vsize>
    <memory-utilized-rss>362956</memory-utilized-rss>
    <memory-utilized-pss>278516</memory-utilized-pss>
  </memory-per-process>
  <memory-per-process y:self="/rest/operational-state/mem-state/mem-list/memory-per-process/3873">
    <memory-process-id>3873</memory-process-id>
    <memory-process-name>mpls_main</memory-process-name>
    <memory-utilized>2.80</memory-utilized>
    <memory-utilized-vsize>1880548</memory-utilized-vsize>
    <memory-utilized-rss>346236</memory-utilized-rss>
    <memory-utilized-pss>275416</memory-utilized-pss>
  </memory-per-process>
  <memory-per-process y:self="/rest/operational-state/mem-state/mem-list/memory-per-process/3871">
    <memory-process-id>3871</memory-process-id>
    <memory-process-name>ospfd</memory-process-name>
    <memory-utilized>1.80</memory-utilized>
    <memory-utilized-vsize>1557948</memory-utilized-vsize>
    <memory-utilized-rss>226732</memory-utilized-rss>
    <memory-utilized-pss>158470</memory-utilized-pss>
  </memory-per-process>
  <memory-per-process y:self="/rest/operational-state/mem-state/mem-list/memory-per-process/3874">
    <memory-process-id>3874</memory-process-id>
    <memory-process-name>sysdiag</memory-process-name>
    <memory-utilized>1.80</memory-utilized>
    <memory-utilized-vsize>1520860</memory-utilized-vsize>
    <memory-utilized-rss>221400</memory-utilized-rss>
    <memory-utilized-pss>142162</memory-utilized-pss>
  </memory-per-process>
  ...
</mem-list>
<mem-allpart y:self="/rest/operational-state/mem-state/mem-allpart">

```



```
<mem-allpart-sum y:self="/rest/operational-state/mem-state/mem-allpart/mem-allpart-sum/%22SW/0%22">
  <memory-blade-name>SW/0</memory-blade-name>
  <memory-used-percentage>41.64</memory-used-percentage>
  <memory-total>12071784</memory-total>
  <memory-total-used>5027244</memory-total-used>
  <memory-total-free>7044540</memory-total-free>
  <memory-cached>861464</memory-cached>
</mem-allpart-sum>
</mem-allpart>
</mem-state>
</data>
```

## History

| Release version | History                       |
|-----------------|-------------------------------|
| 18r.2.00        | This API call was introduced. |

## mctd-client-state-state

### 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. Use of the Resource-Depth request header is recommended.

### 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>
```

## mct-l2ys-state

### 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-mem-vlan                        | Displays the complete member-vlan information.                          |
| <base_URI>/operational-state/mct-l2ys-state/show-cluster-mem-vlan/{cluster-id}/num-vlans | Displays the complete member-vlan information for specified cluster-id. |

### Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

### 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>
```

## mct-state

### 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. Use of the Resource-Depth request header is recommended.

### 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>
```

## mpls-state

### Resource URIs

| URI  | Description               |
|--|---------------------------|
| <base_URI>/rest/operational-state/mpls-state | Displays the MPLS status. |

### Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

### Examples

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

### URI

http://host:80/rest/operational-state/mpls-state

### Request Body

None

### Response Body

```
<mpls-state xmlns="urn:brocade.com:mgmt:brocade-mpls-operational" y:self="/rest/operational-state/mpls-state">
  <ldp y:self="/rest/operational-state/mpls-state/ldp">
    <ldp-out y:self="/rest/operational-state/mpls-state/ldp/ldp-out">
      <ldp-initialized>true</ldp-initialized>
      <lsr-id>1.2.3.4</lsr-id>
      <lsr-id-configured>false</lsr-id-configured>
      <loopback>1</loopback>
      <hello-interval-link>5</hello-interval-link>
      <hello-interval-target>15</hello-interval-target>
      <hold-time-sent-link>15</hold-time-sent-link>
      <hold-time-sent-target>45</hold-time-sent-target>
      <ka-interval>6</ka-interval>
      <ka-multiple>6</ka-multiple>
      <ka-timeout>36</ka-timeout>
      <ka-timeout-default>true</ka-timeout-default>
      <load-sharing>3</load-sharing>
      <advertise-fecs-for-prefix-list>ldp-route-injection</advertise-fecs-for-prefix-list>
      <advertise-fecs-for-prefix-list-exists>true</advertise-fecs-for-prefix-list-exists>
      <inbound-fecs-filtering-prefix-list>&quot;&quot;</inbound-fecs-filtering-prefix-list>
      <inbound-fecs-filtering-prefix-list-exists>>false</inbound-fecs-filtering-prefix-list-exists>
      <outbound-fecs-filtering-prefix-list>&quot;&quot;</outbound-fecs-filtering-prefix-list>
      <outbound-fecs-filtering-prefix-list-exists>>false</outbound-fecs-filtering-prefix-
```



```

list-exists>
  <tunnel-metric>0</tunnel-metric>
  <fec-128-used-for-auto-disc-current>>false</fec-128-used-for-auto-disc-current>
  <fec-128-used-for-auto-disc-configured>>false</fec-128-used-for-auto-disc-configured>
  <end-of-lib>>false</end-of-lib>
  <eol-notification-time>60000</eol-notification-time>
  <tx-silence-time>1000</tx-silence-time>
  <rx-silence-time>1000</rx-silence-time>
  <gr-enable>>false</gr-enable>
  <gr-helper>>false</gr-helper>
  <gr-reconnect-time>0</gr-reconnect-time>
  <gr-max-peer-reconnect-time>0</gr-max-peer-reconnect-time>
  <gr-recovery-time>0</gr-recovery-time>
  <gr-max-peer-recovery-time>0</gr-max-peer-recovery-time>
  <forwarding-state-timer-running>>false</forwarding-state-timer-running>
  <forwarding-state-timer-remaining>0</forwarding-state-timer-remaining>
  <lwd-delay>60</lwd-delay>
  <lwd-default>>true</lwd-default>
</ldp-out>
<interface y:self="/rest/operational-state/mpls-state/ldp/interface">
  <ldp-interface-data y:self="/rest/operational-state/mpls-state/ldp/interface/ldp-
interface-data/%22Ve 101%22%2CVe">
    <ldp-interface-name>&quot;Ve 101&quot;</ldp-interface-name>
    <ldp-interface-type>Ve</ldp-interface-type>
    <ldp-interface-lbbsp>0</ldp-interface-lbbsp>
    <ldp-interface-nbr-cnt>1</ldp-interface-nbr-cnt>
    <ldp-interface-hello-intl>5</ldp-interface-hello-intl>
    <ldp-interface-hello-timeout>15</ldp-interface-hello-timeout>
    <ldp-interface-hello-next>2</ldp-interface-hello-next>
  </ldp-interface-data>
</interface>
<ldp-neighbors y:self="/rest/operational-state/mpls-state/ldp/ldp-neighbors">
  <num-link-neighbors>1</num-link-neighbors>
  <num-targeted-neighbors>1</num-targeted-neighbors>
  <neighbor y:self="/rest/operational-state/mpls-state/ldp/ldp-neighbors/neighbor/
6.6.6.6%2C0">
    <neighbor-ldpid>6.6.6.6</neighbor-ldpid>
    <labelspaceid>0</labelspaceid>
    <neighbor-transport>6.6.6.6</neighbor-transport>
    <interface-name>&quot;Ve 101&quot;</interface-name>
    <max-hold-time>15</max-hold-time>
    <time-left>14</time-left>
    <up-time>&quot;19 hr 22 min 18 sec &quot;</up-time>
    <configured-hold-time>15</configured-hold-time>
    <neighbor-proposed-hold-time>15</neighbor-proposed-hold-time>
  </neighbor>
  <neighbor y:self="/rest/operational-state/mpls-state/ldp/ldp-neighbors/neighbor/
4.4.3.2%2C0">
    <neighbor-ldpid>4.4.3.2</neighbor-ldpid>
    <labelspaceid>0</labelspaceid>
    <neighbor-transport>4.4.3.2</neighbor-transport>
    <interface-name>(targeted)</interface-name>
    <max-hold-time>45</max-hold-time>
    <time-left>35</time-left>
    <up-time>&quot;22 hr 36 min 57 sec &quot;</up-time>
    <configured-hold-time>45</configured-hold-time>
    <neighbor-proposed-hold-time>45</neighbor-proposed-hold-time>
  </neighbor>
</ldp-neighbors>
<ldp-session-summary y:self="/rest/operational-state/mpls-state/ldp/ldp-session-
summary">
  <num-link-sessions>1</num-link-sessions>
  <num-operational-link-sessions>1</num-operational-link-sessions>
  <num-targeted-sessions>1</num-targeted-sessions>

```

```

    <num-operational-targeted-sessions>1</num-operational-targeted-sessions>
  </ldp-session-summary>
  <fec y:self="/rest/operational-state/mpls-state/ldp/fec">
    <ldp-fec-summary y:self="/rest/operational-state/mpls-state/ldp/fec/ldp-fec-
summary">
      <tot-no-of-prefix-fec>3804</tot-no-of-prefix-fec>
      <tot-no-of-prefix-fec-installed>1003</tot-no-of-prefix-fec-installed>
      <tot-no-of-prefix-fec-filtered>0</tot-no-of-prefix-fec-filtered>
      <tot-no-of-vc-fec-128>251</tot-no-of-vc-fec-128>
      <tot-no-of-vc-fec-129>0</tot-no-of-vc-fec-129>
      <tot-no-of-vc-fec-installed>250</tot-no-of-vc-fec-installed>
      <tot-no-of-route-upd-proc-errors>0</tot-no-of-route-upd-proc-errors>
      <tot-no-of-vc-fec-proc-errors>0</tot-no-of-vc-fec-proc-errors>
    </ldp-fec-summary>
    <ldp-fec-prefixes y:self="/rest/operational-state/mpls-state/ldp/fec/ldp-fec-
prefixes">
      <tot-no-of-prefix-fec>3804</tot-no-of-prefix-fec>
      <tot-no-of-prefix-fec-installed>1003</tot-no-of-prefix-fec-installed>
      <tot-no-of-prefix-fec-filtered>0</tot-no-of-prefix-fec-filtered>
      <tot-no-of-prefix-fec-lwd>0</tot-no-of-prefix-fec-lwd>
      <prefix y:self="/rest/operational-state/mpls-state/ldp/fec/ldp-fec-prefixes/
prefix/%221.2.3.4/32%22">
        <destination>1.2.3.4/32</destination>
        <state>current</state>
        <ingress>No</ingress>
        <egress>Yes</egress>
        <filtered>--</filtered>
        <lwd>No</lwd>
        <nexthops y:self="/rest/operational-state/mpls-state/ldp/fec/ldp-fec-prefixes/
prefix/%221.2.3.4/32%22/nexthops/--">
          <nexthop>--</nexthop>
          <out-intf>--</out-intf>
        </nexthops>
      </prefix>
    </ldp-fec-prefixes>
  </fec>
<<OUTPUT TRUNCATED>>

```

## mpls-state/auto-bandwidth-template

### Resource URIs

| URI   | Description  |
|---|--|
| <base_URI>/operational-state/mpls-state/auto-bandwidth-template                               | Displays the auto-bandwidth templates.   |
| <base_URI>/operational-state/mpls-state/auto-bandwidth-template/{name}/adjustment-interval    | Displays the adjustment interval - the time interval after which the LSP bandwidth should be adjusted.   |
| <base_URI>/operational-state/mpls-state/auto-bandwidth-template/{name}/adjustment-threshold   | Displays the adjustment threshold: bandwidth will be adjusted only if the percentage difference of Max-Sample-BW w.r.t current-BW is greater than this value.                                  |
| <base_URI>/operational-state/mpls-state/auto-bandwidth-template/{name}/maximum-bandwidth      | Displays maximum-bandwidth: the LSP bandwidth can never be greater than this value   |
| <base_URI>/operational-state/mpls-state/auto-bandwidth-template/{name}/minimum-bandwidth      | Displays minimum-bandwidth: the LSP bandwidth can never be lower than this value   |
| <base_URI>/operational-state/mpls-state/auto-bandwidth-template/{name}/overflow-limit         | Displays overflow-limit: The least number of times the sampled-BW should consecutively overflow adjustment-threshold to trigger premature adjustment.  |
| <base_URI>/operational-state/mpls-state/auto-bandwidth-template/{name}/underflow-limit        | Displays underflow-limit: The number of consecutive samples which have to be below the threshold to trigger a premature adjustment.  |
| <base_URI>/operational-state/mpls-state/auto-bandwidth-template/{name}/mode                   | Displays mode value. Values are 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. |
| <base_URI>/operational-state/mpls-state/auto-bandwidth-template/{name}/sample-recording       | Displays whether the template is set to record the sample history. Values: enable or disable.  |
| <base_URI>/operational-state/mpls-state/auto-bandwidth-template/{name}/associated-paths-count | Displays the number of LSP paths associated with an auto-bandwidth template.   |
| <base_URI>/operational-state/mpls-state/auto-bandwidth-template/{name}/associated-paths       | Displays the LSP paths associated with an auto-bandwidth template.   |

| URI  | Description  |
|--|--|
| <base_URI>/operational-state/mpls-state/auto-bandwidth-template/{name}/associated-paths/{lsp-name}/path-name | Displays the path currently selected for a particular LSP. |
| <base_URI>/operational-state/mpls-state/auto-bandwidth-template/{name}/associated-paths/{lsp-name}/is-active | Displays whether the path for an LSP is active.            |

## Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

## Examples

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

## URI

http://host:80/rest/operational-state/mpls-state/auto-bandwidth-template/aaa

## Request Body

None

## Response Body

```
<auto-bandwidth-template xmlns="urn:brocade.com:mgmt:brocade-mpls-operational"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/operational-state/mpls-state/auto-bandwidth-template/aaa">
  <name>aaa</name>
  <adjustment-interval>1800</adjustment-interval>
  <adjustment-threshold>0</adjustment-threshold>
  <maximum-bandwidth>2147483647</maximum-bandwidth>
  <minimum-bandwidth>5000</minimum-bandwidth>
  <overflow-limit>0</overflow-limit>
  <underflow-limit>0</underflow-limit>
  <mode>false</mode>
  <sample-recording>false</sample-recording>
  <associated-paths-count>0</associated-paths-count>
</auto-bandwidth-template>
```

## mpls-state/autobw-threshold-table-entry

### Resource URIs

| URI  | Description   |
|--|---|
| <base_URI>/operational-state/mpls-state/autobw-threshold-table-entry                                     | Displays the threshold table with the range of current-bandwidth and the corresponding absolute adjustment-threshold. |
| <base_URI>/operational-state/mpls-state/autobw-threshold-table-entry/{bandwidth}/threshold               | Displays the absolute adjustment-threshold corresponding to the bandwidth.  |
| <base_URI>/operational-state/mpls-state/autobw-threshold-table-entry/{bandwidth}/is-percentage-threshold | Displays whether percentage-based threshold method is used. Boolean value.  |

### Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

### Examples

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

### URI

http://host:80/rest/operational-state/mpls-state/autobw-threshold-table-entry

### Request Body

None

### Response Body

```
<<autobw-threshold-table-entry xmlns="urn:brocade.com:mgmt:brocade-mpls-operational"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/operational-state/mpls-state/autobw-threshold-table-entry/567">
  <bandwidth>567</bandwidth>
  <threshold>800</threshold>
  <is-percentage-threshold>false</is-percentage-threshold>
</autobw-threshold-table-entry>
<autobw-threshold-table-entry xmlns="urn:brocade.com:mgmt:brocade-mpls-operational"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/operational-state/mpls-state/autobw-threshold-table-entry/1000">
  <bandwidth>1000</bandwidth>
  <threshold>500</threshold>
  <is-percentage-threshold>false</is-percentage-threshold>
</autobw-threshold-table-entry>
<autobw-threshold-table-entry xmlns="urn:brocade.com:mgmt:brocade-mpls-operational"
```

```
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/operational-state/mpls-state/autobw-threshold-table-entry/10000">
  <bandwidth>10000</bandwidth>
  <threshold>3453</threshold>
  <is-percentage-threshold>>false</is-percentage-threshold>
</autobw-threshold-table-entry>
<autobw-threshold-table-entry xmlns="urn:brocade.com:mgmt:brocade-mpls-operational"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/operational-state/mpls-state/autobw-threshold-table-entry/2147483647">
  <bandwidth>2147483647</bandwidth>
  <threshold>10</threshold>
  <is-percentage-threshold>>true</is-percentage-threshold>
</autobw-threshold-table-entry>
```

## mpls-state/autobw-threshold-table-summary

---

### Resource URIs

| URI   | Description  |
|---|--|
| <base_URI>/operational-state/mpls-state/autobw-threshold-table-summary  | Displays the autobandwidth-threshold table summary.    |
| <base_URI>/operational-state/mpls-state/autobw-threshold-table-summary/total-number-of-autobw-threshold-table-entries | Displays the number of entries in the threshold table. |

### Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

### Examples

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

### URI

http://host:80/rest/operational-state/mpls-state/autobw-threshold-table-summary

### Request Body

None

### Response Body

```
<autobw-threshold-table-summary xmlns="urn:brocade.com:mgmt:brocade-mpls-operational"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/operational-state/mpls-state/autobw-threshold-table-summary">
  <total-number-of-autobw-threshold-table-entries>4</total-number-of-autobw-threshold-
table-entries>
</autobw-threshold-table-summary>
```

## mpls-state/dynamic-bypass

### Resource URIs

| URI  | Description  |
|--|--|
| <base_URI>/operational-state/mpls-state/dynamic-bypass   | Displays MPLS dynamic bypass configuration.  |
| <base_URI>/operational-state/mpls-state/dynamic-bypass/dynamic-bypass-global                             | Displays global MPLS dynamic bypass configuration.   |
| <base_URI>/operational-state/mpls-state/dynamic-bypass/dynamic-bypass-global/config-enable               | Displays whether dynamic bypass is enabled globally.   |
| <base_URI>/operational-state/mpls-state/dynamic-bypass/dynamic-bypass-global/config-enable-all           | Displays whether dynamic bypass is enabled on all MPLS interfaces.   |
| <base_URI>/operational-state/mpls-state/dynamic-bypass/dynamic-bypass-global/reoptimize-timer            | Displays status of reoptimization timer for dynamic bypasses.  |
| <base_URI>/operational-state/mpls-state/dynamic-bypass/dynamic-bypass-global/max-bypasses-per-mp         | Displays maximum number of dynamic bypass LSPs that can be created per Merge Point.  |
| <base_URI>/operational-state/mpls-state/dynamic-bypass/dynamic-bypass-global/max-bypasses                | Displays maximum number of dynamic bypass LSPs that can be created in the system.  |
| <base_URI>/operational-state/mpls-state/dynamic-bypass/dynamic-bypass-global/bypass-count                | Displays dynamic bypass count.   |
| <base_URI>/operational-state/mpls-state/dynamic-bypass/dynamic-bypass-interface                          | Displays details of dynamic bypass on MPLS interface.  |
| <base_URI>/operational-state/mpls-state/dynamic-bypass/dynamic-bypass-interface/<if-index>/active-status | Displays active status: Enabled indicates that net effect of global and local configuration enable leads to status is UP. Disabled indicates either local or global admin is DOWN. |
| <base_URI>/operational-state/mpls-state/dynamic-bypass/dynamic-bypass-interface/<if-index>/admin-type    | Displays whether dynamic bypass configuration on the interface is because of local (interface) or global (MPLS device) mode configuration.   |
| <base_URI>/operational-state/mpls-state/dynamic-bypass/dynamic-bypass-interface/<if-index>/admin-status  | Displays when the dynamic bypass is enabled on the interface. UP indicates interface dynamic bypass is admin-config enabled, DOWN implies admin-config disabled.                   |
| <base_URI>/operational-state/mpls-state/dynamic-bypass/dynamic-bypass-interface/<if-index>/hop-limit     | Displays hop limit.  |



| URI  | Description   |
|--|---|
| <base_URI>/operational-state/mpls-state/dynamic-bypass/dynamic-bypass-interface/<if-index>/tie-breaking          | Displays tie breaking mode for multiple equal cost paths. Allowed values are: random, least-fill, most-fill.  |
| <base_URI>/operational-state/mpls-state/dynamic-bypass/dynamic-bypass-interface/<if-index>/cos                   | Displays CoS value.   |
| <base_URI>/operational-state/mpls-state/dynamic-bypass/dynamic-bypass-interface/<if-index>/cspf-comp-mode        | Displays bypass CSPF computation mode. Values are use-te-metric or use-igp-metric.                            |
| <base_URI>/operational-state/mpls-state/dynamic-bypass/dynamic-bypass-interface/<if-index>/setup-priority        | Displays setup priority. Range is 0-7. 0 represents the highest priority.                                     |
| <base_URI>/operational-state/mpls-state/dynamic-bypass/dynamic-bypass-interface/<if-index>/hold-priority         | Displays hold priority. Range is 0-7  |
| <base_URI>/operational-state/mpls-state/dynamic-bypass/dynamic-bypass-interface/<if-index>/traffic-eng-max-rate  | Displays traffic maximum rate. Range is 0-2147483647 kbps.  |
| <base_URI>/operational-state/mpls-state/dynamic-bypass/dynamic-bypass-interface/<if-index>/traffic-eng-mean-rate | Displays traffic mean rate. Range is 0-2147483647 kbps.   |
| <base_URI>/operational-state/mpls-state/dynamic-bypass/dynamic-bypass-interface/<if-index>/traffic-eng-max-burst | Displays traffic maximum burst rate. Range is 0-2147483647 kbps.  |
| <base_URI>/operational-state/mpls-state/dynamic-bypass/dynamic-bypass-interface/<if-index>/from-addr             | Displays IPv4 from-address.   |
| <base_URI>/operational-state/mpls-state/dynamic-bypass/dynamic-bypass-interface/<if-index>/reoptimize-timer      | Displays reoptimization timer value for the Adaptive Bypass LSP reoptimization. Range: 300 to 65535 seconds.  |
| <base_URI>/operational-state/mpls-state/dynamic-bypass/dynamic-bypass-interface/<if-index>/adaptive              | Displays whether the dynamic bypass LSPs are adaptive or non-adaptive.  |
| <base_URI>/operational-state/mpls-state/dynamic-bypass/dynamic-bypass-interface/<if-index>/record-route          | Displays whether the setting to record route is enabled or disabled.  |
| <base_URI>/operational-state/mpls-state/dynamic-bypass/dynamic-bypass-interface/<if-index>/name-prefix           | Displays name prefix for the dynamic bypass LSPs.   |
| <base_URI>/operational-state/mpls-state/dynamic-bypass/dynamic-bypass-interface/<if-index>/primary-path          | Displays the configured explicit path for the dynamic bypass LSPs that are created for a protected interface. |
| <base_URI>/operational-state/mpls-state/dynamic-bypass/dynamic-bypass-interface/<if-index>/max-bypasses-per-mp   | Displays the limit for total number of dynamic bypass LSPs that can be created to a merge point.              |

| URI  | Description  |
|--|--|
| <base_URI>/operational-state/mpls-state/dynamic-bypass/dynamic-bypass-interface/<if-index>/bypass-count                      | Displays dynamic bypass count for an interface,                |
| <base_URI>/operational-state/mpls-state/dynamic-bypass/dynamic-bypass-interface/<if-index>/exclude-any                       | Displays number of admin-group configured as exclude-any.      |
| <base_URI>/operational-state/mpls-state/dynamic-bypass/dynamic-bypass-interface/<if-index>/include-all                       | Displays number of admin-group configured as include-all.      |
| <base_URI>/operational-state/mpls-state/dynamic-bypass/dynamic-bypass-interface/<if-index>/include-any                       | Displays number of admin-group configured as include-any.      |
| <base_URI>/operational-state/mpls-state/dynamic-bypass/dynamic-bypass-interface/<if-index>/status-flags                      | Displays status flag number.                                   |
| <base_URI>/operational-state/mpls-state/dynamic-bypass/dynamic-bypass-interface/<if-index>/mp-count                          | Displays number of merge points.                               |
| <base_URI>/operational-state/mpls-state/dynamic-bypass/dynamic-bypass-interface/<if-index>/mp-infos                          | Displays router ID address and bypass count for merge points.  |
| <base_URI>/operational-state/mpls-state/dynamic-bypass/dynamic-bypass-interface/<if-index>/mp-infos/{router-id}/bypass-count | Displays bypass count per router ID address for a merge point. |

## Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

## Examples

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

## URI

http://host:80/rest/operational-state/mpls-state/dynamic-bypass

## Request Body

None

## Response Body

```
<dynamic-bypass xmlns="urn:brocade.com:mgmt:brocade-mpls-operational" xmlns:y="http://brocade.com/ns/rest"
```

```
y:self="/rest/operational-state/mpls-state/dynamic-bypass">
  <dynamic-bypass-global y:self="/rest/operational-state/mpls-state/dynamic-bypass/
dynamic-bypass-global">
    <config-enable>2</config-enable>
    <config-enable-all>0</config-enable-all>
    <reoptimize-timer>0</reoptimize-timer>
    <max-bypasses-per-mp>250</max-bypasses-per-mp>
    <max-bypasses>250</max-bypasses>
    <bypass-count>1</bypass-count>
  </dynamic-bypass-global>
  <dynamic-bypass-interface y:self="/rest/operational-state/mpls-state/dynamic-bypass/
dynamic-bypass-interface/%22Eth
1/18%22%2Cethernet-interface">
    <if-name>Eth 1/18</if-name>
    <if-type>ethernet-interface</if-type>
  </dynamic-bypass-interface>
</dynamic-bypass>
```

## mpls-state/forwarding-entry

---

### Resource URIs

| URI  | Description                            |
|--|--|
| <base_URI>rest/operational-state/mpls-state/forwarding-entry | Displays information on forward entry. |

### Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

### Examples

#### URI

http://80:/rest/operational-state/mpls-state/forwarding-entry

#### Request Body

None

#### Response Body

```
<forwarding-entry xmlns="urn:brocade.com:mgmt:brocade-mpls-operational" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/operational-state/mpls-state/forwarding-entry/1%2C0">
  <entry-index>1</entry-index>
  <sync-index>0</sync-index>
  <dest-ip-prefix>4.4.3.2/32</dest-ip-prefix>
  <out-label>2048</out-label>
  <protocol>mpls-protocol-rsvp</protocol>
  <out-interface-name>&quot;Ve 101&quot;</out-interface-name>
  <nexthop-ip-addr>16.16.16.2</nexthop-ip-addr>
</forwarding-entry>
```

## mpls-state/interface

### Resource URIs

| URI  | Description                  |
|--|------------------------------|
| <base URI>/rest/operational-state/mpls-state/interface | Displays the MPLS interface. |

### Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

### Examples

#### URI

http://host:80/rest/operational-state/mpls-state/interface

#### Request Body

None

#### Response Body

```
<interface xmlns="urn:brocade.com:mgmt:brocade-mpls-operational" xmlns:y="http://
brocade.com/ns/rest"
y:self="/rest/operational-state/mpls-state/interface/1207959653">
  <interface-index>1207959653</interface-index>
  <interface-name>"Ve 101"</interface-name>
  <admin-status>true</admin-status>
  <oper-status>true</oper-status>
  <mtu>1500</mtu>
  <bypass-lsp-count>0</bypass-lsp-count>
  <max-lsp-priority-level>8</max-lsp-priority-level>
  <is-ldp-enabled>true</is-ldp-enabled>
  <ldp-tunnel-count>1003</ldp-tunnel-count>
  <ldp-transit-tunnel-count>0</ldp-transit-tunnel-count>
  <is-gre-port>false</is-gre-port>
  <admin-group>0</admin-group>
  <admin-group-max>31</admin-group-max>
  <admin-group-min>0</admin-group-min>
  <max-bandwidth>299999985</max-bandwidth>
  <max-resv-bandwidth>299999985</max-resv-bandwidth>
  <resv-bandwidth>299999985 299999985 299999985 299999985 299999985
299999985</resv-bandwidth>
  <advert-unreserved-bandwidth>299999985 299999985 299999985 299999985
299999985 299999985 299999985 299999985
</advert-unreserved-bandwidth>
  <under-provisioned-bandwidth>0 0 0 0 0 0 0 0</under-provisioned-bandwidth>
</interface>
```

## mpls-state/ldp

---

### Resource URIs

| URI   | Description                |
|---|----------------------------|
| <base_URI>/operational-state/mpls-state/ldp | Retrieves LDP information. |

### Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

### Examples

#### URI

https://host:80/rest/operational-state/mpls-state/ldp

#### Request Body

None

#### Response Body

```
<ldp xmlns="urn:brocade.com:mgmt:brocade-mpls-operational" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/operational-state/mpls-state/ldp">
  <ldp-out y:self="/rest/operational-state/mpls-state/ldp/ldp-out">
    <ldp-initialized>true</ldp-initialized>
    <lsr-id>1.2.3.4</lsr-id>
    <lsr-id-configured>>false</lsr-id-configured>
    <loopback>1</loopback>
    <hello-interval-link>5</hello-interval-link>
    <hello-interval-target>15</hello-interval-target>
    <hold-time-sent-link>15</hold-time-sent-link>
    <hold-time-sent-target>45</hold-time-sent-target>
    <ka-interval>6</ka-interval>
    <ka-multiple>6</ka-multiple>
    <ka-timeout>36</ka-timeout>
    <ka-timeout-default>>true</ka-timeout-default>
    <load-sharing>3</load-sharing>
    <advertise-fecs-for-prefix-list>ldp-route-injection</advertise-fecs-for-prefix-list>
    <advertise-fecs-for-prefix-list-exists>true</advertise-fecs-for-prefix-list-exists>
    <inbound-fecs-filtering-prefix-list>&quot;&quot;</inbound-fecs-filtering-prefix-list>
    <inbound-fecs-filtering-prefix-list-exists>false</inbound-fecs-filtering-prefix-list-exists>
    <outbound-fecs-filtering-prefix-list>&quot;&quot;</outbound-fecs-filtering-prefix-list>
    <outbound-fecs-filtering-prefix-list-exists>false</outbound-fecs-filtering-prefix-list-exists>
    <tunnel-metric>0</tunnel-metric>
    <fec-128-used-for-auto-disc-current>false</fec-128-used-for-auto-disc-current>
```

```
<fec-128-used-for-auto-disc-configured>>false</fec-128-used-for-auto-disc-configured>
<end-of-lib>>false</end-of-lib>
<eol-notification-time>60000</eol-notification-time>
<tx-silence-time>1000</tx-silence-time>
<rx-silence-time>1000</rx-silence-time>
<gr-enable>>false</gr-enable>
<gr-helper>>false</gr-helper>
<gr-reconnect-time>0</gr-reconnect-time>
<gr-max-peer-reconnect-time>0</gr-max-peer-reconnect-time>
<gr-recovery-time>0</gr-recovery-time>
<gr-max-peer-recovery-time>0</gr-max-peer-recovery-time>
<forwarding-state-timer-running>>false</forwarding-state-timer-running>
<forwarding-state-timer-remaining>0</forwarding-state-timer-remaining>
<lwd-delay>60</lwd-delay>
<lwd-default>>true</lwd-default>
</ldp-out>
</ldp>
```

## mpls-state/ldp/fec

### Resource URIs

| URI   | Description               |
|---|---------------------------|
| <base_URI>/operational-state/mpls-state/ldp/fec | Displays LDP FEC summary. |

### Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

### Examples

#### URI

http://host:80/rest/operational-state/mpls-state/ldp/fec

#### Request Body

None

#### Response Body

```
<fec xmlns="urn:brocade.com:mgmt:brocade-mpls-operational" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/operational-state/mpls-state/ldp/fec">
  <ldp-fec-summary y:self="/rest/operational-state/mpls-state/ldp/fec/ldp-fec-summary">
    <tot-no-of-prefix-fec>3804</tot-no-of-prefix-fec>
    <tot-no-of-prefix-fec-installed>1003</tot-no-of-prefix-fec-installed>
    <tot-no-of-prefix-fec-filtered>0</tot-no-of-prefix-fec-filtered>
    <tot-no-of-vc-fec-128>251</tot-no-of-vc-fec-128>
    <tot-no-of-vc-fec-129>0</tot-no-of-vc-fec-129>
    <tot-no-of-vc-fec-installed>250</tot-no-of-vc-fec-installed>
    <tot-no-of-route-upd-proc-errors>0</tot-no-of-route-upd-proc-errors>
    <tot-no-of-vc-fec-proc-errors>0</tot-no-of-vc-fec-proc-errors>
  </ldp-fec-summary>
  <ldp-fec-prefixes y:self="/rest/operational-state/mpls-state/ldp/fec/ldp-fec-prefixes">
    <tot-no-of-prefix-fec>3804</tot-no-of-prefix-fec>
    <tot-no-of-prefix-fec-installed>1003</tot-no-of-prefix-fec-installed>
    <tot-no-of-prefix-fec-filtered>0</tot-no-of-prefix-fec-filtered>
    <tot-no-of-prefix-fec-lwd>0</tot-no-of-prefix-fec-lwd>
    <prefix y:self="/rest/operational-state/mpls-state/ldp/fec/ldp-fec-prefixes/prefix/
%221.2.3.4/32%22">
      <destination>1.2.3.4/32</destination>
      <state>current</state>
      <ingress>No</ingress>
      <egress>Yes</egress>
      <filtered>-</filtered>
      <lwd>No</lwd>
      <nexthops y:self="/rest/operational-state/mpls-state/ldp/fec/ldp-fec-prefixes/
prefix/%221.2.3.4/32%22/nexthops/--">
```



```
<nexthop>--</nexthop>  
<out-intf>--</out-intf>  
</nexthops>  
</prefix>  
</ldp-fec-prefixes>  
</fec>
```

## mpls-state/ldp/fec/ldp-fec-prefix-prefix

---

### Resource URIs

| URI   | Description   |
|---|---|
| <base_URI>/operational-state/mpls-state/ldp-fec-prefix-prefix | Displays information on the LDP FEC prefix of prefixes. |

### Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

### Examples

#### URI

http://host:80/rest/operational-state/mpls-state/ldp-fec-prefix-prefix

#### Request Body

None

#### Response Body

```
<ldp-fec-prefix-prefix xmlns="urn:brocade.com:mgmt:brocade-mpls-operational"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/operational-state/mpls-state/ldp/fec/ldp-fec-prefix-prefix">
  <prefix>1.2.3.4/32</prefix>
  <prefix-feccb>1402059352</prefix-feccb>
  <prefix-idx>7507</prefix-idx>
  <prefix-type>2</prefix-type>
  <prefix-pend-notif>Up</prefix-pend-notif>
  <prefix-state>current</prefix-state>
  <prefix-ingress>No</prefix-ingress>
  <prefix-egress>Yes</prefix-egress>
  <prefix-um-dist-done>Yes</prefix-um-dist-done>
  <prefix-lwd>Inactive</prefix-lwd>
  <prefix-lwd-started>&quot; N/A&quot;</prefix-lwd-started>
  <prefix-is-ldp-o-rsvp>false</prefix-is-ldp-o-rsvp>
  <prefix-excess-dms>false</prefix-excess-dms>
</ldp-fec-prefix-prefix>
```

## mpls-state/ldp/fec/ldp-fec-prefixes

### Resource URIs

| URI  | Description                    |
|--|--------------------------------|
| <base_URI>/operational-state/mpls-state/ldp/fec/ldp-fec-prefixes | Displays the LDP FEC prefixes. |

### Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

### Examples

#### URI

http://host:80/operational-state/mpls-state/ldp/fec/ldp-fec-prefixes

#### Request Body

None

#### Response Body

```
<ldp-fec-prefixes xmlns="urn:brocade.com:mgmt:brocade-mpls-operational" xmlns:y="http://
brocade.com/ns/rest"
y:self="/rest/operational-state/mpls-state/ldp/fec/ldp-fec-prefixes">
  <tot-no-of-prefix-fec>3804</tot-no-of-prefix-fec>
  <tot-no-of-prefix-fec-installed>1003</tot-no-of-prefix-fec-installed>
  <tot-no-of-prefix-fec-filtered>0</tot-no-of-prefix-fec-filtered>
  <tot-no-of-prefix-fec-lwd>0</tot-no-of-prefix-fec-lwd>
  <prefix y:self="/rest/operational-state/mpls-state/ldp/fec/ldp-fec-prefixes/prefix/
%221.2.3.4/32%22">
    <destination>1.2.3.4/32</destination>
    <state>current</state>
    <ingress>No</ingress>
    <egress>Yes</egress>
    <filtered>-</filtered>
    <lwd>No</lwd>
    <nexthops y:self="/rest/operational-state/mpls-state/ldp/fec/ldp-fec-prefixes/prefix/
%221.2.3.4/32%22/nexthops/--">
      <nexthop>--</nexthop>
      <out-intf>--</out-intf>
    </nexthops>
  </prefix>
</ldp-fec-prefixes>
```

## mpls-state/ldp/fec/ldp-fec-summary

---

### Resource URIs

| URI   | Description                   |
|---|-------------------------------|
| <base_URI>/operational-state/mpls-state/ldp/fec/ldp-fec-summary | Displays the LDP FEC summary. |

### Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

### Examples

#### URI

http://host:80/rest/operational-state/mpls-state/ldp/fec/ldp-fec-summary>

#### Request Body

None

#### Response Body

```
<ldp-fec-summary xmlns="urn:brocade.com:mgmt:brocade-mpls-operational" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/operational-state/mpls-state/ldp/fec/ldp-fec-summary">
  <tot-no-of-prefix-fec>3804</tot-no-of-prefix-fec>
  <tot-no-of-prefix-fec-installed>1003</tot-no-of-prefix-fec-installed>
  <tot-no-of-prefix-fec-filtered>0</tot-no-of-prefix-fec-filtered>
  <tot-no-of-vc-fec-128>251</tot-no-of-vc-fec-128>
  <tot-no-of-vc-fec-129>0</tot-no-of-vc-fec-129>
  <tot-no-of-vc-fec-installed>250</tot-no-of-vc-fec-installed>
  <tot-no-of-route-upd-proc-errors>0</tot-no-of-route-upd-proc-errors>
  <tot-no-of-vc-fec-proc-errors>0</tot-no-of-vc-fec-proc-errors>
</ldp-fec-summary>
```

## mpls-state/ldp/fec/ldp-fec-vcs

---

### Resource URIs

| URI   | Description                              |
|---|--|
| <base_URI>/operational-state/mpls-state/ldp/fec/ldp-fec-vcs | Displays information on the LDP FEC VCS. |

### Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

### Examples

#### URI

http://host:80/rest/operational-state/mpls-state/ldp/fec/ldp-fec-vcs

#### Request Body

None

#### Response Body

```
<ldp-fec-vcs xmlns="urn:brocade.com:mgmt:brocade-mpls-operational" xmlns:y="http://
brocade.com/ns/rest"
y:self="/rest/operational-state/mpls-state/ldp/fec/ldp-fec-vcs">
  <tot-no-of-vc-fec>251</tot-no-of-vc-fec>
  <tot-no-of-vc-fec-installed>250</tot-no-of-vc-fec-installed>
  <vc y:self="/rest/operational-state/mpls-state/ldp/fec/ldp-fec-vcs/vc/4.4.3.2">
    <peer-id>4.4.3.2</peer-id>
    <peer-lblspc>0</peer-lblspc>
    <state>current</state>
    <vc-id>1</vc-id>
    <peer-vc-type>4</peer-vc-type>
    <peer-fec-type>128</peer-fec-type>
    <ingress>Yes</ingress>
    <egress>Yes</egress>
  </vc>
  <key y:self="/rest/operational-state/mpls-state/ldp/fec/ldp-fec-vcs/key">
    </key>
</ldp-fec-vcs>
```

## mpls-state/ldp/interface

---

### Resource URIs

| URI  | Description                         |
|--|-------------------------------------|
| /rest/operational-state/mpls-state/ldp/interface | Displays LDP interface information. |

### Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

### Examples

#### URI

http://host:80//rest/operational-state/mpls-state/ldp/interface

#### Request Body

None

#### Response Body

```
<ldp-interface-data y:self="/rest/operational-state/mpls-state/ldp/interface/ldp-  
interface-data/%22Ve 101%22%2CVe">  
  <ldp-interface-name>&quot;Ve 101&quot;</ldp-interface-name>  
  <ldp-interface-type>Ve</ldp-interface-type>  
  <ldp-interface-lbbsp>0</ldp-interface-lbbsp>  
  <ldp-interface-nbr-cnt>1</ldp-interface-nbr-cnt>  
  <ldp-interface-hello-int1>5</ldp-interface-hello-int1>  
  <ldp-interface-hello-timeout>15</ldp-interface-hello-timeout>  
  <ldp-interface-hello-next>2</ldp-interface-hello-next>  
</ldp-interface-data>  
</interface>
```

## mpls-state/ldp/ldp-session

### Resource URIs

| URI  | Description                              |
|--|--|
| <base-URI>/operational-state/mpls-state/ldp/ldp-session                      | Displays information on the LDP session. |
| <base_URI>operational-state/mpls-state/ldp/ldp-session/(ip-address)          | Displays the LDP session IP address.     |
| <base_URI>/operational-state/mpls-state/ldp/ldp-session/ip/session-ldp-stats | Displays LDP session status.             |

### Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

### Examples

#### URI

http://host:80/rest/operational-state/mpls-state/ldp/ldp-session

#### Request Body

None

#### Response Body

```
<ldp-session xmlns="urn:brocade.com:mgmt:brocade-mpls-operational" xmlns:y="http://
brocade.com/ns/rest"
y:self="/rest/operational-state/mpls-state/ldp/ldp-session/4.4.3.2:0">
  <peer-ldp-id>4.4.3.2:0</peer-ldp-id>
  <peer-lblspc-id>"&quot;&quot;</peer-lblspc-id>
  <state>Operational</state>
  <adjacency>Targeted</adjacency>
  <role>Passive</role>
  <max-hold>36</max-hold>
  <time-left>31</time-left>
  <session-status>Up</session-status>
  <local-ldp-id>1.2.3.4:0</local-ldp-id>
  <local-lblspc-id>"&quot;&quot;</local-lblspc-id>
  <next-keepalive>3</next-keepalive>
  <entity-index>2</entity-index>
  <targeted-adj-added>Yes</targeted-adj-added>
  <is-retry>>false</is-retry>
  <next-retry>0</next-retry>
  <keepalive-interval>6000</keepalive-interval>
  <local-keepalive-timeout>36</local-keepalive-timeout>
  <peer-proposed-keepalive-timeout>36</peer-proposed-keepalive-timeout>
  <session-up-time>"&quot;22 hr 44 min 19 sec &quot;</session-up-time>
```

```

<tcp-conn-local>1.2.3.4:646</tcp-conn-local>
<tcp-conn-remote>4.4.3.2:13603</tcp-conn-remote>
<tcp-state>ESTABLISHED</tcp-state>
<num-fecs-received-from-peer>251</num-fecs-received-from-peer>
<num-fecs-installed-from-peer>250</num-fecs-installed-from-peer>
<is-fecs-pending-uninstall>false</is-fecs-pending-uninstall>
<num-fecs-filtered-out>0</num-fecs-filtered-out>
<num-fecs-filtered-in>0</num-fecs-filtered-in>
<filter-prefix-list-exists>false</filter-prefix-list-exists>
<is-only-gr-valid>false</is-only-gr-valid>
<gr-enabled>false</gr-enabled>
<peer-reconnect-time>0</peer-reconnect-time>
<peer-recovery-time>0</peer-recovery-time>
<reconnect-time-in-use>0</reconnect-time-in-use>
<reconnect-time-remaining>0</reconnect-time-remaining>
<recovery-time-in-use>0</recovery-time-in-use>
<recovery-time-remaining>0</recovery-time-remaining>
<local-eol-unrecognized-notification>false</local-eol-unrecognized-notification>
<remote-eol-unrecognized-notification>false</remote-eol-unrecognized-notification>
<does-session-support-eol>false</does-session-support-eol>
<local-state>>true</local-state>
<remote-state>false</remote-state>
<eol-notification-time>0</eol-notification-time>
<eol-notification-time-remaining>0</eol-notification-time-remaining>
<eol-tx-label-silence-time>0</eol-tx-label-silence-time>
<eol-tx-label-silence-time-remaining>0</eol-tx-label-silence-time-remaining>
<eol-rx-label-silence-time>1000</eol-rx-label-silence-time>
<eol-rx-label-silence-time-remaining>0</eol-rx-label-silence-time-remaining>
<filtered>enum=0</filtered>
<interfaces>(targeted)</interfaces>
<addresses>4.4.3.2 34.34.34.2 45.45.45.1</addresses>
<session-ldp-stats y:self="/rest/operational-state/mpls-state/ldp/ldp-session/4.4.3.2:0/
session-ldp-stats">
  <ldp-protocol-errors-instance-total y:self="/rest/operational-state/mpls-state/ldp/
ldp-session/4.4.3.2:0/session-ldp-stats/
ldp-protocol-errors-instance-total">
    </ldp-protocol-errors-instance-total>
  <ldp-protocol-stats-instance-total y:self="/rest/operational-state/mpls-state/ldp/ldp-
session/4.4.3.2:0/session-ldp-stats/
ldp-protocol-stats-instance-total">
    </ldp-protocol-stats-instance-total>
  </session-ldp-stats>
</ldp-session>

```



## mpls-state/ldp/ldp-session-summary

---

### Resource URIs

| URI   | Description                       |
|---|-----------------------------------|
| <base_URI>/operational-state/mpls-state/ldp/ldp-session-summary | Displays the LDP session summary. |

### Usage Guidelines

Only GET operations is supported. Use of the Resource-Depth request header is recommended.

### Examples

#### URI

http://host:80/rest/operational-state/mpls-state/ldp/ldp-session-summary

#### Request Body

None

#### Response Body

```
<ldp-session-summary xmlns="urn:brocade.com:mgmt:brocade-mpls-operational"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/operational-state/mpls-state/ldp/ldp-session-summary">
  <num-link-sessions>1</num-link-sessions>
  <num-operational-link-sessions>1</num-operational-link-sessions>
  <num-targeted-sessions>1</num-targeted-sessions>
  <num-operational-targeted-sessions>1</num-operational-targeted-sessions>
</ldp-session-summary>
```

## mpls-state/ldp/statistics

### Resource URIs

| URI  | Description                           |
|--|---------------------------------------|
| <base_URI>/operational-state/mpls-state/ldp/statistics | Displays the MPLS traffic statistics. |

### Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

### Examples

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

### URI

http://host:80/rest/operational-state/mpls-state/ldp/statistics

### Request Body

None

### Response Body

```
<statistics xmlns="urn:brocade.com:mgmt:brocade-mpls-operational" xmlns:y="http://
brocade.com/ns/rest"
y:self="/rest/operational-state/mpls-state/ldp/statistics">
  <ldp-protocol-errors-instance-total y:self="/rest/operational-state/mpls-state/ldp/
statistics/
ldp-protocol-errors-instance-total">
    <protocol-errors y:self="/rest/operational-state/mpls-state/ldp/statistics/
ldp-protocol-errors-instance-total/protocol-errors/0">
      <error-type>0</error-type>
      <count>0</count>
    </protocol-errors>
    <protocol-errors y:self="/rest/operational-state/mpls-state/ldp/statistics/ldp-
protocol-errors-instance-total/
protocol-errors/1">
      <error-type>1</error-type>
      <count>0</count>
    </protocol-errors>
    <protocol-errors y:self="/rest/operational-state/mpls-state/ldp/statistics/ldp-
protocol-errors-instance-total/
protocol-errors/2">
      <error-type>2</error-type>
      <count>0</count>
    </protocol-errors>
    <protocol-errors y:self="/rest/operational-state/mpls-state/ldp/statistics/ldp-
protocol-errors-instance-total/
protocol-errors/3">
```

```

    <error-type>3</error-type>
    <count>0</count>
  </protocol-errors>
  <protocol-errors y:self="/rest/operational-state/mpls-state/ldp/statistics/ldp-
protocol-errors-instance-total/
protocol-errors/4">
    <error-type>4</error-type>
    <count>0</count>
  </protocol-errors>
  <protocol-errors y:self="/rest/operational-state/mpls-state/ldp/statistics/ldp-
protocol-errors-instance-total/
protocol-errors/5">
    <error-type>5</error-type>
    <count>0</count>
  </protocol-errors>
  <protocol-errors y:self="/rest/operational-state/mpls-state/ldp/statistics/ldp-
protocol-errors-instance-total/
protocol-errors/6">
    <error-type>6</error-type>
    <count>0</count>
  </protocol-errors>
  <protocol-errors y:self="/rest/operational-state/mpls-state/ldp/statistics/ldp-
protocol-errors-instance-total/
protocol-errors/7">
    <error-type>7</error-type>
    <count>0</count>
  </protocol-errors>
  <protocol-errors y:self="/rest/operational-state/mpls-state/ldp/statistics/ldp-
protocol-errors-instance-total/
protocol-errors/8">
    <error-type>8</error-type>
    <count>0</count>
  </protocol-errors>
  <protocol-errors y:self="/rest/operational-state/mpls-state/ldp/statistics/ldp-
protocol-errors-instance-total/
protocol-errors/9">
    <error-type>9</error-type>
    <count>0</count>
  </protocol-errors>
  <protocol-errors y:self="/rest/operational-state/mpls-state/ldp/statistics/ldp-
protocol-errors-instance-total/
protocol-errors/10">
    <error-type>10</error-type>
    <count>0</count>
  </protocol-errors>
  <protocol-errors y:self="/rest/operational-state/mpls-state/ldp/statistics/ldp-
protocol-errors-instance-total/
protocol-errors/11">
    <error-type>11</error-type>
    <count>0</count>
  </protocol-errors>
  <protocol-errors y:self="/rest/operational-state/mpls-state/ldp/statistics/ldp-
protocol-errors-instance-total/
protocol-errors/12">
    <error-type>12</error-type>
    <count>0</count>
  </protocol-errors>
  <protocol-errors y:self="/rest/operational-state/mpls-state/ldp/statistics/ldp-
protocol-errors-instance-total/
protocol-errors/13">
    <error-type>13</error-type>
    <count>0</count>
  </protocol-errors>
  <protocol-errors y:self="/rest/operational-state/mpls-state/ldp/statistics/ldp-

```

```

protocol-errors-instance-total/
protocol-errors/14">
  <error-type>14</error-type>
  <count>0</count>
</protocol-errors>
</ldp-protocol-errors-instance-total>
<ldp-protocol-stats-instance-total y:self="/rest/operational-state/mpls-state/ldp/
statistics/
ldp-protocol-stats-instance-total">
  <protocol-stats y:self="/rest/operational-state/mpls-state/ldp/statistics/ldp-
protocol-stats-instance-total/
protocol-stats/0">
  <stat-type>0</stat-type>
  <rx-count>0</rx-count>
  <tx-count>1</tx-count>
</protocol-stats>
  <protocol-stats y:self="/rest/operational-state/mpls-state/ldp/statistics/ldp-
protocol-stats-instance-total/
protocol-stats/1">
  <stat-type>1</stat-type>
  <rx-count>14052</rx-count>
  <tx-count>14052</tx-count>
</protocol-stats>
  <protocol-stats y:self="/rest/operational-state/mpls-state/ldp/statistics/ldp-
protocol-stats-instance-total/
protocol-stats/2">
  <stat-type>2</stat-type>
  <rx-count>5464</rx-count>
  <tx-count>5467</tx-count>
</protocol-stats>
  <protocol-stats y:self="/rest/operational-state/mpls-state/ldp/statistics/ldp-
protocol-stats-instance-total/
protocol-stats/3">
  <stat-type>3</stat-type>
  <rx-count>3</rx-count>
  <tx-count>2</tx-count>
</protocol-stats>
  <protocol-stats y:self="/rest/operational-state/mpls-state/ldp/statistics/ldp-
protocol-stats-instance-total/
protocol-stats/4">
  <stat-type>4</stat-type>
  <rx-count>25367</rx-count>
  <tx-count>25364</tx-count>
</protocol-stats>
  <protocol-stats y:self="/rest/operational-state/mpls-state/ldp/statistics/ldp-
protocol-stats-instance-total/
protocol-stats/5">
  <stat-type>5</stat-type>
  <rx-count>2</rx-count>
  <tx-count>2</tx-count>
</protocol-stats>
  <protocol-stats y:self="/rest/operational-state/mpls-state/ldp/statistics/ldp-
protocol-stats-instance-total/
protocol-stats/6">
  <stat-type>6</stat-type>
  <rx-count>0</rx-count>
  <tx-count>0</tx-count>
</protocol-stats>
  <protocol-stats y:self="/rest/operational-state/mpls-state/ldp/statistics/ldp-
protocol-stats-instance-total/
protocol-stats/7">
  <stat-type>7</stat-type>
  <rx-count>1255</rx-count>
  <tx-count>11925</tx-count>

```

```

    </protocol-stats>
    <protocol-stats y:self="/rest/operational-state/mpls-state/ldp/statistics/ldp-
protocol-stats-instance-total/
protocol-stats/8">
      <stat-type>8</stat-type>
      <rx-count>0</rx-count>
      <tx-count>0</tx-count>
    </protocol-stats>
    <protocol-stats y:self="/rest/operational-state/mpls-state/ldp/statistics/ldp-
protocol-stats-instance-total/
protocol-stats/9">
      <stat-type>9</stat-type>
      <rx-count>1</rx-count>
      <tx-count>8874</tx-count>
    </protocol-stats>
    <protocol-stats y:self="/rest/operational-state/mpls-state/ldp/statistics/ldp-
protocol-stats-instance-total/
protocol-stats/10">
      <stat-type>10</stat-type>
      <rx-count>8874</rx-count>
      <tx-count>1</tx-count>
    </protocol-stats>
    <protocol-stats y:self="/rest/operational-state/mpls-state/ldp/statistics/ldp-
protocol-stats-instance-total/
protocol-stats/11">
      <stat-type>11</stat-type>
      <rx-count>0</rx-count>
      <tx-count>0</tx-count>
    </protocol-stats>
    <protocol-stats y:self="/rest/operational-state/mpls-state/ldp/statistics/ldp-
protocol-stats-instance-total/
protocol-stats/12">
      <stat-type>12</stat-type>
      <rx-count>0</rx-count>
      <tx-count>0</tx-count>
    </protocol-stats>
  </ldp-protocol-stats-instance-total>
  <ldp-protocol-stats-instance-since-clear y:self="/rest/operational-state/mpls-state/ldp/
statistics/
ldp-protocol-stats-instance-since-clear">
    <protocol-stats y:self="/rest/operational-state/mpls-state/ldp/statistics/ldp-
protocol-stats-instance-since-clear/
protocol-stats/0">
      <stat-type>0</stat-type>
      <rx-count>0</rx-count>
      <tx-count>1</tx-count>
    </protocol-stats>
    <protocol-stats y:self="/rest/operational-state/mpls-state/ldp/statistics/ldp-
protocol-stats-instance-since-clear/
protocol-stats/1">
      <stat-type>1</stat-type>
      <rx-count>14052</rx-count>
      <tx-count>14052</tx-count>
    </protocol-stats>
    <protocol-stats y:self="/rest/operational-state/mpls-state/ldp/statistics/ldp-
protocol-stats-instance-since-clear/
protocol-stats/2">
      <stat-type>2</stat-type>
      <rx-count>5464</rx-count>
      <tx-count>5467</tx-count>
    </protocol-stats>
    <protocol-stats y:self="/rest/operational-state/mpls-state/ldp/statistics/ldp-
protocol-stats-instance-since-clear/
protocol-stats/3">

```

```

    <stat-type>3</stat-type>
    <rx-count>3</rx-count>
    <tx-count>2</tx-count>
  </protocol-stats>
  <protocol-stats y:self="/rest/operational-state/mpls-state/ldp/statistics/ldp-
protocol-stats-instance-since-clear/
protocol-stats/4">
    <stat-type>4</stat-type>
    <rx-count>25367</rx-count>
    <tx-count>25364</tx-count>
  </protocol-stats>
  <protocol-stats y:self="/rest/operational-state/mpls-state/ldp/statistics/ldp-
protocol-stats-instance-since-clear/
protocol-stats/5">
    <stat-type>5</stat-type>
    <rx-count>2</rx-count>
    <tx-count>2</tx-count>
  </protocol-stats>
  <protocol-stats y:self="/rest/operational-state/mpls-state/ldp/statistics/ldp-
protocol-stats-instance-since-clear/
protocol-stats/6">
    <stat-type>6</stat-type>
    <rx-count>0</rx-count>
    <tx-count>0</tx-count>
  </protocol-stats>
  <protocol-stats y:self="/rest/operational-state/mpls-state/ldp/statistics/ldp-
protocol-stats-instance-since-clear/
protocol-stats/7">
    <stat-type>7</stat-type>
    <rx-count>1255</rx-count>
    <tx-count>11925</tx-count>
  </protocol-stats>
  <protocol-stats y:self="/rest/operational-state/mpls-state/ldp/statistics/ldp-
protocol-stats-instance-since-clear/
protocol-stats/8">
    <stat-type>8</stat-type>
    <rx-count>0</rx-count>
    <tx-count>0</tx-count>
  </protocol-stats>
  <protocol-stats y:self="/rest/operational-state/mpls-state/ldp/statistics/ldp-
protocol-stats-instance-since-clear/
protocol-stats/9">
    <stat-type>9</stat-type>
    <rx-count>1</rx-count>
    <tx-count>8874</tx-count>
  </protocol-stats>
  <protocol-stats y:self="/rest/operational-state/mpls-state/ldp/statistics/ldp-
protocol-stats-instance-since-clear/
protocol-stats/10">
    <stat-type>10</stat-type>
    <rx-count>8874</rx-count>
    <tx-count>1</tx-count>
  </protocol-stats>
  <protocol-stats y:self="/rest/operational-state/mpls-state/ldp/statistics/ldp-
protocol-stats-instance-since-clear/
protocol-stats/11">
    <stat-type>11</stat-type>
    <rx-count>0</rx-count>
    <tx-count>0</tx-count>
  </protocol-stats>
  <protocol-stats y:self="/rest/operational-state/mpls-state/ldp/statistics/ldp-
protocol-stats-instance-since-clear/
protocol-stats/12">
    <stat-type>12</stat-type>

```

```

    <rx-count>0</rx-count>
    <tx-count>0</tx-count>
  </protocol-stats>
</ldp-protocol-stats-instance-since-clear>
<ldp-protocol-errors-instance-since-clear y:self="/rest/operational-state/mpls-
state/ldp/statistics/
ldp-protocol-errors-instance-since-clear">
  <protocol-errors y:self="/rest/operational-state/mpls-state/ldp/statistics/ldp-
protocol-errors-instance-since-clear/
protocol-errors/0">
    <error-type>0</error-type>
    <count>0</count>
  </protocol-errors>
  <protocol-errors y:self="/rest/operational-state/mpls-state/ldp/statistics/ldp-
protocol-errors-instance-since-clear/
protocol-errors/1">
    <error-type>1</error-type>
    <count>0</count>
  </protocol-errors>
  <protocol-errors y:self="/rest/operational-state/mpls-state/ldp/statistics/ldp-
protocol-errors-instance-since-clear/
protocol-errors/2">
    <error-type>2</error-type>
    <count>0</count>
  </protocol-errors>
  <protocol-errors y:self="/rest/operational-state/mpls-state/ldp/statistics/ldp-
protocol-errors-instance-since-clear/
protocol-errors/3">
    <error-type>3</error-type>
    <count>0</count>
  </protocol-errors>
  <protocol-errors y:self="/rest/operational-state/mpls-state/ldp/statistics/ldp-
protocol-errors-instance-since-clear/
protocol-errors/4">
    <error-type>4</error-type>
    <count>0</count>
  </protocol-errors>
  <protocol-errors y:self="/rest/operational-state/mpls-state/ldp/statistics/ldp-
protocol-errors-instance-since-clear/
protocol-errors/5">
    <error-type>5</error-type>
    <count>0</count>
  </protocol-errors>
  <protocol-errors y:self="/rest/operational-state/mpls-state/ldp/statistics/ldp-
protocol-errors-instance-since-clear/
protocol-errors/6">
    <error-type>6</error-type>
    <count>0</count>
  </protocol-errors>
  <protocol-errors y:self="/rest/operational-state/mpls-state/ldp/statistics/ldp-
protocol-errors-instance-since-clear/
protocol-errors/7">
    <error-type>7</error-type>
    <count>0</count>
  </protocol-errors>
  <protocol-errors y:self="/rest/operational-state/mpls-state/ldp/statistics/ldp-
protocol-errors-instance-since-clear/
protocol-errors/8">
    <error-type>8</error-type>
    <count>0</count>
  </protocol-errors>
  <protocol-errors y:self="/rest/operational-state/mpls-state/ldp/statistics/ldp-
protocol-errors-instance-since-clear/
protocol-errors/9">

```

```
    <error-type>9</error-type>
    <count>0</count>
  </protocol-errors>
  <protocol-errors y:self="/rest/operational-state/mpls-state/ldp/statistics/ldp-
protocol-errors-instance-since-clear/
protocol-errors/10">
    <error-type>10</error-type>
    <count>0</count>
  </protocol-errors>
  <protocol-errors y:self="/rest/operational-state/mpls-state/ldp/statistics/ldp-
protocol-errors-instance-since-clear/
protocol-errors/11">
    <error-type>11</error-type>
    <count>0</count>
  </protocol-errors>
  <protocol-errors y:self="/rest/operational-state/mpls-state/ldp/statistics/ldp-
protocol-errors-instance-since-clear/
protocol-errors/12">
    <error-type>12</error-type>
    <count>0</count>
  </protocol-errors>
  <protocol-errors y:self="/rest/operational-state/mpls-state/ldp/statistics/ldp-
protocol-errors-instance-since-clear/
protocol-errors/13">
    <error-type>13</error-type>
    <count>0</count>
  </protocol-errors>
  <protocol-errors y:self="/rest/operational-state/mpls-state/ldp/statistics/ldp-
protocol-errors-instance-since-clear/
protocol-errors/14">
    <error-type>14</error-type>
    <count>0</count>
  </protocol-errors>
</ldp-protocol-errors-instance-since-clear>
</statistics>
```



## mpls-state/ldp/tunnels

---

### Resource URIs

| URI  | Description                    |
|--|--------------------------------|
| <base_URI>operational-state/mpls-state/ldp/tunnels | Displays the MPLS LDP tunnels. |

### Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

### Examples

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

### URI

http://host:80/rest/operational-state/mpls-state/ldp/tunnels

### Request Body

None

### Response Body

```
<tunnels xmlns="urn:brocade.com:mgmt:brocade-mpls-operational" xmlns:y="http://
brocade.com/ns/rest"
y:self="/rest/operational-state/mpls-state/ldp/tunnels">
  <total-tunnel-count>1</total-tunnel-count>
  <ldp-tunnels y:self="/rest/operational-state/mpls-state/ldp/tunnels/ldp-tunnels/
13.13.13.2%2C32">
    <tunnel-destination>13.13.13.2</tunnel-destination>
    <prefix-length>32</prefix-length>
  </ldp-tunnels>
</tunnels>
```

## mpls-state/ldp/tunnels/ldp-tunnels

---

### Resource URIs

| URI  | Description                                   |
|--|---|
| <base_URI>/operational-state/ mpls-state/ldp/tunnels/ldp-tunnels                     | Displays MPLS LDP tunnel information.         |
| <base_URI>/operational-state/mpls-state/ldp/tunnels/ldp-tunnels/{tunnel-destination} | Displays MPLS LDP tunnel destination details. |

### Usage Guidelines

Only GET operations is supported. Use of the Resource-Depth request header is recommended.

### Examples

#### URI

http://host:80/rest/operational-state/ mpls-state/ldp/tunnels/ldp-tunnels

#### Request Body

None

#### Response Body

```
<ldp-tunnels xmlns="urn:brocade.com:mgmt:brocade-mpls-operational" xmlns:y="http://
brocade.com/ns/rest"
y:self="/rest/operational-state/mpls-state/ldp/tunnels/ldp-tunnels/3.3.3.3%2C32">
  <tunnel-destination>3.3.3.3</tunnel-destination>
  <prefix-length>32</prefix-length>
  <tunnel-interface-index>2092958233</tunnel-interface-index>
  <tunnel-metric>0</tunnel-metric>
  <tunnel-vif>537</tunnel-vif>
  <out-segments y:self="/rest/operational-state/mpls-state/ldp/tunnels/ldp-tunnels/
3.3.3.3%2C32/out-segments/%22Ve 101%22">
    <outgoing-interface>&quot;Ve 101&quot;</outgoing-interface>
    <next-hop-ipaddress>16.16.16.2</next-hop-ipaddress>
  </out-segments>
</ldp-tunnels>
```

## mpls-state/lsp

### Resource URIs

| URI   | Description  |
|---|--|
| <base_URI>/operational-state/mpls-state/lsp   | Displays the MPLS LSP information.   |
| <base_URI>/operational-state/mpls-state/lsp/{lsp-name}  | Displays the MPLS LSP details.   |
| <base_URI>/operational-state/mpls-state/lsp/{lsp-name}/autobw-history                                   | Displays the source address for the LSP.   |
| <base_URI>/operational-state/mpls-state/lsp/{lsp-name}/auto-bandwidth                                   | Displays the auto-bandwidth configuration.   |
| <base_URI>/operational-state/mpls-state/lsp/{lsp-name}/auto-bandwidth/adjustment-interval               | Displays the configured adjustment-timer value.  |
| <base_URI>/operational-state/mpls-state/lsp/{lsp-name}/auto-bandwidth/adjustment-threshold              | Displays the configured adjustment-threshold value.  |
| <base_URI>/operational-state/mpls-state/lsp/{lsp-name}/auto-bandwidth/maximum-bandwidth                 | The configured maximum bandwidth.  |
| <base_URI>/operational-state/mpls-state/lsp/{lsp-name}/auto-bandwidth/minimum-bandwidth                 | The configured minimum bandwidth.  |
| <base_URI>/operational-state/mpls-state/lsp/{lsp-name}/auto-bandwidth/overflow-limit                    | Displays the configured overflow-limit value.  |
| <base_URI>/operational-state/mpls-state/lsp/{lsp-name}/auto-bandwidth/underflow-limit                   | Displays the number of samples that must be below the threshold to trigger a premature adjustment. |
| <base_URI>/operational-state/mpls-state/lsp/{lsp-name}/auto-bandwidth/mode                              | Displays the auto-bandwidth mode.  |
| <base_URI>/operational-state/mpls-state/lsp/{lsp-name}/auto-bandwidth/sample-recording                  | Displays whether sample recording is enabled   |
| <base_URI>/operational-state/mpls-state/lsp/{lsp-name}/auto-bandwidth/is-adjustment-interval-inherited  | Displays whether adjustment interval is inherited.   |
| <base_URI>/operational-state/mpls-state/lsp/{lsp-name}/auto-bandwidth/is-adjustment-threshold-inherited | Displays whether adjustment threshold is inherited.  |
| <base_URI>/operational-state/mpls-state/lsp/{lsp-name}/auto-bandwidth/is-maximum-bandwidth-inherited    | Displays whether maximum bandwidth is inherited.   |

| URI  | Description   |
|--|---|
| <base_URI>/operational-state/mpls-state/lsp/{lsp-name}/auto-bandwidth/is-minimum-bandwidth-inherited | Displays whether minimum bandwidth is inherited.  |
| <base_URI>/operational-state/mpls-state/lsp/{lsp-name}/auto-bandwidth/is-overflow-limit-inherited    | Displays whether overflow limit is inherited.   |
| <base_URI>/operational-state/mpls-state/lsp/{lsp-name}/auto-bandwidth/is-underflow-limit-inherited   | Displays whether underflow limit is inherited.  |
| <base_URI>/operational-state/mpls-state/lsp/{lsp-name}/auto-bandwidth/is-mode-inherited              | Displays whether mode is inherited.   |
| <base_URI>/operational-state/mpls-state/lsp/{lsp-name}/auto-bandwidth/is-sample-recording-inherited  | Displays whether sample recording is inherited.   |
| <base_URI>/operational-state/mpls-state/lsp/{lsp-name}/auto-bandwidth/working-status                 | Displays working status.  |
| <base_URI>/operational-state/mpls-state/lsp/{lsp-name}/auto-bandwidth/num-samples-collected          | Displays the number of samples collected.   |
| <base_URI>/operational-state/mpls-state/lsp/{lsp-name}/auto-bandwidth/last-sample-traffic-rate       | Displays the sampled-bandwidth.   |
| <base_URI>/operational-state/mpls-state/lsp/{lsp-name}/auto-bandwidth/maximum-of-samples-collected   | Displays the maximum number of the samples collected so far in the current adjustment-interval.       |
| <base_URI>/operational-state/mpls-state/lsp/{lsp-name}/auto-bandwidth/maximum-of-underflow-samples   | Displays the maximum number of underflow samples collected so far in the current adjustment-interval. |
| <base_URI>/operational-state/mpls-state/lsp/{lsp-name}/auto-bandwidth/overflow-count                 | Displays the overflow count.  |
| <base_URI>/operational-state/mpls-state/lsp/{lsp-name}/auto-bandwidth/underflow-count                | Displays the underflow count.   |
| <base_URI>/operational-state/mpls-state/lsp/{lsp-name}/auto-bandwidth/time-to-adjustment             | Displays the time remaining for the current adjust-interval.  |
| <base_URI>/operational-state/mpls-state/lsp/{lsp-name}/auto-bandwidth/adjustment-status              | Displays the adjustment status.   |
| <base_URI>/operational-state/mpls-state/lsp/{lsp-name}/auto-bandwidth/previous-bandwidth             | Displays the previous bandwidth.  |

| URI   | Description   |
|---|---|
| <base_URI>/operational-state/mpls-state/lsp/{lsp-name}/auto-bandwidth/new-bandwidth   | Displays the new bandwidth.   |
| <base_URI>/operational-state/mpls-state/lsp/{lsp-name}/auto-bandwidth/adjustment-reason                                     | Displays the reason for adjustment.   |
| <base_URI>/operational-state/mpls-state/lsp/{lsp-name}/auto-bandwidth/time-of-last-adjustment                               | Displays the time of the last adjustment.   |
| <base_URI>/operational-state/mpls-state/lsp/{lsp-name}/instances/{instance-id},{lsp-id}/auto-bandwidth                      | Displays the autobandwidth status.  |
| <base_URI>/operational-state/mpls-state/lsp/{lsp-name}/instances/{instance-id},{lsp-id}/auto-bandwidth/config-template      | Displays the autobandwidth template.  |
| <base_URI>/operational-state/mpls-state/lsp/{lsp-name}/instances/{instance-id},{lsp-id}/auto-bandwidth/adjustment-interval  | Displays the autobandwidth configured adjustment-timer value.                         |
| <base_URI>/operational-state/mpls-state/lsp/{lsp-name}/instances/{instance-id},{lsp-id}/auto-bandwidth/adjustment-threshold | Displays the autobandwidth configured adjustment-threshold value.                     |
| <base_URI>/operational-state/mpls-state/lsp/{lsp-name}/instances/{instance-id},{lsp-id}/auto-bandwidth/maximum-bandwidth    | Displays the autobandwidth configured minimum bandwidth.                              |
| <base_URI>/operational-state/mpls-state/lsp/{lsp-name}/instances/{instance-id},{lsp-id}/auto-bandwidth/minimum-bandwidth    | Displays the autobandwidth configured maximum bandwidth.                              |
| <base_URI>/operational-state/mpls-state/lsp/{lsp-name}/instances/{instance-id},{lsp-id}/auto-bandwidth/overflow-limit       | Displays the autobandwidth configured overflow-limit value.                           |
| <base_URI>/operational-state/mpls-state/lsp/{lsp-name}/instances/{instance-id},{lsp-id}/auto-bandwidth/underflow-limit      | Displays the autobandwidth configured underflow-limit value.                          |
| <base_URI>/operational-state/mpls-state/lsp/{lsp-name}/instances/{instance-id},{lsp-id}/auto-bandwidth/mode                 | Displays the autobandwidth mode value. Values are monitor-only or monitor-and-signal. |
| <base_URI>/operational-state/mpls-state/lsp/{lsp-name}/instances/{instance-id},{lsp-id}/auto-bandwidth/sample-recording     | Displays whether the autobandwidth template is set to record the sample history.      |

| URI  | Description   |
|--|---|
| <base_URI>/operational-state/mpls-state/lsp/{lsp-name}secondary-path/{path-name}/auto-bandwidth                      | Displays the autobandwidth status for secondary path.   |
| <base_URI>/operational-state/mpls-state/lsp/{lsp-name}secondary-path/{path-name}/auto-bandwidth/config-template      | Displays the autobandwidth template for secondary path.   |
| <base_URI>/operational-state/mpls-state/lsp/{lsp-name}secondary-path/{path-name}/auto-bandwidth/adjustment-interval  | Displays the autobandwidth configured adjustment-timer value for secondary path.                    |
| <base_URI>/operational-state/mpls-state/lsp/{lsp-name}secondary-path/{path-name}/auto-bandwidth/adjustment-threshold | Displays the autobandwidth configured adjustment-threshold for secondary path.                      |
| <base_URI>/operational-state/mpls-state/lsp/{lsp-name}secondary-path/{path-name}/auto-bandwidth/maximum-bandwidth    | Displays the autobandwidth configured maximum bandwidth for secondary path.                         |
| <base_URI>/operational-state/mpls-state/lsp/{lsp-name}secondary-path/{path-name}/auto-bandwidth/minimum-bandwidth    | Displays the autobandwidth configured minimum bandwidth for secondary path.                         |
| <base_URI>/operational-state/mpls-state/lsp/{lsp-name}secondary-path/{path-name}/auto-bandwidth/overflow-limit       | Displays the autobandwidth configured overflow-limit value for secondary path.                      |
| <base_URI>/operational-state/mpls-state/lsp/{lsp-name}secondary-path/{path-name}/auto-bandwidth/underflow-limit      | Displays the autobandwidth configured underflow-limit value for secondary path.                     |
| <base_URI>/operational-state/mpls-state/lsp/{lsp-name}secondary-path/{path-name}/auto-bandwidth/mode                 | Displays the autobandwidth mode value for secondary path.   |
| <base_URI>/operational-state/mpls-state/lsp/{lsp-name}secondary-path/{path-name}/auto-bandwidth/sample-recording     | Displays whether the autobandwidth template is set to record the sample history for secondary path. |
| <base_URI>/operational-state/mpls-state/lsp/{lsp-name}/basic/lsp-type-dynamic  | Displays whether LSP is type dynamic.   |
| <base_URI>/operational-state/mpls-state/lsp/{lsp-name}/instances/{instance-id},{lsp-id}/is-dynamic-bypass            | Displays whether dynamic bypass state is enabled or disabled.                                       |
| <base_URI>/operational-state/mpls-state/lsp/{lsp-name}/instances/{instance-id},{lsp-id}/config-type-dynamic          | Displays whether interface dynamic bypass configuration mode is enabled or disabled                 |

## Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

## Examples

### URI

`http://host:80/rest/operational-state/mpls-state/lsp`

### Request Body

None

### Response Body

```
<lsp xmlns="urn:brocade.com:mgmt:brocade-mpls-operational" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/operational-state/mpls-state/lsp/tor4_1140">
  <lsp-name>tor4_1140</lsp-name>return
  <history>&quot; 0 07-24 13:05:25 : LSP tunnel is Enabled\\n 1 07-24 13:06:48 :
CSPF-Computation failed for Primary path ve101. Error 0:(Initializing)[4 times]\\n 2
07-24 13:06:48 :
CSPF-Computation failed for Secondary path ve171. Error 0:(Initializing)\\n 3 07-24
13:07:48 :
CSPF-Computation failed for Primary path ve101. Error 0:(Initializing)\\n 4 07-24
13:07:48 :
CSPF-Computation failed for Secondary path ve171. Error 0:(Initializing)\\n 5 07-24
13:08:48 :
CSPF-Computation failed for Primary path ve101. Error 0:(Initializing)\\n 6 07-24
13:08:48 :
CSPF-Computation failed for Secondary path ve171. Error 0:(Initializing)\\n 7 07-24
13:09:48 :
CSPF-Computation failed for Primary path ve101. Error 0:(Initializing)\\n 8 07-24
13:09:48 :
CSPF-Computation failed for Secondary path ve171. Error 0:(Initializing)\\n 9 07-24
13:10:50 :
CSPF-Computation successful for Primary path ve101. Computed route:\\
\\n
- &gt;16.16.16.2- &gt;36.36.36.1- &gt;34.34.34.2\\n&quot; &quot; 10 07-24 13:10:50 :
CSPF-Computation successful for Secondary path ve171. Computed route:\\
\\n
- &gt;51.51.51.1- &gt;45.45.45.1\\n 11 07-24 13:10:50 : Secondary path ve171. RRO
received:\\n
- &gt;51.51.51.1- &gt;45.45.45.1 \\n 12 07-24 13:10:50 : Secondary path ve171 setup
successful .
Instance id 1\\n 13 07-24 13:10:50 : LSP tunnel is UP with Secondary path ve171 as
Active\\n 14
07-24 13:10:50 : Tunnel added or updated, out-interface: Ve 171, out-label 2206\\n 15
07-24 13:10:50 :
Primary path ve101. RRO received:\\n
- &gt;16.16.16.2- &gt;36.36.36.1- &gt;34.34.34.2 \\n 16 07-24 13:10:50 : Primary path
ve101 setup successful .
Instance id 1\\n 17 07-24 13:10:50 : LSP tunnel is UP with Primary path ve101 as
Active\\n 18 07-24 13:10:50 :
Tunnel added or updated, out-interface: Ve 101, out-label 2217\\n&quot;</history>
<basic y:self="/rest/operational-state/mpls-state/lsp/tor4_1140/basic">
```

```

<tunnel-vif-index>1162</tunnel-vif-index>
<lsp-type-bypass>>false</lsp-type-bypass>
<lsp-type-dynamic>>false</lsp-type-dynamic>
<from-address-configured>>false</from-address-configured>
<from-address>1.2.3.4</from-address>
<to-address>4.4.3.2</to-address>
<admin-up>>true</admin-up>
<operational-status>operational-up</operational-status>
<lsp-is-active>>true</lsp-is-active>
<lsp-has-primary-path>>true</lsp-has-primary-path>
<path-name>ve101</path-name>
<out-label>2217</out-label>
<out-interface-name>&quot;Ve 101&quot;</out-interface-name>
<primary-up>>true</primary-up>
<primary-active>>true</primary-active>
<lsp-has-secondary>>true</lsp-has-secondary>
<secondary-up>>true</secondary-up>
<secondary-active>>false</secondary-active>
<lsp-has-selected-secondary>>false</lsp-has-selected-secondary>
<lsp-has-frr>>false</lsp-has-frr>
<up-down-count>1</up-down-count>
<retry-count>0</retry-count>
</basic>
<forwarding y:self="/rest/operational-state/mppls-state/lsp/tor4_1140/forwarding">
  <tunnel-vif-index>1162</tunnel-vif-index>
  <lsp-id>317</lsp-id>
  <forwarding-up>>true</forwarding-up>
  <primary-active>>true</primary-active>
  <primary-up>>true</primary-up>
  <secondary-active>>false</secondary-active>
  <secondary-up>>true</secondary-up>
  <instance-id>1</instance-id>
  <out-port-id>1207959653</out-port-id>
  <out-port-name>&quot;Ve 101&quot;</out-port-name>
  <out-label>2217</out-label>
</forwarding>
<instances y:self="/rest/operational-state/mppls-state/lsp/tor4_1140/instances/1%2C317">
  <instance-id>1</instance-id>
  <lsp-id>317</lsp-id>
  <current-instance>true</current-instance>
  <new-instance>>false</new-instance>
  <old-instance>>false</old-instance>
  <is-primary>true</is-primary>
  <is-current-secondary>>false</is-current-secondary>
  <is-selected-secondary>>false</is-selected-secondary>
  <instance-admin-up>true</instance-admin-up>
  <instance-is-up>true</instance-is-up>
  <instance-is-active>true</instance-is-active>
  <is-adaptive>true</is-adaptive>
  <is-bypass>>false</is-bypass>
  <is-dynamic-bypass>>false</is-dynamic-bypass>
  <config-admin-up>true</config-admin-up>
  <config-from-address-configured>>false</config-from-address-configured>
  <config-from-address>1.2.3.4</config-from-address>
  <config-to-address>4.4.3.2</config-to-address>
  <config-type-bypass>>false</config-type-bypass>
  <config-type-dynamic>>false</config-type-dynamic>
  <config-adaptive>true</config-adaptive>
  <config-ospf-area>0.0.0.0</config-ospf-area>
  <config-isis-level>0</config-isis-level>
  <config-revert-time-configured>>false</config-revert-time-configured>
  <config-revert-time>0</config-revert-time>
  <config-retry-count>0</config-retry-count>
  <config-shortcut-ospf>>false</config-shortcut-ospf>

```



```

<config-shortcut-area-configured>>false</config-shortcut-area-configured>
<config-shortcut-area>0</config-shortcut-area>
<config-notify-ospf>>false</config-notify-ospf>
<config-shortcut-isis>>false</config-shortcut-isis>
<config-isis-shortcut-level-configured>>false</config-isis-shortcut-level-configured>
<config-isis-shortcut-level>0</config-isis-shortcut-level>
<config-notify-isis>>false</config-notify-isis>
<config-metric-configured>>false</config-metric-configured>
<config-metric>0</config-metric>
<config-ospf-ignore-metric>>false</config-ospf-ignore-metric>
<config-ospf-relative-metric>0</config-ospf-relative-metric>
<config-ospf-announce-metric>>false</config-ospf-announce-metric>
<config-ospf-aaf>0</config-ospf-aaf>
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<config-isis-relative-metric>0</config-isis-relative-metric>
<config-isis-announce-configured>>false</config-isis-announce-configured>
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<config-tspec-mtu>0</config-tspec-mtu>
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<config-mtu-configured>>false</config-mtu-configured>
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<config-tie-break-least-fill>>false</config-tie-break-least-fill>
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<config-cspf-disabled>>false</config-cspf-disabled>
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<config-hot-standby>>false</config-hot-standby>
<config-pinned>>false</config-pinned>
<config-persistenct>>false</config-persistenct>
<config-frr-global-revertive>>false</config-frr-global-revertive>
<config-frr-hold-time>5</config-frr-hold-time>
<config-soft-preempt>>false</config-soft-preempt>
<config-exclude-interface-change>>false</config-exclude-interface-change>
<config-prority-configured>>false</config-prority-configured>
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<config-holding-prority>0</config-holding-prority>
<config-hop-limit-configured>>false</config-hop-limit-configured>
<config-hop-limit>0</config-hop-limit>
<config-traffic-eng-rate-configured>>false</config-traffic-eng-rate-configured>
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<config-traffic-eng-max-rate>0</config-traffic-eng-max-rate>
<config-traffic-eng-max-burst>0</config-traffic-eng-max-burst>
<config-abw-configured>>false</config-abw-configured>
<config-bfd-configured>>false</config-bfd-configured>
<config-admin-group-configured>>false</config-admin-group-configured>
<config-cspf-computation-mode>cspf-computation-mode-use-te-metric-global</config-cspf-
computation-mode>
  <path-computed-by-cspf>>true</path-computed-by-cspf>
  <path-computed-by-interface-constraint>>false</path-computed-by-interface-constraint>
  <cspf-computation-mode>cspf-computation-mode-use-te-metric</cspf-computation-mode>
  <cspf-group-computation-mode-default>>true</cspf-group-computation-mode-default>
  <cspf-group-computation-mode-add-penalty>>false</cspf-group-computation-mode-add-
penalty>
  <cspf-group-computation-mode-exclude-groups>>false</cspf-group-computation-mode-
exclude-groups>
  <cspf-group-computation-mode-high-cost>>false</cspf-group-computation-mode-high-cost>
  <cspf-path-cost>3</cspf-path-cost>

```

```

<csf-path-area>0</csf-path-area>
<csf-computation-error>0</csf-computation-error>
<csf-exclude-hops-present>false</csf-exclude-hops-present>
<rsvp-session-present>true</rsvp-session-present>
<rsvp-session-state-up>true</rsvp-session-state-up>
<rsvp-session-state>2</rsvp-session-state>
<rsvp-session-path-error-code>0</rsvp-session-path-error-code>
<rsvp-session-path-error-value>0</rsvp-session-path-error-value>
<rsvp-session-path-error-node-address>0.0.0.0</rsvp-session-path-error-node-address>
<rsvp-session-rro-hops-present>false</rsvp-session-rro-hops-present>
<config-frr-configured>false</config-frr-configured>
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<config-frr-one-to-many>false</config-frr-one-to-many>
<config-frr-priority-configured>false</config-frr-priority-configured>
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<config-frr-holding-priority>0</config-frr-holding-priority>
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<config-frr-admin-group-configured>false</config-frr-admin-group-configured>
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<instance-frr-configured>0</instance-frr-configured>
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<instance-out-port-name>&quot;Ve 101&quot;</instance-out-port-name>
<instance-out-label>2217</instance-out-label>
<instance-revert-time>0</instance-revert-time>
<instance-retry-count>0</instance-retry-count>
<instance-up-down-count>1</instance-up-down-count>
<instance-metric>0</instance-metric>
  <csf-path-hops y:self="/rest/operational-state/mpls-state/lsp/tor4_1140/instances/
1%2C317/csf-path-hops/
1%2C16.16.16.2">
    <hop-index>1</hop-index>
    <hop-address>16.16.16.2</hop-address>
    <type>strict</type>
  </csf-path-hops>
  <rsvp-session-rro-hops y:self="/rest/operational-state/mpls-state/lsp/tor4_1140/
instances/1%2C317/
rsvp-session-rro-hops/1%2C16.16.16.2">
    <hop-index>1</hop-index>
    <hop-address>16.16.16.2</hop-address>
  </rsvp-session-rro-hops>
  <rsvp-session-rro-hops y:self="/rest/operational-state/mpls-state/lsp/tor4_1140/
instances/1%2C317/
rsvp-session-rro-hops/1%2C36.36.36.1">
    <hop-index>1</hop-index>
    <hop-address>36.36.36.1</hop-address>
  </rsvp-session-rro-hops>
  <rsvp-session-rro-hops y:self="/rest/operational-state/mpls-state/lsp/tor4_1140/
instances/1%2C317/
rsvp-session-rro-hops/1%2C34.34.34.2">
    <hop-index>1</hop-index>
    <hop-address>34.34.34.2</hop-address>
  </rsvp-session-rro-hops>
</instances>
<instances y:self="/rest/operational-state/mpls-state/lsp/tor4_1140/instances/1%2C318">
  <instance-id>1</instance-id>
  <lsp-id>318</lsp-id>
  <current-instance>true</current-instance>
  <new-instance>false</new-instance>
  <old-instance>false</old-instance>
  <is-primary>false</is-primary>
  <is-current-secondary>true</is-current-secondary>

```

```

<is-selected-secondary>false</is-selected-secondary>
<instance-admin-up>true</instance-admin-up>
<instance-is-up>true</instance-is-up>
<instance-is-active>false</instance-is-active>
<is-adaptive>true</is-adaptive>
<is-bypass>false</is-bypass>
<is-dynamic-bypass>false</is-dynamic-bypass>
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<config-from-address-configured>false</config-from-address-configured>
<config-from-address>1.2.3.4</config-from-address>
<config-to-address>4.4.3.2</config-to-address>
<config-type-bypass>false</config-type-bypass>
<config-type-dynamic>false</config-type-dynamic>
<config-adaptive>true</config-adaptive>
<config-ospf-area>0.0.0.0</config-ospf-area>
<config-isis-level>0</config-isis-level>
<config-revert-time-configured>false</config-revert-time-configured>
<config-revert-time>0</config-revert-time>
<config-retry-count>0</config-retry-count>
<config-shortcut-ospf>false</config-shortcut-ospf>
<config-shortcut-area-configured>false</config-shortcut-area-configured>
<config-shortcut-area>0</config-shortcut-area>
<config-notify-ospf>false</config-notify-ospf>
<config-shortcut-isis>false</config-shortcut-isis>
<config-isis-shortcut-level-configured>false</config-isis-shortcut-level-configured>
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<config-metric-configured>false</config-metric-configured>
<config-metric>0</config-metric>
<config-ospf-ignore-metric>false</config-ospf-ignore-metric>
<config-ospf-relative-metric>0</config-ospf-relative-metric>
<config-ospf-announce-metric>false</config-ospf-announce-metric>
<config-ospf-aaf>0</config-ospf-aaf>
<config-isis-ignore-metric>false</config-isis-ignore-metric>
<config-isis-relative-metric>0</config-isis-relative-metric>
<config-isis-announce-configured>false</config-isis-announce-configured>
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<config-path-configured>true</config-path-configured>
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<config-reoptimize-timer-configured>false</config-reoptimize-timer-configured>
<config-reoptimize-time>0</config-reoptimize-time>
<config-tspec-mtu-configured>false</config-tspec-mtu-configured>
<config-tspec-mtu>0</config-tspec-mtu>
<config-cos-configured>false</config-cos-configured>
<config-cos>0</config-cos>
<config-mtu-configured>false</config-mtu-configured>
<config-mtu>0</config-mtu>
<config-tie-breaking-configured>false</config-tie-breaking-configured>
<config-tie-break-random>true</config-tie-break-random>
<config-tie-break-least-fill>false</config-tie-break-least-fill>
<config-tie-break-most-fill>false</config-tie-break-most-fill>
<config-cspf-disabled>false</config-cspf-disabled>
<config-rro-disabled>false</config-rro-disabled>
<config-hot-standby>true</config-hot-standby>
<config-pinned>false</config-pinned>
<config-persistent>false</config-persistent>
<config-frr-global-revertive>false</config-frr-global-revertive>
<config-frr-hold-time>0</config-frr-hold-time>
<config-soft-preempt>false</config-soft-preempt>
<config-exclude-interface-change>false</config-exclude-interface-change>
<config-priority-configured>false</config-priority-configured>
<config-setup-priority>7</config-setup-priority>
<config-holding-priority>0</config-holding-priority>
<config-hop-limit-configured>false</config-hop-limit-configured>

```

```

<config-hop-limit>0</config-hop-limit>
<config-traffic-eng-rate-configured>false</config-traffic-eng-rate-configured>
<config-traffic-eng-mean-rate>0</config-traffic-eng-mean-rate>
<config-traffic-eng-max-rate>0</config-traffic-eng-max-rate>
<config-traffic-eng-max-burst>0</config-traffic-eng-max-burst>
<config-abw-configured>false</config-abw-configured>
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<config-admin-group-configured>false</config-admin-group-configured>
<config-cspf-computation-mode>cspf-computation-mode-use-te-metric-global</config-cspf-
computation-mode>
  <path-computed-by-cspf>true</path-computed-by-cspf>
  <path-computed-by-interface-constraint>false</path-computed-by-interface-constraint>
  <cspf-computation-mode>cspf-computation-mode-use-te-metric</cspf-computation-mode>
  <cspf-group-computation-mode-default>true</cspf-group-computation-mode-default>
  <cspf-group-computation-mode-add-penalty>false</cspf-group-computation-mode-add-
penalty>
  <cspf-group-computation-mode-exclude-groups>false</cspf-group-computation-mode-
exclude-groups>
  <cspf-group-computation-mode-high-cost>false</cspf-group-computation-mode-high-cost>
  <cspf-path-cost>2</cspf-path-cost>
  <cspf-path-area>0</cspf-path-area>
  <cspf-computation-error>0</cspf-computation-error>
  <cspf-exclude-hops-present>false</cspf-exclude-hops-present>
  <rsvp-session-present>true</rsvp-session-present>
  <rsvp-session-state-up>true</rsvp-session-state-up>
  <rsvp-session-state>2</rsvp-session-state>
  <rsvp-session-path-error-code>0</rsvp-session-path-error-code>
  <rsvp-session-path-error-value>0</rsvp-session-path-error-value>
  <rsvp-session-path-error-node-address>0.0.0</rsvp-session-path-error-node-address>
  <rsvp-session-rro-hops-present>false</rsvp-session-rro-hops-present>
  <config-frr-configured>false</config-frr-configured>
  <config-frr-one-to-one>false</config-frr-one-to-one>
  <config-frr-one-to-many>false</config-frr-one-to-many>
  <config-frr-priority-configured>false</config-frr-priority-configured>
  <config-frr-setup-priority>0</config-frr-setup-priority>
  <config-frr-holding-priority>0</config-frr-holding-priority>
  <config-frr-hop-limit-configured>false</config-frr-hop-limit-configured>
  <config-frr-hop-limit>0</config-frr-hop-limit>
  <config-frr-bandwidth-configured>false</config-frr-bandwidth-configured>
  <config-frr-bandwidth>0</config-frr-bandwidth>
  <config-frr-admin-group-configured>false</config-frr-admin-group-configured>
  <reoptimize-ignore-count>0</reoptimize-ignore-count>
  <instance-frr-configured>0</instance-frr-configured>
  <instance-out-port-id>1207959723</instance-out-port-id>
  <instance-out-port-name>&quot;Ve 171&quot;</instance-out-port-name>
  <instance-out-label>2206</instance-out-label>
  <instance-revert-time>0</instance-revert-time>
  <instance-retry-count>0</instance-retry-count>
  <instance-up-down-count>0</instance-up-down-count>
  <instance-metric>0</instance-metric>
  <cspf-path-hops y:self="/rest/operational-state/mpls-state/lsp/tor4_1140/instances/
1%2C318/
cspf-path-hops/1%2C51.51.51.1">
    <hop-index>1</hop-index>
    <hop-address>51.51.51.1</hop-address>
    <type>strict</type>
  </cspf-path-hops>
  <rsvp-session-rro-hops y:self="/rest/operational-state/mpls-state/lsp/tor4_1140/
instances/1%2C318/
rsvp-session-rro-hops/1%2C51.51.51.1">
    <hop-index>1</hop-index>
    <hop-address>51.51.51.1</hop-address>
  </rsvp-session-rro-hops>
  <rsvp-session-rro-hops y:self="/rest/operational-state/mpls-state/lsp/tor4_1140/

```

```
instances/1%2C318/  
  rsvp-session-rro-hops/1%2C45.45.45.1">  
    <hop-index>1</hop-index>  
    <hop-address>45.45.45.1</hop-address>  
  </rsvp-session-rro-hops>  
</instances>  
</lsp>
```

## mpls-state/memory

### Resource URIs

| URI   | Description                           |
|---|---------------------------------------|
| <base_URI>/rest/operational-state/mpls-state/memory | Displays the MPLS memory information. |

### Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

### Examples

#### URI

http://host:80/rest/operational-state/mpls-state/memory

#### Request Body

None

#### Response Body

```
<memory xmlns="urn:brocade.com:mgmt:brocade-mpls-operational" xmlns:y="http://
brocade.com/ns/rest"
y:self="/rest/operational-state/mpls-state/memory">
  <total-non-pool-memory>25786932</total-non-pool-memory>
  <pools y:self="/rest/operational-state/mpls-state/memory/pools/0">
    <pool-index>0</pool-index>
    <sub-pools y:self="/rest/operational-state/mpls-state/memory/pools/0/sub-pools/0">
      <sub-pool-index>0</sub-pool-index>
      <gen-size>16260</gen-size>
      <block-size>140</block-size>
      <gen-blocks>116</gen-blocks>
      <current-gens>1</current-gens>
      <current-blocks>116</current-blocks>
      <free-blocks>107</free-blocks>
    </sub-pools>
    <sub-pools y:self="/rest/operational-state/mpls-state/memory/pools/0/sub-pools/1">
      <sub-pool-index>1</sub-pool-index>
      <gen-size>16220</gen-size>
      <block-size>180</block-size>
      <gen-blocks>90</gen-blocks>
      <current-gens>1</current-gens>
      <current-blocks>90</current-blocks>
      <free-blocks>90</free-blocks>
    </sub-pools>
    <sub-pools y:self="/rest/operational-state/mpls-state/memory/pools/0/sub-pools/2">
      <sub-pool-index>2</sub-pool-index>
      <gen-size>16304</gen-size>
      <block-size>276</block-size>
```

```

    <gen-blocks>59</gen-blocks>
    <current-gens>2</current-gens>
    <current-blocks>118</current-blocks>
    <free-blocks>107</free-blocks>
  </sub-pools>
  <sub-pools y:self="/rest/operational-state/mps-state/memory/pools/0/sub-pools/3">
    <sub-pool-index>3</sub-pool-index>
    <gen-size>15608</gen-size>
    <block-size>1732</block-size>
    <gen-blocks>9</gen-blocks>
    <current-gens>225</current-gens>
    <current-blocks>2025</current-blocks>
    <free-blocks>17</free-blocks>
  </sub-pools>
  <sub-pools y:self="/rest/operational-state/mps-state/memory/pools/0/sub-pools/4">
    <sub-pool-index>4</sub-pool-index>
    <gen-size>15932</gen-size>
    <block-size>2652</block-size>
    <gen-blocks>6</gen-blocks>
    <current-gens>1</current-gens>
    <current-blocks>6</current-blocks>
    <free-blocks>6</free-blocks>
  </sub-pools>
  <sub-pools y:self="/rest/operational-state/mps-state/memory/pools/0/sub-pools/5">
    <sub-pool-index>5</sub-pool-index>
    <gen-size>31988</gen-size>
    <block-size>3996</block-size>
    <gen-blocks>8</gen-blocks>
    <current-gens>1</current-gens>
    <current-blocks>8</current-blocks>
    <free-blocks>8</free-blocks>
  </sub-pools>
</pools>
<pools y:self="/rest/operational-state/mps-state/memory/pools/1">
  <pool-index>1</pool-index>
  <sub-pools y:self="/rest/operational-state/mps-state/memory/pools/1/sub-pools/0">
    <sub-pool-index>0</sub-pool-index>
    <gen-size>131024</gen-size>
    <block-size>12</block-size>
    <gen-blocks>10917</gen-blocks>
    <current-gens>4</current-gens>
    <current-blocks>43668</current-blocks>
    <free-blocks>11400</free-blocks>
  </sub-pools>
  <sub-pools y:self="/rest/operational-state/mps-state/memory/pools/1/sub-pools/1">
    <sub-pool-index>1</sub-pool-index>
    <gen-size>65480</gen-size>
    <block-size>20</block-size>
    <gen-blocks>3273</gen-blocks>
    <current-gens>19</current-gens>
    <current-blocks>62187</current-blocks>
    <free-blocks>21897</free-blocks>
  </sub-pools>
  <sub-pools y:self="/rest/operational-state/mps-state/memory/pools/1/sub-pools/2">
    <sub-pool-index>2</sub-pool-index>
    <gen-size>131032</gen-size>
    <block-size>28</block-size>
    <gen-blocks>4679</gen-blocks>
    <current-gens>10</current-gens>
    <current-blocks>46790</current-blocks>
    <free-blocks>17777</free-blocks>
  </sub-pools>
  <sub-pools y:self="/rest/operational-state/mps-state/memory/pools/1/sub-pools/3">
    <sub-pool-index>3</sub-pool-index>

```

```
<gen-size>32708</gen-size>
<block-size>36</block-size>
<gen-blocks>908</gen-blocks>
<current-gens>14</current-gens>
<current-blocks>12712</current-blocks>
<free-blocks>4688</free-blocks>
</sub-pools>
<sub-pools y:self="/rest/operational-state/mps-state/memory/pools/1/sub-pools/4">
  <sub-pool-index>4</sub-pool-index>
  <gen-size>131008</gen-size>
  <block-size>44</block-size>
  <gen-blocks>2977</gen-blocks>
  <current-gens>23</current-gens>
  <current-blocks>68471</current-blocks>
  <free-blocks>26181</free-blocks>
</sub-pools>
<sub-pools y:self="/rest/operational-state/mps-state/memory/pools/1/sub-pools/5">
  <sub-pool-index>5</sub-pool-index>
  <gen-size>131008</gen-size>
  <block-size>52</block-size>
  <gen-blocks>2519</gen-blocks>
  <current-gens>15</current-gens>
  <current-blocks>37785</current-blocks>
  <free-blocks>15754</free-blocks>
</sub-pools>
<sub-pools y:self="/rest/operational-state/mps-state/memory/pools/1/sub-pools/6">
  <sub-pool-index>6</sub-pool-index>
  <gen-size>131000</gen-size>
  <block-size>60</block-size>
  <gen-blocks>2183</gen-blocks>
  <current-gens>8</current-gens>
  <current-blocks>17464</current-blocks>
  <free-blocks>1939</free-blocks>
</sub-pools>
<sub-pools y:self="/rest/operational-state/mps-state/memory/pools/1/sub-pools/7">
  <sub-pool-index>7</sub-pool-index>
  <gen-size>130988</gen-size>
  <block-size>68</block-size>
  <gen-blocks>1926</gen-blocks>
  <current-gens>2</current-gens>
  <current-blocks>3852</current-blocks>
  <free-blocks>291</free-blocks>
</sub-pools>
<sub-pools y:self="/rest/operational-state/mps-state/memory/pools/1/sub-pools/8">
  <sub-pool-index>8</sub-pool-index>
  <gen-size>65456</gen-size>
  <block-size>76</block-size>
  <gen-blocks>861</gen-blocks>
  <current-gens>24</current-gens>
  <current-blocks>20664</current-blocks>
  <free-blocks>8409</free-blocks>
</sub-pools>
<sub-pools y:self="/rest/operational-state/mps-state/memory/pools/1/sub-pools/9">
  <sub-pool-index>9</sub-pool-index>
  <gen-size>131028</gen-size>
  <block-size>92</block-size>
  <gen-blocks>1424</gen-blocks>
  <current-gens>1</current-gens>
  <current-blocks>1424</current-blocks>
  <free-blocks>1351</free-blocks>
</sub-pools>
<sub-pools y:self="/rest/operational-state/mps-state/memory/pools/1/sub-pools/10">
  <sub-pool-index>10</sub-pool-index>
  <gen-size>65420</gen-size>
```



```
<block-size>100</block-size>
<gen-blocks>654</gen-blocks>
<current-gens>1</current-gens>
<current-blocks>654</current-blocks>
<free-blocks>653</free-blocks>
</sub-pools>
<sub-pools y:self="/rest/operational-state/mps-state/memory/pools/1/sub-pools/11">
  <sub-pool-index>11</sub-pool-index>
  <gen-size>131024</gen-size>
  <block-size>108</block-size>
  <gen-blocks>1213</gen-blocks>
  <current-gens>15</current-gens>
  <current-blocks>18195</current-blocks>
  <free-blocks>8195</free-blocks>
</sub-pools>
<sub-pools y:self="/rest/operational-state/mps-state/memory/pools/1/sub-pools/12">
  <sub-pool-index>12</sub-pool-index>
  <gen-size>130984</gen-size>
  <block-size>116</block-size>
  <gen-blocks>1129</gen-blocks>
  <current-gens>11</current-gens>
  <current-blocks>12419</current-blocks>
  <free-blocks>4337</free-blocks>
</sub-pools>
<sub-pools y:self="/rest/operational-state/mps-state/memory/pools/1/sub-pools/13">
  <sub-pool-index>13</sub-pool-index>
  <gen-size>130964</gen-size>
  <block-size>124</block-size>
  <gen-blocks>1056</gen-blocks>
  <current-gens>19</current-gens>
  <current-blocks>20064</current-blocks>
  <free-blocks>10064</free-blocks>
</sub-pools>
<sub-pools y:self="/rest/operational-state/mps-state/memory/pools/1/sub-pools/14">
  <sub-pool-index>14</sub-pool-index>
  <gen-size>130964</gen-size>
  <block-size>132</block-size>
  <gen-blocks>992</gen-blocks>
  <current-gens>26</current-gens>
  <current-blocks>25792</current-blocks>
  <free-blocks>9788</free-blocks>
</sub-pools>
<sub-pools y:self="/rest/operational-state/mps-state/memory/pools/1/sub-pools/15">
  <sub-pool-index>15</sub-pool-index>
  <gen-size>131000</gen-size>
  <block-size>148</block-size>
  <gen-blocks>885</gen-blocks>
  <current-gens>1</current-gens>
  <current-blocks>885</current-blocks>
  <free-blocks>514</free-blocks>
</sub-pools>
<sub-pools y:self="/rest/operational-state/mps-state/memory/pools/1/sub-pools/16">
  <sub-pool-index>16</sub-pool-index>
  <gen-size>65384</gen-size>
  <block-size>156</block-size>
  <gen-blocks>419</gen-blocks>
  <current-gens>1</current-gens>
  <current-blocks>419</current-blocks>
  <free-blocks>390</free-blocks>
</sub-pools>
<sub-pools y:self="/rest/operational-state/mps-state/memory/pools/1/sub-pools/17">
  <sub-pool-index>17</sub-pool-index>
  <gen-size>130892</gen-size>
  <block-size>164</block-size>
```

```
<gen-blocks>798</gen-blocks>
<current-gens>2</current-gens>
<current-blocks>1596</current-blocks>
<free-blocks>593</free-blocks>
</sub-pools>
<sub-pools y:self="/rest/operational-state/mpis-state/memory/pools/1/sub-pools/18">
  <sub-pool-index>18</sub-pool-index>
  <gen-size>130880</gen-size>
  <block-size>180</block-size>
  <gen-blocks>727</gen-blocks>
  <current-gens>12</current-gens>
  <current-blocks>8724</current-blocks>
  <free-blocks>3470</free-blocks>
</sub-pools>
<sub-pools y:self="/rest/operational-state/mpis-state/memory/pools/1/sub-pools/19">
  <sub-pool-index>19</sub-pool-index>
  <gen-size>65444</gen-size>
  <block-size>188</block-size>
  <gen-blocks>348</gen-blocks>
  <current-gens>23</current-gens>
  <current-blocks>8004</current-blocks>
  <free-blocks>3975</free-blocks>
</sub-pools>
<sub-pools y:self="/rest/operational-state/mpis-state/memory/pools/1/sub-pools/20">
  <sub-pool-index>20</sub-pool-index>
  <gen-size>130948</gen-size>
  <block-size>196</block-size>
  <gen-blocks>668</gen-blocks>
  <current-gens>6</current-gens>
  <current-blocks>4008</current-blocks>
  <free-blocks>8</free-blocks>
</sub-pools>
<sub-pools y:self="/rest/operational-state/mpis-state/memory/pools/1/sub-pools/21">
  <sub-pool-index>21</sub-pool-index>
  <gen-size>65300</gen-size>
  <block-size>204</block-size>
  <gen-blocks>320</gen-blocks>
  <current-gens>14</current-gens>
  <current-blocks>4480</current-blocks>
  <free-blocks>230</free-blocks>
</sub-pools>
<sub-pools y:self="/rest/operational-state/mpis-state/memory/pools/1/sub-pools/22">
  <sub-pool-index>22</sub-pool-index>
  <gen-size>16344</gen-size>
  <block-size>212</block-size>
  <gen-blocks>77</gen-blocks>
  <current-gens>1</current-gens>
  <current-blocks>77</current-blocks>
  <free-blocks>75</free-blocks>
</sub-pools>
<sub-pools y:self="/rest/operational-state/mpis-state/memory/pools/1/sub-pools/23">
  <sub-pool-index>23</sub-pool-index>
  <gen-size>131000</gen-size>
  <block-size>236</block-size>
  <gen-blocks>555</gen-blocks>
  <current-gens>32</current-gens>
  <current-blocks>17760</current-blocks>
  <free-blocks>7743</free-blocks>
</sub-pools>
<sub-pools y:self="/rest/operational-state/mpis-state/memory/pools/1/sub-pools/24">
  <sub-pool-index>24</sub-pool-index>
  <gen-size>65288</gen-size>
  <block-size>252</block-size>
  <gen-blocks>259</gen-blocks>
```

```
<current-gens>1</current-gens>
<current-blocks>259</current-blocks>
<free-blocks>258</free-blocks>
</sub-pools>
<sub-pools y:self="/rest/operational-state/mpis-state/memory/pools/1/sub-pools/25">
  <sub-pool-index>25</sub-pool-index>
  <gen-size>32520</gen-size>
  <block-size>260</block-size>
  <gen-blocks>125</gen-blocks>
  <current-gens>1</current-gens>
  <current-blocks>125</current-blocks>
  <free-blocks>121</free-blocks>
</sub-pools>
<sub-pools y:self="/rest/operational-state/mpis-state/memory/pools/1/sub-pools/26">
  <sub-pool-index>26</sub-pool-index>
  <gen-size>32716</gen-size>
  <block-size>268</block-size>
  <gen-blocks>122</gen-blocks>
  <current-gens>1</current-gens>
  <current-blocks>122</current-blocks>
  <free-blocks>121</free-blocks>
</sub-pools>
<sub-pools y:self="/rest/operational-state/mpis-state/memory/pools/1/sub-pools/27">
  <sub-pool-index>27</sub-pool-index>
  <gen-size>130944</gen-size>
  <block-size>284</block-size>
  <gen-blocks>461</gen-blocks>
  <current-gens>18</current-gens>
  <current-blocks>8298</current-blocks>
  <free-blocks>3044</free-blocks>
</sub-pools>
<sub-pools y:self="/rest/operational-state/mpis-state/memory/pools/1/sub-pools/28">
  <sub-pool-index>28</sub-pool-index>
  <gen-size>130836</gen-size>
  <block-size>292</block-size>
  <gen-blocks>448</gen-blocks>
  <current-gens>10</current-gens>
  <current-blocks>4480</current-blocks>
  <free-blocks>176</free-blocks>
</sub-pools>
<sub-pools y:self="/rest/operational-state/mpis-state/memory/pools/1/sub-pools/29">
  <sub-pool-index>29</sub-pool-index>
  <gen-size>130916</gen-size>
  <block-size>324</block-size>
  <gen-blocks>404</gen-blocks>
  <current-gens>30</current-gens>
  <current-blocks>12120</current-blocks>
  <free-blocks>4110</free-blocks>
</sub-pools>
<sub-pools y:self="/rest/operational-state/mpis-state/memory/pools/1/sub-pools/30">
  <sub-pool-index>30</sub-pool-index>
  <gen-size>65300</gen-size>
  <block-size>340</block-size>
  <gen-blocks>192</gen-blocks>
  <current-gens>52</current-gens>
  <current-blocks>9984</current-blocks>
  <free-blocks>3976</free-blocks>
</sub-pools>
<sub-pools y:self="/rest/operational-state/mpis-state/memory/pools/1/sub-pools/31">
  <sub-pool-index>31</sub-pool-index>
  <gen-size>130700</gen-size>
  <block-size>396</block-size>
  <gen-blocks>330</gen-blocks>
  <current-gens>55</current-gens>
```

```
<current-blocks>18150</current-blocks>
<free-blocks>7859</free-blocks>
</sub-pools>
<sub-pools y:self="/rest/operational-state/mps-state/memory/pools/1/sub-pools/32">
  <sub-pool-index>32</sub-pool-index>
  <gen-size>130648</gen-size>
  <block-size>452</block-size>
  <gen-blocks>289</gen-blocks>
  <current-gens>15</current-gens>
  <current-blocks>4335</current-blocks>
  <free-blocks>26</free-blocks>
</sub-pools>
<sub-pools y:self="/rest/operational-state/mps-state/memory/pools/1/sub-pools/33">
  <sub-pool-index>33</sub-pool-index>
  <gen-size>65360</gen-size>
  <block-size>484</block-size>
  <gen-blocks>135</gen-blocks>
  <current-gens>1</current-gens>
  <current-blocks>135</current-blocks>
  <free-blocks>133</free-blocks>
</sub-pools>
<sub-pools y:self="/rest/operational-state/mps-state/memory/pools/1/sub-pools/34">
  <sub-pool-index>34</sub-pool-index>
  <gen-size>65444</gen-size>
  <block-size>564</block-size>
  <gen-blocks>116</gen-blocks>
  <current-gens>85</current-gens>
  <current-blocks>9860</current-blocks>
  <free-blocks>3855</free-blocks>
</sub-pools>
<sub-pools y:self="/rest/operational-state/mps-state/memory/pools/1/sub-pools/35">
  <sub-pool-index>35</sub-pool-index>
  <gen-size>32500</gen-size>
  <block-size>580</block-size>
  <gen-blocks>56</gen-blocks>
  <current-gens>1</current-gens>
  <current-blocks>56</current-blocks>
  <free-blocks>52</free-blocks>
</sub-pools>
<sub-pools y:self="/rest/operational-state/mps-state/memory/pools/1/sub-pools/36">
  <sub-pool-index>36</sub-pool-index>
  <gen-size>130920</gen-size>
  <block-size>700</block-size>
  <gen-blocks>187</gen-blocks>
  <current-gens>44</current-gens>
  <current-blocks>8228</current-blocks>
  <free-blocks>3971</free-blocks>
</sub-pools>
<sub-pools y:self="/rest/operational-state/mps-state/memory/pools/1/sub-pools/37">
  <sub-pool-index>37</sub-pool-index>
  <gen-size>65180</gen-size>
  <block-size>724</block-size>
  <gen-blocks>90</gen-blocks>
  <current-gens>1</current-gens>
  <current-blocks>90</current-blocks>
  <free-blocks>90</free-blocks>
</sub-pools>
<sub-pools y:self="/rest/operational-state/mps-state/memory/pools/1/sub-pools/38">
  <sub-pool-index>38</sub-pool-index>
  <gen-size>65096</gen-size>
  <block-size>748</block-size>
  <gen-blocks>87</gen-blocks>
  <current-gens>1</current-gens>
  <current-blocks>87</current-blocks>
```

```
<free-blocks>85</free-blocks>
</sub-pools>
<sub-pools y:self="/rest/operational-state/mpis-state/memory/pools/1/sub-pools/39">
  <sub-pool-index>39</sub-pool-index>
  <gen-size>130828</gen-size>
  <block-size>788</block-size>
  <gen-blocks>166</gen-blocks>
  <current-gens>49</current-gens>
  <current-blocks>8134</current-blocks>
  <free-blocks>2881</free-blocks>
</sub-pools>
<sub-pools y:self="/rest/operational-state/mpis-state/memory/pools/1/sub-pools/40">
  <sub-pool-index>40</sub-pool-index>
  <gen-size>32312</gen-size>
  <block-size>828</block-size>
  <gen-blocks>39</gen-blocks>
  <current-gens>1</current-gens>
  <current-blocks>39</current-blocks>
  <free-blocks>37</free-blocks>
</sub-pools>
<sub-pools y:self="/rest/operational-state/mpis-state/memory/pools/1/sub-pools/41">
  <sub-pool-index>41</sub-pool-index>
  <gen-size>64844</gen-size>
  <block-size>876</block-size>
  <gen-blocks>74</gen-blocks>
  <current-gens>1</current-gens>
  <current-blocks>74</current-blocks>
  <free-blocks>73</free-blocks>
</sub-pools>
<sub-pools y:self="/rest/operational-state/mpis-state/memory/pools/1/sub-pools/42">
  <sub-pool-index>42</sub-pool-index>
  <gen-size>64760</gen-size>
  <block-size>996</block-size>
  <gen-blocks>65</gen-blocks>
  <current-gens>1</current-gens>
  <current-blocks>65</current-blocks>
  <free-blocks>64</free-blocks>
</sub-pools>
<sub-pools y:self="/rest/operational-state/mpis-state/memory/pools/1/sub-pools/43">
  <sub-pool-index>43</sub-pool-index>
  <gen-size>65300</gen-size>
  <block-size>1020</block-size>
  <gen-blocks>64</gen-blocks>
  <current-gens>1</current-gens>
  <current-blocks>64</current-blocks>
  <free-blocks>64</free-blocks>
</sub-pools>
<sub-pools y:self="/rest/operational-state/mpis-state/memory/pools/1/sub-pools/44">
  <sub-pool-index>44</sub-pool-index>
  <gen-size>130556</gen-size>
  <block-size>1036</block-size>
  <gen-blocks>126</gen-blocks>
  <current-gens>1</current-gens>
  <current-blocks>126</current-blocks>
  <free-blocks>123</free-blocks>
</sub-pools>
<sub-pools y:self="/rest/operational-state/mpis-state/memory/pools/1/sub-pools/45">
  <sub-pool-index>45</sub-pool-index>
  <gen-size>130520</gen-size>
  <block-size>1044</block-size>
  <gen-blocks>125</gen-blocks>
  <current-gens>63</current-gens>
  <current-blocks>7875</current-blocks>
  <free-blocks>3875</free-blocks>
```

```

</sub-pools>
<sub-pools y:self="/rest/operational-state/mppls-state/memory/pools/1/sub-pools/46">
  <sub-pool-index>46</sub-pool-index>
  <gen-size>65204</gen-size>
  <block-size>1164</block-size>
  <gen-blocks>56</gen-blocks>
  <current-gens>1</current-gens>
  <current-blocks>56</current-blocks>
  <free-blocks>14</free-blocks>
</sub-pools>
<sub-pools y:self="/rest/operational-state/mppls-state/memory/pools/1/sub-pools/47">
  <sub-pool-index>47</sub-pool-index>
  <gen-size>130640</gen-size>
  <block-size>1244</block-size>
  <gen-blocks>105</gen-blocks>
  <current-gens>173</current-gens>
  <current-blocks>18165</current-blocks>
  <free-blocks>6656</free-blocks>
</sub-pools>
<sub-pools y:self="/rest/operational-state/mppls-state/memory/pools/1/sub-pools/48">
  <sub-pool-index>48</sub-pool-index>
  <gen-size>130304</gen-size>
  <block-size>1316</block-size>
  <gen-blocks>99</gen-blocks>
  <current-gens>41</current-gens>
  <current-blocks>4059</current-blocks>
  <free-blocks>2</free-blocks>
</sub-pools>
<sub-pools y:self="/rest/operational-state/mppls-state/memory/pools/1/sub-pools/49">
  <sub-pool-index>49</sub-pool-index>
  <gen-size>64280</gen-size>
  <block-size>1836</block-size>
  <gen-blocks>35</gen-blocks>
  <current-gens>314</current-gens>
  <current-blocks>10990</current-blocks>
  <free-blocks>3754</free-blocks>
</sub-pools>
<sub-pools y:self="/rest/operational-state/mppls-state/memory/pools/1/sub-pools/50">
  <sub-pool-index>50</sub-pool-index>
  <gen-size>130568</gen-size>
  <block-size>3036</block-size>
  <gen-blocks>43</gen-blocks>
  <current-gens>275</current-gens>
  <current-blocks>11825</current-blocks>
  <free-blocks>3818</free-blocks>
</sub-pools>
</pools>
<stats y:self="/rest/operational-state/mppls-state/memory/stats/0">
  <mem-stats-index>0</mem-stats-index>
  <mem-type>Misc</mem-type>
  <num-alloc>7007</num-alloc>
  <total-bytes>622528</total-bytes>
  <total-allocs>61577</total-allocs>
  <total-frees>54570</total-frees>
  <peak-alloc>11791</peak-alloc>
  <alloc-fails>0</alloc-fails>
  <free-fails>0</free-fails>
</stats>
<stats y:self="/rest/operational-state/mppls-state/memory/stats/1">
  <mem-stats-index>1</mem-stats-index>
  <mem-type>BFD-Sess</mem-type>
  <num-alloc>0</num-alloc>
  <total-bytes>0</total-bytes>
  <total-allocs>0</total-allocs>

```

```

    <total-frees>0</total-frees>
    <peak-alloc>0</peak-alloc>
    <alloc-fails>0</alloc-fails>
    <free-fails>0</free-fails>
  </stats>
  <stats y:self="/rest/operational-state/mppls-state/memory/stats/2">
    <mem-stats-index>2</mem-stats-index>
    <mem-type>BFD-Peer</mem-type>
    <num-alloc>0</num-alloc>
    <total-bytes>0</total-bytes>
    <total-allocs>0</total-allocs>
    <total-frees>0</total-frees>
    <peak-alloc>0</peak-alloc>
    <alloc-fails>0</alloc-fails>
    <free-fails>0</free-fails>
  </stats>
  <stats y:self="/rest/operational-state/mppls-state/memory/stats/3">
    <mem-stats-index>3</mem-stats-index>
    <mem-type>BFD-Egr-Sess</mem-type>
    <num-alloc>0</num-alloc>
    <total-bytes>0</total-bytes>
    <total-allocs>0</total-allocs>
    <total-frees>0</total-frees>
    <peak-alloc>0</peak-alloc>
    <alloc-fails>0</alloc-fails>
    <free-fails>0</free-fails>
  </stats>
  <stats y:self="/rest/operational-state/mppls-state/memory/stats/4">
    <mem-stats-index>4</mem-stats-index>
    <mem-type>TE-LSA-Id</mem-type>
    <num-alloc>147</num-alloc>
    <total-bytes>12348</total-bytes>
    <total-allocs>469</total-allocs>
    <total-frees>322</total-frees>
    <peak-alloc>149</peak-alloc>
    <alloc-fails>0</alloc-fails>
    <free-fails>0</free-fails>
  </stats>
  <stats y:self="/rest/operational-state/mppls-state/memory/stats/5">
    <mem-stats-index>5</mem-stats-index>
    <mem-type>TE-Node</mem-type>
    <num-alloc>0</num-alloc>
    <total-bytes>0</total-bytes>
    <total-allocs>0</total-allocs>
    <total-frees>0</total-frees>
    <peak-alloc>0</peak-alloc>
    <alloc-fails>0</alloc-fails>
    <free-fails>0</free-fails>
  </stats>
  <stats y:self="/rest/operational-state/mppls-state/memory/stats/6">
    <mem-stats-index>6</mem-stats-index>
    <mem-type>CSPF-RESOLVE</mem-type>
    <num-alloc>0</num-alloc>
    <total-bytes>0</total-bytes>
    <total-allocs>0</total-allocs>
    <total-frees>0</total-frees>
    <peak-alloc>0</peak-alloc>
    <alloc-fails>0</alloc-fails>
    <free-fails>0</free-fails>
  </stats>
  <stats y:self="/rest/operational-state/mppls-state/memory/stats/7">
    <mem-stats-index>7</mem-stats-index>
    <mem-type>CSPF-UNRESOLV</mem-type>
    <num-alloc>0</num-alloc>

```

```

<total-bytes>0</total-bytes>
<total-allocs>0</total-allocs>
<total-frees>0</total-frees>
<peak-alloc>0</peak-alloc>
<alloc-fails>0</alloc-fails>
<free-fails>0</free-fails>
</stats>
<stats y:self="/rest/operational-state/mpls-state/memory/stats/8">
  <mem-stats-index>8</mem-stats-index>
  <mem-type>Sess-Disp-Param</mem-type>
  <num-alloc>0</num-alloc>
  <total-bytes>0</total-bytes>
  <total-allocs>0</total-allocs>
  <total-frees>0</total-frees>
  <peak-alloc>0</peak-alloc>
  <alloc-fails>0</alloc-fails>
  <free-fails>0</free-fails>
</stats>
<stats y:self="/rest/operational-state/mpls-state/memory/stats/9">
  <mem-stats-index>9</mem-stats-index>
  <mem-type>Disp-Param</mem-type>
  <num-alloc>0</num-alloc>
  <total-bytes>0</total-bytes>
  <total-allocs>0</total-allocs>
  <total-frees>0</total-frees>
  <peak-alloc>0</peak-alloc>
  <alloc-fails>0</alloc-fails>
  <free-fails>0</free-fails>
</stats>
<stats y:self="/rest/operational-state/mpls-state/memory/stats/10">
  <mem-stats-index>10</mem-stats-index>
  <mem-type>Disp-Buf</mem-type>
  <num-alloc>0</num-alloc>
  <total-bytes>0</total-bytes>
  <total-allocs>0</total-allocs>
  <total-frees>0</total-frees>
  <peak-alloc>0</peak-alloc>
  <alloc-fails>0</alloc-fails>
  <free-fails>0</free-fails>
</stats>
<stats y:self="/rest/operational-state/mpls-state/memory/stats/11">
  <mem-stats-index>11</mem-stats-index>
  <mem-type>Path</mem-type>
  <num-alloc>4</num-alloc>
  <total-bytes>608</total-bytes>
  <total-allocs>4</total-allocs>
  <total-frees>0</total-frees>
  <peak-alloc>4</peak-alloc>
  <alloc-fails>0</alloc-fails>
  <free-fails>0</free-fails>
</stats>
<stats y:self="/rest/operational-state/mpls-state/memory/stats/12">
  <mem-stats-index>12</mem-stats-index>
  <mem-type>Sec-Path</mem-type>
  <num-alloc>2000</num-alloc>
  <total-bytes>584000</total-bytes>
  <total-allocs>3900</total-allocs>
  <total-frees>1900</total-frees>
  <peak-alloc>3900</peak-alloc>
  <alloc-fails>0</alloc-fails>
  <free-fails>0</free-fails>
</stats>
<stats y:self="/rest/operational-state/mpls-state/memory/stats/13">
  <mem-stats-index>13</mem-stats-index>

```



```
<mem-type>LSP</mem-type>
<num-alloc>5003</num-alloc>
<total-bytes>6523912</total-bytes>
<total-allocs>22056</total-allocs>
<total-frees>17053</total-frees>
<peak-alloc>7800</peak-alloc>
<alloc-fails>0</alloc-fails>
<free-fails>0</free-fails>
</stats>
<stats y:self="/rest/operational-state/mppls-state/memory/stats/14">
  <mem-stats-index>14</mem-stats-index>
  <mem-type>CSPF-Route</mem-type>
  <num-alloc>0</num-alloc>
  <total-bytes>0</total-bytes>
  <total-allocs>46004</total-allocs>
  <total-frees>46004</total-frees>
  <peak-alloc>1</peak-alloc>
  <alloc-fails>0</alloc-fails>
  <free-fails>0</free-fails>
</stats>
<stats y:self="/rest/operational-state/mppls-state/memory/stats/15">
  <mem-stats-index>15</mem-stats-index>
  <mem-type>Link-List</mem-type>
  <num-alloc>0</num-alloc>
  <total-bytes>0</total-bytes>
  <total-allocs>0</total-allocs>
  <total-frees>0</total-frees>
  <peak-alloc>0</peak-alloc>
  <alloc-fails>0</alloc-fails>
  <free-fails>0</free-fails>
</stats>
<stats y:self="/rest/operational-state/mppls-state/memory/stats/16">
  <mem-stats-index>16</mem-stats-index>
  <mem-type>Ingr-LSP</mem-type>
  <num-alloc>0</num-alloc>
  <total-bytes>0</total-bytes>
  <total-allocs>0</total-allocs>
  <total-frees>0</total-frees>
  <peak-alloc>0</peak-alloc>
  <alloc-fails>0</alloc-fails>
  <free-fails>0</free-fails>
</stats>
<stats y:self="/rest/operational-state/mppls-state/memory/stats/17">
  <mem-stats-index>17</mem-stats-index>
  <mem-type>Bkup-Trans-LSP</mem-type>
  <num-alloc>0</num-alloc>
  <total-bytes>0</total-bytes>
  <total-allocs>0</total-allocs>
  <total-frees>0</total-frees>
  <peak-alloc>0</peak-alloc>
  <alloc-fails>0</alloc-fails>
  <free-fails>0</free-fails>
</stats>
<stats y:self="/rest/operational-state/mppls-state/memory/stats/18">
  <mem-stats-index>18</mem-stats-index>
  <mem-type>Bkup-Trans-LSP</mem-type>
  <num-alloc>0</num-alloc>
  <total-bytes>0</total-bytes>
  <total-allocs>0</total-allocs>
  <total-frees>0</total-frees>
  <peak-alloc>0</peak-alloc>
  <alloc-fails>0</alloc-fails>
  <free-fails>0</free-fails>
</stats>
```

```
<stats y:self="/rest/operational-state/mppls-state/memory/stats/19">
  <mem-stats-index>19</mem-stats-index>
  <mem-type>Reset-LSP-Ctxt</mem-type>
  <num-alloc>0</num-alloc>
  <total-bytes>0</total-bytes>
  <total-allocs>0</total-allocs>
  <total-frees>0</total-frees>
  <peak-alloc>0</peak-alloc>
  <alloc-fails>0</alloc-fails>
  <free-fails>0</free-fails>
</stats>
<stats y:self="/rest/operational-state/mppls-state/memory/stats/20">
  <mem-stats-index>20</mem-stats-index>
  <mem-type>Dbg-Cntr</mem-type>
  <num-alloc>407</num-alloc>
  <total-bytes>34188</total-bytes>
  <total-allocs>407</total-allocs>
  <total-frees>0</total-frees>
  <peak-alloc>407</peak-alloc>
  <alloc-fails>0</alloc-fails>
  <free-fails>0</free-fails>
</stats>
<stats y:self="/rest/operational-state/mppls-state/memory/stats/21">
  <mem-stats-index>21</mem-stats-index>
  <mem-type>Perf</mem-type>
  <num-alloc>0</num-alloc>
  <total-bytes>0</total-bytes>
  <total-allocs>0</total-allocs>
  <total-frees>0</total-frees>
  <peak-alloc>0</peak-alloc>
  <alloc-fails>0</alloc-fails>
  <free-fails>0</free-fails>
</stats>
<stats y:self="/rest/operational-state/mppls-state/memory/stats/22">
  <mem-stats-index>22</mem-stats-index>
  <mem-type>Dbg-Match</mem-type>
  <num-alloc>0</num-alloc>
  <total-bytes>0</total-bytes>
  <total-allocs>0</total-allocs>
  <total-frees>0</total-frees>
  <peak-alloc>0</peak-alloc>
  <alloc-fails>0</alloc-fails>
  <free-fails>0</free-fails>
</stats>
</memory>
```

## mpls-state/path

### Resource URIs

| URI  | Description                            |
|--|--|
| <base_URI>/operational-state/mpls-state/path                 | Displays LDP Path information.         |
| <base_URI>/operational-state/mpls-state/path/{path-name_val} | Displays LSP path information details. |

### Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

### Examples

#### URI

http://host:80/rest/operational-state/mpls-state/path

#### Request Body

None

#### Response Body

```
<path xmlns="urn:brocade.com:mgmt:brocade-mpls-operational" xmlns:y="http://
brocade.com/ns/rest"
y:self="/rest/operational-state/mpls-state/path/admin">
  <path-name>vishal</path-name>
  <usage-count>0</usage-count>
  <path-hops y:self="/rest/operational-state/mpls-state/path/vishal/path-hops/6.6.6">
    <hop-address>6.6.6</hop-address>
    <hop-type>1</hop-type>
  </path-hops>
  <path-hops y:self="/rest/operational-state/mpls-state/path/vishal/path-hops/3.3.3">
    <hop-address>3.3.3</hop-address>
    <hop-type>1</hop-type>
  </path-hops>
</path>
```

## mpls-state/policy

### Resource URIs

| URI   | Description                                |
|---|--|
| <base_URI>/operational-state/mpls-state/policy                          | Displays the MPLS policy.                  |
| <base_URI>/operational-state/mpls-state/policy/auto-bandwidth-enabled   | Returns true if auto bandwidth is enabled. |
| <base_URI>/operational-state/mpls-state/policy/autobw-sample-interval   | Displays autobandwidth sample interval.    |
| <base_URI>/operational-state/mpls-state/policy/autobw-num-sample-record | Displays autobandwidth sample record.      |

### Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

### Examples

#### URI

http://host:80/rest/operational-state/mpls-state/policy

#### Request Body

None

#### Response Body

```
<policy xmlns="urn:brocade.com:mgmt:brocade-mpls-operational" xmlns:y="http://
brocade.com/ns/rest"
y:self="/rest/operational-state/mpls-state/policy">
  <cspf-intf>0</cspf-intf>
  <cspf-group-computation-mode>mpls-cspf-grp-comp-mode-default</cspf-group-computation-
mode>
  <cspf-comp-mode>0</cspf-comp-mode>
  <cspf-comp-ignore-overload-bit>0</cspf-comp-ignore-overload-bit>
  <propagate-ttl>1</propagate-ttl>
  <label-propagate-ttl>0</label-propagate-ttl>
  <vrf-propagate-ttl>0</vrf-propagate-ttl>
  <rtm-route-filter-enabled>true</rtm-route-filter-enabled>
  <rtm-route-filter-all-ibgp-enabled>false</rtm-route-filter-all-ibgp-enabled>
  <ingress-tnnl-actg>0</ingress-tnnl-actg>
  <transit-session-actg>0</transit-session-actg>
  <load-interval>300</load-interval>
  <te-policy-protocol>mpls-te-ospf</te-policy-protocol>
  <te-policy-flags>0</te-policy-flags>
  <te-policy-area>0</te-policy-area>
```

```
<handle-isis-nbr-down>0</handle-isis-nbr-down>
<handle-ospf-nbr-down>0</handle-ospf-nbr-down>
<fast-retry-on>1</fast-retry-on>
<lsp-retry-interval>30</lsp-retry-interval>
<frr-backup-retry-interval>30</frr-backup-retry-interval>
<auto-bandwidth-enabled>0</auto-bandwidth-enabled>
<autobw-sample-interval>300</autobw-sample-interval>
<autobw-num-sample-record>1500</autobw-num-sample-record>
<soft-preempt-cleanup-timer>30</soft-preempt-cleanup-timer>
<rsvp-periodic-flooding-timer>180</rsvp-periodic-flooding-timer>
<admin-groups y:self="/rest/operational-state/mpls-state/policy/admin-groups/ad2">
  <name>ad2</name>
  <group-number>2</group-number>
</admin-groups>
<rsvp-flooding-thresholds y:self="/rest/operational-state/mpls-state/policy/rsvp-
flooding-thresholds/threshold_default_up">
  <threshold-type>threshold_default_up</threshold-type>
  <flooding-thresholds>15 30 45 60 75 80 85 90 95 96 97 98 99 100</flooding-thresholds>
</rsvp-flooding-thresholds>
<rsvp-flooding-thresholds y:self="/rest/operational-state/mpls-state/policy/rsvp-
flooding-thresholds/threshold_default_down">
  <threshold-type>threshold_default_down</threshold-type>
  <flooding-thresholds>15 30 45 60 75 80 85 90 95 96 97 98 99</flooding-thresholds>
</rsvp-flooding-thresholds>
</policy>
```

## mpls-state/policy/admin-groups

---

### Resource URIs

| URI   | Description                          |
|---|--------------------------------------|
| <base_URI>/operational-state/mpls-state/policy/admin-groups | Displays the MPLS admin group entry. |

### Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

### Examples

#### URI

http://host:80/rest/operational-state/mpls-state/policy/admin-groups

#### Request Body

None

#### Response Body

```
<admin-groups xmlns="urn:brocade.com:mgmt:brocade-mpls-operational" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/operational-state/mpls-state/policy/admin-groups/ad2">
  <name>ad2</name>
  <group-number>2</group-number>
</admin-groups>
```

## mpls-state/route

---

### Resource URIs

| URI   | Description                        |
|---|------------------------------------|
| <base_URI>/operational-state/mpls-state/route | Displays routes installed by MPLS. |

### Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

### Examples

#### URI

http://host:80/rest/operational-state/mpls-state/route

#### Request Body

None

#### Response Body

```
<route xmlns="urn:brocade.com:mgmt:brocade-mpls-operational" xmlns:y="http://
brocade.com/ns/rest"
y:self="/rest/operational-state/mpls-state/route/514">
  <entry-index>514</entry-index>
  <outseg-index>1</outseg-index>
  <dest-ip-prefix>4.4.3.2/32</dest-ip-prefix>
  <gateway-ip-addr>4.4.3.2</gateway-ip-addr>
  <out-interface-name>"Ve 101"</out-interface-name>
  <out-label>2832</out-label>
  <protocol>mpls-protocol-rsvp</protocol>
  <vif-index>176</vif-index>
  <metric>0</metric>
  <use-count>0</use-count>
</route>
```

## mpls-state/rsvp

### Resource URIs

| URI  | Description                                     |
|--|---|
| <base_URI>/operational-state/mpls-state/rsvp   | Displays the MPLS RSVP operational information. |
| <base_URI>/operational-state/mpls-state/rsvp/sessions/{dest-ip-addr},{src-ip-addr},{tunnel-id},{session-role}/psbs/{path-index}/frr-facility | Displays whether the FRR facility is enabled.   |

### Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

### Examples

#### URI

http://host:80/rest/operational-state/mpls-state/rsvp

#### Request Body

None

#### Response Body

```
<rsvp xmlns="urn:brocade.com:mgmt:brocade-mpls-operational" xmlns:y="http://
brocade.com/ns/rest"
y:self="/rest/operational-state/mpls-state/rsvp">
  <protocol-status>true</protocol-status>
  <refresh-interval>30</refresh-interval>
  <refresh-multiple>3</refresh-multiple>
  <transport-address>1.2.3.4</transport-address>
  <delay-resv-sending>>false</delay-resv-sending>
  <backup-bandwidth-requirement>>false</backup-bandwidth-requirement>
  <msgid-epoch>128 238 149</msgid-epoch>
  <statistics y:self="/rest/operational-state/mpls-state/rsvp/statistics">
    <packet-error-counters y:self="/rest/operational-state/mpls-state/rsvp/statistics/
packet-error-counters">
      <rx-pkt-bad-length>0</rx-pkt-bad-length>
      <rx-pkt-unknown-type>0</rx-pkt-unknown-type>
      <rx-pkt-bad-version>0</rx-pkt-bad-version>
      <rx-pkt-bad-checksum>0</rx-pkt-bad-checksum>
      <mem-alloc-fail>0</mem-alloc-fail>
      <rx-md5-auth-error>0</rx-md5-auth-error>
      <path-state-timeout>0</path-state-timeout>
      <resv-state-timeout>0</resv-state-timeout>
      <pkt-with-msg-id-drop>0</pkt-with-msg-id-drop>
```



```

<pkt-with-sref-drop>0</pkt-with-sref-drop>
<rx-pkt-bad-length-since-last-clear>0</rx-pkt-bad-length-since-last-clear>
<rx-pkt-unknown-type-since-last-clear>0</rx-pkt-unknown-type-since-last-clear>
<rx-pkt-bad-version-since-last-clear>0</rx-pkt-bad-version-since-last-clear>
<rx-pkt-bad-checksum-since-last-clear>0</rx-pkt-bad-checksum-since-last-clear>
<mem-alloc-fail-since-last-clear>0</mem-alloc-fail-since-last-clear>
<rx-md5-auth-error-since-last-clear>0</rx-md5-auth-error-since-last-clear>
<path-state-timeout-since-last-clear>0</path-state-timeout-since-last-clear>
<resv-state-timeout-since-last-clear>0</resv-state-timeout-since-last-clear>
<pkt-with-msg-id-drop-since-last-clear>0</pkt-with-msg-id-drop-since-last-clear>
<pkt-with-sref-drop-since-last-clear>0</pkt-with-sref-drop-since-last-clear>
<path-errors>0</path-errors>
<resv-errors>0</resv-errors>
<patherr-errors>0</patherr-errors>
<resverr-errors>0</resverr-errors>
<pathtear-errors>0</pathtear-errors>
<resvtear-errors>0</resvtear-errors>
<resvconf-errors>0</resvconf-errors>
<bundle-errors>0</bundle-errors>
<ack-errors>0</ack-errors>
<sumrefresh-errors>0</sumrefresh-errors>
<hello-errors>0</hello-errors>
<nackobject-errors>0</nackobject-errors>
<path-errors-since-last-clear>0</path-errors-since-last-clear>
<resv-errors-since-last-clear>0</resv-errors-since-last-clear>
<patherr-errors-since-last-clear>0</patherr-errors-since-last-clear>
<resverr-errors-since-last-clear>0</resverr-errors-since-last-clear>
<pathtear-errors-since-last-clear>0</pathtear-errors-since-last-clear>
<resvtear-errors-since-last-clear>0</resvtear-errors-since-last-clear>
<resvconf-errors-since-last-clear>0</resvconf-errors-since-last-clear>
<bundle-errors-since-last-clear>0</bundle-errors-since-last-clear>
<ack-errors-since-last-clear>0</ack-errors-since-last-clear>
<sumrefresh-errors-since-last-clear>0</sumrefresh-errors-since-last-clear>
<hello-errors-since-last-clear>0</hello-errors-since-last-clear>
<nackobject-errors-since-last-clear>0</nackobject-errors-since-last-clear>
</packet-error-counters>
<packet-counters y:self="/rest/operational-state/mpls-state/rsvp/statistics/packet-counters">
  <path-tx>5932227</path-tx>
  <resv-tx>5486908</resv-tx>
  <patherr-tx>0</patherr-tx>
  <resverr-tx>0</resverr-tx>
  <pathtear-tx>3800</pathtear-tx>
  <resvtear-tx>0</resvtear-tx>
  <resvconf-tx>0</resvconf-tx>
  <bundle-tx>1856</bundle-tx>
  <ack-tx>6</ack-tx>
  <sumrefresh-tx>52063</sumrefresh-tx>
  <hello-tx>2743</hello-tx>
  <path-rx>5490062</path-rx>
  <resv-rx>5933506</resv-rx>
  <patherr-rx>0</patherr-rx>
  <resverr-rx>0</resverr-rx>
  <pathtear-rx>3</pathtear-rx>
  <resvtear-rx>0</resvtear-rx>
  <resvconf-rx>0</resvconf-rx>
  <bundle-rx>2390</bundle-rx>
  <ack-rx>0</ack-rx>
  <sumrefresh-rx>52128</sumrefresh-rx>
  <hello-rx>2742</hello-rx>
  <path-tx-since-last-clear>5932227</path-tx-since-last-clear>
  <resv-tx-since-last-clear>5486908</resv-tx-since-last-clear>
  <patherr-tx-since-last-clear>0</patherr-tx-since-last-clear>
  <resverr-tx-since-last-clear>0</resverr-tx-since-last-clear>

```

```

    <pathtear-tx-since-last-clear>3800</pathtear-tx-since-last-clear>
    <resvtgear-tx-since-last-clear>0</resvtgear-tx-since-last-clear>
    <resvconf-tx-since-last-clear>0</resvconf-tx-since-last-clear>
    <bundle-tx-since-last-clear>1856</bundle-tx-since-last-clear>
    <ack-tx-since-last-clear>6</ack-tx-since-last-clear>
    <sumrefresh-tx-since-last-clear>52063</sumrefresh-tx-since-last-clear>
    <hello-tx-since-last-clear>2743</hello-tx-since-last-clear>
    <path-rx-since-last-clear>5490062</path-rx-since-last-clear>
    <resv-rx-since-last-clear>5933506</resv-rx-since-last-clear>
    <patherr-rx-since-last-clear>0</patherr-rx-since-last-clear>
    <resvrr-rx-since-last-clear>0</resvrr-rx-since-last-clear>
    <pathtear-rx-since-last-clear>3</pathtear-rx-since-last-clear>
    <resvtgear-rx-since-last-clear>0</resvtgear-rx-since-last-clear>
    <resvconf-rx-since-last-clear>0</resvconf-rx-since-last-clear>
    <bundle-rx-since-last-clear>2390</bundle-rx-since-last-clear>
    <ack-rx-since-last-clear>0</ack-rx-since-last-clear>
    <sumrefresh-rx-since-last-clear>52128</sumrefresh-rx-since-last-clear>
    <hello-rx-since-last-clear>2742</hello-rx-since-last-clear>
  </packet-counters>
</statistics>
<igp-sync y:self="/rest/operational-state/mppls-state/rsvp/igp-sync">
  <isis-nbr-down-enabled>false</isis-nbr-down-enabled>
  <ospf-nbr-down-enabled>false</ospf-nbr-down-enabled>
</igp-sync>
<interfaces y:self="/rest/operational-state/mppls-state/rsvp/interfaces/1207959653">
  <interface-index>1207959653</interface-index>
  <interface-name>"Ve 101"</interface-name>
  <admin-status>true</admin-status>
  <oper-status>true</oper-status>
  <is-tunnel-interface>false</is-tunnel-interface>
  <hello-interval>30</hello-interval>
  <hello-tolerance>30</hello-tolerance>
  <hello-status>enabled-local</hello-status>
  <is-md5-auth-enabled>false</is-md5-auth-enabled>
  <reliable-messages>disabled</reliable-messages>
  <bundle-messages>enabled-local</bundle-messages>
  <summary-refresh>enabled-local</summary-refresh>
  <active-outsegs>2000</active-outsegs>
  <inactive-outsegs>0</inactive-outsegs>
  <bandwidth-resv-outsegs>0</bandwidth-resv-outsegs>
  <active-backup-outsegs>0</active-backup-outsegs>
  <inactive-backup-outsegs>0</inactive-backup-outsegs>
  <interface-preempts>0</interface-preempts>
  <interface-resv-soft-preempts>0</interface-resv-soft-preempts>
  <interface-flooding-up-threshold>default-config</interface-flooding-up-threshold>
  <interface-flooding-down-threshold>default-config</interface-flooding-down-threshold>
  <duplicate-preempts-dropped>0</duplicate-preempts-dropped>
  <bypass-interface>false</bypass-interface>
  <interface-tunnel-name>"</interface-tunnel-name>
  <bypass-tunnel-interface-name>"</bypass-tunnel-interface-name>
  <interface-te-up-thresholds>15 30 45 60 75 80 85 90 95 96 97 98 99 100</interface-te-
up-thresholds>
  <interface-te-down-thresholds>99 98 97 96 95 90 85 80 75 60 45 30 15</interface-te-
down-thresholds>
  <error-counters y:self="/rest/operational-state/mppls-state/rsvp/interfaces/1207959653/
error-counters">
    <recv-md5-auth-errors>0</recv-md5-auth-errors>
    <pkt-with-msgid-drop>0</pkt-with-msgid-drop>
    <pkt-with-sref-drop>0</pkt-with-sref-drop>
    <nackobject-errors>0</nackobject-errors>
    <recv-md5-auth-errors-since-last-clear>0</recv-md5-auth-errors-since-last-clear>
    <pkt-with-msgid-drop-since-last-clear>0</pkt-with-msgid-drop-since-last-clear>
    <pkt-with-sref-drop-since-last-clear>0</pkt-with-sref-drop-since-last-clear>
    <nackobject-errors-since-last-clear>0</nackobject-errors-since-last-clear>

```

```

</error-counters>
<packet-counters y:self="/rest/operational-state/mpls-state/rsvp/interfaces/
1207959653/packet-counters">
  <path-tx>3900</path-tx>
  <resv-tx>4003</resv-tx>
  <patherr-tx>0</patherr-tx>
  <resvrr-tx>0</resvrr-tx>
  <pathtear-tx>1900</pathtear-tx>
  <resvtear-tx>0</resvtear-tx>
  <resvconf-tx>0</resvconf-tx>
  <bundle-tx>1856</bundle-tx>
  <ack-tx>6</ack-tx>
  <sumrefresh-tx>52063</sumrefresh-tx>
  <hello-tx>2743</hello-tx>
  <path-rx>6396</path-rx>
  <resv-rx>3900</resv-rx>
  <patherr-rx>0</patherr-rx>
  <resvrr-rx>0</resvrr-rx>
  <pathtear-rx>0</pathtear-rx>
  <resvtear-rx>0</resvtear-rx>
  <resvconf-rx>0</resvconf-rx>
  <bundle-rx>2390</bundle-rx>
  <ack-rx>0</ack-rx>
  <sumrefresh-rx>52128</sumrefresh-rx>
  <hello-rx>2742</hello-rx>
  <path-tx-since-last-clear>3900</path-tx-since-last-clear>
  <resv-tx-since-last-clear>4003</resv-tx-since-last-clear>
  <patherr-tx-since-last-clear>0</patherr-tx-since-last-clear>
  <resvrr-tx-since-last-clear>0</resvrr-tx-since-last-clear>
  <pathtear-tx-since-last-clear>1900</pathtear-tx-since-last-clear>
  <resvtear-tx-since-last-clear>0</resvtear-tx-since-last-clear>
  <resvconf-tx-since-last-clear>0</resvconf-tx-since-last-clear>
  <bundle-tx-since-last-clear>1856</bundle-tx-since-last-clear>
  <ack-tx-since-last-clear>6</ack-tx-since-last-clear>
  <sumrefresh-tx-since-last-clear>52063</sumrefresh-tx-since-last-clear>
  <hello-tx-since-last-clear>2743</hello-tx-since-last-clear>
  <path-rx-since-last-clear>6396</path-rx-since-last-clear>
  <resv-rx-since-last-clear>3900</resv-rx-since-last-clear>
  <patherr-rx-since-last-clear>0</patherr-rx-since-last-clear>
  <resvrr-rx-since-last-clear>0</resvrr-rx-since-last-clear>
  <pathtear-rx-since-last-clear>0</pathtear-rx-since-last-clear>
  <resvtear-rx-since-last-clear>0</resvtear-rx-since-last-clear>
  <resvconf-rx-since-last-clear>0</resvconf-rx-since-last-clear>
  <bundle-rx-since-last-clear>2390</bundle-rx-since-last-clear>
  <ack-rx-since-last-clear>0</ack-rx-since-last-clear>
  <sumrefresh-rx-since-last-clear>52128</sumrefresh-rx-since-last-clear>
  <hello-rx-since-last-clear>2742</hello-rx-since-last-clear>
</packet-counters>
</interfaces>
<sessions y:self="/rest/operational-state/mpls-state/rsvp/sessions/
4.4.3.2%2C1.2.3.4%2C1%2Csession-role-ingress">
  <dest-ip-addr>4.4.3.2</dest-ip-addr>
  <src-ip-addr>1.2.3.4</src-ip-addr>
  <tunnel-id>1</tunnel-id>
  <session-role>session-role-ingress</session-role>
  <psbs y:self="/rest/operational-state/mpls-state/rsvp/sessions/
4.4.3.2%2C1.2.3.4%2C1%2Csession-role-ingress/psbs/1">
    <path-index>1</path-index>
    <session-name>tor4_1</session-name>
    <session-type>session-type-none</session-type>
    <path-operational-status>true</path-operational-status>
    <session-out-label>2048</session-out-label>
    <session-out-interface>&quot;Ve 101&quot;</session-out-interface>
    <lsp-id>1</lsp-id>
  </psbs>
</sessions>

```

```

<path-refresh>5</path-refresh>
<path-refresh-ttd>4212865</path-refresh-ttd>
<resv-refresh>8</resv-refresh>
<resv-refresh-ttd>133</resv-refresh-ttd>
<tspec-peak>0</tspec-peak>
<tspec-rate>0</tspec-rate>
<tspec-size>0</tspec-size>
<tspec-minimum>20</tspec-minimum>
<tspec-m>65535</tspec-m>
<psb-setup-priority>7</psb-setup-priority>
<psb-hold-priority>0</psb-hold-priority>
<session-attribute-all-flags>4</session-attribute-all-flags>
<sa-flag-label-recording>false</sa-flag-label-recording>
<sa-flag-soft-preemption-desired>false</sa-flag-soft-preemption-desired>
<sa-flag-se-style>true</sa-flag-se-style>
<sa-flag-local-protect>false</sa-flag-local-protect>
<sa-flag-bandwidth-protect>false</sa-flag-bandwidth-protect>
<is-downstream-backup-psb>false</is-downstream-backup-psb>
<is-backup-psb>false</is-backup-psb>
<is-upstream-psb>true</is-upstream-psb>
<path-downstream-only>false</path-downstream-only>
<path-sent-to-ip>16.16.16.2</path-sent-to-ip>
<path-sent-interface>&quot;Ve 101&quot;</path-sent-interface>
<path-sent-auth-on>false</path-sent-auth-on>
<path-sent-message-id>1</path-sent-message-id>
<resv-received-from-ip>16.16.16.2</resv-received-from-ip>
<resv-received-interface>&quot;Ve 101&quot;</resv-received-interface>
<resv-received-auth-on>false</resv-received-auth-on>
<resv-received-message-id>1</resv-received-message-id>
<session-style>reservation-style-shared-explicit</session-style>
<session-ero-hops y:self="/rest/operational-state/mpls-state/rsvp/sessions/
4.4.3.2%2C1.2.3.4%2C1%2Csession-role-ingress/
psbs/1/session-ero-hops/16.16.16.2">
  <ip-addr>16.16.16.2</ip-addr>
  <ero-flag-is-strict-hop>true</ero-flag-is-strict-hop>
</session-ero-hops>
<session-ero-hops y:self="/rest/operational-state/mpls-state/rsvp/sessions/
4.4.3.2%2C1.2.3.4%2C1%2Csession-role-ingress/
psbs/1/session-ero-hops/36.36.36.1">
  <ip-addr>36.36.36.1</ip-addr>
  <ero-flag-is-strict-hop>true</ero-flag-is-strict-hop>
</session-ero-hops>
<session-ero-hops y:self="/rest/operational-state/mpls-state/rsvp/sessions/
4.4.3.2%2C1.2.3.4%2C1%2Csession-role-ingress/
psbs/1/session-ero-hops/34.34.34.2">
  <ip-addr>34.34.34.2</ip-addr>
  <ero-flag-is-strict-hop>true</ero-flag-is-strict-hop>
</session-ero-hops>
<session-rro-hops y:self="/rest/operational-state/mpls-state/rsvp/sessions/
4.4.3.2%2C1.2.3.4%2C1%2Csession-role-ingress/
psbs/1/session-rro-hops/16.16.16.2">
  <ip-addr>16.16.16.2</ip-addr>
  <rro-flag-is-local-protect-available>false</rro-flag-is-local-protect-available>
  <rro-flag-is-local-protect-in-use>false</rro-flag-is-local-protect-in-use>
  <rro-flag-rro-is-router-id>false</rro-flag-rro-is-router-id>
  <rro-flag-rro-node-protect>false</rro-flag-rro-node-protect>
  <rro-flag-rro-bandwidth-protect>false</rro-flag-rro-bandwidth-protect>
</session-rro-hops>
<session-rro-hops y:self="/rest/operational-state/mpls-state/rsvp/sessions/
4.4.3.2%2C1.2.3.4%2C1%2Csession-role-ingress/
psbs/1/session-rro-hops/36.36.36.1">
  <ip-addr>36.36.36.1</ip-addr>
  <rro-flag-is-local-protect-available>false</rro-flag-is-local-protect-available>
  <rro-flag-is-local-protect-in-use>false</rro-flag-is-local-protect-in-use>

```

```

    <rro-flag-rro-is-router-id>>false</rro-flag-rro-is-router-id>
    <rro-flag-rro-node-protect>>false</rro-flag-rro-node-protect>
    <rro-flag-rro-bandwidth-protect>>false</rro-flag-rro-bandwidth-protect>
  </session-rro-hops>
  <session-rro-hops y:self="/rest/operational-state/mpls-state/rsvp/sessions/
4.4.3.2%2C1.2.3.4%2C1%2Csession-role-ingress/
psbs/1/session-rro-hops/34.34.34.2">
    <ip-addr>34.34.34.2</ip-addr>
    <rro-flag-is-local-protect-available>>false</rro-flag-is-local-protect-available>
    <rro-flag-is-local-protect-in-use>>false</rro-flag-is-local-protect-in-use>
    <rro-flag-rro-is-router-id>>false</rro-flag-rro-is-router-id>
    <rro-flag-rro-node-protect>>false</rro-flag-rro-node-protect>
    <rro-flag-rro-bandwidth-protect>>false</rro-flag-rro-bandwidth-protect>
  </session-rro-hops>
</psbs>
<neighbors y:self="/rest/operational-state/mpls-state/rsvp/neighbors/16.16.16.2">
  <neighbor-ip-addr>16.16.16.2</neighbor-ip-addr>
  <neighbor-interface>"Ve 101"</neighbor-interface>
  <neighbor-status>UP</neighbor-status>
  <neighbor-last-status-change>0:22:50:29</neighbor-last-status-change>
  <rsvp-hello-tx>2743</rsvp-hello-tx>
  <rsvp-hello-rx>2742</rsvp-hello-rx>
  <refresh-reduction-support>>true</refresh-reduction-support>
  <msg-id-support>>true</msg-id-support>
  <active-lsps>4000</active-lsps>
  <rsvp-hello-interval>30</rsvp-hello-interval>
  <rsvp-hello-tolerance>30</rsvp-hello-tolerance>
  <neighbor-remote-instance>391734</neighbor-remote-instance>
  <neighbor-local-instance>367490</neighbor-local-instance>
  <last-hello-rx>21</last-hello-rx>
  <next-hello-req-tx>8</next-hello-req-tx>
</neighbors>
<neighbors y:self="/rest/operational-state/mpls-state/rsvp/neighbors/51.51.51.1">
  <neighbor-ip-addr>51.51.51.1</neighbor-ip-addr>
  <neighbor-interface>"Ve 171"</neighbor-interface>
  <refresh-reduction-support>>false</refresh-reduction-support>
  <msg-id-support>>true</msg-id-support>
  <active-lsps>4000</active-lsps>
</neighbors>
</rsvp>

```

## mpls-state/rsvp/igp-sync

---

### Resource URIs

| URI   | Description   |
|---|---|
| <base_URI>/operational-state/mpls-state/rsvp/igp-sync | Displays the MPLS RSVP IGP synchronization information. |

### Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

### Examples

#### URI

http://host:80/rest/operational-state/mpls-state/rsvp/igp-sync

#### Request Body

None

#### Response Body

```
<igp-sync xmlns="urn:brocade.com:mgmt:brocade-mpls-operational" xmlns:y="http://  
brocade.com/ns/rest"  
y:self="/rest/operational-state/mpls-state/rsvp/igp-sync">  
  <isis-nbr-down-enabled>false</isis-nbr-down-enabled>  
  <ospf-nbr-down-enabled>false</ospf-nbr-down-enabled>  
</igp-sync>
```

## mpls-state/rsvp/interfaces

### Resource URIs

| URI  | Description                             |
|--|---|
| <base_URI>/operational-state/mpls-state/ldp/interfaces | Displays the LDP interface information. |

### Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

### Examples

#### URI

http://host:80/rest/operational-state/mpls-state/ldp/interfaces

#### Request Body

None

#### Response Body

```
<interfaces xmlns="urn:brocade.com:mgmt:brocade-mpls-operational" xmlns:y="http://
brocade.com/ns/rest"
y:self="/rest/operational-state/mpls-state/rsvp/interfaces/1207959653">
  <interface-index>1207959653</interface-index>
  <interface-name>"Ve 101"</interface-name>
  <admin-status>true</admin-status>
  <oper-status>true</oper-status>
  <is-tunnel-interface>false</is-tunnel-interface>
  <hello-interval>30</hello-interval>
  <hello-tolerance>30</hello-tolerance>
  <hello-status>enabled-local</hello-status>
  <is-md5-auth-enabled>false</is-md5-auth-enabled>
  <reliable-messages>disabled</reliable-messages>
  <bundle-messages>enabled-local</bundle-messages>
  <summary-refresh>enabled-local</summary-refresh>
  <active-outsegs>2000</active-outsegs>
  <inactive-outsegs>0</inactive-outsegs>
  <bandwidth-resv-outsegs>0</bandwidth-resv-outsegs>
  <active-backup-outsegs>0</active-backup-outsegs>
  <inactive-backup-outsegs>0</inactive-backup-outsegs>
  <interface-preempts>0</interface-preempts>
  <interface-resv-soft-preempts>0</interface-resv-soft-preempts>
  <interface-flooding-up-threshold>default-config</interface-flooding-up-threshold>
  <interface-flooding-down-threshold>default-config</interface-flooding-down-threshold>
  <duplicate-preempts-dropped>0</duplicate-preempts-dropped>
  <bypass-interface>false</bypass-interface>
  <interface-tunnel-name>"</interface-tunnel-name>
  <bypass-tunnel-interface-name>"</bypass-tunnel-interface-name>
```

```

    <interface-te-up-thresholds>15 30 45 60 75 80 85 90 95 96 97 98 99 100</interface-te-up-
thresholds>
    <interface-te-down-thresholds>99 98 97 96 95 90 85 80 75 60 45 30 15</interface-te-down-
thresholds>
    <error-counters y:self="/rest/operational-state/mppls-state/rsvp/interfaces/1207959653/
error-counters">
      <recv-md5-auth-errors>0</recv-md5-auth-errors>
      <pkt-with-msgid-drop>0</pkt-with-msgid-drop>
      <pkt-with-sref-drop>0</pkt-with-sref-drop>
      <nackobject-errors>0</nackobject-errors>
      <recv-md5-auth-errors-since-last-clear>0</recv-md5-auth-errors-since-last-clear>
      <pkt-with-msgid-drop-since-last-clear>0</pkt-with-msgid-drop-since-last-clear>
      <pkt-with-sref-drop-since-last-clear>0</pkt-with-sref-drop-since-last-clear>
      <nackobject-errors-since-last-clear>0</nackobject-errors-since-last-clear>
    </error-counters>
    <packet-counters y:self="/rest/operational-state/mppls-state/rsvp/interfaces/1207959653/
packet-counters">
      <path-tx>3900</path-tx>
      <resv-tx>4003</resv-tx>
      <patherr-tx>0</patherr-tx>
      <resverr-tx>0</resverr-tx>
      <pathtear-tx>1900</pathtear-tx>
      <resvtear-tx>0</resvtear-tx>
      <resvconf-tx>0</resvconf-tx>
      <bundle-tx>1857</bundle-tx>
      <ack-tx>6</ack-tx>
      <sumrefresh-tx>52117</sumrefresh-tx>
      <hello-tx>2746</hello-tx>
      <path-rx>6396</path-rx>
      <resv-rx>3900</resv-rx>
      <patherr-rx>0</patherr-rx>
      <resverr-rx>0</resverr-rx>
      <pathtear-rx>0</pathtear-rx>
      <resvtear-rx>0</resvtear-rx>
      <resvconf-rx>0</resvconf-rx>
      <bundle-rx>2390</bundle-rx>
      <ack-rx>0</ack-rx>
      <sumrefresh-rx>52177</sumrefresh-rx>
      <hello-rx>2745</hello-rx>
      <path-tx-since-last-clear>3900</path-tx-since-last-clear>
      <resv-tx-since-last-clear>4003</resv-tx-since-last-clear>
      <patherr-tx-since-last-clear>0</patherr-tx-since-last-clear>
      <resverr-tx-since-last-clear>0</resverr-tx-since-last-clear>
      <pathtear-tx-since-last-clear>1900</pathtear-tx-since-last-clear>
      <resvtear-tx-since-last-clear>0</resvtear-tx-since-last-clear>
      <resvconf-tx-since-last-clear>0</resvconf-tx-since-last-clear>
      <bundle-tx-since-last-clear>1857</bundle-tx-since-last-clear>
      <ack-tx-since-last-clear>6</ack-tx-since-last-clear>
      <sumrefresh-tx-since-last-clear>52117</sumrefresh-tx-since-last-clear>
      <hello-tx-since-last-clear>2746</hello-tx-since-last-clear>
      <path-rx-since-last-clear>6396</path-rx-since-last-clear>
      <resv-rx-since-last-clear>3900</resv-rx-since-last-clear>
      <patherr-rx-since-last-clear>0</patherr-rx-since-last-clear>
      <resverr-rx-since-last-clear>0</resverr-rx-since-last-clear>
      <pathtear-rx-since-last-clear>0</pathtear-rx-since-last-clear>
      <resvtear-rx-since-last-clear>0</resvtear-rx-since-last-clear>
      <resvconf-rx-since-last-clear>0</resvconf-rx-since-last-clear>
      <bundle-rx-since-last-clear>2390</bundle-rx-since-last-clear>
      <ack-rx-since-last-clear>0</ack-rx-since-last-clear>
      <sumrefresh-rx-since-last-clear>52177</sumrefresh-rx-since-last-clear>
      <hello-rx-since-last-clear>2745</hello-rx-since-last-clear>
    </packet-counters>
  </interfaces>

```



## mpls-state/rsvp/neighbors

### Resource URIs

| URI  | Description   |
|--|---|
| <base_URI>/operational-state/mpls-state/rsvp/neighbors | Displays the RSVP neighbor operational information. |

### Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

### Examples

#### URI

http://host:80/rest/operational-state/mpls-state/rsvp/neighbors

#### Request Body

None

#### Response Body

```
<neighbors xmlns="urn:brocade.com:mgmt:brocade-mpls-operational" xmlns:y="http://
brocade.com/ns/rest"
y:self="/rest/operational-state/mpls-state/rsvp/neighbors/16.16.16.2">
  <neighbor-ip-addr>16.16.16.2</neighbor-ip-addr>
  <neighbor-interface>&quot;Ve 101&quot;</neighbor-interface>
  <neighbor-status>UP</neighbor-status>
  <neighbor-last-status-change>0:22:52:10</neighbor-last-status-change>
  <rsvp-hello-tx>2747</rsvp-hello-tx>
  <rsvp-hello-rx>2746</rsvp-hello-rx>
  <refresh-reduction-support>true</refresh-reduction-support>
  <msg-id-support>true</msg-id-support>
  <active-lsps>4000</active-lsps>
  <rsvp-hello-interval>30</rsvp-hello-interval>
  <rsvp-hello-tolerance>30</rsvp-hello-tolerance>
  <neighbor-remote-instance>391734</neighbor-remote-instance>
  <neighbor-local-instance>367490</neighbor-local-instance>
  <last-hello-rx>2</last-hello-rx>
  <next-hello-req-tx>27</next-hello-req-tx>
</neighbors>
<neighbors xmlns="urn:brocade.com:mgmt:brocade-mpls-operational" xmlns:y="http://
brocade.com/ns/rest" y:self="/rest/operational-state/mpls-state/rsvp/neighbors/
51.51.51.1">
  <neighbor-ip-addr>51.51.51.1</neighbor-ip-addr>
  <neighbor-interface>&quot;Ve 171&quot;</neighbor-interface>
  <refresh-reduction-support>false</refresh-reduction-support>
  <msg-id-support>true</msg-id-support>
```

```
<active-lsps>4000</active-lsps>  
</neighbors>
```

## mpls-state/rsvp/statistics

### Resource URIs

| URI   | Description                           |
|---|---------------------------------------|
| <base_URI>/operational-state/mpls-state/rsvp/statistics | Displays MPLS RSVP global statistics. |

### Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

### Examples

#### URI

http://host:80/rest/operational-state/mpls-state/rsvp/statistics

#### Request Body

None

#### Response Body

```
<statistics xmlns="urn:brocade.com:mgmt:brocade-mpls-operational" xmlns:y="http://
brocade.com/ns/rest"
y:self="/rest/operational-state/mpls-state/rsvp/statistics">
  <packet-error-counters y:self="/rest/operational-state/mpls-state/rsvp/statistics/
packet-error-counters">
    <rx-pkt-bad-length>0</rx-pkt-bad-length>
    <rx-pkt-unknown-type>0</rx-pkt-unknown-type>
    <rx-pkt-bad-version>0</rx-pkt-bad-version>
    <rx-pkt-bad-checksum>0</rx-pkt-bad-checksum>
    <mem-alloc-fail>0</mem-alloc-fail>
    <rx-md5-auth-error>0</rx-md5-auth-error>
    <path-state-timeout>0</path-state-timeout>
    <resv-state-timeout>0</resv-state-timeout>
    <pkt-with-msg-id-drop>0</pkt-with-msg-id-drop>
    <pkt-with-sref-drop>0</pkt-with-sref-drop>
    <rx-pkt-bad-length-since-last-clear>0</rx-pkt-bad-length-since-last-clear>
    <rx-pkt-unknown-type-since-last-clear>0</rx-pkt-unknown-type-since-last-clear>
    <rx-pkt-bad-version-since-last-clear>0</rx-pkt-bad-version-since-last-clear>
    <rx-pkt-bad-checksum-since-last-clear>0</rx-pkt-bad-checksum-since-last-clear>
    <mem-alloc-fail-since-last-clear>0</mem-alloc-fail-since-last-clear>
    <rx-md5-auth-error-since-last-clear>0</rx-md5-auth-error-since-last-clear>
    <path-state-timeout-since-last-clear>0</path-state-timeout-since-last-clear>
    <resv-state-timeout-since-last-clear>0</resv-state-timeout-since-last-clear>
    <pkt-with-msg-id-drop-since-last-clear>0</pkt-with-msg-id-drop-since-last-clear>
    <pkt-with-sref-drop-since-last-clear>0</pkt-with-sref-drop-since-last-clear>
    <path-errors>0</path-errors>
    <resv-errors>0</resv-errors>
    <patherr-errors>0</patherr-errors>
```

```

<resvterr-errors>0</resvterr-errors>
<pathtear-errors>0</pathtear-errors>
<resvttear-errors>0</resvttear-errors>
<resvconf-errors>0</resvconf-errors>
<bundle-errors>0</bundle-errors>
<ack-errors>0</ack-errors>
<sumrefresh-errors>0</sumrefresh-errors>
<hello-errors>0</hello-errors>
<nackobject-errors>0</nackobject-errors>
<path-errors-since-last-clear>0</path-errors-since-last-clear>
<resv-errors-since-last-clear>0</resv-errors-since-last-clear>
<patherr-errors-since-last-clear>0</patherr-errors-since-last-clear>
<resvterr-errors-since-last-clear>0</resvterr-errors-since-last-clear>
<pathtear-errors-since-last-clear>0</pathtear-errors-since-last-clear>
<resvttear-errors-since-last-clear>0</resvttear-errors-since-last-clear>
<resvconf-errors-since-last-clear>0</resvconf-errors-since-last-clear>
<bundle-errors-since-last-clear>0</bundle-errors-since-last-clear>
<ack-errors-since-last-clear>0</ack-errors-since-last-clear>
<sumrefresh-errors-since-last-clear>0</sumrefresh-errors-since-last-clear>
<hello-errors-since-last-clear>0</hello-errors-since-last-clear>
<nackobject-errors-since-last-clear>0</nackobject-errors-since-last-clear>
</packet-error-counters>
<packet-counters y:self="/rest/operational-state/mpls-state/rsvp/statistics/packet-
counters">
  <path-tx>5940294</path-tx>
  <resv-tx>5494960</resv-tx>
  <patherr-tx>0</patherr-tx>
  <resvterr-tx>0</resvterr-tx>
  <pathtear-tx>3800</pathtear-tx>
  <resvttear-tx>0</resvttear-tx>
  <resvconf-tx>0</resvconf-tx>
  <bundle-tx>1857</bundle-tx>
  <ack-tx>6</ack-tx>
  <sumrefresh-tx>52140</sumrefresh-tx>
  <hello-tx>2747</hello-tx>
  <path-rx>5498060</path-rx>
  <resv-rx>5941541</resv-rx>
  <patherr-rx>0</patherr-rx>
  <resvterr-rx>0</resvterr-rx>
  <pathtear-rx>3</pathtear-rx>
  <resvttear-rx>0</resvttear-rx>
  <resvconf-rx>0</resvconf-rx>
  <bundle-rx>2390</bundle-rx>
  <ack-rx>0</ack-rx>
  <sumrefresh-rx>52204</sumrefresh-rx>
  <hello-rx>2746</hello-rx>
  <path-tx-since-last-clear>5940294</path-tx-since-last-clear>
  <resv-tx-since-last-clear>5494960</resv-tx-since-last-clear>
  <patherr-tx-since-last-clear>0</patherr-tx-since-last-clear>
  <resvterr-tx-since-last-clear>0</resvterr-tx-since-last-clear>
  <pathtear-tx-since-last-clear>3800</pathtear-tx-since-last-clear>
  <resvttear-tx-since-last-clear>0</resvttear-tx-since-last-clear>
  <resvconf-tx-since-last-clear>0</resvconf-tx-since-last-clear>
  <bundle-tx-since-last-clear>1857</bundle-tx-since-last-clear>
  <ack-tx-since-last-clear>6</ack-tx-since-last-clear>
  <sumrefresh-tx-since-last-clear>52140</sumrefresh-tx-since-last-clear>
  <hello-tx-since-last-clear>2747</hello-tx-since-last-clear>
  <path-rx-since-last-clear>5498060</path-rx-since-last-clear>
  <resv-rx-since-last-clear>5941541</resv-rx-since-last-clear>
  <patherr-rx-since-last-clear>0</patherr-rx-since-last-clear>
  <resvterr-rx-since-last-clear>0</resvterr-rx-since-last-clear>
  <pathtear-rx-since-last-clear>3</pathtear-rx-since-last-clear>
  <resvttear-rx-since-last-clear>0</resvttear-rx-since-last-clear>
  <resvconf-rx-since-last-clear>0</resvconf-rx-since-last-clear>

```

```
<bundle-rx-since-last-clear>2390</bundle-rx-since-last-clear>  
<ack-rx-since-last-clear>0</ack-rx-since-last-clear>  
<sumrefresh-rx-since-last-clear>52204</sumrefresh-rx-since-last-clear>  
<hello-rx-since-last-clear>2746</hello-rx-since-last-clear>  
</packet-counters>  
</statistics>
```

## mpls-state/rsvp/statistics/packet-counters

---

### Resource URIs

| URI   | Description                    |
|---|--------------------------------|
| <base_URI>/operational-state/mpls-state/rsvp/statistics/packet-counters | Displays RSVP packet counters. |

### Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

### Examples

#### URI

http://host:80/rest/operational-state/mpls-state/rsvp/statistics/packet-counters

#### Request Body

None

#### Response Body

```
<packet-counters xmlns="urn:brocade.com:mgmt:brocade-mpls-operational" xmlns:y="http://
brocade.com/ns/rest"
y:self="/rest/operational-state/mpls-state/rsvp/statistics/packet-counters">
  <path-tx>5941629</path-tx>
  <resv-tx>5496282</resv-tx>
  <patherr-tx>0</patherr-tx>
  <resverr-tx>0</resverr-tx>
  <pathtear-tx>3800</pathtear-tx>
  <resvtear-tx>0</resvtear-tx>
  <resvconf-tx>0</resvconf-tx>
  <bundle-tx>1857</bundle-tx>
  <ack-tx>6</ack-tx>
  <sumrefresh-tx>52156</sumrefresh-tx>
  <hello-tx>2748</hello-tx>
  <path-rx>5499432</path-rx>
  <resv-rx>5942885</resv-rx>
  <patherr-rx>0</patherr-rx>
  <resverr-rx>0</resverr-rx>
  <pathtear-rx>3</pathtear-rx>
  <resvtear-rx>0</resvtear-rx>
  <resvconf-rx>0</resvconf-rx>
  <bundle-rx>2390</bundle-rx>
  <ack-rx>0</ack-rx>
  <sumrefresh-rx>52216</sumrefresh-rx>
  <hello-rx>2747</hello-rx>
  <path-tx-since-last-clear>5941629</path-tx-since-last-clear>
  <resv-tx-since-last-clear>5496282</resv-tx-since-last-clear>
  <patherr-tx-since-last-clear>0</patherr-tx-since-last-clear>
```

```
<resverr-tx-since-last-clear>0</resverr-tx-since-last-clear>
<path-tear-tx-since-last-clear>3800</path-tear-tx-since-last-clear>
<resv-tear-tx-since-last-clear>0</resv-tear-tx-since-last-clear>
<resv-conf-tx-since-last-clear>0</resv-conf-tx-since-last-clear>
<bundle-tx-since-last-clear>1857</bundle-tx-since-last-clear>
<ack-tx-since-last-clear>6</ack-tx-since-last-clear>
<sum-refresh-tx-since-last-clear>52156</sum-refresh-tx-since-last-clear>
<hello-tx-since-last-clear>2748</hello-tx-since-last-clear>
<path-rx-since-last-clear>5499432</path-rx-since-last-clear>
<resv-rx-since-last-clear>5942885</resv-rx-since-last-clear>
<path-err-rx-since-last-clear>0</path-err-rx-since-last-clear>
<resv-err-rx-since-last-clear>0</resv-err-rx-since-last-clear>
<path-tear-rx-since-last-clear>3</path-tear-rx-since-last-clear>
<resv-tear-rx-since-last-clear>0</resv-tear-rx-since-last-clear>
<resv-conf-rx-since-last-clear>0</resv-conf-rx-since-last-clear>
<bundle-rx-since-last-clear>2390</bundle-rx-since-last-clear>
<ack-rx-since-last-clear>0</ack-rx-since-last-clear>
<sum-refresh-rx-since-last-clear>52216</sum-refresh-rx-since-last-clear>
<hello-rx-since-last-clear>2747</hello-rx-since-last-clear>
</packet-counters>
```

## mpls-state/rsvp/statistics/packet-error-counters

### Resource URIs

| URI   | Description                              |
|---|--|
| <base_URI>/operational-state/mpls-state/rsvp/statistics/packet-error-counters | Displays the RSVP error packet counters. |

### Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

### Examples

#### URI

http://host:80/rest/operational-state/mpls-state/rsvp/statistics/packet-error-counters

#### Request Body

None

#### Response Body

```
<packet-error-counters xmlns="urn:brocade.com:mgmt:brocade-mpls-operational"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/operational-state/mpls-state/rsvp/statistics/packet-error-counters">
  <rx-pkt-bad-length>0</rx-pkt-bad-length>
  <rx-pkt-unknown-type>0</rx-pkt-unknown-type>
  <rx-pkt-bad-version>0</rx-pkt-bad-version>
  <rx-pkt-bad-checksum>0</rx-pkt-bad-checksum>
  <mem-alloc-fail>0</mem-alloc-fail>
  <rx-md5-auth-error>0</rx-md5-auth-error>
  <path-state-timeout>0</path-state-timeout>
  <resv-state-timeout>0</resv-state-timeout>
  <pkt-with-msg-id-drop>0</pkt-with-msg-id-drop>
  <pkt-with-sref-drop>0</pkt-with-sref-drop>
  <rx-pkt-bad-length-since-last-clear>0</rx-pkt-bad-length-since-last-clear>
  <rx-pkt-unknown-type-since-last-clear>0</rx-pkt-unknown-type-since-last-clear>
  <rx-pkt-bad-version-since-last-clear>0</rx-pkt-bad-version-since-last-clear>
  <rx-pkt-bad-checksum-since-last-clear>0</rx-pkt-bad-checksum-since-last-clear>
  <mem-alloc-fail-since-last-clear>0</mem-alloc-fail-since-last-clear>
  <rx-md5-auth-error-since-last-clear>0</rx-md5-auth-error-since-last-clear>
  <path-state-timeout-since-last-clear>0</path-state-timeout-since-last-clear>
  <resv-state-timeout-since-last-clear>0</resv-state-timeout-since-last-clear>
  <pkt-with-msg-id-drop-since-last-clear>0</pkt-with-msg-id-drop-since-last-clear>
  <pkt-with-sref-drop-since-last-clear>0</pkt-with-sref-drop-since-last-clear>
  <path-errors>0</path-errors>
  <resv-errors>0</resv-errors>
  <patherr-errors>0</patherr-errors>
  <resverr-errors>0</resverr-errors>
  <pathtear-errors>0</pathtear-errors>
```



```
<resvtear-errors>0</resvtear-errors>
<resvconf-errors>0</resvconf-errors>
<bundle-errors>0</bundle-errors>
<ack-errors>0</ack-errors>
<sumrefresh-errors>0</sumrefresh-errors>
<hello-errors>0</hello-errors>
<nackobject-errors>0</nackobject-errors>
<path-errors-since-last-clear>0</path-errors-since-last-clear>
<resv-errors-since-last-clear>0</resv-errors-since-last-clear>
<patherr-errors-since-last-clear>0</patherr-errors-since-last-clear>
<resverr-errors-since-last-clear>0</resverr-errors-since-last-clear>
<pathtear-errors-since-last-clear>0</pathtear-errors-since-last-clear>
<resvtear-errors-since-last-clear>0</resvtear-errors-since-last-clear>
<resvconf-errors-since-last-clear>0</resvconf-errors-since-last-clear>
<bundle-errors-since-last-clear>0</bundle-errors-since-last-clear>
<ack-errors-since-last-clear>0</ack-errors-since-last-clear>
<sumrefresh-errors-since-last-clear>0</sumrefresh-errors-since-last-clear>
<hello-errors-since-last-clear>0</hello-errors-since-last-clear>
<nackobject-errors-since-last-clear>0</nackobject-errors-since-last-clear>
</packet-error-counters>
```

## mpls-state/statistics-oam

### Resource URIs

| URI  | Description                         |
|--|-------------------------------------|
| <base_URI>/operational-state/mpls-state/statistics-oam | Displays the OAM packet statistics. |

### Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

### Examples

#### URI

http://host:80/rest/operational-state/mpls-state/statistics-oam

#### Request Body

None

#### Response Body

```
<statistics-oam xmlns="urn:brocade.com:mgmt:brocade-mpls-operational" xmlns:y="http://
brocade.com/ns/rest"
y:self="/rest/operational-state/mpls-state/statistics-oam">
  <usr-ping-count>1</usr-ping-count>
  <usr-traceroute-count>1</usr-traceroute-count>
  <echo-req-sent-count>8</echo-req-sent-count>
  <echo-req-received-count>0</echo-req-received-count>
  <echo-req-timeout-count>0</echo-req-timeout-count>
  <echo-resp-sent-count>0</echo-resp-sent-count>
  <echo-resp-received-count>8</echo-resp-received-count>
  <return-codes y:self="/rest/operational-state/mpls-state/statistics-oam/return-codes/3">
    <number>3</number>
    <name>Egress</name>
    <tx-count>0</tx-count>
    <rx-count>6</rx-count>
  </return-codes>
  <return-codes y:self="/rest/operational-state/mpls-state/statistics-oam/return-codes/8">
    <number>8</number>
    <name>Transit</name>
    <tx-count>0</tx-count>
    <rx-count>2</rx-count>
  </return-codes>
  <return-codes y:self="/rest/operational-state/mpls-state/statistics-oam/return-codes/0">
    <number>0</number>
    <name>"No return code"</name>
    <tx-count>0</tx-count>
    <rx-count>0</rx-count>
  </return-codes>
```

```

<return-codes y:self="/rest/operational-state/mpls-state/statistics-oam/return-codes/1">
  <number>1</number>
  <name>&quot;Malformed request&quot;</name>
  <tx-count>0</tx-count>
  <rx-count>0</rx-count>
</return-codes>
<return-codes y:self="/rest/operational-state/mpls-state/statistics-oam/return-codes/2">
  <number>2</number>
  <name>&quot;Unsupported TLV&quot;</name>
  <tx-count>0</tx-count>
  <rx-count>0</rx-count>
</return-codes>
<return-codes y:self="/rest/operational-state/mpls-state/statistics-oam/return-codes/4">
  <number>4</number>
  <name>&quot;No FEC mapping&quot;</name>
  <tx-count>0</tx-count>
  <rx-count>0</rx-count>
</return-codes>
<return-codes y:self="/rest/operational-state/mpls-state/statistics-oam/return-codes/5">
  <number>5</number>
  <name>&quot;DS map mismatch&quot;</name>
  <tx-count>0</tx-count>
  <rx-count>0</rx-count>
</return-codes>
<return-codes y:self="/rest/operational-state/mpls-state/statistics-oam/return-codes/6">
  <number>6</number>
  <name>&quot;Unknown upstream intf&quot;</name>
  <tx-count>0</tx-count>
  <rx-count>0</rx-count>
</return-codes>
<return-codes y:self="/rest/operational-state/mpls-state/statistics-oam/return-codes/7">
  <number>7</number>
  <name>&quot;Reserved return code&quot;</name>
  <tx-count>0</tx-count>
  <rx-count>0</rx-count>
</return-codes>
<return-codes y:self="/rest/operational-state/mpls-state/statistics-oam/return-codes/9">
  <number>9</number>
  <name>&quot;Unlabeled output intf&quot;</name>
  <tx-count>0</tx-count>
  <rx-count>0</rx-count>
</return-codes>
<return-codes y:self="/rest/operational-state/mpls-state/statistics-oam/return-codes/
10">
  <number>10</number>
  <name>&quot;FEC mapping mismatch&quot;</name>
  <tx-count>0</tx-count>
  <rx-count>0</rx-count>
</return-codes>
<return-codes y:self="/rest/operational-state/mpls-state/statistics-oam/return-codes/
11">
  <number>11</number>
  <name>&quot;No label entry&quot;</name>
  <tx-count>0</tx-count>
  <rx-count>0</rx-count>
</return-codes>
<return-codes y:self="/rest/operational-state/mpls-state/statistics-oam/return-codes/
12">
  <number>12</number>
  <name>&quot;Rx intf protocol mismatch&quot;</name>
  <tx-count>0</tx-count>
  <rx-count>0</rx-count>
</return-codes>
<return-codes y:self="/rest/operational-state/mpls-state/statistics-oam/return-codes/

```

```
13">  
  <number>13</number>  
  <name>&quot;Premature LSP termination&quot;</name>  
  <tx-count>0</tx-count>  
  <rx-count>0</rx-count>  
</return-codes>  
</statistics-oam>
```

## mpls-state/summary

### Resource URIs

| URI  | Description  |
|--|--|
| <base_URI>/operational-state/mpls-state/summary                              | Displays the MPLS summary.                                 |
| <base_URI>/operational-state/mpls-state/summary/auto-bw-templates-supported  | Displays the number of supported autobandwidth templates.  |
| <base_URI>/operational-state/mpls-state/summary/auto-bw-templates-configured | Displays the number of configured autobandwidth templates. |

### Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

### Examples

#### URI

http://host:80/rest/operational-state/mpls-state/summary

#### Request Body

None

#### Response Body

```
<summary xmlns="urn:brocade.com:mgmt:brocade-mpls-operational" xmlns:y="http://
brocade.com/ns/rest"
y:self="/rest/operational-state/mpls-state/summary">
  <paths-configured>4</paths-configured>
  <lsp-configured>2000</lsp-configured>
  <lsp-enabled>2000</lsp-enabled>
  <lsp-operational>2000</lsp-operational>
  <detour-lsp-up>0</detour-lsp-up>
  <backup-lsp-up>0</backup-lsp-up>
  <bypass-lsp>0</bypass-lsp>
  <bypass-lsp-up>0</bypass-lsp-up>
  <bypass-lsp-enabled>0</bypass-lsp-enabled>
  <ldp-lsp-operational>1003</ldp-lsp-operational>
  <transit-lsp-configured>0</transit-lsp-configured>
  <transit-lsp-enabled>0</transit-lsp-enabled>
  <transit-lsp-operational>0</transit-lsp-operational>
  <cspf-groups-configured>0</cspf-groups-configured>
  <tunnels-supported>5000</tunnels-supported>
  <tunnels-allocated>3003</tunnels-allocated>
  <cross-connects-supported>10000</cross-connects-supported>
  <cross-connects-allocated>7003</cross-connects-allocated>
  <auto-bw-templates-supported>100</auto-bw-templates-supported>
```

```
<auto-bw-templates-configured>0</auto-bw-templates-configured>  
<times-enabled>1</times-enabled>  
</summary>
```

## mpls-state/te

---

### Resource URIs

| URI  | Description  |
|--|--|
| <base_URI>/operational-state/mpls-state/te               | Displays MPLS traffic engineering operational information. |
| <base_URI>/operational-state/mpls-state/te/database      | Displays MPLS TE database operational information.         |
| <base_URI>/operational-state/mpls-state/te/database/area | Displays MPLS TE database area operational information.    |

### Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

### Examples

#### URI

http://host:80/rest/operational-state/mpls-state/te

#### Request Body

None

#### Response Body

```
<te xmlns="urn:brocade.com:mgmt:brocade-mpls-operational" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/operational-state/mpls-state/te">
  <ospf-te-enabled>true</ospf-te-enabled>
  <isis-te-enabled>false</isis-te-enabled>
  <ospf-area-id>0.0.0.0</ospf-area-id>
  <isis-level-id>0</isis-level-id>
  <database y:self="/rest/operational-state/mpls-state/te/database">
    <router-id>1.2.3.4</router-id>
    <area y:self="/rest/operational-state/mpls-state/te/database/area/0.0.0.0%2C0">
      <area-id>0.0.0.0</area-id>
      <level-id>0</level-id>
      <igp-isis>false</igp-isis>
      <igp-ospf>true</igp-ospf>
      <host-name>&quot;&quot;</host-name>
      <router-id>1.2.3.4</router-id>
      <total-network-nodes>0</total-network-nodes>
      <total-router-nodes>0</total-router-nodes>
      <total-p2p-links>0</total-p2p-links>
      <total-p2mp-links>0</total-p2mp-links>
      <node y:self="/rest/operational-state/mpls-state/te/database/area/0.0.0.0%2C0/node/%22%22%2C4.4.3.2">
```

```

<local-node-id>&quot;&quot;</local-node-id>
<local-router-id>4.4.3.2</local-router-id>
<igp-isis>>false</igp-isis>
<igp-ospf>>true</igp-ospf>
<area-id>0.0.0.0</area-id>
<level-id>0</level-id>
<router>>true</router>
<network>>false</network>
<host-name>&quot;&quot;</host-name>
<gen-code>0</gen-code>
<lsa-id>0</lsa-id>
<total-p2p-links>0</total-p2p-links>
<total-p2mp-links>0</total-p2mp-links>
<overloaded>0</overloaded>
<link y:self="/rest/operational-state/mppls-state/te/database/area/0.0.0.0%2C0/
node/%22%22%2C4.4.3.2/
link/%22%22%2C%22%22%2C4.4.3.2%2C3.3.3%2C34.34.34.2%2C34.34.34.1">
  <local-node-id>&quot;&quot;</local-node-id>
  <remote-node-id>&quot;&quot;</remote-node-id>
  <local-router-id>4.4.3.2</local-router-id>
  <remote-router-id>3.3.3.3</remote-router-id>
  <local-ip>34.34.34.2</local-ip>
  <remote-ip>34.34.34.1</remote-ip>
  <igp-isis>>false</igp-isis>
  <igp-ospf>>true</igp-ospf>
  <area-id>0.0.0.0</area-id>
  <level-id>0</level-id>
  <local-host-name>&quot;&quot;</local-host-name>
  <remote-host-name>&quot;&quot;</remote-host-name>
  <router>>true</router>
  <network>>false</network>
  <p2p>>true</p2p>
  <p2mp>>false</p2mp>
  <gen-code>1376</gen-code>
  <lsa-id>16777226</lsa-id>
  <pending-delete>0</pending-delete>
  <igp-metric>1</igp-metric>
  <te-metric>1</te-metric>
  <admin-group>0</admin-group>
  <max-bandwidth>49999998</max-bandwidth>
  <max-reservable-bandwidth>49999998</max-reservable-bandwidth>
  <unreserved-priority-0-bandwidth>49999998</unreserved-priority-0-bandwidth>
  <unreserved-priority-1-bandwidth>49999998</unreserved-priority-1-bandwidth>
  <unreserved-priority-2-bandwidth>49999998</unreserved-priority-2-bandwidth>
  <unreserved-priority-3-bandwidth>49999998</unreserved-priority-3-bandwidth>
  <unreserved-priority-4-bandwidth>49999998</unreserved-priority-4-bandwidth>
  <unreserved-priority-5-bandwidth>49999998</unreserved-priority-5-bandwidth>
  <unreserved-priority-6-bandwidth>49999998</unreserved-priority-6-bandwidth>
  <unreserved-priority-7-bandwidth>49999998</unreserved-priority-7-bandwidth>
</link>
</node>
<node y:self="/rest/operational-state/mppls-state/te/database/area/0.0.0.0%2C0/node/
%22%22%2C6.6.6.6">
  <local-node-id>&quot;&quot;</local-node-id>
  <local-router-id>6.6.6.6</local-router-id>
  <igp-isis>>false</igp-isis>
  <igp-ospf>>true</igp-ospf>
  <area-id>0.0.0.0</area-id>
  <level-id>0</level-id>
  <router>>true</router>
  <network>>false</network>
  <host-name>&quot;&quot;</host-name>
  <gen-code>0</gen-code>
  <lsa-id>0</lsa-id>

```



```

<total-p2p-links>0</total-p2p-links>
<total-p2mp-links>0</total-p2mp-links>
<overloaded>0</overloaded>
<link y:self="/rest/operational-state/mpls-state/te/database/area/0.0.0.0%2C0/
node/%22%22%2C6.6.6.6/
link/%22%22%2C%22%22%2C6.6.6.6%2C3.3.3.3%2C36.36.36.2%2C36.36.36.1">
  <local-node-id>&quot;&quot;</local-node-id>
  <remote-node-id>&quot;&quot;</remote-node-id>
  <local-router-id>6.6.6.6</local-router-id>
  <remote-router-id>3.3.3.3</remote-router-id>
  <local-ip>36.36.36.2</local-ip>
  <remote-ip>36.36.36.1</remote-ip>
  <igp-isis>>false</igp-isis>
  <igp-ospf>>true</igp-ospf>
  <area-id>0.0.0.0</area-id>
  <level-id>0</level-id>
  <local-host-name>&quot;&quot;</local-host-name>
  <remote-host-name>&quot;&quot;</remote-host-name>
  <router>>true</router>
  <network>>false</network>
  <p2p>>true</p2p>
  <p2mp>>false</p2mp>
  <gen-code>1382</gen-code>
  <lsa-id>16777218</lsa-id>
  <pending-delete>0</pending-delete>
  <igp-metric>1</igp-metric>
  <te-metric>1</te-metric>
  <admin-group>0</admin-group>
  <max-bandwidth>39999998</max-bandwidth>
  <max-reservable-bandwidth>39999998</max-reservable-bandwidth>
  <unreserved-priority-0-bandwidth>39999998</unreserved-priority-0-bandwidth>
  <unreserved-priority-1-bandwidth>39999998</unreserved-priority-1-bandwidth>
  <unreserved-priority-2-bandwidth>39999998</unreserved-priority-2-bandwidth>
  <unreserved-priority-3-bandwidth>39999998</unreserved-priority-3-bandwidth>
  <unreserved-priority-4-bandwidth>39999998</unreserved-priority-4-bandwidth>
  <unreserved-priority-5-bandwidth>39999998</unreserved-priority-5-bandwidth>
  <unreserved-priority-6-bandwidth>39999998</unreserved-priority-6-bandwidth>
  <unreserved-priority-7-bandwidth>39999998</unreserved-priority-7-bandwidth>
</link>
<link y:self="/rest/operational-state/mpls-state/te/database/area/0.0.0.0%2C0/
node/%22%22%2C6.6.6.6/
link/%22%22%2C%22%22%2C6.6.6.6%2C1.2.3.4%2C16.16.16.2%2C16.16.16.1">
  <local-node-id>&quot;&quot;</local-node-id>
  <remote-node-id>&quot;&quot;</remote-node-id>
  <local-router-id>6.6.6.6</local-router-id>
  <remote-router-id>1.2.3.4</remote-router-id>
  <local-ip>16.16.16.2</local-ip>
  <remote-ip>16.16.16.1</remote-ip>
  <igp-isis>>false</igp-isis>
  <igp-ospf>>true</igp-ospf>
  <area-id>0.0.0.0</area-id>
  <level-id>0</level-id>
  <local-host-name>&quot;&quot;</local-host-name>
  <remote-host-name>&quot;&quot;</remote-host-name>
  <router>>true</router>
  <network>>false</network>
  <p2p>>true</p2p>
  <p2mp>>false</p2mp>
  <gen-code>1391</gen-code>
  <lsa-id>16777219</lsa-id>
  <pending-delete>0</pending-delete>
  <igp-metric>1</igp-metric>
  <te-metric>1</te-metric>
  <admin-group>0</admin-group>

```

```
<max-bandwidth>299999869</max-bandwidth>
<max-reservable-bandwidth>3000</max-reservable-bandwidth>
<unreserved-priority-0-bandwidth>3000</unreserved-priority-0-bandwidth>
<unreserved-priority-1-bandwidth>3000</unreserved-priority-1-bandwidth>
<unreserved-priority-2-bandwidth>3000</unreserved-priority-2-bandwidth>
<unreserved-priority-3-bandwidth>3000</unreserved-priority-3-bandwidth>
<unreserved-priority-4-bandwidth>3000</unreserved-priority-4-bandwidth>
<unreserved-priority-5-bandwidth>3000</unreserved-priority-5-bandwidth>
<unreserved-priority-6-bandwidth>3000</unreserved-priority-6-bandwidth>
<unreserved-priority-7-bandwidth>3000</unreserved-priority-7-bandwidth>
</link>
</node>
</area>
</database>
</te>
```

## mpls-state/te/router-id-map

---

### Resource URIs

| URI  | Description   |
|--|---|
| <base_URI>/operational-state/mpls-state/te/router-id-map | Displays the MPLS TE database SRLG or CSPF group operational information. |

### Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

### Examples

#### URI

http://host:80/rest/operational-state/mpls-state/te/router-id-map

#### Request Body

None

#### Response Body

```
<router-id-map xmlns="urn:brocade.com:mgmt:brocade-mpls-operational" xmlns:y="http://
brocade.com/ns/rest"
y:self="/rest/operational-state/mpls-state/te/router-id-map/1.2.3.4">
  <ip-address>1.2.3.4</ip-address>
  <router-id>1.2.3.4</router-id>
  <resolved>true</resolved>
  <igp-isis>false</igp-isis>
  <igp-ospf>true</igp-ospf>
  <isis-level>0</isis-level>
  <ospf-area>0.0.0.0</ospf-area>
  <origin-ted>true</origin-ted>
  <origin-path>0</origin-path>
  <origin-lsp>21052</origin-lsp>
  <origin-other>false</origin-other>
</router-id-map>
```

## overlay-transit-state

---

### 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. Use of the Resource-Depth request header is recommended.

### 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`

## packet-encap-processing-state

---

### Resource URIs

| URI  | Description   |
|--|---|
| <base_URI>/operational-state/packet-encap-processing-state | Displays packet encapsulation processing information. |

### Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

### Examples

The following example shows the complete cURL command and server response for the packet-encap-processing-state GET operation.

### URI

http://host:80/rest/operational-state/packet-encap-processing-state

### Request Body

```
curl -H "Accept: application/vnd.operational-state.resource+xml" -H "Resource-Depth: 6"
-u "lab:Tester**" http://10.20.229.40:80/rest/operational-state/packet-encap-processing-state
```

### Response Body

```
<data xmlns="http://brocade.com/ns/rest" xmlns:y="http://brocade.com/ns/rest" y:self="/
rest/operational-state">
<packet-encap-processing-state xmlns="urn:brocade.com:mgmt:brocade-nsm-operational"
y:self="/rest/operational-state/packet-encap-processing-state">
  <packet-encap-info-list y:self="/rest/operational-state/packet-encap-processing-state/
packet-encap-info-list">
    </packet-encap-info-list>
  </packet-encap-processing-state>
</data>
```

### History

| Release version | History                       |
|-----------------|-------------------------------|
| 18r.2.00        | This API call was introduced. |

## qos-mpls-state

### Resource URIs

| URI  | Description   |
|--|---|
| <base_URI>/operational-state/qos-mpls-state                        | Displays the MPLS Quality of Service status.  |
| <base_URI>/operational-state/qos-mpls-state/exp-dscp               | Displays the status of the qos-mpls map of type exp-dscp applied on the device.         |
| <base_URI>/operational-state/qos-mpls-state/exp-dscp/enabled-slots | Displays the status of the enabled slots for the qos-mpls map of type exp-dscp applied. |
| <base_URI>/operational-state/qos-mpls-state/exp-dscp/traffic-class | Displays the traffic-class status for the qos-mpls map of type exp-dscp applied.        |

### Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

### Examples

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

### URI

http://host:80/rest/operational-state/qos-mpls-state/exp-dscp

### Request Body

None

### Response Body

```
<qos-mpls-state xmlns="urn:brocade.com:mgmt:brocade-qos-operational" xmlns:y="http://
brocade.com/ns/rest"
y:self="/rest/operational-state/qos-mpls-state/exp-dscp">
  <map-type>exp-dscp</map-type>
  <map-name>mmmm</map-name>
  <enabled-slots></enabled-slots>
  <exp>0 1 2 3 4 5 6 7</exp>
  <dscp>0 7 5 24 32 40 48 56</dscp>
</qos-mpls-state>
```

## queues-state

### 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. Use of the Resource-Depth request header is recommended.

### 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-interface-list>
  </queues-state>
</data>
```

```

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>
  <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>54777</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>
</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>
    <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>

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    <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 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

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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>
  <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>

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    <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/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

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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>

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    <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%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

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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>
  <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>

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    <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

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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>

```

## sfm-state

### 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. Use of the Resource-Depth request header is recommended.

### Examples

#### URI

http://host:80/rest/operational-state/sfm-state

#### Request Body

None

#### Response Body

```
<sfm-state xmlns="urn:brocade.com:mgmt:brocade-sysmgr-operational" y:self="/rest/operational-state/sfm-state">
  <mcast y:self="/rest/operational-state/sfm-state/mcast/0">
    <mcastid>0</mcastid>
    <mcast-count>0</mcast-count>
    <mcast-sfmid>1</mcast-sfmid>
    <mcast-feid>1</mcast-feid>  </mcast>
  <mcast y:self="/rest/operational-state/sfm-state/mcast/0">
```







```

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 0 0 1 1 0 1 1 1 1 1 0 1 1 0 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0
1 1 1 1 1 1 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0 0 0 0</links-error>
<links-errorcount>63 0 63 0 0 0 0 63 63 0 63 63 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0 63 63 63
0 0 63 0 0 0 0 0 63 0 0 63 0 0 0 63 63 63 63 63 63 63 63 63 63 63 0 0 0 0 0 0 63 63 63
63 63 63 63 63 63 63 63 63
63 63 63 63 63 63 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 63 63 63 63 63 63 63
63 63 63 63 63 63 63 63 63
63 63 63 63 63 63 63</links-errorcount> </links>
<queue y:self="/rest/operational-state/sfm-state/queue/1">
  <queue-sfmid>1</queue-sfmid>
  <queue-feid>1</queue-feid>
  <queue-pipe>0</queue-pipe>
  <queue-dch-count>0</queue-dch-count>
  <queue-dcm-count>5</queue-dcm-count>
  <queue-dcl-count>0</queue-dcl-count>
  <queue-dcm-value>1787938099 1788235776 1788236832 112256 1786966745</queue-dcm-
value>
  <queue-dcm-linkno>0 3 0 0 1786761961</queue-dcm-linkno> </queue>
<queue y:self="/rest/operational-state/sfm-state/queue/1">
  <queue-sfmid>1</queue-sfmid>
  <queue-feid>2</queue-feid>
  <queue-pipe>0</queue-pipe>
  <queue-dch-count>0</queue-dch-count>
  <queue-dcm-count>5</queue-dcm-count>
  <queue-dcl-count>0</queue-dcl-count>
  <queue-dcm-value>1787938099 1788235776 1788236832 112256 1786966745</queue-dcm-
value>
  <queue-dcm-linkno>0 3 0 0 1786761961</queue-dcm-linkno> </queue>
<thresholds y:self="/rest/operational-state/sfm-state/thresholds/1">
  <thresholds-sfmid>1</thresholds-sfmid>
  <thresholds-feid>1</thresholds-feid>
  <thresholds-port>144</thresholds-port>
  <thresholds-pipe>0 0 0</thresholds-pipe>
  <thresholds-rxthreshold>511 511 511</thresholds-rxthreshold>
  <thresholds-txthreshold>24 32 40</thresholds-txthreshold>
  <thresholds-midthreshold>100 110 120</thresholds-midthreshold> </thresholds>
<thresholds y:self="/rest/operational-state/sfm-state/thresholds/1">
  <thresholds-sfmid>1</thresholds-sfmid>
  <thresholds-feid>2</thresholds-feid>
  <thresholds-port>144</thresholds-port>
  <thresholds-pipe>0 0 0</thresholds-pipe>
  <thresholds-rxthreshold>511 511 511</thresholds-rxthreshold>
  <thresholds-txthreshold>24 32 40</thresholds-txthreshold>
  <thresholds-midthreshold>100 110 120</thresholds-midthreshold> </thresholds>
<connectivity y:self="/rest/operational-state/sfm-state/connectivity/1">
  <connectivity-sfmid>1</connectivity-sfmid>
  <connectivity-count>66</connectivity-count>
  <connectivity-feid>1</connectivity-feid>
  <connectivity-type></connectivity-type>
  <connectivity-linkid>1 2 0 3 34 1 2 0 1 35 0 35 34 35 33 34 35 33 35 33 34 33 35 0 35
1 34
1 2 0 3 0 2 1 35 33 32 34 33 34 34 33 34 32 35 33 2 1 3 0 2 0 35 33 34 32 0 35 33 34 35 1
34 1 34 35</connectivity-linkid>
<connectivity-moduleid>76 76 76 74 82 74 72 74 72 82 72 80 38 38 38 36 36 24 24 24 26
8 0 10 0 10 2
0 2 2 4 4 78 78 80 78 82 80 8 10 6 8 6 6 16 16 14 16 12 14 18 18 18 20 12 20 22 20 22
12 22 14 26 26</connectivity-moduleid>
<connectivity-port>24 25 26 27 28 29 30 31 32 33 34 35 48 50 52 56 58 59 64 65 69 70 72
73 74 75 76 77
78 79 80 81 82 83 100 101 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119
120 121 122

```

```

123 124 125 126 127 128 129 130 131 136 141</connectivity-port> </connectivity>
<connectivity y:self="/rest/operational-state/sfm-state/connectivity/1">
  <connectivity-sfmid>1</connectivity-sfmid>
  <connectivity-count>66</connectivity-count>
  <connectivity-feid>2</connectivity-feid>
  <connectivity-type></connectivity-type>
  <connectivity-linkid>30 31 32 30 31 32 31 32 30 32 30 31 32 31 33 30 31 4 30 32 5 31
5 30 31 32
30 33 30 32 3 5 2 4 5 30 4 3 31 5 31 4 31 4 31 5 4 3 5 30 2 4 3 5 32 30 33 30 3 5 31 32 4
2 4 3</connectivity-linkid>
<connectivity-moduleid>38 38 38 36 36 36 24 24 24 26 26 26 18 18 20 18 20 12 20 22 12 22
14 22 78 78
78 80 80 82 76 76 74 76 74 82 74 72 82 72 80 72 8 0 10 0 2 0 2 10 2 4 4 4 10 8 8 6 16 16
6 6 16 14 14 12</connectivity-moduleid>
<connectivity-port>0 2 7 8 10 11 42 43 44 47 53 56 60 61 62 63 64 65 66 67 68 69 70 71 78
79 80 81 82 83
84 85 86 87 88 89 90 91 92 93 94 95 120 121 122 123 124 125 126 127 128 129 130 131 132
133 134 135 136
137 138 139 140 141 142 143</connectivity-port> </connectivity>
<serdesmode y:self="/rest/operational-state/sfm-state/serdesmode/1">
  <serdesmode-sfmid>1</serdesmode-sfmid>
  <serdesmode>2</serdesmode>
  <serdesmode-feid>1</serdesmode-feid> </serdesmode>
<serdesmode y:self="/rest/operational-state/sfm-state/serdesmode/1">
  <serdesmode-sfmid>1</serdesmode-sfmid>
  <serdesmode>2</serdesmode>
  <serdesmode-feid>2</serdesmode-feid> </serdesmode>
</sfm-state>

```

## spf-log-state

### 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   |

| URI   | Description   |
|---|---|
| <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. Use of the Resource-Depth request header is recommended.

## 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-ppsf-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-ppsf-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-levels>
</spf-log-state>
```

## sr-state

---

### Resource URIs

| URI                                   | Description                          |
|---------------------------------------|--------------------------------------|
| <base_URI>/operational-state/sr-state | Displays SR operational information. |

### Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

### Examples

The following example shows the complete cURL command and server response for the `sr-state` GET operation.

### URI

`http://host:80/rest/operational-state/sr-state`

### Request Body

```
curl -H "Accept: application/vnd.operational-state.resource+xml" -H "Resource-Depth: 6"
-u "lab:Tester**" http://10.20.229.40:80/rest/operational-state/sr-state
```

### Response Body

```
<data xmlns="http://brocade.com/ns/rest" xmlns:y="http://brocade.com/ns/rest" y:self="/
rest/operational-state">
<sr-state xmlns="urn:brocade.com:mgmt:brocade-mpls-operational" y:self="/rest/operational-
state/sr-state">
  <tunnels y:self="/rest/operational-state/sr-state/tunnels">
  </tunnels>
  <summary y:self="/rest/operational-state/sr-state/summary">
    <current-srgb-range y:self="/rest/operational-state/sr-state/summary/current-srgb-
range">
    </current-srgb-range>
    <pending-srgb-range y:self="/rest/operational-state/sr-state/summary/pending-srgb-
range">
    </pending-srgb-range>
  </summary>
</sr-state>
</data>
```

### History

| Release version | History                       |
|-----------------|-------------------------------|
| 18r.2.00        | This API call was introduced. |

## sub-interface-statistics-state/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. Use of the Resource-Depth request header is recommended.

### 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>
```

## sub-interface-statistics-state/bridge-domain-statistics/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. Use of the Resource-Depth request header is recommended.

### 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>
```

## tm-state

### 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/tmvoqingvalegrvalprioival              | 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.                               |



| URI   | Description                                  |
|---|--|
| <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. Use of the Resource-Depth request header is recommended.

## Examples

### URI

`http://host:80//rest/operational-state/tm-state`

## topology-group-state

---

### Resource URIs

| URI   | Description                          |
|---|--------------------------------------|
| <base_URI>/operational-state/topology-group-state | Displays topology group information. |

### Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

### Examples

The following example shows the complete cURL command and server response for the topology-group-state GET operation.

### URI

http://host:80/rest/operational-state/topology-group-state

### Request Body

```
curl -H "Accept: application/vnd.operational-state.resource+xml" -H "Resource-Depth: 6"
-u "lab:Tester**" http://10.20.229.40:80/rest/operational-state/topology-group-state
```

### Response Body

```
<data xmlns="http://brocade.com/ns/rest" xmlns:y="http://brocade.com/ns/rest" y:self="/
rest/operational-state">
<topology-group-state xmlns="urn:brocade.com:mgmt:brocade-nsm-operational" y:self="/rest/
operational-state/topology-group-state">
</topology-group-state>
</data>
```

### History

| Release version | History                       |
|-----------------|-------------------------------|
| 18r.2.00        | This API call was introduced. |

## traffic-state

### 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.      |

| URI  | Description   |
|--|---|
| <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. Use of the Resource-Depth request header is recommended.

## 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>
```

## 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. Use of the Resource-Depth request header is recommended.

### 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>"22 hr 35 min 41 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/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>"</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-assigned-lsp>
</vc-peer-data>
</vc-peer-state>
```

## vpn-statistics-state

### Resource URIs

| URI   | Description              |
|---|--------------------------|
| <base_URI>/operational-state/vpn-statistics-state | Displays VPN statistics. |

### Usage Guidelines

Only GET operation is supported. Use of the Resource-Depth request header is recommended.

### Examples

The following example shows the complete cURL command and server response for the vpn-statistics-state GET operation.

### URI

http://host:80/rest/operational-state/vpn-statistics-state

### Request Body

```
curl -H "Accept: application/vnd.operational-state.resource+xml" -H "Resource-Depth: 6"
-u "lab:Tester**" http://10.20.229.40:80/rest/operational-state/vpn-statistics-state
```

### Response Body

```
<data xmlns="http://brocade.com/ns/rest" xmlns:y="http://brocade.com/ns/rest" y:self="/
rest/operational-state">
  <vpn-statistics-state xmlns="urn:brocade.com:mgmt:brocade-nsm-operational"
y:self="/rest/operational-state/vpn-statistics-state">
    <vpn-vrf-statistics y:self="/rest/operational-state/vpn-statistics-state/vpn-vrf-
statistics/13vpn-100">
      <vrf-name>l3vpn-100</vrf-name>
      <tunnel-in-pkt>238166892</tunnel-in-pkt>
      <tunnel-out-pkt>0</tunnel-out-pkt>
    </vpn-vrf-statistics>
    <vpn-vrf-statistics y:self="/rest/operational-state/vpn-statistics-state/vpn-vrf-
statistics/13vpn-107">
      <vrf-name>l3vpn-107</vrf-name>
      <tunnel-in-pkt>238168153</tunnel-in-pkt>
      <tunnel-out-pkt>0</tunnel-out-pkt>
    </vpn-vrf-statistics>
    <vpn-vrf-statistics y:self="/rest/operational-state/vpn-statistics-state/vpn-vrf-
statistics/13vpn-1">
      <vrf-name>l3vpn-1</vrf-name>
      <tunnel-in-pkt>238168445</tunnel-in-pkt>
      <tunnel-out-pkt>0</tunnel-out-pkt>
    </vpn-vrf-statistics>
    <vpn-vrf-statistics y:self="/rest/operational-state/vpn-statistics-state/vpn-vrf-
```

```
statistics/13vpn-106">
  <vrf-name>13vpn-106</vrf-name>
  <tunnel-in-pkt>238166979</tunnel-in-pkt>
  <tunnel-out-pkt>0</tunnel-out-pkt>
</vpn-vrf-statistics>
<vpn-vrf-statistics y:self="/rest/operational-state/vpn-statistics-state/vpn-vrf-
statistics/13vpn-101">
  <vrf-name>13vpn-101</vrf-name>
  <tunnel-in-pkt>238168608</tunnel-in-pkt>
  <tunnel-out-pkt>0</tunnel-out-pkt>
</vpn-vrf-statistics>
<vpn-vrf-statistics y:self="/rest/operational-state/vpn-statistics-state/vpn-vrf-
statistics/13vpn-10">
  <vrf-name>13vpn-10</vrf-name>
  <tunnel-in-pkt>238170295</tunnel-in-pkt>
  <tunnel-out-pkt>0</tunnel-out-pkt>
</vpn-vrf-statistics>
<vpn-vrf-statistics y:self="/rest/operational-state/vpn-statistics-state/vpn-vrf-
statistics/13vpn-103">
  <vrf-name>13vpn-103</vrf-name>
  <tunnel-in-pkt>238168307</tunnel-in-pkt>
  <tunnel-out-pkt>0</tunnel-out-pkt>
</vpn-vrf-statistics>
<vpn-vrf-statistics y:self="/rest/operational-state/vpn-statistics-state/vpn-vrf-
statistics/13vpn-105">
  <vrf-name>13vpn-105</vrf-name>
  <tunnel-in-pkt>238168616</tunnel-in-pkt>
  <tunnel-out-pkt>0</tunnel-out-pkt>
</vpn-vrf-statistics>
<vpn-vrf-statistics y:self="/rest/operational-state/vpn-statistics-state/vpn-vrf-
statistics/13vpn-102">
  <vrf-name>13vpn-102</vrf-name>
  <tunnel-in-pkt>238167386</tunnel-in-pkt>
  <tunnel-out-pkt>0</tunnel-out-pkt>
</vpn-vrf-statistics>
<vpn-vrf-statistics y:self="/rest/operational-state/vpn-statistics-state/vpn-vrf-
statistics/13vpn-104">
  <vrf-name>13vpn-104</vrf-name>
  <tunnel-in-pkt>238166630</tunnel-in-pkt>
  <tunnel-out-pkt>0</tunnel-out-pkt>
</vpn-vrf-statistics>
<vpn-vrf-statistics y:self="/rest/operational-state/vpn-statistics-state/vpn-vrf-
statistics/13vpn-108">
  <vrf-name>13vpn-108</vrf-name>
  <tunnel-in-pkt>238166348</tunnel-in-pkt>
  <tunnel-out-pkt>0</tunnel-out-pkt>
</vpn-vrf-statistics>
<vpn-vrf-statistics y:self="/rest/operational-state/vpn-statistics-state/vpn-vrf-
statistics/13vpn-109">
  <vrf-name>13vpn-109</vrf-name>
  <tunnel-in-pkt>238166568</tunnel-in-pkt>
  <tunnel-out-pkt>0</tunnel-out-pkt>
</vpn-vrf-statistics>
<vpn-vrf-statistics y:self="/rest/operational-state/vpn-statistics-state/vpn-vrf-
statistics/13vpn-11">
  <vrf-name>13vpn-11</vrf-name>
  <tunnel-in-pkt>238170320</tunnel-in-pkt>
  <tunnel-out-pkt>0</tunnel-out-pkt>
</vpn-vrf-statistics>
<vpn-vrf-statistics y:self="/rest/operational-state/vpn-statistics-state/vpn-vrf-
statistics/13vpn-110">
  <vrf-name>13vpn-110</vrf-name>
  <tunnel-in-pkt>238169026</tunnel-in-pkt>
  <tunnel-out-pkt>0</tunnel-out-pkt>
```



```
</vpn-vrf-statistics>
<vpn-vrf-statistics y:self="/rest/operational-state/vpn-statistics-state/vpn-vrf-
statistics/l3vpn-111">
  <vrf-name>l3vpn-111</vrf-name>
  <tunnel-in-pkt>238166594</tunnel-in-pkt>
  <tunnel-out-pkt>0</tunnel-out-pkt>
</vpn-vrf-statistics>
<vpn-vrf-statistics y:self="/rest/operational-state/vpn-statistics-state/vpn-vrf-
statistics/l3vpn-118">
  <vrf-name>l3vpn-118</vrf-name>
  <tunnel-in-pkt>238167251</tunnel-in-pkt>
  <tunnel-out-pkt>0</tunnel-out-pkt>
</vpn-vrf-statistics>
<vpn-vrf-statistics y:self="/rest/operational-state/vpn-statistics-state/vpn-vrf-
statistics/l3vpn-112">
  <vrf-name>l3vpn-112</vrf-name>
  <tunnel-in-pkt>238166851</tunnel-in-pkt>
  <tunnel-out-pkt>0</tunnel-out-pkt>
</vpn-vrf-statistics>
<vpn-vrf-statistics y:self="/rest/operational-state/vpn-statistics-state/vpn-vrf-
statistics/l3vpn-116">
  <vrf-name>l3vpn-116</vrf-name>
  <tunnel-in-pkt>238167503</tunnel-in-pkt>
  <tunnel-out-pkt>0</tunnel-out-pkt>
</vpn-vrf-statistics>
<vpn-vrf-statistics y:self="/rest/operational-state/vpn-statistics-state/vpn-vrf-
statistics/l3vpn-113">
  <vrf-name>l3vpn-113</vrf-name>
  <tunnel-in-pkt>238166319</tunnel-in-pkt>
  <tunnel-out-pkt>0</tunnel-out-pkt>
</vpn-vrf-statistics>
<vpn-vrf-statistics y:self="/rest/operational-state/vpn-statistics-state/vpn-vrf-
statistics/l3vpn-121">
  <vrf-name>l3vpn-121</vrf-name>
  <tunnel-in-pkt>238157099</tunnel-in-pkt>
  <tunnel-out-pkt>0</tunnel-out-pkt>
</vpn-vrf-statistics>
<vpn-vrf-statistics y:self="/rest/operational-state/vpn-statistics-state/vpn-vrf-
statistics/l3vpn-114">
  <vrf-name>l3vpn-114</vrf-name>
  <tunnel-in-pkt>238167205</tunnel-in-pkt>
  <tunnel-out-pkt>0</tunnel-out-pkt>
</vpn-vrf-statistics>
<vpn-vrf-statistics y:self="/rest/operational-state/vpn-statistics-state/vpn-vrf-
statistics/l3vpn-119">
  <vrf-name>l3vpn-119</vrf-name>
  <tunnel-in-pkt>238167751</tunnel-in-pkt>
  <tunnel-out-pkt>0</tunnel-out-pkt>
</vpn-vrf-statistics>
<vpn-vrf-statistics y:self="/rest/operational-state/vpn-statistics-state/vpn-vrf-
statistics/l3vpn-117">
  <vrf-name>l3vpn-117</vrf-name>
  <tunnel-in-pkt>238167768</tunnel-in-pkt>
  <tunnel-out-pkt>0</tunnel-out-pkt>
</vpn-vrf-statistics>
<vpn-vrf-statistics y:self="/rest/operational-state/vpn-statistics-state/vpn-vrf-
statistics/l3vpn-115">
  <vrf-name>l3vpn-115</vrf-name>
  <tunnel-in-pkt>238168153</tunnel-in-pkt>
  <tunnel-out-pkt>0</tunnel-out-pkt>
</vpn-vrf-statistics>
<vpn-vrf-statistics y:self="/rest/operational-state/vpn-statistics-state/vpn-vrf-
statistics/l3vpn-120">
  <vrf-name>l3vpn-120</vrf-name>
```

```
<tunnel-in-pkt>238168078</tunnel-in-pkt>
<tunnel-out-pkt>0</tunnel-out-pkt>
</vpn-vrf-statistics>
<vpn-vrf-statistics y:self="/rest/operational-state/vpn-statistics-state/vpn-vrf-
statistics/13vpn-125">
  <vrf-name>l3vpn-125</vrf-name>
  <tunnel-in-pkt>238168766</tunnel-in-pkt>
  <tunnel-out-pkt>0</tunnel-out-pkt>
</vpn-vrf-statistics>
<vpn-vrf-statistics y:self="/rest/operational-state/vpn-statistics-state/vpn-vrf-
statistics/13vpn-12">
  <vrf-name>l3vpn-12</vrf-name>
  <tunnel-in-pkt>238167806</tunnel-in-pkt>
  <tunnel-out-pkt>0</tunnel-out-pkt>
</vpn-vrf-statistics>
<vpn-vrf-statistics y:self="/rest/operational-state/vpn-statistics-state/vpn-vrf-
statistics/13vpn-123">
  <vrf-name>l3vpn-123</vrf-name>
  <tunnel-in-pkt>238168053</tunnel-in-pkt>
  <tunnel-out-pkt>0</tunnel-out-pkt>
</vpn-vrf-statistics>
<vpn-vrf-statistics y:self="/rest/operational-state/vpn-statistics-state/vpn-vrf-
statistics/13vpn-122">
  <vrf-name>l3vpn-122</vrf-name>
  <tunnel-in-pkt>238168755</tunnel-in-pkt>
  <tunnel-out-pkt>0</tunnel-out-pkt>
</vpn-vrf-statistics>
<vpn-vrf-statistics y:self="/rest/operational-state/vpn-statistics-state/vpn-vrf-
statistics/13vpn-124">
  <vrf-name>l3vpn-124</vrf-name>
  <tunnel-in-pkt>238168978</tunnel-in-pkt>
  <tunnel-out-pkt>0</tunnel-out-pkt>
</vpn-vrf-statistics>
<vpn-vrf-statistics y:self="/rest/operational-state/vpn-statistics-state/vpn-vrf-
statistics/13vpn-126">
  <vrf-name>l3vpn-126</vrf-name>
  <tunnel-in-pkt>238167826</tunnel-in-pkt>
  <tunnel-out-pkt>0</tunnel-out-pkt>
</vpn-vrf-statistics>
<vpn-vrf-statistics y:self="/rest/operational-state/vpn-statistics-state/vpn-vrf-
statistics/13vpn-127">
  <vrf-name>l3vpn-127</vrf-name>
  <tunnel-in-pkt>238167753</tunnel-in-pkt>
  <tunnel-out-pkt>0</tunnel-out-pkt>
</vpn-vrf-statistics>
<vpn-vrf-statistics y:self="/rest/operational-state/vpn-statistics-state/vpn-vrf-
statistics/13vpn-128">
  <vrf-name>l3vpn-128</vrf-name>
  <tunnel-in-pkt>238167485</tunnel-in-pkt>
  <tunnel-out-pkt>0</tunnel-out-pkt>
</vpn-vrf-statistics>
<vpn-vrf-statistics y:self="/rest/operational-state/vpn-statistics-state/vpn-vrf-
statistics/13vpn-21">
  <vrf-name>l3vpn-21</vrf-name>
  <tunnel-in-pkt>238169525</tunnel-in-pkt>
  <tunnel-out-pkt>0</tunnel-out-pkt>
</vpn-vrf-statistics>
<vpn-vrf-statistics y:self="/rest/operational-state/vpn-statistics-state/vpn-vrf-
statistics/13vpn-16">
  <vrf-name>l3vpn-16</vrf-name>
  <tunnel-in-pkt>238169270</tunnel-in-pkt>
  <tunnel-out-pkt>0</tunnel-out-pkt>
</vpn-vrf-statistics>
<vpn-vrf-statistics y:self="/rest/operational-state/vpn-statistics-state/vpn-vrf-
```

```

statistics/13vpn-13">
  <vrf-name>13vpn-13</vrf-name>
  <tunnel-in-pkt>238167150</tunnel-in-pkt>
  <tunnel-out-pkt>0</tunnel-out-pkt>
</vpn-vrf-statistics>
<vpn-vrf-statistics y:self="/rest/operational-state/vpn-statistics-state/vpn-vrf-
statistics/13vpn-19">
  <vrf-name>13vpn-19</vrf-name>
  <tunnel-in-pkt>238168690</tunnel-in-pkt>
  <tunnel-out-pkt>0</tunnel-out-pkt>
</vpn-vrf-statistics>
<vpn-vrf-statistics y:self="/rest/operational-state/vpn-statistics-state/vpn-vrf-
statistics/13vpn-14">
  <vrf-name>13vpn-14</vrf-name>
  <tunnel-in-pkt>238168389</tunnel-in-pkt>
  <tunnel-out-pkt>0</tunnel-out-pkt>
</vpn-vrf-statistics>
<vpn-vrf-statistics y:self="/rest/operational-state/vpn-statistics-state/vpn-vrf-
statistics/13vpn-17">
  <vrf-name>13vpn-17</vrf-name>
  <tunnel-in-pkt>238170170</tunnel-in-pkt>
  <tunnel-out-pkt>0</tunnel-out-pkt>
</vpn-vrf-statistics>
<vpn-vrf-statistics y:self="/rest/operational-state/vpn-statistics-state/vpn-vrf-
statistics/13vpn-15">
  <vrf-name>13vpn-15</vrf-name>
  <tunnel-in-pkt>238169298</tunnel-in-pkt>
  <tunnel-out-pkt>0</tunnel-out-pkt>
</vpn-vrf-statistics>
</vpn-statistics-state>
</data>

```

## History

| Release version | History                       |
|-----------------|-------------------------------|
| 18r.2.00        | This API call was introduced. |

## vxlan-acl-state/extended-data

---

### 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. Use of the Resource-Depth request header is recommended.

### 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>
```



# Operations API

---

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---

## activate-status

---

### Resource URIs

| URI                                   | Description                               |
|---------------------------------------|---|
| <base_URI>/operations/activate-status | Retrieves the firmware activation status. |

### Parameters

*overall-status*

Displays overall activation status on the switch.

### Usage Guidelines

Only POST operation is supported.

### Examples

#### URI

`http://host:80/rest/operations/activate-status`

## Request Body

```
<activate-status></activate-status>
```

## Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-firmware'>  
  <overall-status>0</overall-status>  
  <status>0</status>  
</output>
```

## bna-config-cmd

---

### Resource URIs

| 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/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>
```



## bna-config-cmd-status

---

### Resource URIs

| 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/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>
```

## clear-mpls-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

## clear-mpls-ldp-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

## clear-mpls-lsp

---

### 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

## clear-mpls-rsvp-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

## clear-mpls-rsvp-statistics-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

## clear-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

## clear-tm-voq-stat-ing-all-egr-all

---

### Resource URIs

| URI   | Description               |
|---|---------------------------|
| <base_URI>/operations/clear-tm-voq-stat-ing-all-egr-all | Clears all voq statistics |

## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

`http://host:80/rest/operations/clear-tm-voq-stat-ing-all-egr-all`

### Request

```
<clear-tm-voq-stat-ing-all-egr-all></clear-tm-voq-stat-ing-all-egr-all>
```

---

## clear-tm-voq-stat-ing-all-egr-iframe

### Resource URIs

| URI   | Description                                   |
|---|---|
| <code>&lt;base_URI&gt;/operations/clear-tm-voq-stat-ing-all-egr-iframe</code> | Clears per port voq statistics on all devices |

## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

`http://host:80/rest/operations/clear-tm-voq-stat-ing-all-egr-iframe`

### Request Body

```
<clear-tm-voq-stat-ing-all-egr-iframe></clear-tm-voq-stat-ing-all-egr-iframe>
```

---

## clear-tm-voq-stat-slot-id-egr-all

### Resource URIs

| URI  | Description                                 |
|--|---|
| <code>&lt;base_URI&gt;/operations/clear-tm-voq-stat-slot-id-egr-all</code> | Clears all voq statistics for selected slot |



## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

`http://host:80/rest/operations/clear-tm-voq-stat-slot-id-egr-all`

### Request Body

```
<clear-tm-voq-stat-slot-id-egr-all><slot-id>5</slot-id></clear-tm-voq-stat-slot-id-egr-all>
```

## clear-tm-voq-slot-id-egress-port-name

---

### Resource URIs

| URI  | Description                                       |
|--|---|
| <code>&lt;base_URI&gt;/operations/clear-tm-voq-slot-id-egress-port-name</code> | Clears per port voq statistics for selected slots |

## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

`http://host:80/rest/operations/clear-tm-voq-slot-id-egress-port-name`

### Request Body

```
<clear-tm-voq-slot-id-egress-port-name><slot-id>5</slot-id></clear-tm-voq-slot-id-egress-port-name>
```

## firmware-download

---

### Resource URIs

| URI                                     | Description                            |
|---|--|
| <base_URI>/operations/firmware-download | Retrieves the firmware level commands. |

### Parameters

*fwdl-status*

Displays the status. 0 or 1 - Success. Any negative value is error.

*fwdl-msg*

0 - Success but disruptive/non-ISSU upgrade, 1 - Success and ISSU upgrade. Any negative value is error.

### Usage Guidelines

Only POST operation is supported.

### Examples

#### URI

http://host:80/rest/operations/firmware-download

#### Request Body (for coldboot)

```
<firmware-download>
  <scp>
    <user>fvt</user>
    <password>pray4green</password>
    <host>10.31.2.25</host>
    <directory>/buildsjc/sre/SQA/nos/slx16r.1.00/slxr16.1.00_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>
  <auto-activate/>
</firmware-download>
```

## Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-firmware'>
  <cluster-output>
    <fdwl-status>0</fdwl-status>
    <fdwl-msg>Disruptive.</fdwl-msg>
  </cluster-output>
  <fdwl-cmd-status>0</fdwl-cmd-status>
  <fdwl-cmd-msg>Logical-chassis firmware download initiated.</fdwl-cmd-msg>
</output>
```

## fwdl-status

---

### Resource URIs

| URI                               | Description                             |
|-----------------------------------|---|
| <base_URI>/operations/fwdl-status | Retrieves the firmware download status. |

### Parameters

*fwdl-state*

Displays the firmware download state.

*number-of-entries*

Specifies the number of status entries.

*index*

Displays the sequence number for the message.

*blade-name*

Displays the name of the blade.

*message-id*

Displays the message identifier.

*date-and-time-info*

Displays the date and time of the message. The format is YYYY-MM-DD/HH:MM:SS.SSSS.

*message*

Displays the textual description of the status.

### Usage Guidelines

Only POST operation is supported.

### Examples

#### URI

http://host:80/rest/operations/fwdl-status

### Request Body

```
<fwdl-status></fwdl-status>
```

## Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-firmware'>
  <fwdl-state>completed</fwdl-state>
  <number-of-entries>18</number-of-entries>
  <fwdl-entries>
    <index>1</index>
    <blade-name>SW/0</blade-name>
    <message-id>0</message-id>
    <date-and-time-info>2014-06-23/19:31:31</date-and-time-info>
    <message>Firmware install begins.</message>
  </fwdl-entries>
  <fwdl-entries>
    <index>2</index>
    <blade-name>SW/0</blade-name>
    <message-id>0</message-id>
    <date-and-time-info>2014-06-23/19:34:44</date-and-time-info>
    <message>Firmware install ends.</message>
  </fwdl-entries>
  <fwdl-entries>
    <index>3</index>
    <blade-name>SW/1</blade-name>
    <message-id>0</message-id>
    <date-and-time-info>2014-06-23/19:34:44</date-and-time-info>
    <message>Firmware install begins.</message>
  </fwdl-entries>
</output>
```

## get-arp

---

### Resource URIs

| URI                           | Description                      |
|-------------------------------|----------------------------------|
| <base_URI>/operations/get-arp | Retrieves the ARP cache details. |

### Parameters

*ip-address*

Displays the IP address of the ARP entry.

*mac-address*

Displays the MAC address of the ARP entry.

*interface-type*

Displays the interface type.

*interface-name*

Displays the interface name.

*is-resolved*

Indicates whether the ARP entry is resolved or not.

*age*

Displays the age of the ARP entry.

*entry-type*

Displays the type of the ARP entry.

### Usage Guidelines

Only POST operation is supported.

### Examples

#### URI

http://host:80/rest/operations/get-arp

### Request Body

```
<get-arp></get-arp>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-arp'>  
<arp-entry>
```

```
<ip-address>20.0.0.122</ip-address>  
<mac-address>0005.3379.407a</mac-address>  
<interface-type>unknown</interface-type>  
<interface-name></interface-name>  
<is-resolved>true</is-resolved>  
<age>03:16:05</age>  
<entry-type>dynamic</entry-type>  
</arp-entry>  
</output>
```

## get-contained-in-ID

---

### Resource URIs

| URI                                       | Description  |
|---|--|
| <base_URI>/operations/get-contained-in-ID | Retrieves enclosure related information on embedded platforms. |

### Parameters

*contained-in-ID*

Provides present slot ID of switch.

### Usage Guidelines

Only POST operation is supported.

### Examples

#### URI

http://host:80/rest/operations/get-contained-in-ID

### Request Body

```
<get-contained-in-ID></get-contained-in-ID>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-Enclosure-show'>
  <contained-in-ID>Bay 7</contained-in-ID>
</output>
```



## get-interface-detail

---

### Resource URIs

| URI  | Description   |
|--|---|
| <base_URI>/operations/get-interface-detail | Retrieves operational data for a given VLAN and enumeration of all the interfaces belonging to this VLAN. |

### Parameters

*interface-type*

Displays the interface type.

*interface-name*

Displays the interface name.

*port-mode*

Displays the operational mode of the particular interface. This is applicable only for physical interfaces or port-channel interfaces.

*if-name*

Displays the interface display name as in MIB-II's ifTable. However interface-name and interface-type values of this instance forms fully qualified name for this interface.

*if-state*

Displays the current operational state of this interface.

*line-protocol-state*

Displays the 'Line protocol' state of the interface.

*line-protocol-state-info*

Displays the reason for the current line protocol state of the interface.

*hardware-type*

Displays the type of the interface.

*current-hardware-address*

Displays the address of the interface at its protocol sub-layer.

*logical-hardware-address*

Displays the address of the interface at its protocol sub-layer.

*ifindex*

A unique value, greater than zero, for each interface.

*mtu*

Displays the IP MTU value of the interface.

*actual-line-speed*

Displays the actual line speed of this interface.

*configured-line-speed*

Displays the administratively configured line speed of the interface.

*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.

*ifHCOutOctets*

Displays the total number of octets transmitted out of the interface, including framing characters.

*ifHCOutUcastPkts*

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.

*ifHCOutMulticastPkts*

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.

*ifHCOutBroadcastPkt*

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.

*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/operations/get-interface-detail`

## Request Body

```
<get-interface-detail></get-interface-detail>
```

## Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-interface-ext'>
  <interface>
    <interface-type>port-channel</interface-type>
    <interface-name>l</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>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>port-channel</interface-type>
  <interface-name>2</interface-name>
</get-interface-detail>

```

## get-interface-switchport

---

### Resource URIs

| URI  | Description   |
|--|---|
| <base_URI>/operations/get-interface-switchport | Returns switch-port or Layer 2 characteristics of all the interfaces in the managed device. |

### Parameters

*interface-name*

Displays the Interface value.

*interface-type*

Displays the type of the interface.

*mode*

Displays the mode of the port-channel.

*fcoe-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/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>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>
```

## get-ip-interface

---

### Resource URIs

| URI                                    | Description                         |
|--|-------------------------------------|
| <base_URI>/operations/get-ip-interface | Retrieves the IP interface details. |

### Parameters

*interface-name*

Displays the Interface value.

*if-name*

Displays the interface display name as in MIB-II's ifTable. However interface-name and interface-type values of this instance forms fully qualified name for this interface.

*if-state*

Displays the current operational state of the interface.

*line-protocol-state*

Displays the 'Line protocol' state of the interface.

*ip-address*

Displays the IP address for the management interface.

*ipv4*

Displays the IP address in dotted decimal/Mask (A.B.C.D/M).

*ipv4-type*

Indicates whether IP address is primary/secondary and corresponding Broadcast IP.

*broadcast*

Displays the broadcast IP Address.

*ip-mtu*

Displays the MTU type.

*vrf*

Displays the VRF name.

### Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operations/get-ip-interface

### Request Body

```
<get-ip-interface></get-ip-interface>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-interface-ext'>
  <interface>
    <interface-type>port-channel</interface-type>
    <interface-name>1</interface-name>
    <if-name>Port-channel 1</if-name>
    <if-state>down</if-state>
    <line-protocol-state>down</line-protocol-state>
    <ip-address>
      <ipv4>unassigned</ipv4>
    </ip-address>
  </interface>
  <interface>
    <interface-type>port-channel</interface-type>
    <interface-name>2</interface-name>
    <if-name>Port-channel 2</if-name>
    <if-state>down</if-state>
    <line-protocol-state>down</line-protocol-state>
    <ip-address>
      <ipv4>unassigned</ipv4>
    </ip-address>
  </interface>
  <has-more>false</has-more>
</output>
```



## get-last-config-update-time

---

### Resource URIs

| URI   | Description  |
|---|--|
| <base_URI>/operations/get-last-config-update-time | Retrieves the time stamp of the last configuration change. |

### Parameters

*last-config-update-time*

Displays the time stamp of the last configuration change.

### Usage Guidelines

Only POST operation is supported.

### Examples

#### URI

http://host:80/rest/operations/get-last-config-update-time

### Request Body

```
<get-last-config-update-time></get-last-config-update-time>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-vcs'>  
  <last-config-update-time>1402481614</last-config-update-time>  
</output>
```

## get-last-config-update-time-for-xpaths

### Resource URIs

| URI  | Description   |
|--|---|
| <base_URI>/operations/get-last-config-update-time-for-xpaths | Retrieves the time stamp of the last configuration change for xpaths. |

### Parameters

*xpath-string*

Displays the xpath string.

*last-config-update-time*

Indicates the time stamp of the last configuration change for xpath.

### Usage Guidelines

Only POST operation is supported.

### Examples

#### URI

http://host:80/rest/operations/get-last-config-update-time-for-xpaths

### Request Body

```
<get-last-config-update-time-for-xpaths></get-last-config-update-time-for-xpaths>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-vcs'>
  <last-config-update-time-for-xpaths>
    <xpath-string>/</xpath-string>
    <last-config-update-time>1402481614</last-config-update-time>
  </last-config-update-time-for-xpaths>
  <last-config-update-time-for-xpaths>
    <xpath-string>/cee-map</xpath-string>
    <last-config-update-time>1401508522</last-config-update-time>
  </last-config-update-time-for-xpaths>
</output>
```

## get-lldp-neighbor-detail

---

### Resource URIs

| URI  | Description   |
|--|---|
| <base_URI>/operations/get-lldp-neighbor-detail | Retrieves the neighbor details of all the interfaces of the managed entity. |

### Parameters

*local-interface-name*

Indicates the local interface display name.

*local-interface-ifindex*

Indicates the local interface IfIndex.

*local-interface-mac*

Indicates the local interface MAC address.

*remote-interface-name*

Indicates the remote interface display name.

*remote-interface-mac*

Indicates the remote interface MAC address.

*dead-interval*

Indicates the dead interval.

*remaining-life*

Indicates the remaining life period.

*remote-chassis-id*

Indicates the remote chassis ID.

*lldp-pdu-transmitted*

Displays the number of LLDP PDUs transmitted from the interface.

*lldp-pdu-received*

Displays the number of LLDP PDUs received by the interface.

*remote-system-name*

Indicates the remote system name.

### Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operations/get-lldp-neighbor-detail

### Request Body

```
<get-lldp-neighbor-detail></get-lldp-neighbor-detail>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-lldp-ext'>
  <lldp-neighbor-detail>
    <local-interface-name>Te 7/0/1</local-interface-name>
    <local-interface-ifindex>201334784</local-interface-ifindex>
    <local-interface-mac>0005.33ee.8006</local-interface-mac>
    <remote-interface-name>port-channel 14/1/10</remote-interface-name>
    <remote-interface-mac>0005.3379.6de7</remote-interface-mac>
    <dead-interval>120</dead-interval>
    <remaining-life>117</remaining-life>
    <remote-chassis-id>0005.3379.6d58</remote-chassis-id>
    <lldp-pdu-transmitted>373</lldp-pdu-transmitted>
    <lldp-pdu-received>372</lldp-pdu-received>
    <remote-system-name>M4</remote-system-name>
  </lldp-neighbor-detail>
  <lldp-neighbor-detail>
    <local-interface-name>Te 7/0/3</local-interface-name>
    <local-interface-ifindex>201351168</local-interface-ifindex>
    <local-interface-mac>0005.33ee.8008</local-interface-mac>
    <remote-interface-name>port1</remote-interface-name>
    <remote-interface-mac>0005.3348.8e4f</remote-interface-mac>
    <dead-interval>120</dead-interval>
    <remaining-life>92</remaining-life>
    <remote-chassis-id>0005.3348.8e4f</remote-chassis-id>
    <lldp-pdu-transmitted>373</lldp-pdu-transmitted>
    <lldp-pdu-received>366</lldp-pdu-received>
  </lldp-neighbor-detail>
  <lldp-neighbor-detail>
    <local-interface-name>Te 7/0/31</local-interface-name>
    <local-interface-ifindex>201580544</local-interface-ifindex>
    <local-interface-mac>0005.33ee.8024</local-interface-mac>
    <remote-interface-name>port-channel 6/0/31</remote-interface-name>
    <remote-interface-mac>0005.33e7.2803</remote-interface-mac>
    <dead-interval>120</dead-interval>
    <remaining-life>116</remaining-life>
    <remote-chassis-id>0005.33e7.27e0</remote-chassis-id>
    <lldp-pdu-transmitted>373</lldp-pdu-transmitted>
    <lldp-pdu-received>373</lldp-pdu-received>
    <remote-system-name>RIGEL-MOR</remote-system-name>
  </lldp-neighbor-detail>
  <has-more>false</has-more>
</output>
```

## get-mac-acl-for-intf

---

### Resource URIs

| URI  | Description                                      |
|--|--|
| <base_URI>/operations/get-mac-acl-for-intf | Retrieves the MAC ACL applied on the interfaces. |

### Parameters

*interface-name*

Displays the interface name.

*interface-type*

Displays the interface type.

*policy-name*

Displays the MAC ACL policy name.

### Usage Guidelines

Only POST operation is supported.

### Examples

#### URI

http://host:80/rest/operations/get-mac-acl-for-intf

### Request Body

```
<get-mac-acl-for-intf></get-mac-acl-for-intf>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-mac-access-list'>
  <interface>
    <interface-name>1/0/7</interface-name>
    <interface-type>port-channel</interface-type>
    <ingress-policy>
      <policy-name>stdmacacl</policy-name>
    </ingress-policy>
    <egress-policy>
      <policy-name>stdmacacl</policy-name>
    </egress-policy>
  </interface>
</output>
```

## get-mac-address-table

---

### Resource URIs

| URI   | Description   |
|---|---|
| <base_URI>/operations/get-mac-address-table | Returns operational data for a given MAC entry and the corresponding details of that MAC entry. |

### Parameters

*vlanid*

Displays the VLAN ID.

*mac-address*

Displays the MAC address.

*mac-type*

Displays the MAC type.

*mac-state*

Displays the MAC state.

*interface-type*

Displays the interface type.

*interface-name*

Displays the interface name.

### Usage Guidelines

Only POST operation is supported.

### Examples

#### URI

http://host:80/rest/operations/get-mac-address-table

### Request Body

### Response Body

## Request Body

```
<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>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>
```

## get-media-detail

---

### Resource URIs

| URI                                    | Description   |
|--|---|
| <base_URI>/operations/get-media-detail | Retrieves the media properties of all the interfaces. |

### Parameters

*interface-type*

Displays the interface type.

*interface-name*

Displays the interface name.

*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/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>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>

```

## get-maint-mode-status

### Resource URIs

| URI   | Description                           |
|---|---------------------------------------|
| <base_URI>/operations/get-maint-mode-status | Retrieves the maintenance mode status |

### Parameters

#### config-status

Displays the maintenance mode configuration status.

#### overall-status

Displays overall status of maintenance mode operation.

#### num-stages

Displays the total number of stages involved in entering/exiting maintenance mode.

#### current-stage

Displays the current stage that is active.

#### max-time

Displays the maximum time required to enter/exit maintenance mode.

#### container stages

Place holder for stages.

#### stage-num

Displays the stage number.

**time-taken**

Displays the time taken for this stage in seconds.

**daemon-name**

Displays the name of daemon.

**status**

Displays the status of the daemon.

## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operations/get-maint-mode-status

## Request Body

```
<get-maint-mode-status></get-maint-mode-status>
```

## Response Body

```
<output xmlns='urn:broadcom.com:mgmt:brocade-system-maintenance'>
  <config-status>enabled</config-status>
  <overall-status>complete</overall-status>
  <num-stages>2</num-stages>
  <current-stage>2</current-stage>
  <max-time>100</max-time>
  <stages>
    <stage>
      <stage-num>1</stage-num>
      <daemons>
        <daemon>
          <daemon-name>bgp</daemon-name>
          <status>time-out</status>
        </daemon>
        <daemon>
          <daemon-name>mct</daemon-name>
          <status>complete</status>
        </daemon>
      </daemons>
    </stage>
    <stage>
      <stage-num>2</stage-num>
      <daemons>
        <daemon>
          <daemon-name>bgp</daemon-name>
          <status>complete</status>
        </daemon>
        <daemon>
          <daemon-name>mct</daemon-name>
          <status>complete</status>
        </daemon>
      </daemons>
    </stage>
  </stages>
</output>
```

```
        </daemon>  
      </daemons>  
    </stage>  
  </stages>  
</output>
```

## get-netconf-client-capabilities

---

### Resource URIs

| URI   | Description  |
|---|--|
| <base_URI>/operations/get-netconf-client-capabilities | Retrieves the vendor information of all the NETCONF clients. |

### Parameters

*session-id*

Displays the session ID of the NETCONF client session.

*user-name*

Displays the login name of the user for the NETCONF client session.

*vendor*

Displays the vendor name of the NETCONF client session.

*product*

Displays the product name of the NETCONF client session.

*version*

Displays the product version of the NETCONF client session.

*identity*

Displays the identity of the NETCONF client session.

*host-ip*

Displays the IP address of NETCONF client session.

*time*

Displays the login time of NETCONF client session.

### Usage Guidelines

Only POST operation is supported.

### Examples

#### URI

http://host:80/rest/operations/get-netconf-client-capabilities

### Request Body

```
<get-netconf-client-capabilities></get-netconf-client-capabilities>
```

## Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-netconf-ext'>
  <session>
    <session-id>532</session-id>
    <user-name>admin</user-name>
    <vendor>BROCADE</vendor>
    <product>Network Advisor</product>
    <version>12.3.3 build 18</version>
    <identity>Administrator</identity>
    <af-type>IPV4</af-type>
    <host-ip>10.20.237.24</host-ip>
    <time>2015-01-12T11:02:42+00:00</time>
  </session>
</output>
```

## get-port-channel-detail

### Resource URIs

| URI  | Description  |
|--|--|
| <code>&lt;base_URI&gt;/operations/get-port-channel-detail</code> | 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.

### Usage Guidelines

Only POST operation is supported.

### Examples

#### URI

`http://host:80/rest/operations/get-port-channel-detail`

### Request Body

```
<get-port-channel-detail></get-port-channel-detail>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-lag'>
  <lacp>
    <aggregator-id>1</aggregator-id>
    <aggregator-type>standard</aggregator-type>
    <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>
```



## get-portchannel-info-by-intf

---

### Resource URIs

| URI  | Description   |
|--|---|
| <base_URI>/operations/get-portchannel-info-by-intf | Displays Link Aggregation Control Protocol (LACP) configuration parameters for an Aggregation Port. |

### Parameters

*interface-type*

Displays the interface type.

*interface-name*

Displays the interface name.

*actor-port*

Displays the actor port number.

*system-priority*

Displays the System Priority.

*actor-system-id*

Displays the Actor system ID.

*partner-oper-priority*

Displays the partner operational priority.

*partner-system-id*

Displays the Partner system ID.

*actor-priority*

Displays the Actor Priority.

*admin-key*

Displays the Admin key.

*oper-key*

Displays the Operational key.

*receive-machine-state*

Displays the state of the 'Receive Machine'.

*periodic-transmission-machine-state*

Displays the state of the 'Periodic Transmission machine'.

*mux-machine-state*

Displays the state of the 'Mux machine'.

*admin-state*

Displays the Admin state.

*oper-state*

Displays the Operational state.

*partner-oper-state*

Displays the Partner Operational state.

*partner-oper-port*

Displays the Partner Operational port.

*actor-chip-number*

Displays the actor chip number.

*actor-max-deskew*

Displays the actor maximum deskew.

*partner-chip-number*

Displays the actor chip number.

*partner-max-deskew*

Displays the partner maximum deskew.

*actor-brcd-state*

Displays the actor BRCD trunk state.

*partner-brcd-state*

Displays the partner BRCD trunk state.

## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

`http://host:80/rest/operations/get-portchannel-info-by-intf`

### Request Body

```
<get-portchannel-info-by-intf></get-portchannel-info-by-intf>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-lag'>
  <lacp>
    <interface-type>port-channel</interface-type>
    <interface-name>122/8/1</interface-name>
    <actor-port>524204122304</actor-port>
    <system-priority>32255</system-priority>
    <actor-system-id>01:e0:52:00:20:00</actor-system-id>
    <partner-oper-priority>1</partner-oper-priority>
    <partner-system-id>00:00:00:00:00:01</partner-system-id>
    <actor-priority>32768</actor-priority>
```

```
<admin-key>40</admin-key>
<oper-key>40</oper-key>
<receive-machine-state>current</receive-machine-state>
<periodic-transmission-machine-state>slow-periodic</periodic-transmission-machine-
state>
<mux-machine-state>collecting-distributing</mux-machine-state>
<admin-state>activity aggregation defaulted</admin-state>
<oper-state>activity aggregation synchronization collecting distributing</oper-state>
<partner-oper-state>activity aggregation synchronization collecting distributing</
partner-oper-state>
  <partner-oper-port>1</partner-oper-port>
</lACP>
</output>
```

## get-stp-brief-info

---

### Resource URIs

| URI                                      | Description                         |
|--|-------------------------------------|
| <base_URI>/operations/get-stp-brief-info | Displays spanning tree information. |

### Parameters

*stp-mode*

Displays the type of the Spanning Tree Protocol configured on the switch.

*priority*

Displays the Bridge priority.

*hello-time*

Displays the interval between two transmissions of BPDU packets sent by the Root Bridge to tell all other switches that it is indeed the Root Bridge (1 to 10 sec).

*max-age*

Displays the Max Age may be set to ensure that old information does not endlessly circulate through redundant paths in the network, preventing the effective propagation of new information (6 to 40 sec).

*forward-delay*

Displays the port on the Switch spends this time in the listening state while moving from the blocking state to the forwarding state (4 to 30 sec).

*interface-type*

Displays the interface type.

*interface-name*

Displays the interface name.

*spanningtree-enabled*

Enables spanning tree.

*if-index*

Displays the interface index.

*interface-id*

Displays the interface ID.

*if-role*

Displays the interface role.

*if-state*

Displays the interface state.

*external-path-cost*

Designated external path cost.

*internal-path-cost*

Designated internal path cost.

*configured-path-cost*

Displays the configured path cost.

*designated-port-id*

Displays the designated port ID.

*port-priority*

Displays the Port priority.

*designated-bridge-id*

Displays the designated bridge ID.

*port-hello-time*

Displays the Port hello time.

*forward-transitions-count*

Displays the number of forward transitions.

*received-stp-type*

Displays the received (rx) STP type.

*transmitted-stp-type*

Displays the transmitted (tx) STP type.

*edge-port*

Displays the edge port mode.

*auto-edge*

Displays the auto edge.

*admin-edge*

Displays the admin edge.

*edge-delay*

Displays the edge delay.

*configured-root-guard*

Displays the configured root guard.

*oper-root-guard*

Displays the operational root guard.

*boundary-port*

Displays the Is boundary.

*oper-bpdu-guard*

Displays the operational BPDU guard.

*oper-bpdu-filter*

Displays the operational BPDU filter.

*link-type*

Displays the spanning tree link type.

*rx-bpdu-count*

Displays the received BPDU count.

*tx-bpdu-count*

Displays the transmitted BPDU count.

## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operations/get-stp-brief-info

### Request Body

```
<get-stp-brief-info></get-stp-brief-info>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-xstp-ext'>
  <spanning-tree-info>
    <stp-mode>stp</stp-mode>
    <stp>
      <root-bridge>
        <priority>32768</priority>
        <bridge-id>8000.01e0.5200.0193</bridge-id>
        <hello-time>2</hello-time>
        <max-age>20</max-age>
        <forward-delay>15</forward-delay>
      </root-bridge>
      <bridge>
        <priority>32768</priority>
        <bridge-id>8000.01e0.5200.0193</bridge-id>
        <hello-time>2</hello-time>
        <max-age>20</max-age>
        <forward-delay>15</forward-delay>
      </bridge>
    </stp>
  </spanning-tree-info>
  <has-more>false</has-more>
</output>
```

## get-stp-mst-detail

---

### Resource URIs

| URI                                      | Description                           |
|--|---------------------------------------|
| <base_URI>/operations/get-stp-mst-detail | Retrieves RPC to return MSTP details. |

### Parameters

*cist-root-id*

Displays the CIST Root ID.

*cist-bridge-id*

Displays the CIST bridge ID.

*cist-reg-root-id*

Displays the CIST regional root ID.

*root-forward-delay*

Displays the CIST root forward delay.

*hello-time*

Displays the CIST root hello time.

*max-age*

Displays the CIST root maximum age.

*max-hops*

Displays the hops the BPDU will be valid.

*migrate-time*

Displays the migration time.

*interface-type*

Displays the interface type.

*interface-name*

Displays the interface name.

*spanningtree-enabled*

Displays if the spanning tree enabled.

*if-index*

Displays the interface index.

*interface-id*

Displays the interface ID.

*if-role*

Displays the interface role.

*if-state*

Displays the interface state.

*internal-path-cost*

Displays the designated internal path cost.

*external-path-cost*

Displays the designated external path cost.

*configured-path-cost*

Displays the configured path cost.

*designated-port-id*

Displays the designated port ID.

*port-priority*

Displays the port priority.

*designated-bridge-id*

Displays the designated bridge ID.

*forward-transitions-count*

Displays the number of forward transitions.

*port-hello-time*

Displays the Port hello time.

*received-stp-type*

Displays the received (rx) stp type.

*transmitted-stp-type*

Displays the transmitted (tx) stp type.

*edge-port*

Displays the Edge Port mode.

*auto-edge*

Displays the Auto Edge.

*edge-delay*

Displays the Edge delay.

*admin-edge*

Displays the Admin Edge.

*boundary-port*

Displays the Is boundary.

*configured-root-guard*

Displays the configured root guard.

*oper-root-guard*

Displays the operational root guard.

*oper-bpdu-guard*

Displays the operational BPDU guard.

*oper-bpdu-filter*

Displays the operational BPDU filter.



*link-type*

Displays the point-to-point - enable rapid transition.

*rx-bpdu-count*

Displays the received BPDU count.

*tx-bpdu-count*

Displays the transmitted BPDU count.

*instance-id*

Displays the instance ID of the last received spanning-tree instance.

*msti-root-id*

Displays the MSTI Root ID.

*msti-bridge-id*

Displays the MSTI bridge ID.

*msti-bridge-priority*

Displays the MSTI bridge priority.

*vlan-id*

Displays the VLAN ID.

## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operations/get-stp-mst-detail

## Request Body

```
<get-stp-mst-detail></get-stp-mst-detail>
```

## Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-xstp-ext'>
  <cist>
    <cist-root-id>8000.01e0.5200.05bf</cist-root-id>
    <cist-bridge-id>8000.01e0.5200.05bf</cist-bridge-id>
    <cist-reg-root-id>8000.01e0.5200.05bf</cist-reg-root-id>
    <root-forward-delay>15</root-forward-delay>
    <hello-time>2</hello-time>
    <max-age>20</max-age>
    <max-hops>20</max-hops>
    <migrate-time>3</migrate-time>
  <port>
    <interface-type>port-channel</interface-type>
    <interface-name>2/0/12</interface-name>
```

```

    <spanningtree-enabled>>false</spanningtree-enabled>
    <if-index>403046411</if-index>
    <interface-id>32768</interface-id>
    <if-role>disabled</if-role>
    <if-state>forwarding</if-state>
    <internal-path-cost>0</internal-path-cost>
    <external-path-cost>0</external-path-cost>
    <configured-path-cost>20000000</configured-path-cost>
    <designated-port-id>0</designated-port-id>
    <port-priority>128</port-priority>
    <designated-bridge-id>0000.0000.0000.0000</designated-bridge-id>
    <forward-transitions-count>0</forward-transitions-count>
    <port-hello-time>2</port-hello-time>
    <received-stp-type>none</received-stp-type>
    <transmitted-stp-type>mstp</transmitted-stp-type>
    <edge-port>off</edge-port>
    <auto-edge>no</auto-edge>
    <edge-delay>3</edge-delay>
    <admin-edge>no</admin-edge>
    <boundary-port>yes</boundary-port>
    <configured-root-guard>off</configured-root-guard>
    <oper-root-guard>off</oper-root-guard>
    <oper-bpdu-guard>off</oper-bpdu-guard>
    <oper-bpdu-filter>off</oper-bpdu-filter>
    <link-type>point-to-point</link-type>
    <rx-bpdu-count>0</rx-bpdu-count>
    <tx-bpdu-count>0</tx-bpdu-count>
  </port>
</cist>
<msti>
  <instance-id>1</instance-id>
  <msti-root-id>8001.01e0.5200.05bf</msti-root-id>
  <msti-bridge-id>8001.01e0.5200.05bf</msti-bridge-id>
  <msti-bridge-priority>32769</msti-bridge-priority>
  <port>
    <interface-type>port-channel</interface-type>
    <interface-name>2/0/12</interface-name>
    <spanningtree-enabled>>false</spanningtree-enabled>
    <if-index>403046411</if-index>
    <interface-id>32768</interface-id>
    <if-role>disabled</if-role>
    <if-state>forwarding</if-state>
    <internal-path-cost>0</internal-path-cost>
    <configured-path-cost>20000000</configured-path-cost>
    <designated-port-id>0</designated-port-id>
    <port-priority>128</port-priority>
    <designated-bridge-id>0000.0000.0000.0000</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>

```

## get-system-uptime

---

### Resource URIs

| URI                                     | Description   |
|---|---|
| <base_URI>/operations/get-system-uptime | Retrieves the time since this managed entity was last re-initialized. |

### Parameters

#### *days*

Displays the number of days the managed node is up since its last re-initialization.

#### *hours*

Displays the number of hours the managed node is up since its last re-initialization.

#### *minutes*

Displays the number of minutes the managed node is up since its last re-initialization.

#### *seconds*

Displays the number of seconds the managed node is up since its last re-initialization.

### Usage Guidelines

Only POST operation is supported.

### Examples

#### URI

http://host:80/rest/operations/get-system-uptime

### Request Body

```
<get-system-uptime></get-system-uptime>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-system'>
  <show-system-uptime>
    <days>0</days>
    <hours>11</hours>
    <minutes>15</minutes>
    <seconds>37</seconds>
```

```
</show-system-uptime>
</output>
```

## get-tunnel-info

### Resource URIs

| URI                                   | Description  |
|---------------------------------------|--|
| <base_URI>/operations/get-tunnel-info | Retrieves the summary of one or more tunnels from the switch. Output contains tunnel records sorted in the ascending order of tunnel ID. |

### Input Parameters

#### page-cursor

Opaque data identifying the next page, returned by previous RPC call. RPC returns first page data if this value is not present or empty.

#### node-id

Node from which the tunnel information is to be retrieved. If not specified, data is retrieved from all nodes.

#### choice filter-type

Input filter.

#### case filter-by-id

Filter by tunnel ID. Output can have at most only one tunnel information. The last-rcvd-record-id parameter is ignored.

#### case filter-by-mode

Filter by tunnel mode.

#### case filter-by-gateway

Filter by overlay gateway name.

#### case filter-by-sip

Filter by tunnel source IP. Only IPv4 addresses are supported in this release.

#### case filter-by-dip

Filter by tunnel destination IP. Only IPv4 addresses are supported in this release.

#### case filter-by-cfg-src

Filter by configuration source.

#### case filter-by-site

Filter by overlay site name.

#### case filter-by-opr-state

Filter by tunnel oper state.

#### case filter-by-bfd-state

Filter by tunnel bfd state.

## Output Parameters

### **tunnel id**

Displays the tunnel ID.

### **mode**

Displays the tunnel encapsulation type.

### **src-ip**

Displays the tunnel source IP address.

### **dest-ip**

Displays the tunnel destination IP address.

### **vrf**

Displays the tunnel vrf; encapsulated frames are routed to destination IP address in this vrf.

### **config-src**

Displays the tunnel configuration source which indicates how the tunnel was created.

### **admin-state**

Displays the tunnel admin state

### **oper-state**

Displays the tunnel oper state.

### **bfd-state**

Displays the tunnel bfd state. No value will be returned if bfd is not enabled on this tunnel.

### **container nodes**

Displays the nodes from which this tunnel data is retrieved.

### **node-id**

Displays the node ID.

### **has-conflicts**

Indicates this tunnel has conflicting data across nodes. Client can repeat the rpc with node-id filter to inspect data from specific node.

### **next-page-cursor**

Opaque data identifying the next page. Client must pass this value as 'page-cursor' parameter in following RPC to retrieve next page tunnel data. Value will not be present if no more tunnel records exist i.e. if current page is the last page.

## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operations/get-tunnel-info

### Request Body

```
<get-tunnel-info></get-tunnel-info>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-tunnels-ext'>
  <tunnel>
    <id>61441</id>
    <mode>vxlan</mode>
    <src-ip>107.107.107.10</src-ip>
    <dest-ip>107.107.107.2</dest-ip>
    <vrf>default-vrf</vrf>
    <config-src>site-config</config-src>
    <admin-state>up</admin-state>
    <oper-state>up</oper-state>
    <nodes>
      <node-id>1</node-id>
    </nodes>
  </tunnel>
</output>
```

## get-tunnel-statistics

### Resource URIs

| URI   | Description  |
|---|--|
| <base_URI>/operations/get-tunnel-statistics | Retrieves tunnel statistics - count of bytes and frames transmitted and received. Output records are sorted in ascending order of tunnel ID. |

### Input Parameters

#### page-cursor

Opaque data identifying the next page, returned by previous RPC call. RPC returns first page data if this value is not present or empty.

#### node-id

Node from which the tunnel statistics is to be retrieved. If not specified, data is retrieved from all nodes.

#### tunnel-id-type

Filter by tunnel ID. Output can have at most only one tunnel information. The last-rcvd-record-id parameter is ignored.

**filter-by-mode**

Filter by tunnel mode.

**case filter-by-gateway**

Filter by overlay gateway name.

## Output Parameters

**id**

Displays the tunnel ID.

**tx-frames**

Displays the number of frames transmitted.

**tx-bytes**

Displays the number of bytes transmitted

**rx-frames**

Displays the number of frames received.

**rx-bytes**

Displays the number of bytes received. Value will not be present if the hardware does not support rx byte counter.

**next-page-cursor**

Opaque data identifying the next page. Client must pass this value as 'page-cursor' parameter in following RPC to retrieve next page tunnel data. Value will not be present if no more tunnel records exist i.e. if current page is the last page.

## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

`http://host:80/rest/operations/get-tunnel-statistics`

## Request Body

```
<get-tunnel-statistics></get-tunnel-statistics>
```

## get-vlan-brief

---

### Resource URIs

| URI                                  | Description  |
|--------------------------------------|--|
| <base_URI>/operations/get-vlan-brief | Retrieves the operational data for a given VLAN and enumeration of all the interfaces belonging to the VLAN. |

### Parameters

*vlan-id*

Displays the VLAN ID.

*vlan-type*

Displays the VLAN type.

*vlan-name*

Displays the administrative name of the VLAN.

*vlan-state*

Displays the operational state of the VLAN.

*last-vlan-id*

Displays the last VLAN record that has been fetched.

### Usage Guidelines

Only POST operation is supported.

### Examples

#### URI

http://host:80/rest/operations/get-vlan-brief

#### Request Body

```
<get-vlan-brief></get-vlan-brief>
```

If the entire information cannot be retrieved in a single execution, the last 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'>
  <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>
```

## graceful-restart

### Resource URIs

| URI  | Description                    |
|--|--------------------------------|
| <base_URI>/config/running/router/ospf/default-vrf/graceful-restart | Enables OSPF graceful restart. |

| GET URI  | Description  |
|--|--|
| <base_URI>/config/running/router/ospf/default-vrf/graceful-restart | Retrieves OSPF graceful restart configuration information. |

| PATCH URI  | Payload   | Description   |
|--|---|---|
| <base_URI>/config/running/router/ospf/default-vrf/graceful-restart | <graceful-restart-enable>true</graceful-restart-enable> | Enables OSPF graceful restart.  |
| <base_URI>/config/running/router/ospf/default-vrf/graceful-restart | <helper-disable>true</helper-disable>                   | Disables helper mode.   |
| <base_URI>/config/running/router/ospf/default-vrf/graceful-restart | <restart-time> </restart-time>                          | Configures the maximum restart wait time that is advertised to neighbors. |

| DELETE URI  |
|---|
| <base_URI>/config/running/router/ospf/default-vrf/graceful-restart                |
| <base_URI>/config/running/router/ospf/default-vrf/graceful-restart/helper-disable |
| <base_URI>/config/running/router/ospf/default-vrf/graceful-restart/restart-time   |

### Parameters

#### **helper-disable**

Disables helper mode.

#### **restart-time**

Configures the maximum restart wait time that is advertised to neighbors.

### Usage Guidelines

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

## Examples

This example uses the GET option to retrieve configuration details.

```
<graceful-restart xmlns="urn:brocade.com:mgmt:brocade-ospf"
xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/router/ospf/default-vrf/
graceful-restart">
  <graceful-restart-enable>true</graceful-restart-enable>
  <helper-disable>true</helper-disable>
  <restart-time>150</restart-time>
</graceful-restart>
```

## mpls-reopt-lsp

---

### 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

## optimized-replication

### Resource URIs

| URI  | Description   |
|--|---|
| <base_URI>/config/running/overlay-gateway/<gateway name>/optimized-replication | Configures optimized replication under an overlay gateway instance. |

| GET URI  | Description  |
|--|--|
| <base_URI>/config/running/overlay-gateway/<gateway name>/optimized-replication | Retrieves optimized replication-related configuration information. |

| POST URI   | Payload  | Description   |
|--|--|---|
| <base_URI>/config/running/overlay-gateway/<gateway name>                       | <optimized-replication> </optimized-replication>                   | Configures optimized replication under an overlay gateway instance.     |
| <base_URI>/config/running/overlay-gateway/<gateway name>/optimized-replication | <underlay-mdt-default-group>{x.x.x.x}</underlay-mdt-default-group> | Configures the default underlay MDT group for the specified IP address. |

| PATCH URI   | Payload  | Description  |
|---|--|--|
| <base_URI>/config/running/overlay-gateway/<gateway name>/optimized-replication/underlay-mdt-group | <underlay-mdt-group><group-ip-address>{x.x.x.x}</group-ip-address><broadcast-domain-type>vlan</broadcast-domain-type><add>[16-20]</add></underlay-mdt-group> | Configures the underlay MDT group for the specified IP address |

| DELETE URI  |
|---|
| <base_URI>/config/running/overlay-gateway/<gateway name>/optimized-replication                                  |
| <base_URI>/config/running/overlay-gateway/<gateway name>/optimized-replication/underlay-mdt-default-group       |
| <base_URI>/config/running/overlay-gateway/<gateway name>/optimized-replication/underlay-mdt-group/{x.x.x.x}vlan |

### Parameters

#### **underlay-mdt-default-group**

Configures the default underlay MDT group for the specified IP address.

**underlay-mdt-group**

Configures the underlay MDT group for the specified IP address.

## Usage Guidelines

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

## Examples

This example uses the GET option to retrieve configuration details.

```
<optimized-replication xmlns="urn:brocade.com:mgmt:brocade-tunnels"
xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/overlay-gateway/g1/
optimized-replication">
  <underlay-mdt-default-group>239.0.0.255</underlay-mdt-default-group>
  <underlay-mdt-group y:self="/rest/config/running/overlay-gateway/g1/optimized-
replication/
underlay-mdt-group/239.0.0.1%2Cvlan">
    <group-ip-address>239.0.0.1</group-ip-address>
    <broadcast-domain-type>vlan</broadcast-domain-type>
    <add>16-20</add>
  </underlay-mdt-group>
</optimized-replication>
```

---

## reload

---

### Resource URIs

| URI                          | Description         |
|------------------------------|---------------------|
| <base_URI>/operations/reload | Reloads the device. |

### Usage Guidelines

Only POST operation is supported.

### Examples

#### URI

http://host:80/rest/operations/reload

### Request Body

```
<reload></reload>
```

### Response Body

None

## set-http-application-url

---

### Resource URIs

| URI  | Description                  |
|--|------------------------------|
| <base_URI>/operations/set-http-application-url | Update HTTP application URL. |

### Parameters

#### *status-code*

Displays the status code as URL updated successfully - 0, Error not able to update configuration - 1 or Error not able to remove configuration - 2.

#### *status-string*

Displays the error in string format.

### Usage Guidelines

Only POST operation is supported.

### Examples

#### URI

http://host:80/rest/operations/set-http-application-url

### Request Body

```
<set-http-application-url>
  <config-http-app-url>
    <url>www.google.com</url>
    <op-type>0</op-type>
  </config-http-app-url>
</set-http-application-url>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-http-redirect'>
  <status-code>0</status-code>
  <status-string>Success</status-string>
</output>
```



## show/selinux/status

---

### Resource URIs

| URI                                       | Description                            |
|---|--|
| <base_URI>/operations/show/selinux/status | Retrieves the current SE Linux status. |

### Usage Guidelines

Only POST operation is supported.

### Examples

#### Rest URL - curl command

```
curl -v -X POST -u admin:password http://10.20.61.172/rest/operations/show/selinux/status
Example:
bash-4.2$ curl -v -X POST -u admin:password http://10.20.61.172/rest/operations/show/selinux/status
```

### URI

http://host:80/rest/operations/show/selinux/status

### Request Body

```
<sestatus></sestatus>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-sec-services'>
  <sestatus-output>
    SELinux status:          enabled
    SELinuxfs mount:        /sys/fs/selinux
    SELinux root directory: /etc/selinux
    Loaded policy name:     mls
    Current mode:           permissive
    Mode from config file:  enforcing
    Policy MLS status:      enabled
    Policy deny_unknown status: allowed
    Memory protection checking: actual (secure)
    Max kernel policy version: 31
  </sestatus-output>
</output>
```

## show/snmp-server/status

---

### Resource URIs

| POST URIs                                     | Description  |
|---|--|
| <base_URI>/operations/show/snmp-server/status | Displays the status of SNMP server on all configured VRFs. |

### Parameters

None.

### Usage Guidelines

POST operation is supported.

### Examples

The following example uses the POST option to retrieve the SNMP server details.

### URI

http://host:80/rest/operations/show/snmp-server/status

### Request Body

None

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-snmp'>
  <status>
    <server>
      <vrf>mgmt-vrf</vrf>
      <status>enabled</status>
    </server>
    <server>
      <vrf>default-vrf</vrf>
      <status>enabled</status>
    </server>
    <server>
      <vrf>red</vrf>
      <status>disabled</status>
    </server>
  </status>
</output>
```

## show-clock

---

### Resource URIs

| URI                              | Description   |
|----------------------------------|---|
| <base_URI>/operations/show-clock | Retrieves current time for the cluster or specified switch. |

### Parameters

*current-time*

Displays the switch date and time.

*timezone*

Displays the region/city or region/state/city.

### Usage Guidelines

Only POST operation is supported.

### Examples

#### URI

http://host:80/rest/operations/show-clock

### Request Body

```
<show-clock></show-clock>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-clock'>
  <clock-time>
    <current-time>2017-03-17T05:13:28+00:00</current-time>
    <timezone>Etc/GMT</timezone>
  </clock-time>
</output>
```

## show-fabric-trunk-info

---

### Resource URIs

| 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-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/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>
```

## show-firmware-version

---

### 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.

*Is-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>
```



## show-ntp

---

### Resource URIs

| URI                            | Description                       |
|--------------------------------|-----------------------------------|
| <base_URI>/operations/show-ntp | Retrieves NTP server information. |

### Parameters

#### *LOCL*

Indicates whether the LOCL is true or false.

### Usage Guidelines

Only POST operation is supported.

### Examples

#### URI

http://host:80/rest/operations/show-ntp

### Request Body

```
<show-ntp></show-ntp>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-ntp'>  
  <node-active-server>  
    <LOCL>true</LOCL>  
  </node-active-server>  
</output>
```

## show-raslog

---

### Resource URIs

| URI                               | Description                      |
|-----------------------------------|----------------------------------|
| <base_URI>/operations/show-raslog | Retrieves the entries of RASLOG. |

### Parameters

#### *number-of-entries*

Displays the number of recent events to be fetched from the RASLOG entries.

#### *index*

Displays the sequence number for the message.

#### *message-id*

Displays the message identifier.

#### *date-and-time-info*

Displays the date and time of the message. The format is: YYYY-MM-DD/HH:MM:SS.SSSS (micro seconds).

#### *severity*

Displays the severity of the message. Valid values include: INFO, WARNING, ERROR, and CRITICAL.

#### *log-type*

Specifies if the message is a SYSTEM or DCE log.

#### *repeat-count*

Displays the number of times the particular event has occurred.

#### *message*

Displays the textual description of the event.

#### *message-flag*

Displays the type of the message.

#### *switch-or-chassis-name*

Displays the switch name or chassis name for the generator of the message..

### Usage Guidelines

Only POST operation is supported.

### Examples

#### URI

`http://host:80/rest/operations/show-raslog`

## Request Body

```
<show-raslog></show-raslog>
```

The API can be used to retrieve some number of last entries by providing the following tags as in the 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>
    <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>
```

## show-support-save-status

---

### Resource URIs

| URI  | Description   |
|--|---|
| <base_URI>/operations/show-support-save-status | Retrieves the information on the status of a recent support save request. |

### Parameters

*status*

Displays the status of recent support save.

*message*

Displays the textual description of status of recent support save.

*percentage-of-completion*

Displays the value of percentage of completion.

### Usage Guidelines

Only POST operation is supported.

### Examples

#### URI

http://host:80/rest/operations/show-support-save-status

### 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>
    <status>unknown</status>
    <message>supportsave is not running.</message>
    <percentage-of-completion>0</percentage-of-completion>
  </show-support-save-status>
</output>
```

## show-system-info

---

### Resource URIs

| URI                                    | Description                       |
|--|-----------------------------------|
| <base_URI>/operations/show-system-info | Retrieves the system information. |

### Parameters

*stack-mac*

Displays the MAC address of the switch.

### Usage Guidelines

Only POST operation is supported.

### Examples

#### URI

http://host:80/rest/operations/show-system-info

### Request Body

```
<show-system-info></show-system-info>
```

### Response Body

```
<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>
```

## show-system-monitor

---

### Resource URIs

| URI                                       | Description   |
|---|---|
| <base_URI>/operations/show-system-monitor | Retrieves the overall status for a selected switch. |

### Parameters

*switch-name*

Displays the name of the switch.

*switch-ip*

Displays the IP address of the switch.

*switch-state*

Displays the switch status based on components.

*switch-state-reason*

Displays the component reason for switch status.

*report-time*

Displays the switch report time stamp.

*component-name*

Displays the component name.

*component-state*

Displays the component status based on thresholds.

*port-area*

Displays the port identifier.

*port-name*

Displays the port name.

*port-state*

Displays the port state.

### Usage Guidelines

Only POST operation is supported.

### Examples

#### URI

<http://host:80/rest/operations/show-system-monitor>

## Request Body

```
<show-system-monitor></show-system-monitor>
```

## Response Body

```
<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>
```