



# Extreme SLX-OS REST API Guide, 20.8.1

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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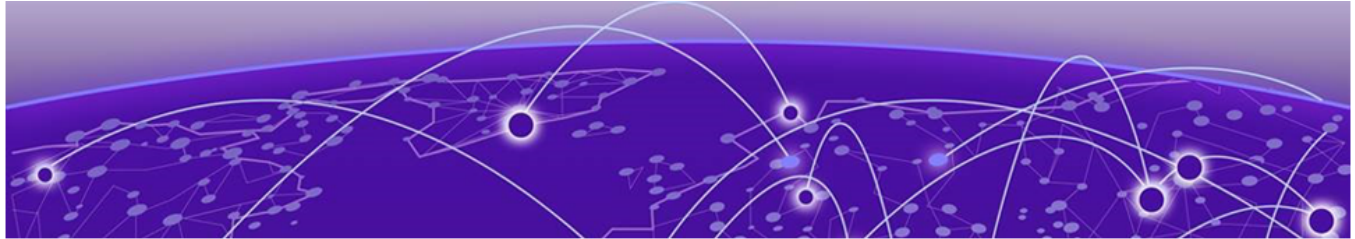
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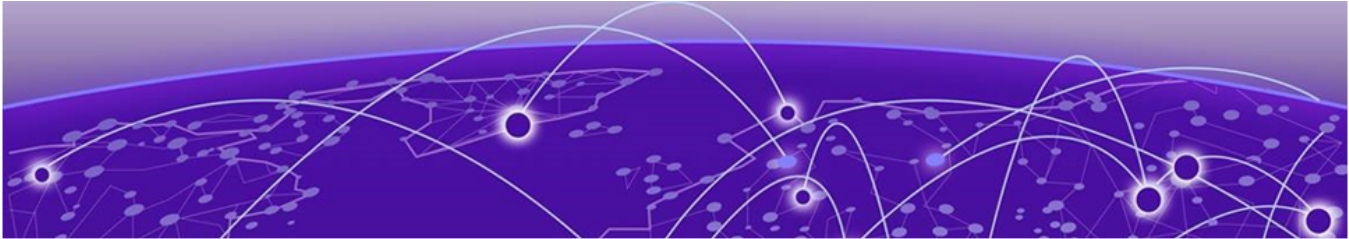
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# Preface

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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 Extreme Networks switches, the product is referred to as *the switch*.

**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</b> names	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</b> text	Bold text indicates command names, keywords, and command options.
<i>italic</i> text	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 articles, white papers, and case studies

## Open Source Declarations

Some software files have been licensed under certain open source licenses. Information is available on the [Open Source Declaration](#) page.

## Training

Extreme Networks offers product training courses, both online and in person, as well as specialized certifications. For details, visit the [Extreme Networks Training](#) page.

## 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 2800. 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.

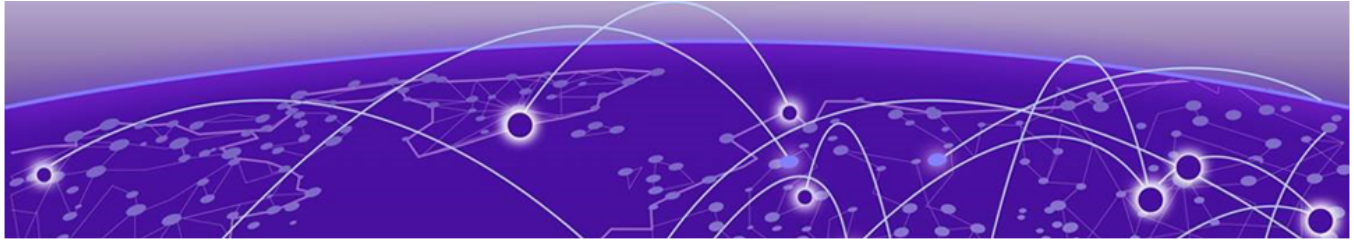
## Send Feedback

The User Enablement 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, email us at [Product-Documentation@extremenetworks.com](mailto:Product-Documentation@extremenetworks.com).

Provide as much detail as possible including the publication title, topic heading, and page number (if applicable), along with your comments and suggestions for improvement.



# About This Document

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[What's New in this Document](#) on page 35

[Supported Hardware](#) on page 35

## What's New in this Document

---

This document is released with the SLX-OS 20.8.1 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

---

For instances in which a topic or part of a topic applies to some devices but not to others, the topic specifically identifies the devices.

SLX-OS 20.8.1 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.

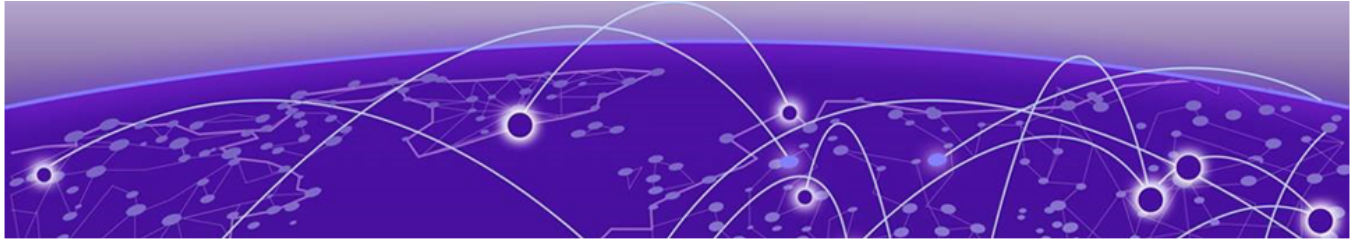
All configurations and software features that are applicable to SLX 9740 devices are also applicable for the Extreme 8820 devices.

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 37  
[Transport protocol requirements](#) on page 37  
[Logging in and out](#) on page 38  
[Supported operations](#) on page 39  
[Media types](#) on page 44  
[XML resource representation](#) on page 45  
[HTTP header](#) on page 45  
[HTTP status code and messages](#) on page 49

## 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

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

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

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

```

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

```

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

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

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

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

## Supported operations

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

### GET

The GET method is used to retrieve the representation of the resource (for example, 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>"Eth 1/15"</mep-port>
    <port-state>0</port-state>
```

```
<rmep y:self="/rest/operational-state/cfm-state/cfm-connectivity/domain/test/ma/
name/mep/1/rmep/2">
  <rmep-id>2</rmep-id>
  <rmep-mac>0000.0000.0000</rmep-mac>
  <vlan-id>0</vlan-id>
  <rmep-port>&quot;&quot;</rmep-port>
  <rmep-state>0</rmep-state>
</rmep>
</mep>
</ma>
```

**Note**

A request payload is not required for a GET operation.

## POST

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

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

**Request header**

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

**Request message body**

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

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

**Response**

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

**Note**

A request payload is required for a POST operation.



## PUT

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

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

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

### Request header

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

### Request message body

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

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

### Response

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



#### Note

A request payload is required for a PUT operation.

## PATCH

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

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

### Request header

```
PATCH /rest/config/running/ldap-server/host/test_API HTTP/1.1
Authorization: Basic YWRtaW46cGFzc3dvcmQ=
User-Agent: curl/7.19.7 (x86_64-redhat-linux-gnu) libcurl/7.19.7 NSS/3.12.9.0 zlib/1.2.3
libidn/1.18 libssh2/1.2.2
Host: 192.168.10.2
Accept: application/vnd.configuration.resource+xml
Content-Length: 55
```

### Request message body

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

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

### Response

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



#### Note

A request payload is required for a PATCH operation.

## DELETE

The DELETE method is used to delete the known resource.

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

### Request header

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

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

### Response

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

```
Content-Length: 0
Content-Type: text/html
```

**Note**

An authorization header is required to perform a DELETE operation.

**Note**

A request payload is not required for a DELETE operation.

## HEAD

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

### Request header

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

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

### Response

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

**Note**

A request payload is not required for a HEAD operation.

## OPTIONS

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

### Request header

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

## Response

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



### Note

A request payload is not required for an OPTIONS operation.

## Media types

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

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

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

**Table 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

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

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

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

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

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

## HTTP header

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

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

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

**Table 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/ vnd.configuration.resource+xml application/vnd.operations.resource+xml application/ vnd.configuration.resource+json application/vnd.yang.operation+json
PUT	application/ vnd.configuration.resource+xml application/ vnd.configuration.resource+json

**Table 5: Methods and supported media types (continued)**

Method	Media types
PATCH	application/ vnd.configuration.resource+xml application/ vnd.configuration.resource+json
DELETE	application/ vnd.configuration.resource+xml application/ vnd.configuration.resource+json

For more information about the media types, refer to the [Media types](#) 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> Methods: GET Media types: All 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>
  </mem-list>
</mem-state>
</data>
```



#### 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>
  </summary>
</mem-state>
</data>
```

```

<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 proccess 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>
</mpls>
```

## HTTP status code and messages

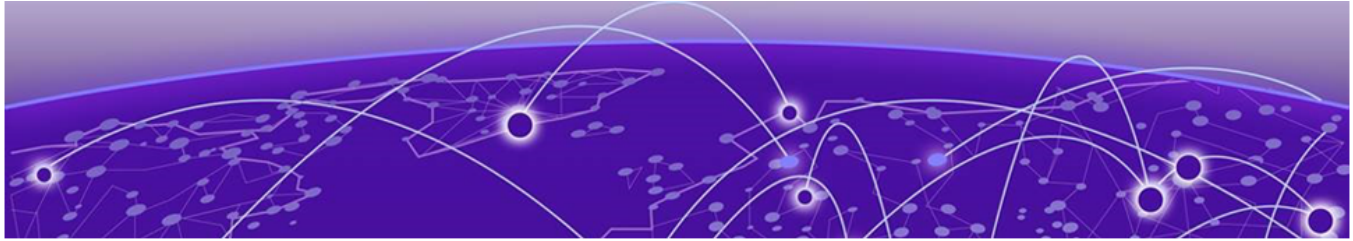
Both success and error status are reported to the client by way of the HTTP Status-Line, which contains the HTTP status code. The application-specific error messages are similar to the CLI error messages.

**Table 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

**Table 6: HTTP status code (continued)**

Status-Line	Description
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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[Resources](#) on page 51

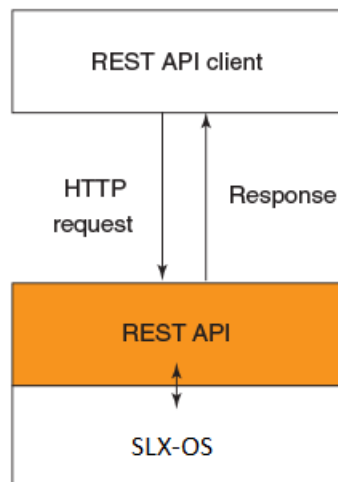
## REST API

---

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

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

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



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

## Resources

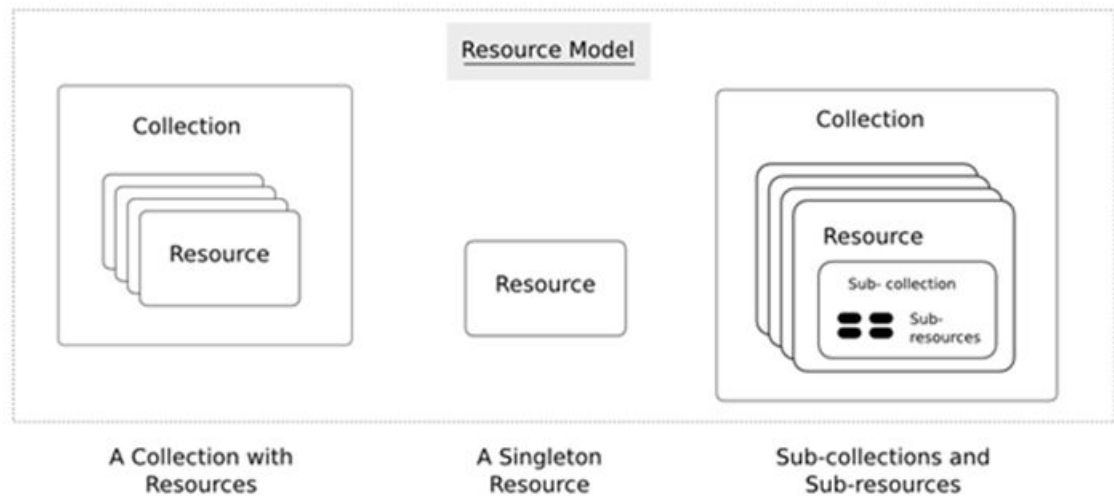
---

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

Only a few standard methods are defined for the resource corresponding to the standard HTTP, such as GET, HEAD, OPTIONS, POST, PUT, PATCH, and DELETE. Resources can be grouped into collections (in the YANG model, it is represented

as a "List" statement). Each collection is homogeneous (it contains only one type of resource) and unordered.

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



**Figure 2: Resource Model**

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

## Base resource

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

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

The base resource consists of Configuration resource (/config/running), 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

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

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

URIs consists of two parts:

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

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

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



### Note

URIs are case-sensitive.

## URI structure

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

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

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

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

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

### URI encoding

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

- The delimiter between adjacent keywords in URIs is a Comma (,). This is encoded as %2C.

#### *Base URI*

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



#### **Note**

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

#### *Top-level URIs*

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

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



# Configuration APIs

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[interface/{interface-type}/{interface-name}/ip/arp-aging-timeout](#) on page 116  
[interface/{interface-type}/{interface-name}/ip/dhcp/relay/gateway](#) on page 118  
[interface/{interface-type}/{interface-name}/ip/dhcp/relay/servers](#) on page 120  
[interface/{interface-type}/{interface-name}/ip/igmp](#) on page 123  
[interface/{interface-type}/{interface-name}/ip/policy](#) on page 127  
[interface/{interface-type}/{interface-name}/ip/proxy-arp](#) on page 130  
[interface/{interface-type}/{interface-name}/ip/router/isis](#) on page 132  
[interface/{interface-type}/{interface-name}/ip/vrrp-extended](#) on page 134  
[interface/{interface-type}/{interface-name}/ipv6/access-group](#) on page 136  
[interface/{interface-type}/{interface-name}/ipv6/dhcp/relay](#) on page 139  
[interface/{interface-type}/{interface-name}/ipv6/nd](#) on page 143

[interface/{interface-type}/{interface-name}/ipv6/ospf](#) on page 154  
[interface/{interface-type}/{interface-name}/ipv6/policy](#) on page 160  
[interface/{interface-type}/{interface-name}/ipv6/router/isis](#) on page 163  
[interface/{interface-type}/{interface-name}/ipv6/vrrp-extended](#) on page 165  
[interface/{interface-type}/{interface-name}/isis](#) on page 167  
[interface/{interface-type}/{interface-name}/link-error-disable](#) on page 177  
[interface/{interface-type}/{interface-name}/link-fault-signaling](#) on page 179  
[interface/{interface-type}/{interface-name}/link-oam](#) on page 182  
[interface/{interface-type}/{interface-name}/lldp](#) on page 185  
[interface/{interface-type}/{interface-name}/loop-detection](#) on page 187  
[interface/{interface-type}/{interface-name}/qos](#) on page 190  
[interface/{interface-type}/{interface-name}/nd/ra-dns-server](#) on page 198  
[interface/{interface-type}/{interface-name}/rmon/collection](#) on page 201  
[interface/{interface-type}/{interface-name}/sflow](#) on page 205  
[interface/{interface-type}/{interface-name}/spanning-tree](#) on page 208  
[interface/{interface-type}/{interface-name}/storm-control/ingress](#) on page 215  
[interface/{interface-type}/{interface-name}/switchport](#) on page 219  
[interface/{interface-type}/{interface-name}/switchport/port-security](#) on page 224  
[interface/{interface-type}/{interface-name}/vrrp-extended-group](#) on page 229  
[interface/{interface-type}/{interface-name}/vrrp-group](#) on page 235  
[interface/Port-channel](#) on page 240  
[interface/tunnel](#) on page 243  
[interface/vlan/{vlan-number}/suppress-nd](#) on page 247  
[interface/vlan/{vlan-number}/suppress-arp](#) on page 248  
[ip/access-list](#) on page 249  
[ip/as-path](#) on page 254  
[ip/community-list](#) on page 256  
[ip/extcommunity-list](#) on page 259  
[ip/dhcp/relay](#) on page 262  
[ip/dhcp/snooping](#) on page 265  
[ip/dhcp/snooping/trust](#) on page 267  
[ip/igmp](#) on page 268  
[ip/irdp](#) on page 271  
[ip/prefix-list](#) on page 272  
[ip/route](#) on page 275  
[ip/source-guard](#) on page 279  
[ipv6/access-list](#) on page 282  
[ipv6/nd](#) on page 287  
[ipv6/prefix-list](#) on page 290  
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## aaa/accounting

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

### Resource URIs

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

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

### Parameters

*server-type*

Specifies server for accounting. Possible values are:

**None**

Disables login accounting.

**tacacs+**

Configures to use TACACS+ server.

**radius**

Configures to use radius server.

**exec**

Login accounting.

**default**

Sends the logged information to the default server.

**start-stop**

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

**server-type**

Specifies server for accounting : tacas+ or radius

## Usage Guidelines

GET, OPTIONS, and HEAD operations are supported.

## Examples

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

## URI

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

## Request Body

None

## Response Body

```
<accounting y:self="/rest/config/running/aaa/accounting">
  <exec y:self="/rest/config/running/aaa/accounting/exec">
    <default y:self="/rest/config/running/aaa/accounting/exec/default">
      <start-stop y:self="/rest/config/running/aaa/accounting/exec/default/start-stop">
        <server-type>none</server-type>
      </start-stop>
    </default>
  </exec>
  <commands y:self="/rest/config/running/aaa/accounting/commands">
    <default y:self="/rest/config/running/aaa/accounting/commands/default">
      <start-stop y:self="/rest/config/running/aaa/accounting/commands/default/start-stop">
        <server-type>tacacs+</server-type>
      </start-stop>
    </default>
  </commands>
</accounting>
```

## aaa/authentication

Configures, retrieves, and modifies AAA login sequence.

### Resource URIs

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

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

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

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

## 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. This example sets the complete sequence.

### URI

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

## Request Body

```
<first>radius</first>  
<second>ldap-auth-fallback</second>  
<third>local-auth-fallback</third>
```

## 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

Configures, modifies, or retrieves ACL configuration.

### Resource URIs

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

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

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

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

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

DELETE URIs
-------------



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

Configures, modifies, or retrieves alias configuration.

### Resource URIs

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

### Parameters

*alias*

Configures global alias.

*user*

Configures user alias mode.

### Usage Guidelines

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



#### Note

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

### Examples

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

### URI

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

### Request Body

None

### Response Body

```
<alias-config xmlns="urn:brocade.com:mgmt:brocade-aaa" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/alias-config">
  <alias y:self="/rest/config/running/alias-config/alias/alias1"/>
```

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

## arp

Configures, modifies, or retrieves Address Resolution Protocol (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

Configures, modifies, or retrieves banner messages.

### Resource URIs

URI	Description
<base_URI>/config/running/banner	Banner messages

### Parameters

*login*

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

*motd*

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

*incoming*

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

### Usage Guidelines

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

### Examples

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

### URI

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

### Request Body

None

### Response Body

```
<banner xmlns="urn:brocade.com:mgmt:brocade-aaa" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/banner">
  <login>user1</login>
  <motd>Good Morning</motd>
  <incoming>yes</incoming>
</banner>
```



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

### URI

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

### Request Body

None

### Response Body

None

## bridge-domain

Configures a bridge domain.

### Resource URIs

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

GET URIs	Description
<base_URI>/config/running/bridge-domain	Retrieves a bridge domain configuration information.
<base_URI>/config/running/bridge-domain/router-interface/%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

Configures, modifies, or retrieves the Chassis Virtual address.

### Resource URIs

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

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

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

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

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

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



## Parameters

*virtual-ip*

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

*virtual-ipv6*

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

## Usage Guidelines

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

## Examples

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

## URI

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

## Request Body

None

## Response Body

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

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

## URI

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

## Request Body

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

## Response Body

None

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

## URI

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

## Request Body

None

## Response Body

None

## clock

Configures, modifies, or retrieves system time zone.

### 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>
```

## qos/map/cos-mutation

Configures CoS Mutation map.

### Resource URIs

URI	Description
<base_URI>/config/running/qos/map/cos-mutation/{cos-mutation-map-name}	Configures a CoS Mutation map.
<base_URI>/config/running/qos/map/cos-mutation/{cos-mutation-map-name}/map	Configures a CoS Mutation map mapping entry.

GET URIs	Description
<base_URI>/config/running/qos/map/cos-mutation/{cos-mutation-map-name}	Retrieves CoS Mutation map information.

POST URIs	Payload	Description
<base_URI>/config/running/qos/map/cos-mutation/{cos-mutation-map-name}	<map><cos>{in-cos-value}</cos><to><cos>{out-cos-value}</cos></to></map>	Creates the CoS mapping entry.

DELETE URIs
<base_URI>/config/running/qos/map/cos-mutation/{cos-mutation-map-name}
<base_URI>/config/running/qos/map/cos-mutation/{cos-mutation-map-name}/map/{cos-mutation-mapping}

### Parameters

**cos-mutation-map-name**

Name of the CoS Mutation map.

**in-cos-value**

The incoming CoS value.

**out-cos-value**

The mapped CoS value.

### Usage Guidelines

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

## Examples

The following example uses the POST operation to create a CoS Mutation map and add a mutation map entry.

### URI

`http://host:80/rest/config/running/qos/map`

### Request Body

```
<cos-mutation><name>test-cos-mut-map-1</name><map><cos>3</cos><to><cos>2</cos></to></map></cos-mutation>
```

### Response Body

None

## Example

The following example uses the DELETE operation to remove a configured CoS Mutation map.

### URI

`http://host:80/rest/config/running/qos/map`

### Request Body

```
<cos-mutation><name>test-cos-mut-map-1</name></cos-mutation>
```

### Response Body

None

Enables leaking of connected routes between VRFs.

## Resource URIs

URI	Description
<base-uri>/config/running/{vrf-name}/address-family/ipv4/unicast/connected-route-leak	Enables leaking of connected routes for a specific destination VRF.

PUT URI	Payload	Description
<base-uri>/config/running/vrf/{vrf-name}/address-family/ipv4/unicast/connected-route-leak	{vrf-name}	Configures <i>connected-route-leak</i> for the destination VRF specified by the {vrf-name} parameter.

DELETE URI	Description
<base-uri>/config/running/vrf/{vrf-name}/address-family/ipv4/unicast/connected-route-leak	Deletes the <i>connected-route-leak</i> configuration for the specified VRF.

{vrf-name}

The name of the VRF for which this configuration is applicable.

## Usage Guidelines

Only GET, PUT, and DELETE operations are supported.

## Examples

URI

https://host:443/rest/config/running/vrf/green/address-family/ipv4/unicast/connected-route-leak

Request Body

```
<connected-route-leak>true</connected-route-leak>
```

Response Body

None

## delete configuration

---

Deletes the prefix-independent-convergence 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

---

Displays running configuration for prefix-independent-convergence.

### Resource URIs

URI	Description
<base_URI>/config/running/cluster/do show running-config prefix-independent-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

Configures, retrieves, and modifies 802.1X authentication.

### Resource URIs

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

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

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

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

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

### Parameters

*test timeout*

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

## Usage Guidelines

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

## Examples

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

### URI

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

### Request Body

None

### Response Body

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

The following example uses the PATCH option to configure dot1x.

### URI

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

### Request Body

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

### Response Body

None

The following example uses the DELETE option to remove dot1x.

### URI

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

### Request Body

None

## Response Body

None

## filter-change-update-delay

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

### Resource URIs

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

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

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

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

### Parameters

*filter-delay-value*

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

### Usage Guidelines

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

### Examples

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

### URI

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

## Request Body

None

## Response Body

None

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

## URI

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

## Request Body

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

## Response Body

None

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

## URI

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

## Request Body

None

## Response Body

None

## get-fec-counter-detail

Retrieves the FEC counter information for a selected ethernet interface.

### Resource URIs

URI	Description
<base-URI>/operations/get-fec-counter-detail	Retrieves FEC counters for a give Ethernet slot/port combination.

POST URI	Payload	Description
<base_URI>/operations/get-fec-counter-detail/	{interface-type}{interface-port}	Retrieves the FEC counters for a particular ethernet interface.

### Parameters

**interface-type** {interface-type}

Pass *ethernet* as the value for this field.

**interface-name** {interface-name}

The slot/port information for the port.

### Output

*interface-type*

The interface type for this query.

*interface-name*

The slot/port id for this interface.

*ifFecCorrectedBlocks*

Displays the number of corrected Blocks. Displays Zero (0) when FEC is *Disabled* or is not supported.

*ifFecUncorrectedBlocks*

Displays the number of uncorrected Blocks. Displays Zero (0) when FEC is *Disabled* or is not supported.

### Usage Guidelines

Only POST operation is supported.



#### Note

HTTPS must be enabled and the required SSL certificates must be imported on to the device.

## Examples

### URI

<https://host:443/restconf/operations/get-fec-counter-detail>

### Request Body

```
<interface-type>ethernet</interface-type>
<interface-name>0/49</interface-name>
```

### Response

```
<output xmlns='urn:brocade.com:mgmt:brocade-interface-ext'>
  <interface-type>ethernet</interface-type>
  <interface-name>0/49</interface-name>
  <ifFecCorrectedBlocks>0</ifFecCorrectedBlocks>
  <ifFecUncorrectedBlocks>0</ifFecUncorrectedBlocks>
</output>
```



## hardware

Configures, modifies, or retrieves the hardware management configuration.

### Resource URIs

URI	Description
<base_URI>/config/running/hardware	Hardware management configuration
<base_URI>/config/running/hardware/connector	Connector. Refer to hardware/connector for information.
<base_URI>/config/running/hardware/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

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

### Resource URIs

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

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

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

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

### Parameters

*interface-type*

Supported interface type: Ethernet only.

*delay-link-event-entry*

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

*delay-link-event-type*

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

### Usage Guidelines

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

## Examples

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

### URI

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

### Request Body

None

### Response Body

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

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

### URI

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

### Request Body

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

### Response Body

None

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

### URI

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

### Request Body

None

## Response Body

None

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

Configures, retrieves, and modifies 802.1X authentication.

### Resource URIs

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

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

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>(enumerat ion)</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}/ethernet-segment/advertise

Configures the AC influenced DF election capability for this interface.

### Resource URIs

URI	Description
/rest/config/running/interface/{interface-type}/{interface-name}/ethernet-segment/advertise/capability/ac-influenced-df-election	Configures the AC influenced DF election capability on this interface.

GET URIs	Description
/rest/config/running/interface/{interface-type}/{interface-name}/ethernet-segment/advertise/capability/	Configures the AC influenced DF election capability on this interface.

PUT URIs	Payload	Description
/rest/config/running/interface/{interface-type}/{interface-name}/ethernet-segment/advertise/capability/	<ac-influenced-df-election>	Configures the AC influenced DF election capability on this interface.

DELETE URIs
/rest/config/running/interface/{interface-type}/{interface-name}/ethernet-segment/advertise/capability/ac-influenced-df-election

### Parameters

*interface-type*

Supported interface type.

*interface-name*

The name of the interface.

**ac-influenced-df-election**

The switch to enable AC influenced DF election on this interface.

### 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/ethernet-segment/  
advertise/capability

## Request Body

None

## Response Body

```
<capability xmlns="urn:brocade.com:mgmt:brocade-interface" xmlns:y="http://  
brocade.com/ns/rest" y:self="/rest/config/running/interface/Port-channel/1/ethernet-  
segment/advertise/capability">  
  <ac-influenced-df-election>false</ac-influenced-df-election>  
</capability>
```

The following example uses PATCH operation to update this configuration.

## URI

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

## Request Body

```
<ethernet-segment>  
  <advertise>  
    <capability>  
      <ac-influenced-df-election>true</ac-influenced-df-election>  
    </capability>  
  </advertise>  
</ethernet-segment>
```

## Response Body

None

The following example uses DELETE operation to remove the AC influenced DF election configuration.

## URI

http://host:80/rest/config/running/interface/ethernet/%221/1%22/ethernet-segment/  
advertise/capability/ac-influenced-df-election

## Request Body

None

## Response Body

None

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

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

### Resource URIs

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

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

POST URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip	<address><address>{inet:ip v4-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:ip v4-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

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

### Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/access-group	Configures IP access group. Valid interface types: Ethernet, Port-channel, Ve.

### 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.

*traffic-type*

Specifies the type of traffic. The only supported configuration is *routed*. When configured, it enables IP ACL filtering only on routed traffic. This parameter is only supported when ACL is applied to the inbound traffic on an Layer 3 sub-interface such as the VE interface.

### 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

#### 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 with the *traffic-type* set to *routed* to a VE interface.

### URI

http://host:80/rest/config/running/interface/ve/%22100/ip/access-group

### Request Body

```
<access-group xmlns="urn:brocade.com:mgmt:brocade-ip-access-list" y:self="/rest/config/running/interface/ve/%221100/ip/access-group/acl%2Cin">
  <ip-access-list>acl8</ip-access-list>
  <ip-direction>in</ip-direction>
  <traffic-type>routed</traffic-type>
</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

Configures ARP Aging timeout.

### Resource URIs

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

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

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

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

### Parameters

*interface-type*

Valid interface types:Ethernet and Ve.

*arp-aging-timeout*

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

### Usage Guidelines

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

### Examples

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

## URI

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

## Request Body

None

## Response Body

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

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

## URI

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

## Request Body

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

## Response Body

None

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

## URI

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

## Request Body

None

## Response Body

None

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

Configures DHCP relay gateway.

### Resource URIs

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

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

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

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

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

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

### Parameters

*address*

IP address of the gateway.

## Usage Guidelines

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

## Examples

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

### URI

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

### Request Body

None

### Response Body

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

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

### URI

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

### Request Body

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

### Response Body

None

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

### URI

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

### Request Body

None

### Response Body

None

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

Configures DHCP relay servers.

### Resource URIs

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

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

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

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

### Parameters

*address*

IP address of the server.

*use-vrf*

Specifies the VRF name.



## Usage Guidelines

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

## Examples

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

### URI

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

### Request Body

None

### Response Body

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

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

### URI

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

### Request Body

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

### Response Body

None

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

## URI

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

## Request Body

None

## Response Body

None

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

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

### Resource URIs

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

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

POST URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/igmp	<static-group><igmp3-sg-addr>{igmp3-sg-addr}</igmp3-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

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

### Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/policy	Configures PBR. Supported interface types are: Ethernet and VE.

GET URIs	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/policy	Configures PBR. Supported interface types are: Ethernet and VE.
<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

Configures Proxy-Arp on the interface.

### Resource URIs

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

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

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

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

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

### Parameters

*interface-type*

Valid interface types: Ethernet and Ve.

*proxy-arp*

Enables Proxy-Arp on the interface.

### Usage Guidelines

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

## Examples

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

### URI

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

### Request Body

None

### Response Body

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

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

### URI

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

### Request Body

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

### Response Body

None

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

### URI

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

### Request Body

None

### Response Body

None

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

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

### Resource URIs

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

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

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

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

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

### Usage Guidelines

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

### Examples

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

## URI

http://host:80/rest/config/running/interface/Ve/101/ip/router

## Request Body

None

## Response Body

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

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

## URI

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

## Request Body

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

## Response Body

None

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

## URI

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

## Request Body

None

## Response Body

None

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

Configures, retrieves, and modifies VRRPE.

### Resource URIs

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

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

PUT URIs	Payload	Description
<base_URI>/config/running/interface/{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

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

### Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/access-group/{ipv6-access-list},{ip-direction},{traffic-type}	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/	Retrieves IPv6 access group information. 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><traffic-type>routed</traffic-type></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.

**traffic-type**

The keyword `routed` indicates that the ACL is applicable to Routed traffic in the ingress direction. Only applicable for VE interfaces.



## 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/ve/10/ipv6

### Request Body

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

Configures DHCPv6 relay.

### Resource URIs

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

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

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

*address*

IPv6 address of the server.

*use-vrf*

VRF name of the DHCPv6 server

*servers*

DHCPv6 Server IP Address

## Usage Guidelines

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

## Examples

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

### URI

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

### Request Body

None

### Response Body

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

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

### URI

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

### Request Body

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

### Response Body

None

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

## URI

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

## Request Body

None

## Response Body

None

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

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

### Resource URIs

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

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

GET URIs	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/suppress-ra/suppress-ra-flag	Sets suppress router advertisement flag. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/suppress-ra/mtu	Disables sending MTU in Router-Advertisement messages. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/suppress-ra/all	Suppresses response to RS in addition to not sending RAS. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/ra-interval/max-interval	Sets maximum interval in seconds between router advertisements. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/ra-interval/min	Sets minimum interval in seconds between router advertisements. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/send-ra	Sets to send router advertisement. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/ns-interval	Sets neighbor solicitation interval in seconds. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/address/suppress	Suppresses all IPv6 addresses in router advertisement. Valid interface types: Ethernet, Ve.
<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.



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

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

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

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

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

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

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

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: Ethernet and Ve.

*ra-lifetime*

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

*reachable-time*

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

*mtu*

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

*retrans-timer*

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

*hoplimit*

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

*dad attempts*

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

*dad time*

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

*expire*

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

*max-interval*

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

*min*

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

*ns-interval*

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

## Usage Guidelines

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

## Examples

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

## URI

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

## Request Body

None

## Response Body

```
<nd xmlns="urn:brocade.com:mgmt:brocade-ipv6-nd-ra" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/interface/Ethernet/%221/1%22/ipv6/nd">
  <suppress-ra y:self="/rest/config/running/interface/Ethernet/%221/1%22/ipv6/nd/suppress-
ra">
    </suppress-ra>
    <ra-interval y:self="/rest/config/running/interface/Ethernet/%221/1%22/ipv6/nd/ra-
```

```

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

```

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

## URI

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

## Request Body

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

## Response Body

None



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

### URI

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

### Request Body

None

### Response Body

None

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

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

### Resource URIs

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

GET URIs	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/ospf/area	Displays the OSPF router area id. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/ospf/active	Sets a specific OSPFv3 interface to active. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/ospf/passive	Sets a specific OSPFv3 interface to passive. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/ospf/cost	Displays cost for a specific OSPFv3 interface. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/ospf/instance	Displays the number of OSPFv3 instances running on an interface. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/ospf/mtu-ignore	Displays whether maximum transmission unit (MTU) match checking is enabled or disabled. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/ospf/network	Displays network type. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/ospf/priority	Displays priority for designated router (DR) election and backup designated routers (BDRs) on the interface you are connected to. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/ospf/suppress-linklsa	Displays whether link LSA advertisements are suppressed. Valid interface types: Ethernet, Ve, Loopback.

GET URIs	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/ospf/authentication	Displays authentication for the interface. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/ospf/authentication/ipsec	Displays IPSEC authentication for the interface. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/ospf/authentication/ipsec/key-add-remove-interval	Displays key add or remove interval in seconds. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/ospf/hello-interval	Sets the length of time between the transmission of hello packets that an interface sends to neighbor routers. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/ospf/dead-interval	Displays the time period for which a neighbor router waits for a hello packet from the device before declaring the router down. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/ospf/hello-jitter	Displays the allowed jitter between HELLO packets. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/ospf/retransmit-interval	Displays the retransmit interval. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/ospf/transmit-delay	Displays transmit delay for link-update packets. Valid interface types: Ethernet, Ve, Loopback.

PUT URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/ospf/active	<active>{enumeration}</active>	Sets a specific OSPFv3 interface to active. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/ospf/passive	<passive>{enumeration}</passive>	Sets a specific OSPFv3 interface to passive. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/ospf/cost	<cost>{uint32}</cost>	Configures cost for a specific OSPFv3 interface. Valid interface types: Ethernet, Ve, Loopback.

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

PUT URIs	Payload	Description
<base_URI>/config/running/ interface/{interface-type}/ {interface-name}/ipv6/ospf/ retransmit-interval	<retransmit- interval>{common- def:time-interval-sec}</ retransmit-interval>	Configures the retransmit interval. The retransmit interval is the time between Link-State Advertisement (LSA) retransmissions to adjacent routers for a given interface. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/ interface/{interface-type}/ {interface-name}/ipv6/ospf/ transmit-delay	<transmit-delay>{common- def:time-interval-sec}</ transmit-delay>	Configures transmit delay for link-update packets. The transmit delay is the estimated time required for OSPFv3 to send linkstate update packets on the interface to which you are connected. Valid interface types: Ethernet, Ve, Loopback.

PATCH URIs	Payload	Description
<base_URI>/config/running/ interface/{interface- type}/{name}/ipv6/ospf/ authentication/ipsec	<authentication><spi>{spi- value-type}</ spi><ah>{algorithm-type- ah}</ ah><disable>{enumeration authentication>	Security Parameter Index specifying the authentication algorithm to use. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/ interface/{interface- type}/{name}/ipv6/ospf/ authentication/ipsec	<authentication><spi>{spi- value-type}</spi><no- encrypt>{enumeration}</no- encrypt><disable>{enumeration 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 authentication>	Security Parameter Index with Key used for ah. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/ interface/{interface- type}/{name}/ipv6/ospf/ authentication/ipsec	<authentication><spi>{spi- value-type}</ spi><esp>{algorithm-type- esp}</ esp><disable>{enumeration authentication>	Security Parameter Index specifying Encapsulating Security Payload (ESP). 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/%221/1%22/ipv6/ospf/active

## Request Body

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

## Response Body

None

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

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

### Resource URIs

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

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

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

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

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

### Usage Guidelines

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



## Examples

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

### URI

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

### Request Body

None

### Response Body

None

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

### URI

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

### Request Body

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

### Response Body

None

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

### URI

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

### Request Body

None

## Response Body

None

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

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

### Resource URIs

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

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

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

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

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

### Usage Guidelines

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

### Examples

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

## URI

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

## Request Body

None

## Response Body

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

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

## URI

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

## Request Body

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

## Response Body

None

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

## URI

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

## Request Body

None

## Response Body

None

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

Configures, retrieves, and modifies VRRPE.

### Resource URIs

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

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

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

PATCH URIs	Payload	Description
<base_URI>/config/running/interface/{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

Configures IS-IS routing protocol.

### Resource URIs

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

GET URI	Description
<base_URI>/rest<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis	Configures IS-IS routing protocol. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/rest<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/auth-check	Authenticates incoming PDUs for LSPs, CSNP, and PSNP. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/rest<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/auth-check/level-1	Authenticate incoming PDUs for Level-1 LSPs, CSNP, and PSNP. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/rest<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/auth-check/level-1/disable	Disables authentication of incoming PDUs for Level-1 LSPs, CSNP, and PSNP. Valid interface types: Ethernet, Ve, Loopback.
<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
<code>&lt;base_URI&gt;/config/running/ interface/{interface-type}/ {interface-name}/isis/ipv6</code>	<code>&lt;metric&gt;&lt;interface-ipv6- metric-level&gt;level-2&lt;/ interface-ipv6-metric- level&gt;&lt;interface-ipv6- metric-val&gt;{unit32}&lt;/ interface-ipv6-metric-val&gt;&lt;/ metric&gt;</code>	Interface ipv6 Metric for IS-IS. Valid interface types: Ethernet, Ve, Loopback.
<code>&lt;base_URI&gt;/config/running/ interface/{interface-type}/ {interface-name}/isis</code>	<code>&lt;metric&gt;&lt;interface-metric- level&gt;level-2&lt;/interface- metric-level&gt;&lt;interface- metric-val&gt;{unit32}&lt;/ interface-metric-val&gt;&lt;/ metric&gt;</code>	Interface metric. Valid interface types: Ethernet, Ve, Loopback.

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

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

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

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/%224/10%22/isis">
  <auth-check y:self="/rest/config/running/interface/Ethernet/%224/10%22/isis/auth-check">
    <level-1 y:self="/rest/config/running/interface/Ethernet/%224/10%22/isis/auth-check/
level-1">
      <disable>true</disable>
    </level-1>
    <level-2 y:self="/rest/config/running/interface/Ethernet/%224/10%22/isis/auth-check/
level-2">
      <disable>true</disable>
    </level-2>
  </auth-check>
  <reverse-metric y:self="/rest/config/running/interface/Ethernet/%224/10%22/isis/reverse-
metric">
    <rev-metric-val>2000</rev-metric-val>
  </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

Configures port link dampening {PLD}.

### Resource URIs

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

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

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

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

### Parameters

*interface-type*

Valid interface type:Ethernet only.

*link-error-disable-entry*

Specifies the link error disable entry.

*sampling-time-in-sec*

Specifies the sampling time.

*wait-time-in-sec*

Specifies the wait time.

## Usage Guidelines

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

## Examples

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

### URI

`http://host:80/rest/config/running/interface/ethernet/%221/1%22/link-error-disable`

### Request Body

None

### Response Body

```
<link-error-disable xmlns="urn:brocade.com:mgmt:brocade-pld" xmlns:y="http://
brocade.com/ns/
rest" y:self="/rest/config/running/interface/Ethernet/%221/1%22/link-error-disable">
  <link-error-disable-entry>1</link-error-disable-entry>
  <sampling-time-in-sec>10</sampling-time-in-sec>
  <wait-time-in-sec>10</wait-time-in-sec>
</link-error-disable>
```

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

### URI

`http://host:80/rest/config/running/interface/ethernet/%221/1%22/link-error-disable`

### Request Body

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

### Response Body

None

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

Configures, retrieves, and modifies Link Fault Signaling (LFS).

### Resource URIs

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

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

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

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

DELETE URIs
-------------

**DELETE URIs**

<base\_URI>/config/running/interface/{interface-type}/{interface-name}/link-fault-signaling/tx

<base\_URI>/config/running/interface/{interface-type}/{interface-name}/link-fault-signaling/rx

## Parameters

*rx*

Specifies RX LFS

*tx*

Specifies TX LFS

## Usage Guidelines

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

## Examples

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

### URI

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

### Request Body

None

### Response Body

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

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

### URI

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

### Request Body

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

## Response Body

None

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

## URI

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

## Request Body

None

## Response Body

None

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

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

### Resource URIs

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

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

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

PATCH URIs	Payload	Description
	<link-oam><enable>{enumeration}</enable></link-oam>	Enables / Disables Link-OAM. Valid interface type: Ethernet.

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

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

## Parameters

### *action*

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

### *enable*

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

### *allow-loopback*

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

## Usage Guidelines

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



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

Configures LLDP at the interface level/

### Resource URIs

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

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

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

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

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

### Parameters

*interface-type*

Valid interface type:Ethernet.

*profile*

Specifies the LLDP profile.

## Usage Guidelines

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

## Examples

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

### URI

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

### Request Body

None

### Response Body

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

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

### URI

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

### Request Body

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

### Response Body

None

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

### URI

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

### Request Body

None

### Response Body

None

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

Configures, modifies, or retrieves Interface Loop Detection configuration.

### Resource URIs

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

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

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

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

PUT URIs	Payload	Description
{interface-name}/loop-detection/vlan		

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

Configures, modifies and retrieves QoS on an interface.

### Resource URIs

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

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

GET URIs	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/random-detect	Configure Random Early Detect (RED) Profile. Supported interface type: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/random-detect/traffic-class/{red-tc-value}	Traffic-class to configure RED on. Supported interface type: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/drop-monitor	Configure QoS drop monitor polling. Supported interface type: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/drop-monitor/enable	Enable polling on ingress and egress queue drops on this interface. Supported interface type: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/flowcontrol	Configure IEEE 802.3x Flow Control. Supported interface type: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/flowcontrol/rx	Configure Pause reception. Supported interface type: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/rx-queue	Configure Ingress Queue Parameters. Supported interface type: Ethernet.
<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.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/cos-mutation	Apply CoS Mutation map. Supported interface type: Ethernet, Port-channel.

POST URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/	<traffic-class><red-tc-value>{traffic-class-id-	Configure RED on a traffic class. Supported

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

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



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

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

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

PATCH URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/rx-queue/multicast	<multicast><guarantee-rate>{guarantee-rate-type}</guarantee-rate></multicast>	Configure multicast data guarantee rate. Supported interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/rx-queue/multicast	<multicast><best-effort-rate>{best-effort-rate-type}</best-effort-rate></multicast>	Configure multicast data best effort rate. Supported interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/rx-queue/multicast/queue-size/{traffic-class}	<queue-size><min-queue-size>{min-queue-size-type}</min-queue-size><max-queue-size>{max-queue-size-type}</max-queue-size></queue-size>	Configure multicast data best effort rate. Supported interface type: Ethernet.
<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.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/cos-mutation	<cos-mutation><map>{cos-mutation-map-name}</map></cos-mutation>	Configure a CoS Mutation map for the 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}

DELETE URIs
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/drop-monitor/enable
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/flowcontrol
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/rx-queue/unicast/queue-size/{traffic-class}
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/rx-queue/multicast/guarantee-rate
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/rx-queue/multicast/best-effort-rate
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/rx-queue/multicast/queue-size/{traffic-class}

## Usage Guidelines

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

## Example

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

## URI

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

## Request Body

None

## Response Body

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

## Example

The following example uses the PATCH option to configure QoS.

## URI

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

## Request Body

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

## Response Body

None

## 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

The following example uses the PATCH option to apply a CoS Mutation map to the specific ethernet interface.

## URI

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

## Request Body

```
<cos-mutation><map>cos-mut-map-1</map></cos-mutation>
```

## Response Body

None

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

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

### Resource URIs

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

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

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

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

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

### Usage Guidelines

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

## Examples

The following example uses the GET option to retrieve the configuration details and the lifetime multiplier information.

### URI

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

### Request Body

None

### Response Body

```
<ra-dns-server xmlns="urn:brocade.com:mgmt:brocade-ipv6-nd-ra" xmlns:y="http://
brocade.com/ns/rest"
y:self="/rest/config/running/ipv6/nd/ra-dns-server/2100:21:2134::566">
  <dns-server-prefix-global>2100:21:2134::566</dns-server-prefix-global>
</ra-dns-server>
<ra-dns-server xmlns="urn:brocade.com:mgmt:brocade-ipv6-nd-ra" xmlns:y="http://
brocade.com/ns/rest"
y:self="/rest/config/running/ipv6/nd/ra-dns-server/3600:36::1">
  <dns-server-prefix-global>3600:36::1</dns-server-prefix-global>
</ra-dns-server>
<ra-dns-server xmlns="urn:brocade.com:mgmt:brocade-ipv6-nd-ra" xmlns:y="http://
brocade.com/ns/rest"
y:self="/rest/config/running/ipv6/nd/ra-dns-server/3600:36::11">
  <dns-server-prefix-global>3600:36::11</dns-server-prefix-global>
</ra-dns-server>
```

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

### URI

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

### Request Body

```
<ra-dns-server><dns-server-prefix-global>3300:36::11</dns-server-prefix-global><lifetime-
multiplier>199</lifetime-multiplier>
</ra-dns-server>
```

### Response Body

None

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

Configures RMON ethernet statistics collection.

### Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/rmon/collection	Configures RMON ethernet collection statistics. Valid interface type: Ethernet.

GET URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/rmon/collection/stats/{ether-stats-index}/owner	Displays RMON ether statistics collection owner identity. Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/rmon/collection/history/{history-control-index}/buckets	Displays the number of buckets for the RMON collection history. Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/rmon/collection/history/{history-control-index}/interval	Displays the polling interval. Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/rmon/collection/history/{history-control-index}/owner	Displays RMON history index owner identity. Valid interface type: Ethernet.

POST URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/rmon/collection	<stats><ether-stats-index>{int32}</ether-stats-index></stats>	Configures RMON collection statistics. Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/rmon/collection	<history><history-control-index>{int32}</history-control-index></history>	Configures RMON collection history. Valid interface type: Ethernet.

PUT URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/rmon/collection/stats/{ether-stats-index}/owner	<owner>{string}</owner>	Configures RMON ether statistics collection owner identity. Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/rmon/collection/history/{history-control-index}/buckets	<buckets>{unit32}</buckets>	Configures the number of buckets for the RMON

PUT URIs	Payload	Description
collection/history/{history-control-index}/buckets		collection history. Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/rmon/collection/history/{history-control-index}/interval	<interval>{unit32}</interval>	Configures polling interval. Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/rmon/collection/history/{history-control-index}/owner	<owner>{string}</owner>	Configures RMON history index owner identity. Valid interface type: Ethernet.

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

Configures, modifies, or retrieves sFlow configuration.

### Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/sflow	Configures sFlow. Valid interface type: Ethernet.

GET URIs	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/sflow	Configures sFlow. Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/sflow/enable	Retrieves information on whether sFlow is enabled on an interface. Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/sflow/polling-interval	Retrieves information on sFlow polling interval. Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/sflow/sample-rate	Retrieves information on sFlow sampling rate. Valid interface type: Ethernet.

PATCH URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/sflow	<sflow><enable>true</enable></sflow>	Enables sFlow. Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/sflow	<sflow><polling-interval>{uint32}</polling-interval></sflow>	Configures sFlow polling interval. Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/sflow	<sflow><sample-rate>{uint32}</sample-rate></sflow>	Configures sFlow sampling rate. Valid interface type: Ethernet.

PUT URIs	Payload	Description
	<sflow><enable>true</enable></sflow>	Enables sFlow. Valid interface type: Ethernet.

PUT URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/sflow		
<base_URI>/config/running/interface/{interface-type}/{interface-name}/sflow	<sflow><polling-interval>{uint32}</polling-interval></sflow>	Configures sFlow polling interval. Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/sflow	<sflow><sample-rate>{uint32}</sample-rate></sflow>	Configures sFlow sampling rate. Valid interface type: Ethernet.

DELETE URIs
<base_URI>/config/running/interface/{interface-type}/{interface-name}/sflow
<base_URI>/config/running/interface/{interface-type}/{interface-name}/sflow/polling-interval
<base_URI>/config/running/interface/{interface-type}/{interface-name}/sflow/sample-rate

## Parameters

*interface-type*

Valid interface type:Ethernet only.

*polling-interval*

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

*sample-rate*

Specifies sampling rate value. The value can range from 2 through 16777215. The default value is 32768.

## Usage Guidelines

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

## Examples

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

## URI

http://host:80/rest/config/running/interface/{interface-type}/{interface-name}/sflow/  
polling-interval

## Request Body

None

## Response Body

```
<polling-interval xmlns="urn:brocade.com:mgmt:brocade-sflow" xmlns:y="http://
brocade.com/ns/rest"
y:self="/rest/config/running/interface/Ethernet/%221/42%22/sflow/polling-interval">56</
polling-interval>
```

The following example uses the PATCH option to configure the sampling rate.

## URI

http://host:80/rest/config/running/interface/{interface-type}/{interface-name}/sflow/  
sampling-rate

## Request Body

None

## Response Body

```
<sample-rate>30</sample-rate>
```

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

Configures spanning tree.

### Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree	Configures spanning tree at the interface level. Valid interface types: Ethernet, Port-channel.

GET URIs	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree/portfast	Enable an interface to move directly to forwarding on link up. Valid interface types: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree/guard	Change an interface's spanning tree guard mode. Valid interface types: Ethernet, Port-channel.

POST URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree	<instance><id>(unit32)</id><priority>(unit32)</priority></instance>	Configures STP instance. Valid interface types: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree/autoedge	<autoedge>(empty)</autoedge>	Configures STP auto-edge. Valid interface types: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree/cost	<cost>(unitr32)</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.



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

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

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

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

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

#### DELETE URIs

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

Configures, modifies, or retrieves the BUM Storm Control that limits ingress traffic on a specified interface.

### Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/storm-control	Configures BUM Storm Control that limits ingress traffic on a specified interface. Valid interface type: Ethernet.

GET URIs	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/storm-control/ingress	Retrieves BUM Storm Control configuration that limits ingress traffic on a specified interface. Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/storm-control/ingress/{protocol-type}	Retrieves BUM Storm Control configuration of specific protocol type (broadcast, multicast, unknown-unicast). Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/storm-control/ingress/{protocol-type}/{rate-bps   rate-percent}	Retrieves the amount of traffic allowed, either in bits per second or a percentage of the capacity of the interface. Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/storm-control/ingress/{protocol-type}/bum-action	Retrieves the BUM action. Valid interface type: Ethernet.

POST URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/storm-control	<ingress><protocol-type>broadcast</protocol-type><rate-format>{enumeration}</rate-format><rate-bps>(rate-limit-bps-type)</rate-bps></ingress>	Configures BUM Storm Control that limits ingress traffic on a specified interface. Valid interface type: Ethernet.

PUT URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/storm-	<rate-percent>{rate-limit-percentage-type}</rate-percent>	Configure the rate limit in percentage of the line rate. Valid interface type: Ethernet.

PUT URIs	Payload	Description
control/ingress/{protocol-type}/rate-percent		
<base_URI>/config/running/interface/{interface-type}/{interface-name}/storm-control/ingress/{protocol-type}/bum-action	<bum-action>{enumeration}</bum-action>	Configures bum action. Allowed values: monitor or shutdown. Valid interface type: Ethernet.

PATCH URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/storm-control/ingress/{protocol-type}	<ingress><rate-format>{enumeration}</rate-format><rate-bps>{rate-limit-bps-type}</rate-bps></ingress>	Configure the rate limit in bits per second (bps)Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/storm-control/ingress/{protocol-type}	<ingress><rate-percent>{rate-limit-percentage-type}</rate-percent></ingress>	Configure the rate limit in percentage of the line rateValid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/storm-control/ingress/{protocol-type}	<ingress><bum-action>{enumeration}</bum-action></ingress>	Configures bum action. Allowed values: monitor or shutdown. Valid interface type: Ethernet.

DELETE URIs
<base_URI>/config/running/interface/{interface-type}/{interface-name}/storm-control/ingress/broadcast
<base_URI>/config/running/interface/{interface-type}/{interface-name}/storm-control/ingress/multicast
<base_URI>/config/running/interface/{interface-type}/{interface-name}/storm-control/ingress/unknown-unicast
<base_URI>/config/running/interface/{interface-type}/{interface-name}/storm-control/ingress/multicast/rate-percent
<base_URI>/config/running/interface/{interface-type}/{interface-name}/storm-control/ingress/broadcast/rate-percent
<base_URI>/config/running/interface/{interface-type}/{interface-name}/storm-control/ingress/broadcast/bum-action
<base_URI>/config/running/interface/{interface-type}/{interface-name}/storm-control/ingress/{protocol-type}

## Usage Guidelines

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



## Examples

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

### URI

http://host:80/rest/config/running/interface/Ethernet/%221/1%22/storm-control/ingress/  
broadcast

### Request Body

None

### Response Body

```
<ingress xmlns="urn:brocade.com:mgmt:brocade-qos-mls" xmlns:y="http://brocade.com/ns/  
rest"  
y:self="/rest/config/running/interface/Ethernet/%221/1%22/storm-control/ingress/  
broadcast">  
  <protocol-type>broadcast</protocol-type>  
  <rate-format>limit-percent</rate-format>  
  <rate-percent>1</rate-percent>  
  <bum-action>monitor</bum-action>  
</ingress>
```

The following is an example of the POST operation to configure BUM Storm Control that limits ingress traffic on a specified interface.

### URI

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

### Request Body

```
<ingress><protocol-type>broadcast</protocol-type><rate-format>limit-bps</rate-  
format><rate-bps>(rate-limit-bps-type)  
</rate-bps>  
</ingress>
```

### Response Body

None

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

Configures, modifies, or retrieves the switching characteristics of the Layer 2 interface

### Resource URIs

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

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

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

PUT URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport	<switchport>true</switchport>	Make an interface a switchport. Supported interface types: Ethernet, Port-Channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/mode/vlan-mode	<vlan-mode>trunk</vlan-mode>	Make interface mode to trunk. Supported interface types: Ethernet, Port-Channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/access/vlan	<vlan>101</vlan>	Set the default VLAN for the interface. Supported interface types: Ethernet, Port-Channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/trunk/allowed/vlan/all	<all>{enumeration}</all>	Make interface part of all VLAN. Supported interface types: Ethernet, Port-Channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/trunk/allowed/vlan/none	<none>{enumeration}</none>	Remove interface membership from all VLAN. Supported interface types: Ethernet, Port-Channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/trunk/allowed/vlan/add	<add>(unit32)</add>	Allow the specified VLANs to Xmit/Rx. Supported interface types: Ethernet, Port-Channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/trunk/allowed/vlan/except	<except>(unit32)</except>	Allow all VLANs except the specified VLAN. Supported interface types: Ethernet, Port-Channel.

PUT URIs	Payload	Description
<base_URI>/config/running/ interface/{interface- type}/{interface-name}/ switchport/trunk/allowed/ vlan/remove	<remove>(unit32)</remove>	Remove a VLAN range that Xmit/Rx. Supported interface types: Ethernet, Port-Channel.
<base_URI>/config/running/ interface/{interface- type}/{interface-name}/ switchport/trunk/tag	<tag />	Enable tagging. Supported interface types: Ethernet, Port-Channel.
<base_URI>/config/running/ interface/{interface- type}/{interface-name}/ switchport/trunk/tag/ native-vlan	<native- vlan>{enumeration}</ native-vlan>	Set the native VLAN characteristics. Supported interface types: Ethernet, Port-Channel.
<base_URI>/config/running/ interface/{interface- type}/{interface-name}/ switchport/trunk/native- vlan	<native-vlan>(unit32)</ native-vlan>	Set the native VLAN characteristics. Supported interface types: Ethernet, Port-Channel.

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

PATCH URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/trunk/allowed/vlan	<vlan><except>651-700</except></vlan>	Allow all VLANs except the specified VLAN. Supported interface types: Ethernet, Port-Channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/trunk/allowed/vlan	<vlan><remove>601-650</remove></vlan>	Remove a VLAN range that Xmit/Rx. Supported interface types: Ethernet, Port-Channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/trunk/tag	<tag><native-vlan>true</native-vlan></tag>	Enable tagging. Supported interface types: Ethernet, Port-Channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/trunk	<trunk><native-vlan>601</native-vlan></trunk>	Set the native VLAN characteristics. Supported interface types: Ethernet, Port-Channel.

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

## 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

Configures, retrieves, and modifies port security on an interface.

### Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/port-security	Configures port security on an interface. Valid interface types: Ethernet and Port-channel.

GET URIs	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/port-security	Retrieves port security details. Valid interface types: Ethernet and Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/port-security/max	Retrieves the maximum number of secure MAC addresses allowed on the interface. Valid interface types: Ethernet and Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/port-security/port-security-mac-address	Retrieves the details of the MAC addresses used for port security on an interface port. Valid interface types: Ethernet and Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/port-security/port-security-mac-address/{mac-address},{vlan}	Retrieves the details of the MAC address-based VLAN classifier rule used to map to a specific VLAN. Valid interface types: Ethernet and Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/port-security/sticky	Retrieves the details of sticky MAC learning. Valid interface types: Ethernet and Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/port-security/sticky/sticky-flag	Retrieves details of sticky MAC learning on the port that converts the dynamically learned MAC addresses to sticky secure MAC addresses. Valid interface types: Ethernet and Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/port-security/sticky/port-security-mac-address	Retrieves details of sticky MAC addresses. Valid interface types: Ethernet and Port-channel.



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

Configures, retrieves, and modifies VRRPE group

### Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group	Configures VRRPE group. Supported interface type: Ve.

GET URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}/virtual-mac	Virtual MAC. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}/track/network/{network-address}/priority	Network to be tracked. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}/track/network/{network-address}/priority	Virtual MAC. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}/advertisement-interval	Network to be tracked. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}/enable	Trackport Priority. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}/hold-time	Hold-time. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}/preempt-mode	Set preempt mode for the session. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}/arp/unicast-request/receive	Receive unicast ARP requests. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}/priority	Configures the priority. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}/description	Characters describing the interface.

GET URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}/advertise-backup	Enable periodic backup advertisement messages. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}/backup-advertisement-interval	Enable interval for backup advertisement messages. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}/short-path-forwarding/basic	Enable backup router to send traffic. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}/short-path-forwarding/revert-priority	Sets the revert priority while enabling backup router to send traffic. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}/advertisement-interval-scale	Ipv4 session advertisement interval scale factor. Supported interface type: Ve.

POST URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}	<vrrp-extended-group><vrid>{vrrp-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-ifttype}</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-	<virtual-mac>{enumeration}</virtual-mac>	Virtual MAC. Supported interface type: Ve.

PUT URIs	Payload	Description
extended-group/{vrid}/virtual-mac		
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}/track/network/{network-address}/priority	<priority>{uint8}</priority>	Track priority for the network to be tracked. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}/track/interface/{interface-type},{interface-name}/priority	<priority>{uint8}</priority>	Track priority for the interface to be tracked. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}/advertisement-interval	<advertisement-interval>{uint32}</advertisement-interval>	Advertisement interval. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}/enable	<enable>{enumeration}</enable>	Enable Session. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}/hold-time	<hold-time>{uint32}</hold-time>	Hold-time. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}/preempt-mode	<preempt-mode>{enumeration}</preempt-mode>	Set preempt mode for the session. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}/arp/unicast-request/receive	<receive>{enumeration}</receive>	Receive unicast ARP requests. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}/priority	<priority>{uint8}</priority>	Configures the priority. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}/description	<description>{string}</description>	Characters describing the interface. Supported interface type: Ve.

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

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



PATCH URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}	<vrrp-extended-group><priority>{uint8}</priority></vrrp-extended-group>	Configures the priority. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}	<vrrp-extended-group><description>{string}</description></vrrp-extended-group>	Characters describing the interface. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}	<vrrp-extended-group><advertise-backup>{enumeration}</advertise-backup></vrrp-extended-group>	Enable periodic backup advertisement messages. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}	<vrrp-extended-group><backup-advertisement-interval>{uint32}</backup-advertisement-interval></vrrp-extended-group>	Enable interval for backup advertisement messages. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/20/short-path-forwarding	<short-path-forwarding><basic>{enumeration}</basic></short-path-forwarding>	Enable backup router to send traffic. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/20/short-path-forwarding	<short-path-forwarding><revert-priority>{uint8}</revert-priority></short-path-forwarding>	Sets the revert priority while enabling backup router to send traffic. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}	<vrrp-extended-group><advertisement-interval-scale>{uint32}</advertisement-interval-scale></vrrp-extended-group>	Ipv4 session advertisement interval scale factor. Supported interface type: Ve.

## Usage Guidelines

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

## Examples

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

## URI

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

## Request Body

None

## Response Body

```
<vrrp-extended-group y:self="/rest/config/running/interface/Ve/2/vrrp-extended-group/2">
  <vrid>2</vrid>
  <virtual-ip y:self="/rest/config/running/interface/Ve/2/vrrp-extended-group/2/virtual-
ip/20.1.1.101">
    <virtual-ipaddr>20.1.1.101</virtual-ipaddr>
  </virtual-ip>
  <track y:self="/rest/config/running/interface/Ve/2/vrrp-extended-group/2/track">
  </track>
  <enable>true</enable>
  <preempt-mode>true</preempt-mode>
  <arp y:self="/rest/config/running/interface/Ve/2/vrrp-extended-group/2/arp">
    <unicast-request y:self="/rest/config/running/interface/Ve/2/vrrp-extended-
group/2/arp/unicast-request">
    </unicast-request>
  </arp>
  <priority>101</priority>
  <short-path-forwarding y:self="/rest/config/running/interface/Ve/2/vrrp-extended-
group/2/short-path-forwarding">
  </short-path-forwarding>
</vrrp-extended-group>
```

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

## URI

http://host:80/rest/config/running/interface/Ve/100

## Request Body

```
<vrrp-extended-group><vrid>20</vrid></vrrp-extended-group>
```

## Response Body

None

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

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

### Resource URIs

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

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

POST URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}	<vrrp-group><vrid>{vrid-type}</vrid></vrrp-group>	Configures a virtual router group (VRRP). Supported

POST URIs	Payload	Description
		interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-group/{vrid},{version}	<virtual-ip><virtual-ipaddr>{ip-address}</virtual-ipaddr></virtual-ip>	Virtual IPv4 address in dotted decimal. Supported interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-group/{vrid},{version}/track	<interface><interface-type>ethernet</interface-type><interface-name>{interface-name}</interface-name></interface>	Interface to be tracked. Supported interface types: Ethernet, Ve.

PUT URIs	Payload	Description
<base_URI>/config/running/{interface-type}/{interface-name}/vrrp-group/{vrid},{version}/track/interface/{interface-type},{interface-name}/priority	<priority>{uint8}</priority>	Trackport Priority. Supported interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-group/{vrid},{version}/advertisement-interval	<advertisement-interval>{uint32}</advertisement-interval>	Advertisement interval. Supported interface types: Ethernet, Ve.
<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.

PUT URIs	Payload	Description
<base_URI>/config/running/ interface/{interface-type}/ {interface-name}/vrrp- group/{vrid},{version}/ priority	<priority>{uint8}</priority>	Configures the priority. Supported interface types: Ethernet, Ve.
<base_URI>/config/running/ interface/{interface-type}/ {interface-name}/vrrp- group/{vrid},{version}/ description	<description>vrrpedescriptio n</description>	Characters describing the interface. Supported interface types: Ethernet, Ve.
<base_URI>/config/running/ interface/{interface-type}/ {interface-name}/vrrp- group/{vrid},{version}/use- v2-checksum	<use-v2-checksum>true</ use-v2-checksum>	Enables v2 checksum computation method for VRRPv3 session. Supported interface types: Ethernet, Ve.

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

PATCH URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-group/{vrid},{version}/arp/unicast-request	<unicast-request><receive>true</receive></unicast-request>	Receive unicast ARP requests. Supported interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-group/{vrid},{version}	<interface><priority>{uint8}</priority></interface>	Configures the priority. Supported interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-group/{vrid},{version}	<vrrp-group><description>{string}</description></vrrp-group>	Characters describing the interface. Supported interface types: Ethernet, Ve.

## Usage Guidelines

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

## Examples

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

## URI

http://host:80/rest/config/running/interface/Ve/2/vrrp-group/1%2C2

## Request Body

None

## Response Body

```
<vrrp-group xmlns="urn:brocade.com:mgmt:brocade-vrrp" y:self="/rest/config/running/
interface/Ve/2/vrrp-group/1%2C2">
  <vrid>1</vrid>
  <version>2</version>
  <virtual-ip y:self="/rest/config/running/interface/Ve/2/vrrp-group/1%2C2/virtual-ip/
20.1.1.100">
    <virtual-ipaddr>20.1.1.100</virtual-ipaddr>
  </virtual-ip>
  <track y:self="/rest/config/running/interface/Ve/2/vrrp-group/1%2C2/track">
  </track>
  <enable>true</enable>
  <preempt-mode>true</preempt-mode>
  <arp y:self="/rest/config/running/interface/Ve/2/vrrp-group/1%2C2/arp">
    <unicast-request y:self="/rest/config/running/interface/Ve/2/vrrp-group/1%2C2/arp/
unicast-request">
      </unicast-request>
    </arp>
    <priority>101</priority>
  </vrrp-group>
```

The following is an example of the POST operation to configure virtual IPv4 address in dotted decimal.

## URI

http://host:80/rest/config/running/interface/Ethernet/%221%22/vrrp-group/10/2

## Request Body

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

## Response Body

None

## interface/Port-channel

Configures Port-channel interface.

### Resource URIs

URI	Description
<base_URI>/config/running/interface/Port-channel/{name}	Configures the list of port-channels.

GET URIs	Description
<base_URI>/config/running/interface/Port-channel/{name}	Retrieves the pot channel.
<base_URI>/config/running/interface/Port-channel/{name}/speed	Retrieves speed of the port.
<base_URI>/config/running/interface/Port-channel/{name}/description	Retrieves interface specific description.
<base_URI>/config/running/interface/Port-channel/{name}/shutdown	Shutdown the selected interface
<base_URI>/config/running/interface/Port-channel/{name}/minimum-links	Minimum number of links.
<base_URI>/config/running/interface/Port-channel/{name}/mtu	Sets mtu value to interface.
<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

Configures a tunnel.

### Resource URIs

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

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

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

PUT URIs	Payload	Description
<base_URI>/config/running/interface/tunnel/{identifier}/mode/gre/ip	<ip>{enumeration}</ip>	Enables generic routing encapsulation (GRE) over a tunnel interface and

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

DELETE URIs
<base_URI>/config/running/interface/tunnel/{identifier}

## Parameters

*identifier*

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

*ve num*

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

*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

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

### Resource URIs

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

### Parameters

*enable*  
Enables ND suppression on the current VLAN.

### Usage Guidelines

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

### Examples

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

### URI

http://host:80/rest/config/running/interface/vlan/8000/suppress-nd

### Request Body

None

### Response Body

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

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

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

### Resource URIs

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

### Parameters

*enable*

Enables ARP suppression on the current VLAN.

### Usage Guidelines

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

### Examples

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

### URI

http://host:80/rest/config/running/interface/vlan/8000/suppress-arp

### Request Body

None

### Response Body

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



## ip/access-list

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

### Resource URIs

URI	Description
<base_URI>/config/running/ip	The Internet Protocol configuration.
<base_URI>/config/running/ip/access-list/standard	Standard IP ACL configuration.
<base_URI>/config/running/ip/access-list/standard/{ACL-name}/seq	Sequence number configuration.
<base_URI>/config/running/ip/access-list/extended	Extended IP ACL configuration.
<base_URI>/config/running/ip/access-list/extended/{ACL-name}/seq	Sequence number configuration.

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

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

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

**DELETE URIs**

&lt;base\_URI&gt;/config/running/running/ip/access-list/extended/{acl-name}

&lt;base\_URI&gt;/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.

*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.

*connlimit*

Number of connections allowed per IP address.

*copy-sflow*

For incoming traffic, sends matching packets to the sFlow collector.

*count*

Enables statistics for the rule.

*dscp*

Specifies the DSCP field value in IP header when a packet matches a flow.

*dscp-force*

Specifies the DSCP value to be used instead of the DSCP value in the packet for filtering. This value is in the range 0 through 63.

*fragment*

Filter fragmented packets. This keyword and *non-fragment* keyword cannot be used together.

*log*

Enables inbound logging for the rule. In addition, the ACL log buffer must be enabled, using the **debug access-list-log buffer** command.

*mirror*

(Supported for rules in ACLs applied on physical interfaces to inbound traffic. Not supported for PBR, rACLs, or ACL-RL.) Mirrors packets matching the rule.

*non-fragment*

Filter non-fragmented packets. This keyword and *fragment* keyword cannot be used together.

*tc-force*

In permit rules applied to incoming traffic, sets or forces the *traffic-class* for the packets to the configured value. By default, *traffic-class* is derived from the *traffic-class QoS map*.

*tc-force-value* can be in the range 0 through 7. Can be used along with the **dscp-force** parameter to enforce both DSCP and TC mapping.

**Note**

Only applicable for SLX 9250, SLX 9150T, Extreme 8720, and Extreme 8520.

*vlan*

Specifies a VLAN interface to which the ACL is bound.

## 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>
    <seq-id>10</seq-id>
    <action>permit</action>
    <source>any</source>
    <dst>any</dst>
    <vlan>100</vlan>
    <log>true</log>
    <tc-force>3</tc-force>
  </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/ipv4AclTest01">
    <name>ipv4AclTest01</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/ipv4EAclTest02">
    <name>ipv4EAclTest02</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

Configures, retrieves, and modifies BGP AS Path filter.

### Resource URIs

URI	Description
<base_URI>/config/running/ip/as-path	Configures BGP AS Path filter.

GET URIs	Description
<base_URI>/config/running/ip/as-path	Retrieves BGP AS Path filter.
<base_URI>/config/running/ip/as-path/access-list/{name},{seq-keyword},{instance}	Retrieves BGP AS Path Access List.

POST URIs	Payload	Description
<base_URI>/config/running/ip/as-path	<access-list><name>{ip-as-path-name-t}</name><seq-keyword>{enumeration}</seq-keyword><instance>{instance-id-t}</instance><ip-action>{action-t}</ip-action><ip-reg-expr>{ip-as-path-reg-expr-t}</ip-reg-expr></access-list>	Configures BGP AS Path Access List.

PATCH URIs	Payload	Description
<base_URI>/config/running/ip/as-path/access-list/{name},{seq-keyword},{instance}	<access-list><ip-action>{action-t}</ip-action><ip-reg-expr>{ip-as-path-reg-expr-t}</ip-reg-expr></access-list>	Configures BGP AS Path Access List.

DELETE URIs
<base_URI>/config/running/ip/as-path/access-list/{name},{seq-keyword},{instance}

### Usage Guidelines

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

### Examples

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

## URI

http://host:80/rest/config/running/ip/as-path

## Request Body

None

## Response Body

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

The following example uses the POST option to configure BGP AS Path filter.

## URI

http://host:80/rest/config/running/config/running/ip/as-path

## Request Body

```
<access-list><name>{ip-as-path-name-t}</name><seq-keyword>{key}</seq-
keyword><instance>{instance-id-t}
</instance><ip-action>{action-t}</ip-action><ip-reg-expr>{ip-as-path-reg-expr-t}</ip-reg-
expr></access-list>
```

## Response Body

None

The following example uses the DELETE option to remove BGP AS Path filter.

## URI

http://host:80/rest/config/running/ip/as-path/access-list/aclt/key/1}

## Request Body

None

## Response Body

None

## ip/community-list

Configures, retrieves, and modifies IP community list.

### Resource URIs

URI	Description
<base_URI>/config/running/ip/community-list	Configures IP community list.

GET URIs	Description
<base_URI>/config/running/ip/community-list	Retrieves IP community list.
<base_URI>/config/running/ip/community-list/standard/{name},{seq-keyword},{instance}	Retrieves standard community list.
<base_URI>/config/running/ip/community-list/extended/{name},{seq-keyword},{instance}	Retrieves extended community list.

POST URIs	Payload	Description
<base_URI>/config/running/ip/community-list	<standard><name>{ip-community-list-name-t}</name><seq-keyword>{enumeration}</seq-keyword><instance>{instance-id-t}</instance><ip-action>{action-t}</ip-action><std-community-expr>{ip-std-community-expr-t}</std-community-expr></standard>	Configures standard community list.
<base_URI>/config/running/ip/community-list	<extended><name>{ip-community-list-name-t}</name><seq-keyword>{enumeration}</seq-keyword><instance>{instance-id-t}</instance><ip-action>{action-t}</ip-action><ip-community-reg-expr>{ip-community-reg-expr-t}</ip-community-reg-expr></extended>	Configures extended community list.



POST URIs	Payload	Description
	<code>expr-t}&lt;/ip-community-reg-expr&gt;&lt;/extended&gt;</code>	

PATCH URIs	Payload	Description
<code>&lt;base_URI&gt;/config/running/ip/community-list/standard/{name},{seq-keyword},{instance}</code>	<code>&lt;standard&gt;&lt;ip-action&gt;{action-t}&lt;/ip-action&gt;&lt;std-community-expr&gt;{ip-std-community-expr-t}&lt;/std-community-expr&gt;&lt;/standard&gt;</code>	Configures standard community list.
<code>&lt;base_URI&gt;/config/running/ip/community-list/extended/{name},{seq-keyword},{instance}</code>	<code>&lt;extended&gt;&lt;ip-action&gt;{action-t}&lt;/ip-action&gt;&lt;ip-community-reg-expr&gt;{ip-community-reg-expr-t}&lt;/ip-community-reg-expr&gt;&lt;/extended&gt;</code>	Configures extended community list.

DELETE URIs
<code>&lt;base_URI&gt;/config/running/ip/community-list/standard/{name},{seq-keyword},{instance}</code>
<code>&lt;base_URI&gt;/config/running/ip/community-list/extended/{name},{seq-keyword},{instance}</code>

## 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

Configures, retrieves, and modifies standard BGP extended community filter.

### Resource URIs

URI	Description
<base_URI>/config/running/ip/extcommunity-list	Configures a standard BGP extended community filter.

GET URIs	Description
<base_URI>/config/running/ip/extcommunity-list	Sets a standard BGP extended community filter.
<base_URI>/config/running/ip/extcommunity-list/standard/{extcommunity-list-name}	Sets a standard BGP extended community list filter.

PATCH URIs	Payload	Description
<base_URI>/config/running/ip/extcommunity-list/standard/{extcommunity-list-name}	<standard><ext-community-action>{action-t}</ext-community-action><ext-community-expr>{extcommunity-list-expr-t}</ext-community-expr></standard>	Configures a standard BGP extended community list filter.

POST URIs	Payload	Description
<base_URI>/config/running/ip/extcommunity-list	<standard><extcommunity-list-name>{ip-extcommunity-list-name-t}</extcommunity-list-name><ext-community-action>{action-t}</ext-community-action><ext-community-expr>{extcommunity-list-expr-t}</ext-community-expr></standard>	Sets a standard BGP extended community list filter.

DELETE URIs
<base_URI>/config/running/ip/extcommunity-list/standard/{extcommunity-list-name}

### Usage Guidelines

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

## Examples

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

### URI

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

### Request Body

None

### Response Body

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

The following example uses the POST option to configure standard BGP extended community filter.

### URI

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

### Request Body

```
<standard><extcommunity-list-name>{ip-extcommunity-list-name-t}</extcommunity-list-  
name><ext-community-action>  
{action-t}</ext-community-action><ext-community-expr>{extcommunity-list-expr-t}</ext-  
community-expr></standard>
```

### Response Body

None

The following example uses the DELETE option to remove standard BGP extended community filter.

### URI

http://host:80/rest/config/running/ip/extcommunity-list/standard/ip-extcommunity-list-  
name-t

### Request Body

None

## Response Body

None

## ip/dhcp/relay

Configures, modifies, or retrieves IP Dynamic Host Configuration Protocol (DHCP).

### Resource URIs

URI	Description
<base_URI>/config/running/ip/dhcp/relay	Configures DHCP relay.

GET URIs	Description
<base_URI>/config/running/ip	Configure Internet Protocol (IP).
<base_URI>/config/running/ip/dhcp	Configures Dynamic Host Configuration Protocol (DHCP).
<base_URI>/config/running/ip/dhcp/relay/information/option	Configures DHCP relay.

POST URIs	Payload	Description
<base_URI>/config/running/ip/dhcp/relay/information	<option> </option>	Configures DHCP relay option.
<base_URI>/config/running/ip/dhcp/relay/	<disable-flooding/>	Disable flooding of DHCP broadcast packets from the CPU.

PATCH URIs	Payload	Description
<base_URI>/config/running/ip/dhcp/relay/information	<option> </option>	Configures DHCP relay option.
<base_URI>/config/running/ip/dhcp/relay/	<disable-flooding/>	Disable flooding of DHCP broadcast packets from the CPU.

PUT URIs	Payload	Description
<base_URI>/config/running/ip/dhcp/relay/information	<option> </option>	Configures DHCP relay option.
<base_URI>/config/running/ip/dhcp/relay/	<disable-flooding/>	Disable flooding of DHCP broadcast packets from the CPU.

DELETE URIs
<base_URI>/config/running/ip/dhcp/relay/information
<base_URI>/config/running/ip/dhcp/relay/disable-flooding

## 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

The following example uses the POST option to disable flooding of DHCP packets from CPU.

## URI

`http://host:80/rest/config/running/ip/dhcp/relay/disable-flooding`

## Request Body

None

## Response Body

None



## ip/dhcp/snooping

Configures 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>
```

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

## ip/dhcp/snooping/trust

Configures IP DHCP snooping trust under an interface.

### Resource URIs

URI	Description
<base_URI>/config/running/interface/Ethernet/%220/3%22/ip/dhcp/snooping/trust	Configures IP DHCP snooping trust under an interface.

GET URI	Description
<base_URI>/config/running/interface/Ethernet/%220/3%22/ip/dhcp/snooping/trust	Retrieves IP DHCP snooping trust configuration information.

PATCH URI	Payload	Description
<base_URI>/config/running/interface/Ethernet/%220/3%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/%220/3%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/%220/3%22/ip/dhcp/snooping/trust">true</trust>
```

## ip/igmp

Configures the Internet Group Management Protocol (IGMP).

### Resource URIs

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

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

Configures the IPv4 router advertisement protocol.

### Resource URIs

URI	Description
<base_URI>/config/running/interface/Ethernet/%220/3%22/ip/	Configures the IPv4 router advertisement protocol.

GET URI	Description
<base_URI>/config/running/interface/Ethernet/%220/3%22/ip/	Retrieves the IPv4 router advertisement configuration information.

PATCH URI	Payload	Description
<base_URI>/config/running/interface/Ethernet/%220/3%22/ip/	+ <ip><irdp>true</irdp></ip>	Enables the IPv4 router advertisement protocol.

DELETE URI
<base_URI>/config/running/interface/Ethernet/%220/3%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/%220/4%22/ip/irdp">true</irdp>
```

## ip/prefix-list

Configures, retrieves, and modifies IP address prefix list.

### Resource URIs

URI	Description
<base_URI>/config/running/ip/prefix-list/{name},{seq-keyword},{instance}	Configures IP address prefix list.

GET URIs	Description
<base_URI>/config/running/ip/prefix-list/{name},{seq-keyword},{instance}	Retrieves IP address prefix list.
<base_URI>/config/running/ip/prefix-list/{name},{seq-keyword},{instance}/ge	Retrieves minimum IP prefix length.
<base_URI>/config/running/ip/prefix-list/{name},{seq-keyword},{instance}/le	Retrieves maximum IP prefix length.

PATCH URIs	Payload	Description
<base_URI>/config/running/ip/prefix-list/{name},{seq-keyword},{instance}	<prefix-list><action-ipp>{action-t}</action-ipp><prefix-ipp>{inet:ipv4-prefix}</prefix-ipp></prefix-list>	Configures IP address prefix list.
<base_URI>/config/running/ip/prefix-list/{name},{seq-keyword},{instance}	<prefix-list><ge>{prefix-len-t}</ge></prefix-list>	Configures minimum IP prefix length.
<base_URI>/config/running/ip/prefix-list/{name},{seq-keyword},{instance}	<prefix-list><le>{prefix-len-t}</le></prefix-list>	Configures maximum IP prefix length.

PUT URIs	Payload	Description
<base_URI>/config/running/ip/prefix-list/{name},{seq-keyword},{instance}/ge	<ge>{prefix-len-t}</ge>	Configures minimum IP prefix length.
<base_URI>/config/running/ip/prefix-list/{name},{seq-keyword},{instance}/le	<le>{prefix-len-t}</le>	Configures maximum IP prefix length.

DELETE URIs
<base_URI>/config/running/ip/prefix-list/{name},{seq-keyword},{instance}



## Usage Guidelines

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

## Examples

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

### URI

http://host:80/rest/config/running/ip/prefix-list/PRLIST1,seq,5

### Request Body

None

### Response Body

```
<prefix-list xmlns="urn:brocade.com:mgmt:brocade-ip-policy" xmlns:y="http://
brocade.com/ns/rest"
y:self="/rest/config/running/ip/prefix-list/PRLIST1%2Cseq%2C5">
  <name>PRLIST1</name>
  <seq-keyword>seq</seq-keyword>
  <instance>5</instance>
  <action-ipp>permit</action-ipp>
  <prefix-ipp>17.0.0.0/16</prefix-ipp>
  <ge>18</ge>
  <le>24</le>
</prefix-list>
```

The following example uses the PUT option to configure IP address prefix list.

### URI

http://host:80/rest/config/running/config/running/ip/prefix-list/PRLIST1,seq,5/ge

### Request Body

```
<ge>{prefix-len-t}</ge>
```

### Response Body

None

The following example uses the DELETE option to remove IP address prefix list.

### URI

http://host:80/rest/config/running/ip/prefix-list/PRLIST1,seq,5

## Request Body

None

## Response Body

None

## ip/route

Configures, retrieves, and modifies static route to the IP routing table.

### Resource URIs

URI	Description
<base_URI>/config/running/ip/route	Configures static route to the IP routing table.

GET URIs	Description
<base_URI>/config/running/ip/route	Retrieves static route to the IP routing table.

POST URIs	Payload	Description
<base_URI>/config/running/ip/route	<static-route-nh><static-route-dest>{ip-address}</static-route-dest><static-route-next-hop>{ip-address}</static-route-next-hop></static-route-nh></static-route-nh>	Specifies the destination IPv4 address and mask in the format A.B.C.D/L (where "L" is the prefix length of the mask)
<base_URI>/config/running/ip/route	<static-route-oif><static-route-dest>{ip-address}</static-route-dest><static-route-oif-type>{enumeration}</static-route-oif-type><InterfaceNumber>{string}</InterfaceNumber></static-route-oif>	Specifies the destination IPv4 address for egress interface.

PUT URIs	Payload	Description
<base_URI>/config/running/ip/route/static-route-nh/{static-route-dest},{static-route-next-hop}/metric	<metric>{unit32}</metric>	Configures the cost metric of the route. Valid values range from 1 through 16.
<base_URI>/config/running/ip/route/static-route-nh/{static-route-dest},{static-route-next-hop}/distance	<distance>{unit32}</distance>	Configures the administrative distance of the route. When comparing otherwise equal routes to a destination, a Extreme device prefers lower administrative distances over higher ones.

PUT URIs	Payload	Description
<base_URI>/config/running/ip/route/static-route-nh/{static-route-dest},{static-route-next-hop}/tag	<tag>{unit32}</tag>	Configures the tag value of the route to use for route filtering with a route map.
<base_URI>/config/running/ip/route/static-route-oif/{static-route-dest},{static-route-oif-type},{InterfaceNumber}/metric	<metric>{unit32}</metric>	Configures the cost metric of the route for egress interface. Valid values range from 1 through 16.
<base_URI>/config/running/ip/route/static-route-oif/{static-route-dest},{static-route-oif-type},{InterfaceNumber}/distance	<distance>{unit32}</distance>	Configures the administrative distance of the route for egress interface. When comparing otherwise equal routes to a destination, a Extreme device prefers lower administrative distances over higher ones.
<base_URI>/config/running/ip/route/static-route-oif/{static-route-dest},{static-route-oif-type},{InterfaceNumber}/tag	<tag>{unit32}</tag>	Configures the tag value of the route to use for route filtering with a route map for egress interface.

PATCH URIs	Payload	Description
<base_URI>/config/running/ip/route/static-route-nh/{static-route-dest},{static-route-next-hop}	<base_URI><static-route-nh><metric>{uint32}</metric></static-route-nh>	Configures the cost metric of the route.
<base_URI>/config/running/ip/route/static-route-nh/{static-route-dest},{static-route-next-hop}	base_URI><static-route-nh><distance>{uint32}</distance></static-route-nh>	Configures the administrative distance of the route.
<base_URI>/config/running/ip/route/static-route-nh/{static-route-dest},{static-route-next-hop}	<base_URI><static-route-nh><tag>{uint32}</tag></static-route-nh>	Configures the tag value of the route to use for route filtering with a route map.
<base_URI>/config/running/ip/route/static-route-oif/{static-route-dest},{static-route-oif-type},{InterfaceNumber}	<base_URI><static-route-oif><metric>{uint32}</metric></static-route-oif>	Configures the cost metric of the route for egress interface.

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

Configures IP source guard.

### Resource URIs

URI	Description
<base_URI>/config/running/interface/Ethernet/%220/3%22/ip/source-guard	Configures IP source guard.

GET URI	Description
<base_URI>/config/running/interface/Ethernet/%220/3%22/ip/source-guard	Retrieves IP source guard configuration information.

PATCH URI	Payload	Description
<base_URI>/config/running/interface/Ethernet/%220/3%22/ip/source-guard	<source-guard><enable>true</enable></source-guard>	Enables IP source guard.

DELETE URI
<base_URI>/config/running/interface/Ethernet/%220/3%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/%220/4%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/
%220/4%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/%20/4%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/%20/4%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/%20/4%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: Q1ZkYllkPXtgTntBX2x3akt9NVlYVC8403ZTZ3pqYj0=
< 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/%20/4%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/%20/4%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/%220/4%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

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

### Resource URIs

URI	Description
<base_URI>/config/running/ipv6	The Internet Protocol configuration.
<base_URI>/config/running/ipv6/access-list/standard	Standard IP ACL configuration.
<base_URI>/config/running/ipv6/access-list/standard/{ACL-name}/seq	Sequence number configuration.
<base_URI>/config/running/ipv6/access-list/extended	Extended IP ACL configuration.
<base_URI>/config/running/ipv6/access-list/extended/{ACL-name}/seq	Sequence number configuration.

GET URIs	Description
<base_URI>/config/running/ipv6/access-list/standard/{name}/seq/{seq-id}/src-host-ip	Retrieves the source host IP of a specific standard ACL with a sequence ID.
<base_URI>/config/running/ipv6/access-list/standard/{name}/seq/{seq-id}/src-mask	Displays whether count is enabled for a standard ACL.
<base_URI>/config/running/ipv6/access-list/standard/{name}/seq/{seq-id}/count	Displays whether count is enabled for a specific standard ACL.
<base_URI>/config/running/ipv6/access-list/standard/{name}/seq/{seq-id}/log	Displays whether log is configured for a specific standard ACL.
<base_URI>/config/running/ipv6/access-list/extended/{name}/seq/{seq-id}/copy-sflow	Sends matching inbound packets to the sFlow collector.
<base_URI>/config/running/ipv6/access-list/extended/{name}/seq/{seq-id}/sport-number-lt-tcp	s-port numbers less than or equal to Transmission Control Protocol (TCP).
<base_URI>/config/running/ipv6/access-list/extended/{name}/seq/{seq-id}/sport-number-gt-tcp	s-port numbers greater than or equal to Transmission Control Protocol (TCP).
<base_URI>/config/running/ipv6/access-list/extended/{name}/seq/{seq-id}/sport-number-eq-neq-udp	All TCP or User Datagram Protocol (UDP) port numbers except the s-port number.
<base_URI>/config/running/ipv6/access-list/extended/{name}/seq/{seq-id}/sport-number-lt-udp	s-port numbers less than or equal to User Datagram Protocol (UDP).
<base_URI>/config/running/ipv6/access-list/extended/{name}/seq/{seq-id}/sport-number-gt-udp	s-port numbers greater than or equal to User Datagram Protocol (UDP).

GET URIs	Description
<base_URI>/config/running/ipv6/access-list/extended/{name}/seq/{seq-id}/vlan	Displays the VLAN interface to which the ACL is bound.
<base_URI>/config/running/ipv6/access-list/extended/{name}/seq/{seq-id}/count	Displays whether count is enabled for an extended ACL.
<base_URI>/config/running/ipv6/access-list/extended/{name}/seq/{seq-id}/log	Displays whether log is configured for an extended ACL.
<base_URI>/config/running/ipv6/access-list/extended/{name}/seq/{seq-id}/mirror	Mirrors packets matching the rule.

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

*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.

*conlimit connlimit-value*

Number of connections allowed per IP address.

*copy-sflow*

For incoming traffic, sends matching packets to the sFlow collector.

*count*

Enables statistics for the rule.

*drop-precedence-force*

Force the use of the configured *drop-precedence-value* value.

*dscp*

The DSCP value to filter for.

*dscp-force*

The DSCP value to be used instead of the DSCP value in the packet for filtering. This value is in the range 0 through 63.

*log*

Enables inbound logging for the rule. In addition, the ACL log buffer must be enabled, using the **debug access-list-log buffer** command.

*mirror*

(Supported for rules in ACLs applied on physical interfaces to inbound traffic. Not supported for PBR, rACLs, or ACL-RL.) Mirrors packets matching the rule.

*tc-force*

In permit rules applied to incoming traffic, sets or forces the *traffic-class* for the packets to the configured value. By default, *traffic-class* is derived from the *traffic-class QoS map*.

*tc-force-value* can be in the range 0 through 7. Can be used along with the **dscp-force** parameter to enforce both DSCP and TC mapping.



#### Note

Only applicable for SLX 9250, SLX 9150T, Extreme 8720, and Extreme 8520.

*vlan*

Specifies a VLAN interface to which the ACL is bound.

## 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

Configures, modifies, or retrieves Neighbor Discovery commands at global level.

### Resource URIs

URI	Description
<base_URI>/config/running/ipv6/nd	Configures Neighbor Discovery commands.

GET URIs	Description
<base_URI>/config/running/ipv6/nd/global-suppress-ra	Sets globally suppress-ra.
<base_URI>/config/running/ipv6/nd/ra-dns-server/{string}	Sets global DNS server option applied on all ND6 interfaces
<base_URI>/config/running/ipv6/nd/ra-domain-name/{string}/lifetime-multiplier	Set global domain name option that applied on all ND6 interfaces and applies Lifetime multiplier for DNS Search List option.

POST URIs	Payload	Description
<base_URI>/config/running/ipv6/nd	<global-suppress-ra>(enumeration)</global-suppress-ra>	Sets globally suppress-ra.
<base_URI>/config/running/ipv6/nd	<ra-dns-server><dns-server-prefix-global>{dns-server-prefix}</dns-server-prefix-global><lifetime-multiplier>(decimal)</lifetime-multiplier></ra-dns-server>	Set global DNS server option applied on all ND6 interfaces.
<base_URI>/config/running/ipv6/nd	<ra-domain-name><domain-name-string-global>{name}</domain-name-string-global><lifetime-multiplier>(decimal)</lifetime-multiplier></ra-domain-name>	Set global domain name option that applied on all ND6 interfaces.

PUT URIs	Payload	Description
<base_URI>/config/running/ipv6/nd/ra-dns-server/	<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

Configures, retrieves, and modifies IPv6 address prefix list.

### Resource URIs

URI	Description
<base_URI>/config/running/ipv6/prefix-list/{name},{seq-keyword},{instance}	Configures IPv6 address prefix list.

GET URIs	Description
<base_URI>/config/running/ipv6/prefix-list/{name},{seq-keyword},{instance}	Retrieves IPv6 address prefix list.
<base_URI>/config/running/ipv6/prefix-list/{name},{seq-keyword},{instance}/ge	Retrieves minimum IPv6 prefix length.
<base_URI>/config/running/ipv6/prefix-list/{name},{seq-keyword},{instance}/le	Retrieves maximum IPv6 prefix length.

PATCH URIs	Payload	Description
<base_URI>/config/running/ipv6/prefix-list/{name},{seq-keyword},{instance}	<prefix-list><action-ipp><action-t></action-ipp><ipv6-prefix-ipp>{inet:ipv6-prefix}</ipv6-prefix-ipp></prefix-list>	Configures IPv6 address prefix list.
<base_URI>/config/running/ipv6/prefix-list/{name},{seq-keyword},{instance}	<prefix-list><ge>{ipv6-prefix-len-t}</ge></prefix-list>	Configures minimum IPv6 prefix length.
<base_URI>/config/running/ipv6/prefix-list/{name},{seq-keyword},{instance}	<prefix-list><le>{ipv6-prefix-len-t}</le></prefix-list>	Configures maximum IPv6 prefix length.

PUT URIs	Payload	Description
<base_URI>/config/running/ipv6/prefix-list/{name},{seq-keyword},{instance}/ge	<ge>{ipv6-prefix-len-t}</ge>	Configures minimum IPv6 prefix length.
<base_URI>/config/running/ipv6/prefix-list/{name},{seq-keyword},{instance}/le	<le>{ipv6-prefix-len-t}</le>	Configures maximum IPv6 prefix length.

DELETE URIs
<base_URI>/config/running/ipv6/prefix-list/{name},{seq-keyword},{instance}

## Usage Guidelines

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

## Examples

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

### URI

http://host:80/rest/config/running/ipv6/prefix-list/PR6LIST4,seq,5/

### Request Body

```
<prefix-list xmlns="urn:brocade.com:mgmt:brocade-ip-policy" xmlns:y="http://
brocade.com/ns/rest"
y:self="/rest/config/running/ipv6/prefix-list/PR6LIST4%2Cseq%2C5">
  <name>PR6LIST4</name>
  <seq-keyword>seq</seq-keyword>
  <instance>5</instance>
  <action-ipp>permit</action-ipp>
  <ipv6-prefix-ipp>2001:5555:2222:4444::/64</ipv6-prefix-ipp>
  <ge>120</ge>
  <le>128</le>
</prefix-list>
```

### Response Body

None

The following example uses the PUT option to configure IPv6 address prefix list.

### URI

http://host:80/rest/config/running/config/running/ipv6/prefix-list/PR6LIST2,seq,5/ge

### Request Body

```
<ge>{ipv6-prefix-len-t}</ge>
```

### Response Body

None

The following example uses the DELETE option to remove IPv6 address prefix list.

### URI

http://host:80/rest/config/running/ipv6/prefix-list/PR6LIST4%2Cseq%2C5

## Request Body

None

## Response Body

None

## ipv6/router/ospf

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

### Resource URIs

URI	Description
<base_URI>/config/running/ipv6/router/ospf/{vrf}	Configures Open Shortest Path First (OSPF) version 3.

GET URIs	Description
<base_URI>/config/running/ipv6/router/ospf	Retrieves Open Shortest Path First (OSPF) version 3 details.
<base_URI>/config/running/ipv6/router/ospf/{vrf}	Displays the name of the VRF.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}	Displays OSPF router area address
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/normal	Displays the normal area for an area ID.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/nssa	Displays an NSSA area.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/nssa/nssa-area-metric	Displays NSSAs advertised stub route metric.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/nssa/default-information-originate	Controls distribution of default information.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/nssa/default-information-originate/metric	Displays the OSPF metric .
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/nssa/default-information-originate/metric-type	Displays the OSPF metric type.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/nssa/no-redistribution	Do not send redistributed LSA into nssa area.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/nssa/no-summary	Do not send summary LSA into nssa area.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/nssa/translator-always	Sets NSSA translator role.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/nssa/translator-interval	NSSA translator stability interval (sec). Decimal value, range 10-60 seconds. Default is 40s.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/stub	Displays a stub area.

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	Displays 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 Mbts 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

Configures, modifies, or retrieves LDAP server settings.

### Resource URIs

URI	Description
<base_URI>/config/running/ldap-server	LDAP server configuration.
<base_URI>/config/running/ldap-server/host	LDAP Server for AAA. Refer to ldap-server/host for information.
<base_URI>/config/running/ldap-server/maprole	Maps a role to a group. Refer to ldap-server/maprole for information.

### Parameters

*host*

Configures a LDAP server for AAA.

*maprole*

Maps a role to the group.

### Usage Guidelines

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

### Examples

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

### URI

http://host:80/rest/config/running/ldap-server

### Request Body

None

### Response Body

```
<ldap-server xmlns="urn:brocade.com:mgmt:brocade-aaa" xmlns:y="http://brocade.com/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

---

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

### Resource URIs

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

### Parameters

*hostname*

LDAP server host name.

*port*

TCP authentication port. The number of characters can range from 1 through 255.

*retries*

Number of retries for this server connection. The number of retries can range from 0 through 100. The default number of retries is 5.

*timeout*

Number of retries for this server connection. The number of retries can range from 0 through 100. The default number of retries is 5.

*use-vrf*

Specifies the VRF name.

*basedn*

Base domain name. The number of characters can range from 1 through 255.

### Usage Guidelines

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

### Examples

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

### URI

http://host:80/rest/config/running/ldap-server/host

### Request Body

None

## Response Body

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

The following is an example of the POST operation to add an LDAP server to the client server list.

## URI

http://host:80/rest/config/running/ldap-server

## Request Body

```
<host>
  <hostname>test_ACL</hostname>
</host>
```

## Response Body

None

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

## URI

http://host:80/rest/config/running/ldap-server/host/test\_API

## Request Body

None

## Response Body

None

## ldap-server/maprole

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

### Resource URIs

URI	Description
<base_URI>/config/running/ldap-server/maprole	Maps a role to a group.

### Parameters

*ad-group*

AD group belongs to user on the AD Server.

*role*

Specifies the role name.

### Usage Guidelines

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

### Examples

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

### URI

http://host:80/rest/config/running/ldap-server/maprole

### Request Body

None

### Response Body

```
<maprole y:self="/rest/config/running/ldap-server/maprole">
  <group y:self="/rest/config/running/ldap-server/maprole/group/administrator">
    <ad-group>administrator</ad-group>
    <role>admin</role>
  </group>
</maprole>
```

The following is an example of the POST operation to map a role to a group.

### URI

http://host:80/rest/config/running/ldap-server/maprole

## Request Body

```
<group>
  <ad-group>administrator</ad-group>
  <role>admin</role>
</group>
```

## Response Body

None

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

## URI

http://host:80/rest/config/running/ldap-server/maprole/group

## Request Body

None

## Response Body

None

## lag/hash

Configures the various LAG hash parameters.

### Resource URIs

URI	Description
<base_URI>/config/running/lag	Configures the Hash-based LAG parameters.

GET URIs	Description
<base_URI>/config/running/lag	Retrieves the Hash-based LAG parameters.

POST URIs	Payload	Description
<base_URI>/config/running/lag	<bos><start/></bos> <bos><skip/></bos>	Specifies to pick up only the BOS label for hashing. The parameters indicate whether to include the BOS label when hashing.
<base_URI>/config/running/lag	<hdr-count>{count}</hdr-count>	Specifies the number of headers to be considered for LAG hashing.
<base_URI>/config/running/lag	<hdr-start><fwd/></hdr-start> <hdr-start><term/></hdr-start>	Specifies where to start picking headers for key generation. The parameters indicate whether to start from the inner header or the outer header.
<base_URI>/config/running/lag	<normalize/>	Specifies using the same hash in both directions.
<base_URI>/config/running/lag	<pwctlword/>	Specifies including the PW control word in hashing.
<base_URI>/config/running/lag	<rotate>{rotate-number}</rotate/>	Specifies the hashing randomness value.
<base_URI>/config/running/lag	<speculate-mpls><enable/></speculate-mpls>	Enables Speculative MPLS.
<base_URI>/config/running/lag	<speculate-mpls><inner-eth/></speculate-mpls>	Enable inner ETH hash for L2VPN.
<base_URI>/config/running/lag	<speculate-mpls><inner-ip-raw/></speculate-mpls>	Enable inner IPv4 header hash for L2VPN raw mode.
<base_URI>/config/running/lag	<speculate-mpls><inner-ip-tag/></speculate-mpls>	Enable inner IPv4 header hash for L2VPN tag mode.

POST URIs	Payload	Description
<base_URI>/config/running/lag	<speculate-mpls><inner-ipv6-raw/></speculate-mpls>	Enable inner IPv6 header hash for L2VPN raw mode.
<base_URI>/config/running/lag	<speculate-mpls><inner-ipv6-tag/></speculate-mpls>	Enable inner IPv6 header hash for L2VPN tag mode.
<base_URI>/config/running/lag	<srcport/>	Specifies to include source port in hashing configuration.

PATCH URIs	Payload	Description
<base_URI>/config/running/lag	<bos><start/></bos> <bos><skip/></bos>	Specifies to pick up only the BOS label for hashing. The parameters indicate whether to include the BOS label when hashing.
<base_URI>/config/running/lag	<hdr-count>{count}</hdr-count>	Specifies the number of headers to be considered for LAG hashing.
<base_URI>/config/running/lag	<hdr-start><fwd/></hdr-start> <hdr-start><term/></hdr-start>	Specifies where to start picking headers for key generation. The parameters indicate whether to start from the inner header or the outer header.
<base_URI>/config/running/lag	<normalize/>	Specifies using the same hash in both directions.
<base_URI>/config/running/lag	<pwctlword/>	Specifies including the PW control word in hashing.
<base_URI>/config/running/lag	<rotate>{rotate-number}</rotate/>	Specifies the hashing randomness value.
<base_URI>/config/running/lag	<speculate-mpls><enable/></speculate-mpls>	Enables Speculative MPLS.
<base_URI>/config/running/lag	<speculate-mpls><inner-eth/></speculate-mpls>	Enable inner ETH hash for L2VPN.
<base_URI>/config/running/lag	<speculate-mpls><inner-ip-raw/></speculate-mpls>	Enable inner IPv4 header hash for L2VPN raw mode.
<base_URI>/config/running/lag	<speculate-mpls><inner-ip-tag/></speculate-mpls>	Enable inner IPv4 header hash for L2VPN tag mode.
<base_URI>/config/running/lag	<speculate-mpls><inner-ipv6-raw/></speculate-mpls>	Enable inner IPv6 header hash for L2VPN raw mode.

PATCH URIs	Payload	Description
<base_URI>/config/running/lag	<speculate-mpls><inner-ipv6-tag/></speculate-mpls>	Enable inner IPv6 header hash for L2VPN tag mode.
<base_URI>/config/running/lag	<srcport/>	Specifies to include source port in hashing configuration.

Delete URIs
<base-uri>/config/running/lag/bos
<base-uri>/config/running/lag/hdr-count
<base-uri>/config/running/lag/hdr-start
<base-uri>/config/running/lag/normalize
<base-uri>/config/running/lag/rotate
<base-uri>/config/running/lag/pwctlword
<base-uri>/config/running/lag/speculate-mpls
<base-uri>/config/running/lag/srcport

## Parameters

### **bos**

Ignore the entire MPLS label stack and use only the BOS label for hashing.

### **skip**

Hash from the label following the BOS label.

### **start**

(Default) Start the hash from the BOS label.

### **hdr-count** *count*

Configures the number of headers to be considered for LAG hashing. Values range from 1 through 3. The default is 3.

### **hdr-start**

Specifies where to start picking headers for the key generation.

### **fwd**

(Default) Start from the inner header, which is used for forwarding the packet.

### **term**

Start from the outer header, which is the header below the forwarding header and is the last terminated header.

### **normalize**

Configures using the same hash in both directions. The default is disabled.

### **pwctrlword**

Include the PW control word in hashing. The default is disabled.

### **rotate** *rotate-number*

Configures hashing randomness. Values range from 0 through 15. The default is 3.

**speculate-mpls**

Enable MPLS speculate or Ethernet/IP.

**enable**

Enable Speculative MPLS.

**inner-eth**

Enable inner Ethernet header hash for L2VPN.

**inner-ip-raw**

Enable inner IPv4 header hash for L2VPN raw mode.

**inner-ip-tag**

Enable inner IPv4 header hash for L2VPN tag mode

**inner-ipv6-raw**

Enable inner IPv6 header hash for L2VPN raw mode

**inner-ipv6-tag**

Enable inner IPv6 header hash for L2VPN tag mode

**srcport**

Includes the source port in the hashing configuration. The default is not to include it.

## Usage Guidelines

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

## Examples

The following example uses the GET option to retrieve Lag Hash information on an Extreme 8820.

## URI

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

## Request Body

None

## Response Body

```
<hash xmlns="urn:brocade.com:mgmt:brocade-rbridge-lag"
  xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/lag/hash">
  <rotate>l2</rotate>
  <normalize>true</normalize>
</hash>
```

The following example uses the POST option to configure hashing randomness.



## URI

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

## Request Body

```
<hash>
  <rotate>5</rotate>
</hash>
```

## Response Body

None

## link-fault-signaling

Configures, retrieves, and modifies Link Fault Signaling (LFS).

### Resource URIs

URI	Description
<base_URI>/config/running/link-fault-signaling	Configures LFS

GET URIs	Description
<base_URI>/config/running/link-fault-signaling	Retrieves LFS
<base_URI>/config/running/link-fault-signaling/tx	Retrieves TX LFS
<base_URI>/config/running/link-fault-signaling/rx	Retrieves RX LFS

PATCH URIs	Payload	Description
<base_URI>/config/running/link-fault-signaling/rx	<rx>(enumeration)</rx>	Configures RX LFS
<base_URI>/config/running/link-fault-signaling/tx	<tx>(enumeration)</tx>	Configures TX LFS

PUT URIs	Payload	Description
<base_URI>/config/running/link-fault-signaling/tx	<tx>(enumeration)</tx>	Configures TX LFS
<base_URI>/config/running/link-fault-signaling/rx	<rx>(enumeration)</rx>	Configures RX LFS

DELETE URIs
<base_URI>/config/running/link-fault-signaling/tx
<base_URI>/config/running/link-fault-signaling/rx

### Parameters

*rx*

Specifies RX LFS

*tx*

Specifies TX LFS

## Usage Guidelines

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

## Examples

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

### URI

http://host:80/rest/config/running/link-fault-signaling

### Request Body

None

### Response Body

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

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

### URI

http://host:80/rest/config/running/link-fault-signaling/rx

### Request Body

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

### Response Body

None

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

### URI

http://host:80/rest/config/running/link-fault-signaling/tx

### Request Body

None

## Response Body

None

## load-balance/hash

Configures the various load balancing parameters.

### Resource URIs

URI	Description
<base_URI>/config/running/load-balance	Configures the Hash-based Load Balancing parameters.

GET URI	Description
<base_URI>/config/running/load-balance	Retrieves the Hash-based Load Balancing parameters.

POST URIs	Payload	Description
<base_URI>/config/running/load-balance/hash/ethernet	<ethernet><da-mac/></ethernet>	Specifies the Layer 2 Destination MAC Address as a hash source.
<base_URI>/config/running/load-balance/hash/ethernet	<ethernet><etype/></ethernet>	Specifies the etype as a hash source.
<base_URI>/config/running/load-balance/hash/ethernet	<ethernet><sa-mac/></ethernet>	Specifies the Layer 2 Source MAC Address as a hash source.
<base_URI>/config/running/load-balance/hash/ethernet	<ethernet><smac-dmac/></ethernet>	Specifies the source and destination MACs of the inner and outer headers as hash sources.
<base_URI>/config/running/load-balance/hash/ethernet	<ethernet><vlan/></ethernet>	Specifies the VLAN option as a hash source.
<base_URI>/config/running/load-balance/hash/ip	<ip><src-l4-port/></ip>	Specifies the Source Layer 4 port as a hash source.
<base_URI>/config/running/load-balance/hash/ip	<ip><dst-l4-port/></ip>	Specifies the Destination Layer 4 port as a hash source.
<base_URI>/config/running/load-balance/hash/ip	<ip><src-ip/></ip>	Specifies the Source IP as a hash source.
<base_URI>/config/running/load-balance/hash/ip	<ip><dst-ip/></ip>	Specifies the Destination IP as a hash source.
<base_URI>/config/running/load-balance/hash/ip	<ip><protocol/></ip>	Specifies the IP Protocol as a hash source.

POST URIs	Payload	Description
<base_URI>/config/running/load-balance/hash/ip	<ip><sip-dip/></ip>	Specifies the IPv4 Source and Destination IP addresses of the inner and outer headers as hash sources.
<base_URI>/config/running/load-balance/hash/ipv6	<ipv6><ipv6-src-ip/></ipv6>	Specifies the IPv6 Source IP as a hash source.
<base_URI>/config/running/load-balance/hash/ipv6	<ipv6><ipv6-src-l4-port/></ipv6>	Specifies the IPv6 Source port as a hash source.
<base_URI>/config/running/load-balance/hash/ipv6	<ipv6><ipv6-dst-ip/></ipv6>	Specifies the IPv6 Destination IP as a hash source.
<base_URI>/config/running/load-balance/hash/ipv6	<ipv6><ipv6-dst-l4-port/></ipv6>	Specifies the IPv6 Destination port as a hash source.
<base_URI>/config/running/load-balance/hash/ipv6	<ipv6><next-header/></ipv6>	Specifies the next IPv6 header as a hash source.
<base_URI>/config/running/load-balance/hash/ipv6	<ipv6><sipv6-dipv6/></ipv6>	Specifies the IPv6 Source and Destination IP addresses as hash sources.
<base_URI>/config/running/load-balance/hash/l4	<l4><src-dst-port/></l4>	Specifies the Layer 4 Source and Destination ports as hash sources.
<base_URI>/config/running/load-balance/hash/mpls	<mpls><label1/></mpls>	Specifies the MPLS Label 1 as the hash source.
<base_URI>/config/running/load-balance/hash/mpls	<mpls><label2/></mpls>	Specifies the MPLS Label 2 as the hash source.
<base_URI>/config/running/load-balance/hash/mpls	<mpls><label3/></mpls>	Specifies the MPLS Label 3 as the hash source.
<base_URI>/config/running/load-balance/hash/mpls	<mpls><all-labels/></mpls>	Specifies all MPLS Labels as hash sources.

PATCH URIs	Payload	Description
<base_URI>/config/running/load-balance/hash/ethernet	<ethernet><da-mac/></ethernet>	Specifies the Layer 2 Destination MAC Address as a hash source.
<base_URI>/config/running/load-balance/hash/ethernet	<ethernet><etype/></ethernet>	Specifies the etype as a hash source.

PATCH URIs	Payload	Description
<base_URI>/config/running/load-balance/hash/ethernet	<ethernet><sa-mac/></ethernet>	Specifies the Layer 2 Source MAC Address as a hash source.
<base_URI>/config/running/load-balance/hash/ethernet	<ethernet><smac-dmac/></ethernet>	Specifies the source and destination MACs of the inner and outer headers as hash source.
<base_URI>/config/running/load-balance/hash/ethernet	<ethernet><vlan/></ethernet>	Specifies the VLAN option as a hash source.
<base_URI>/config/running/load-balance/hash/ip	<ip><src-l4-port/></ip>	Specifies the Source Layer 4 port as a hash source.
<base_URI>/config/running/load-balance/hash/ip	<ip><dst-l4-port/></ip>	Specifies the Destination Layer 4 port as a hash source.
<base_URI>/config/running/load-balance/hash/ip	<ip><src-ip/></ip>	Specifies the Source IP as a hash source.
<base_URI>/config/running/load-balance/hash/ip	<ip><dst-ip/></ip>	Specifies the Destination IP as a hash source.
<base_URI>/config/running/load-balance/hash/ip	<ip><protocol/></ip>	Specifies the IP Protocol as a hash source.
<base_URI>/config/running/load-balance/hash/ip	<ip><sip-dip/></ip>	Specifies the IPv4 Source and Destination IP addresses of the inner and outer headers as hash sources.
<base_URI>/config/running/load-balance/hash/ipv6	<ipv6><ipv6-src-ip/></ipv6>	Specifies the IPv6 Source IP as a hash source.
<base_URI>/config/running/load-balance/hash/ipv6	<ipv6><ipv6-src-l4-port/></ipv6>	Specifies the IPv6 Source port as a hash source.
<base_URI>/config/running/load-balance/hash/ipv6	<ipv6><ipv6-dst-ip/></ipv6>	Specifies the IPv6 Destination IP as a hash source.
<base_URI>/config/running/load-balance/hash/ipv6	<ipv6><ipv6-dst-l4-port/></ipv6>	Specifies the IPv6 Destination port as a hash shource.
<base_URI>/config/running/load-balance/hash/ipv6	<ipv6><next-header/></ipv6>	Specifies the next IPv6 header as a hash source.
<base_URI>/config/running/load-balance/hash/ipv6	<ipv6><sipv6-dipv6/></ipv6>	Specifies the IPv6 Source and Destination IP addresses as hash sources.

PATCH URIs	Payload	Description
<base_URI>/config/running/load-balance/hash/l4	<l4><src-dst-port></l4>	Specifies the Layer 4 Source and Destination ports as hash sources.
<base_URI>/config/running/load-balance/hash/mpls	<mpls><label1/></mpls>	Specifies the MPLS Label 1 as the hash source.
<base_URI>/config/running/load-balance/hash/mpls	<mpls><label2/></mpls>	Specifies the MPLS Label 2 as the hash source.
<base_URI>/config/running/load-balance/hash/mpls	<mpls><label3/></mpls>	Specifies the MPLS Label 3 as the hash source.
<base_URI>/config/running/load-balance/hash/mpls	<mpls><all-labels/></mpls>	Specifies all MPLS Labels as hash sources.

Delete URIs
<base-uri>/config/running/load-balance/hash/ethernet/da-mac
<base-uri>/config/running/load-balance/hash/ethernet/etype
<base-uri>/config/running/load-balance/hash/ethernet/sa-mac
<base-uri>/config/running/load-balance/hash/ethernet/smac-dmac
<base-uri>/config/running/load-balance/hash/ethernet/vlan
<base-uri>/config/running/load-balance/hash/ip/src-l4-port
<base-uri>/config/running/load-balance/hash/ip/dst-l4-port
<base-uri>/config/running/load-balance/hash/ip/src-ip
<base-uri>/config/running/load-balance/hash/ip/dst-ip
<base-uri>/config/running/load-balance/hash/ip/protocol
<base-uri>/config/running/load-balance/hash/ip/sip-dip
<base-uri>/config/running/load-balance/hash/ipv6/ipv6-src-ip
<base-uri>/config/running/load-balance/hash/ipv6/ipv6-src-l4-port
<base-uri>/config/running/load-balance/hash/ipv6/ipv6-dst-ip
<base-uri>/config/running/load-balance/hash/ipv6/ipv6-dst-l4-port
<base-uri>/config/running/load-balance/hash/ipv6/next-header
<base-uri>/config/running/load-balance/hash/ipv6/sip6-dip6
<base-uri>/config/running/load-balance/hash/l4/src-dst-port
<base-uri>/config/running/load-balance/hash/mpls/label1
<base-uri>/config/running/load-balance/hash/mpls/label2
<base-uri>/config/running/load-balance/hash/mpls/label3
<base-uri>/config/running/load-balance/hash/mpls/all-label



## Parameters

### **ethernet**

#### **da-mac**

Specifies Layer 2 destination address.

#### **etype**

Specifies the **etype** option.

#### **sa-mac**

Specifies Layer 2 source address.

#### **vlan**

Specifies the **vlan** option.

#### **smac-dmac**

Specifies the source and destination MACs of the inner and outer headers.

### **ip**

#### **dst-ip**

Specifies destination IP address.

#### **dst-l4-port**

Specifies destination Layer 4 port.

#### **protocol**

Specifies the IP protocol.

#### **sip-dip**

Specifies the IPv4 Source and Destination IP addresses of the inner and outer headers as hash sources.

#### **src-ip**

Specifies source IP address.

#### **src-l4-port**

Specifies source Layer 4 port.

### **ipv6**

#### **ipv6-dst-ip**

Specifies destination IPv6 address.

#### **ipv6-dst-l4-port**

Specifies IPv6 destination Layer 4 port.

#### **ipv6-next-hdr**

Specifies next IPv6 header.

#### **ipv6-src-ip**

Specifies source IPv6 address.

#### **ipv6-src-l4-port**

Specifies IPv6 source Layer 4 port.

#### **sipv6-dipv6**

Specifies IPv6 Source IP and IPv6 Destination IP addresses.

#### **14 src-dst-port**

Only supported on SLX 9740 and Extreme 8820 devices. Specifies using both source and destination ports in L4 header for calculating hash.

#### **mpls**

(Not supported for SLX 9150 or SLX 9250 devices)

##### **label1**

Specifies MPLS label 1. Not supported for SLX 9740 and Extreme 8820.

##### **label2**

Specifies MPLS label 2. Not supported for SLX 9740 and Extreme 8820.

##### **label3**

Specifies MPLS label 3. Not supported for SLX 9740 and Extreme 8820.

##### **all-labels**

Specifies all MPLS labels. Only supported on SLX 9740 and Extreme 8820.

## Usage Guidelines

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

## Examples

The following example uses the GET option to retrieve the configuration information for ethernet Load Balance Hash on an Extreme 8820.

## URI

<base-uri>/rest/config/running/load-balance/hash/ethernet

## Request Body

None

## Response Body

```
<ethernet xmlns="urn:brocade.com:mgmt:brocade-rbridge-lag"
  xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/load-balance/hash/
ethernet">
  <smac-dmac>true</smac-dmac>
  <vlan>true</vlan>
  <etype>true</etype>
</ethernet>
```

The following example uses the POST option to configure *smac-dmac* on an Extreme 8820.

## URI

http://host:80/rest/config/running/load-balance/hash/ethernet

## Request Body

```
<ethernet>
  <smac-dmac>true</smac-dmac>
</ethernet>
```

## Response Body

None

## lvtep/broadcast-local-bias

Enables or disables broadcasting of local Broadcast, Unicast, and Multicast traffic over LVTEP.

### Resource URIs

URI	Description
<code>&lt;base_URI&gt;/config/running/lvtep</code>	LVTEP settings

**Table 7: Get URI**

Get URI	Description
<code>&lt;base_URI&gt;/config/running/lvtep</code>	Retrieves LVTEP settings

**Table 8: Patch/PUT URI**

PATCH/PUT URI	Payload	Description
<code>&lt;base_URI&gt;/config/running/lvtep</code>	<code>&lt;lvtep&gt;&lt;/broadcast-local-bias&gt;&lt;/lvtep&gt;</code>	Enables broadcast-local-bias for LVTEP

DELETE URI
<code>&lt;base_URI&gt;/config/running/lvtep</code>

### 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

Configures, modifies, or retrieves MAC access list.

### Resource URIs

URI	Description
<base_URI>/config/running/mac	MAC access list.
<base_URI>/config/running/mac/access-list/standard	Standard MAC ACL.
<base_URI>/config/running/mac/access-list/standard/{ACL-name}/seq	Sequence number.
<base_URI>/config/running/mac/access-list/extended	Extended IP ACL.
<base_URI>/config/running/mac/access-list/extended/{ACL-name}/seq	Sequence number.

GET URIs	Description
<base_URI>/config/running/mac/access-list/standard/{name}/seq/{seq-id}/srchost	Displays source host for a standard MAC ACL.
<base_URI>/config/running/mac/access-list/standard/{name}/seq/{seq-id}/src-mac-addr-mask	Displays the source MAC address and the comparison mask for a standard MAC ACL.
<base_URI>/config/running/mac/access-list/standard/{name}/seq/{seq-id}/count	Displays statistics for the rule for a standard MAC ACL.
<base_URI>/config/running/mac/access-list/standard/{name}/seq/{seq-id}/log	Displays inbound logging for the rule for a standard MAC ACL.
<base_URI>/config/running/mac/access-list/standard/{name}/seq/{seq-id}/copy-sflow	Displays copy sflow status.
<base_URI>/config/running/mac/access-list/extended/{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.
<base_URI>/config/running/mac/access-list/extended/{name}/seq/{seq-id}/tc-force	Displays tc force status.

POST URIs	Payload	Description
<base_URI>/config/running/mac/access-list	<standard><name>{req_val}</name></standard>	Creates a standard MAC access control list (ACL).
<base_URI>/config/running/mac/access-list/standard/{name}	<seq><seq-id>{req_val}</seq-id><action>{enumeration}</action><source>{enumeration}</source></seq>	Configures a standard MAC ACL.
<base_URI>/config/running/mac/access-list	<extended><name>{req_val}</name></extended>	Creates an extended MAC access control list (ACL).
<base_URI>/config/running/mac/access-list/extended/{name}	<seq><seq-id>{req_val}</seq-id><action>{enumeration}</action><source>{enumeration}</source><srchost>{mac-address-type}</srchost><src-mac-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.

**mirror**

Enables mirroring.

**count**

Displays the count of forwarding entries.

**srchost**

Specifies the source host.

**known-unicast-only**

Specifies the configuration of filtering for known unicast packets.

**unknown-unicast-only**

Specifies the configuration of filtering for unknown unicast packets.

**drop-precedence-force** *dp-value*

Specifies the status of the *drop-precedence-force* configuration. *drop-precedence-force* is supported on the Extreme 8820, SLX 9740, SLX 9640, and SLX 9540 devices, the **drop-precedence-force** keyword is supported only under the default, vxlan-ext, and bgp-flowspec TCAM profiles.

**pcp** *pcp-value*



Specifies to permit or deny a packet with the specific Priority Code Point (PCP) value.

**pcp-force** *pcp-force-value*

Specifies the status of *pcp-force*. It forces the *pcp* value of the packet to the value set in the this field. Applicable only if the ACL is bound on ingress direction.

**tc-force** *tc-force-value*

Forces the *TC* value of the packet to the value set in the *tc-force-value* field. Applicable only if the ACL is bound on ingress direction.



#### Note

Only applicable for SLX 9250, SLX 9150, Extreme 8720, and Extreme 8520.

## 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/acl14">
        <name>acl14</name>
        <seq y:self="/rest/config/running/mac/access-list/extended/acl14/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/acl15">
        <name>acl15</name>
        <seq y:self="/rest/config/running/mac/access-list/extended/acl15/seq/10">
            <seq-id>10</seq-id>
            <action>permit</action>
            <source>any</source>
            <dst>any</dst>
            <vlan>100</vlan>
            <log>true</log>
            <tc-force>3</tc-force>
        </seq>
        <seq y:self="/rest/config/running/mac/access-list/extended/acl15/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

## management-security

### Resource URIs

URI	Description
<base_URI>/config/running/management-security	Sets and retrieves the supported TLS version on the device for both scenarios where the device acts as a server or as a client.

GET URIs	Description
<base_URI>/config/running/management-security	Retrieves the current TLS support configuration.

POST URIs	Payload	Description
<base_URI>/config/running/management-security/ssl-profile/server/tls	<min-version>{1.2 1.3}<min-version>	Specifies the configuration of minimum supported TLS version when the device acts as a Server.
<base_URI>/config/running/management-security/ssl-profile/client/tls	<min-version>{1.2 1.3}<min-version>	Specifies the configuration of minimum supported TLS version when the device acts as a client.

PATCH URIs	Payload	Description
<base_URI>/config/running/management-security/ssl-profile/server/tls	<min-version>{1.2 1.3}<min-version>	Specifies the configuration of minimum supported TLS version when the device acts as a Server.
<base_URI>/config/running/management-security/ssl-profile/client/tls	<min-version>{1.2 1.3}<min-version>	Specifies the configuration of minimum supported TLS version when the device acts as a client.

Delete URIs
<base_URI>/config/running/management-security/ssl-profile/server/tls/min-version
<base_URI>/config/running/management-security/ssl-profile/client/tls/min-version

### Parameters

#### **server**

The TLS version to use when the device is considered a Server.

#### **client**

The TLS version to use when the device is considered a client.

**min-version**

The minimum TLS version supported by the device in the particular mode.

## Usage Guidelines

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

## Examples

The following example uses the GET option to retrieve the current TLS version when the device is a client.

### URI

http://host:80/rest/config/running/management-security/ssl-profile/client

### Request Body

None

### Response Body

```
<tls>
  <min-version>
    1.2
  </min-version>
</tls>
```

The following example uses the PUT option to set the TLS version to version 1.3 when the device is considered a server.

### URI

http://host:80/rest/config/running/management-security/ssl-profile/server

### Request Body

```
<tls>
  <min-version>
    1.3
  </min-version>
</tls>
```

### Response Body

None

## monitor/session

Configures, modifies, or retrieves complete list of configured mirroring sessions.

### Resource URIs

URI	Description
<base_URI>/config/running/monitor/session	Configures complete list of configured mirroring sessions.

GET URIs	Description
<base_URI>/config/running/monitor	Retrieves complete list of configured mirroring sessions.
<base_URI>/config/running/monitor/session/{session-number}	Retrieves mirroring information of particular session.
<base_URI>/config/running/monitor/session/{session-number}/description	Retrieves description of particular mirroring session.
<base_URI>/config/running/monitor/session/{session-number}/direction	Retrieves direction information of particular session.

POST URIs	Payload	Description
<base_URI>/config/running/monitor	<session><session-number>{session-type}</session-number></session>	Configures mirroring session.

PATCH URIs	Payload	Description
<base_URI>/config/running/monitor/session/{session-number}	<session><description>{string}</description></session>	Adds description information to an existing mirroring session.
<base_URI>/config/running/monitor/session/{session-number}	<session><source>source</source><src-ethernet-val>{slot/port}</src-ethernet-val><src-ethernet>ethernet</src-ethernet><destination>destination</destination><dest-ethernet>ethernet</dest-ethernet><dest-ethernet-val>{slot/port}</dest-ethernet-val><direction>{rx tx both}</direction></session>	Adds source interface, destination interface, and direction information to an existing mirroring session created using POST command.
<base_URI>/config/running/monitor/session/{session-number}	<session><source>source</source><src-ethernet-val>{slot/port}</src-ethernet-val><src-ethernet>ethernet</src-	Adds source interface, destination port-channel number, and direction information to an existing

PATCH URIs	Payload	Description
	<pre> ethernet&gt;&lt;destination&gt;dest ination&lt;/destination&gt;&lt;dest- 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>	mirroring session created using POST command.

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

DELETE URIs
<base_URI>/config/running/monitor/session/{session-number}

## Usage Guidelines

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

## Examples

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

## URI

`http://host:80/rest/config/running/monitor/session/3`

## Request Body

None

## Response Body

```

<session xmlns="urn:brocade.com:mgmt:brocade-span" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/monitor/session/3">
  <session-number>3</session-number>
  <source>source</source>
  <src-ethernet>ethernet</src-ethernet>
  <src-ethernet-val>1/3</src-ethernet-val>
  <destination>destination</destination>
  <dest-ethernet>ethernet</dest-ethernet>
  <dest-ethernet-val>1/4</dest-ethernet-val>
  <direction>tx</direction>
</session>

```

The following example uses the POST option to configure mirroring session.

### URI

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

### Request Body

```
<session><session-number>{session-type}</session-number></session>
```

### Response Body

None

The following example uses the DELETE option to remove mirror session.

### URI

`http://host:80/rest/config/running/monitor/session/3`

### Request Body

None

### Response Body

None



## ntp

Configures, modifies, or retrieves NTP commands.

### Resource URIs

URI	Description
<base_URI>/config/running/ntp	NTP commands.

GET URIs	Description
<base_URI>/config/running/ntp	Displays NTP configuration.
<base_URI>/config/running/ntp/authentication-key	Displays Authentication key.
<base_URI>/config/running/ntp/server	Displays NTP server information.

POST URIs	Payload	Description
<base_URI>/config/running/ntp	<server><ip>(ip-address)</ip><use-vrf>(vrf-name)</use-vrf></server>	Configures NTP server.
<base_URI>/config/running/ntp	<authentication-key><keyid>(unit32)</keyid><md5>{string}</md5></authentication-key>	Configures authentication key and MD5 message-digest algorithm.
<base_URI>/config/running/ntp	<server><ip>(ip-address)</ip><use-vrf>(vrf-name)</use-vrf><key>(unit32)</key></server>	Configures NTP server key.
<base_URI>/config//running/ntp/disable	<all>   <server>	Disables the NTP server/client mode. Disabling the NTP server/client mode does not remove the configuration.

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

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

Configures VxLAN visibility.

### Resource URIs

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

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

POST URIs	Payload	Description
<base_URI>/config/running/	<overlay-transit><user-transit-name>{string}</user-transit-name></overlay-transit>	Configures overlay transit.
<base_URI>/config/running/{user-transit-name}	<overlay><access-group>{string}</access-group><in>{enumeration}</in></overlay>	Configures overlay and binding.
<base_URI>/config/running/overlay/access-list/type/vxlan	<extended><ext-user-acl-name>{string}</ext-user-acl-name></extended>	Creates extended ACL.
<base_URI>/config/running/overlay/access-list/type/vxlan	<standard><user-acl-name>{string}</user-acl-name></standard>	Creates standard ACL.

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>fffff</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

Configures, modifies, or retrieves user password attributes.

### Resource URIs

URI	Description
<base_URI>/config/running/password-attributes	System-wide user password attributes.
<base_URI>/config/running/password-attributes/character-restriction	Restriction on various types of characters. Refer to password-attributes/character-restriction for information.

### Parameters

*max-lockout-duration*

Specifies the maximum number of minutes after which the user account is unlocked. The value can range from 0 through 99999. The default value is 0.

*admin-lockout*

Enables lockout for admin role.

*min-length*

Specifies the minimum length of the password. The value can range from 8 through 32 characters. The default length of the password is 8 characters.

*max-retry*

Specifies the maximum number of login retries before which the user account is locked. The value can range from 0 to 16. The default number of login retries is 0.

*character-restriction*

Configures restriction on various types of characters.

### Usage Guidelines

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

### Examples

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

### URI

http://host:80/rest/config/running/password-attributes

### Request Body

None

## Response Body

```
<password-attributes xmlns="urn:brocade.com:mgmt:brocade-aaa" xmlns:y="http://  
brocade.com/ns/rest"  
y:self="/rest/config/running/password-attributes">  
  <max-lockout-duration>12</max-lockout-duration>  
  <min-length>9</min-length>  
  <max-retry>3</max-retry>  
  <character-restriction y:self="/rest/config/running/password-attributes/character-  
restriction"/>  
  <admin-lockout>true</admin-lockout>  
</password-attributes>
```

The following is an example of the PUT operation to configure the password attributes.

## URI

http://host:80/rest/config/running/password-attributes

## Request Body

```
<password-attributes>  
  <max-lockout-duration>10</max-lockout-duration>  
  <min-length>11</min-length>  
  <max-retry>5</max-retry>  
</password-attributes>
```

## Response Body

None

The following is an example of the DELETE operation to remove the maximum retry value.

## URI

http://host:80/rest/config/running/password-attributes/max-retry

## Request Body

None

## Response Body

None

## password-attributes/character-restriction

Configures, modifies, or retrieves character restriction configurations.

### Resource URIs

URI	Description
<base_URI>/config/running/password-attributes/character-restriction	Restriction on various types of characters.

### Parameters

#### *lower*

Specifies the minimum number of lower-case alphabetic characters that must occur in the password. The value can range from 0 through 32. The default minimum value is 8 lower-case alphabetic characters.

#### *numeric*

Specifies the minimum number of numeric characters. The value can range from 0 through 32. The default value is 0.

#### *special-char*

Specifies the minimum number of special characters. The value can range from 0 through 32 characters. The default value is 0 characters.

#### *upper*

Sets the number of uppercase alphabetic characters that must occur in the password.

### Usage Guidelines

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

### Examples

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

### URI

http://host:80/rest/config/running/password-attributes/character-restriction

### Request Body

None

## Response Body

```
<character-restriction y:self="/rest/config/running/password-attributes/character-restriction">
  <upper>1</upper>
  <lower>1</lower>
  <numeric>1</numeric>
  <special-char>1</special-char>
</character-restriction>
```

The following is an example of the PATCH operation to modify the character restriction parameters.

## URI

http://host:80/rest/config/running/password-attributes

## Request Body

```
<password-attributes>
  <character-restriction>
    <upper>2</upper>
    <lower>2</lower>
    <numeric>2</numeric>
    <special-char>1</special-char>
  </character-restriction>
</password-attributes>
```

## Response Body

None

The following is an example of the DELETE operation to change to the default setting.

## URI

http://host:80/rest/config/running/password-attributes

## Request Body

None

## Response Body

None

## password-attributes

Configures, modifies, or retrieves user password attributes.

### Resource URIs

URI	Description
<base_URI>/config/running/password-attributes	System-wide user password attributes.
<base_URI>/config/running/password-attributes/character-restriction	Restriction on various types of characters. Refer to password-attributes/character-restriction for information.
<base_URI>/config/running/password-attributes/expiry-alert-level	Alert configuration of user account password expiry.

### 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.

**info** *number-of-days*

Configures the first level of password expiry alert. This is triggered on the configured <number-of-days> before the day the password expires. This alarm is generated only once.

**minor** *number-of-days*

Configures the second level of password expiry alert. This is triggered on the configured <number-of-days> before the day the password expires. This alarm is generated only once.

**major** *number-of-days*

Configures the penultimate level of password expiry alert. This is triggered on the configured <number-of-days> before the day the password expires. This alarm is generated only once.

**critical** *number-of-days*

Configures the final level of password expiry alert. This is triggered on the configured <number-of-days> before the day the password expires. This alarm is generated only once.

## 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

The following is an example of configuring the various user account expiry alarm levels.

## URI

http://host:80/rest/config/running/password-attributes/expiry-alert-level

## Request Body

```
<expiry-alert-level>
  <info>15</info>
  <minor>10</minor>
  <major>5</major>
  <critical>2</critical>
</expiry-alert-level>
```

## Response Body

None

## prefix-independent-convergence

---

Configures 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

CFM protocol configuration.

### Resource URIs

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

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

POST URIs	Payload	Description
<base_URI>/config/running/protocol	<cfm />	Configures CFM protocol.
<base_URI>/config/running/protocol/cfm	<domain-name><domain-name>{string}</domain-name><level>{unit32}</level></domain-name>	Configures maintenance domain.

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

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

### Resource URIs

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

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

GET URIs	Description
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/threshold	Displays configured threshold settings.
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/threshold/forward	Displays forward direction threshold.
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/threshold/forward/average	Displays average threshold value in the forward direction.
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/threshold/forward/maximum	Displays configured maximum threshold value in the forward direction.
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/threshold/backward	Displays backward direction threshold.
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/threshold/backward/average	Displays average threshold value in the backward direction.
<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.



GET URIs	Description
<base_URI>/config/running/protocol/cfm/y1731/action-profile/{action-profile-name}/event/avg-threshold	Displays average threshold event configuration.
<base_URI>/config/running/protocol/cfm/y1731/action-profile/{action-profile-name}/event/avg-threshold/actions	Displays actions on average threshold event.
<base_URI>/config/running/protocol/cfm/y1731/action-profile/{action-profile-name}/event/max-threshold	Displays maximum threshold event configuration.
<base_URI>/config/running/protocol/cfm/y1731/action-profile/{action-profile-name}/event/max-threshold/actions	Displays actions on maximum threshold event.

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

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

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

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

### Resource URIs

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

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

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

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

PATCH URIs	Payload	Description
	<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

Configures, modifies, or retrieves Link Layer Discovery Protocol (LLDP) configuration.

### Resource URIs

URI	Description
<base_URI>/config/running/protocol	Protocol configuration.
<base_URI>/config/running/protocol/lldp	Link Layer Discovery Protocol (LLDP).

GET URIs	Description
<base_URI>/config/running/protocol/lldp	Protocol configuration.
<base_URI>/config/running/protocol/lldp/description	Retrieves the user description.
<base_URI>/config/running/protocol/lldp/hello	Retrieves hello interval.
<base_URI>/config/running/protocol/lldp/mode	Retrieves LLDP Transmit Only Mode information.
<base_URI>/config/running/protocol/lldp/multiplier	Retrieves multiplier details.
<base_URI>/config/running/protocol/lldp/advertise/dot1-tlv	Retrieves advertise IEEE 802.1 Organizationally Specific TLV configuration details.
<base_URI>/config/running/protocol/lldp/advertise/dot3-tlv	Retrieves advertise IEEE 802.3 Organizationally Specific TLV configuration details.
<base_URI>/config/running/protocol/lldp/advertise/optional-tlv/management-address	Retrieves management address TLV details.
<base_URI>/config/running/protocol/lldp/advertise/optional-tlv/port-description	Retrieves port description TLV details.
<base_URI>/config/running/protocol/lldp/advertise/optional-tlv/system-capabilities	Retrieves system capabilities TLV details.
<base_URI>/config/running/protocol/lldp/advertise/optional-tlv/system-description	Retrieves system description TLV details.
<base_URI>/config/running/protocol/lldp/advertise/optional-tlv/system-name	Retrieves system name TLV details.
<base_URI>/config/running/protocol/lldp/system-name	Retrieves system name.
<base_URI>/config/running/protocol/lldp/system-description	Retrieves system description.
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/description	Retrieves port profile description.

GET URIs	Description
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/hello	Retrieves port profile hello interval configuration details.
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/mode	Retrieves port profile mode.
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/multiplier	Retrieves port profile multiplier.
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/advertise/dot1-tlv	Retrieves port profile advertisement TLV details.
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/advertise/dot3-tlv	Retrieves port profile advertisement TLV details.
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/advertise/optional-tlv/management-address	Retrieves advertise IEEE 802.1 Organizationally Specific TLV configuration details.
<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.

PATCH URIs	Payload	Description
<base_URI>/config/running/protocol/lldp/advertise	<advertise><dot1-tlv>(string)</dot1-tlv></advertise>	Configures LLDP advertisement.
<base_URI>/config/running/protocol/lldp/advertise	<advertise><dot3-tlv>(string)</dot3-tlv></advertise>	Configures LLDP advertisement.
<base_URI>/config/running/protocol/lldp/advertise/optional-tlv	<optional-tlv><management-address>(string)</management-address></optional-tlv>	Configures LLDP optional TLV parameters.
<base_URI>/config/running/protocol/lldp/advertise/optional-tlv	<optional-tlv><port-description>(string)</port-description></optional-tlv>	Configures LLDP optional TLV parameters.
<base_URI>/config/running/protocol/lldp/advertise/optional-tlv	<optional-tlv><system-capabilities>(string)</system-capabilities></optional-tlv>	Configures LLDP optional TLV parameters.
<base_URI>/config/running/protocol/lldp/advertise/optional-tlv	<optional-tlv><system-description>(string)</system-description></optional-tlv>	Configures LLDP optional TLV parameters.
<base_URI>/config/running/protocol/lldp/advertise/optional-tlv	<optional-tlv><system-name>(string)</system-name></optional-tlv>	Configures LLDP optional TLV parameters.
<base_URI>/config/running/protocol/lldp	<lldp><system-name>(string)</system-name></lldp>	Configure LLDP system name.
<base_URI>/config/running/protocol/lldp	<lldp><system-description>(string)</system-description></lldp>	Configures LLDP system description.
<base_URI>/config/running/protocol/lldp	<lldp><disable>(string)</disable></lldp>	Disables LLDP.
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)	<profile><description>(string)</description></profile>	Configures LLDP profile description.
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)	<profile><hello>(uint32)</hello></profile>	Configures LLDP profile hello interval.
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)	<profile><multiplier>(uint32)</multiplier></profile>	Configures LLDP profile multiplier.
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/advertise	<advertise><dot1-tlv>(string)</dot1-tlv></advertise>	Configures LLDP profile advertisement.

PATCH URIs	Payload	Description
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/advertise	<advertise><dot3-tlv>(string)</dot3-tlv></advertise>	Configures LLDP profile advertisement.
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/advertise/optional-tlv	<optional-tlv><management-address>(string)</management-address></optional-tlv>	Configures LLDP optional TLV parameters.
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/advertise/optional-tlv	<optional-tlv><port-description>(string)</port-description></optional-tlv>	Configures LLDP optional TLV parameters.
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/advertise/optional-tlv	<optional-tlv><system-capabilities>(string)</system-capabilities></optional-tlv>	Configures LLDP optional TLV parameters.
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/advertise/optional-tlv	<optional-tlv><system-description>(string)</system-description></optional-tlv>	Configures LLDP optional TLV parameters.
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/advertise/optional-tlv	<optional-tlv><system-name>(string)</system-name></optional-tlv>	Configures LLDP optional TLV parameters.

PUT URIs	Payload	Description
<base_URI>/config/running/protocol/lldp/description	<description>(string)</description>	Configures LLDP description.
<base_URI>/config/running/protocol/lldp/hello	<hello>(unit32)</hello>	Configures LLD hello interval.
<base_URI>/config/running/protocol/lldp/mode	<mode>(unit32)</mode>	Configures LLDP mode.
<base_URI>/config/running/protocol/lldp/multiplier	<multiplier>(unit32)</multiplier>	Configures LLDP multiplier.
<base_URI>/config/running/protocol/lldp/advertise/dot1-tlv	<dot1-tlv>(string)</dot1-tlv>	Configures LLDP advertisement.
<base_URI>/config/running/protocol/lldp/advertise/dot3-tlv	<dot3-tlv>(string)</dot3-tlv>	Configures LLDP advertisement.
<base_URI>/config/running/protocol/lldp/advertise/optional-tlv/management-address	<management-address>(string)</management-address>	Configures LLDP optional TLV parameters.

PUT URIs	Payload	Description
<base_URI>/config/running/protocol/ldp/advertise/optional-tlv/port-description	<port-description>(string)</port-description>	Configures LLDP optional TLV parameters.
<base_URI>/config/running/protocol/ldp/advertise/optional-tlv/system-capabilities	<system-capabilities>(string)</system-capabilities>	Configures LLDP optional TLV parameters.
<base_URI>/config/running/protocol/ldp/advertise/optional-tlv/system-description	<system-description>(string)</system-description>	Configures LLDP optional TLV parameters.
<base_URI>/config/running/protocol/ldp/advertise/optional-tlv/system-name	<system-name>(string)</system-name>	Configures LLDP optional TLV parameters.
<base_URI>/config/running/protocol/ldp/system-name	<system-name>(string)</system-name>	Configure LLDP system name.
<base_URI>/config/running/protocol/ldp/system-description	<system-description>(string)</system-description>	Configures LLDP system description.
<base_URI>/config/running/protocol/ldp/disable	<disable>(string)</disable>	Disables LLDP.
<base_URI>/config/running/protocol/ldp/profile/(profile-name-string)/description	<description>(string)</description>	Configures LLDP profile description.
<base_URI>/config/running/protocol/ldp/profile/(profile-name-string)/hello	<hello>(unit32)</hello>	Configures LLDP profile hello interval.
<base_URI>/config/running/protocol/ldp/profile/(profile-name-string)/mode	<mode>(unit32)</mode>	Configures LLDP profile mode.
<base_URI>/config/running/protocol/ldp/profile/(profile-name-string)/multiplier	<multiplier>(unit32)</multiplier>	Configures LLDP profile multiplier.
<base_URI>/config/running/protocol/ldp/profile/(profile-name-string)/advertise/dot1-tlv	<dot1-tlv>(string)</dot1-tlv>	Configures LLDP profile advertisement.
<base_URI>/config/running/protocol/ldp/profile/(profile-name-string)/advertise/dot3-tlv	<dot3-tlv>(string)</dot3-tlv>	Configures LLDP profile advertisement.

PUT URIs	Payload	Description
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/advertise/optional-tlv/management-address	<management-address>(string)</management-address>	Configures LLDP optional TLV parameters.
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/advertise/optional-tlv/port-description	<port-description>(string)</port-description>	Configures LLDP optional TLV parameters.
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/advertise/optional-tlv/system-capabilities	<system-capabilities>(string)</system-capabilities>	Configures LLDP optional TLV parameters.
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/advertise/optional-tlv/system-description	<system-description>(string)</system-description>	Configures LLDP optional TLV parameters.
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/advertise/optional-tlv/system-name	<system-name>(string)</system-name>	Configures LLDP optional TLV parameters.

DELETE URIs
<base_URI>/config/running/protocol/lldp/description
<base_URI>/config/running/protocol/lldp/hello
<base_URI>/config/running/protocol/lldp/mode
<base_URI>/config/running/protocol/lldp/multiplier
<base_URI>/config/running/protocol/lldp/advertise/dot1-tlv
<base_URI>/config/running/protocol/lldp/advertise/dot3-tlv
<base_URI>/config/running/protocol/lldp/advertise/optional-tlv/management-address
<base_URI>/config/running/protocol/lldp/advertise/optional-tlv/port-description
<base_URI>/config/running/protocol/lldp/advertise/optional-tlv/system-capabilities
<base_URI>/config/running/protocol/lldp/advertise/optional-tlv/system-description
<base_URI>/config/running/protocol/lldp/advertise/optional-tlv/system-name
<base_URI>/config/running/protocol/lldp/system-name
<base_URI>/config/running/protocol/lldp/system-description
<base_URI>/config/running/protocol/lldp/disable
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/description
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/hello

DELETE URIs
<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
<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

Configures, modifies, or retrieves Global Loop Detection configuration.

### Resource URIs

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

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

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

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

DELETE URIs
-------------

**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

Configures MSTP.

### Resource URIs

URI	Description
<base_URI>/config/running/protocol/spanning-tree/mstp	Configures MSTP.

GET URIs	Description
<base_URI>/config/running/protocol/spanning-tree	Retrieves spanning tree configurations.
<base_URI>/config/running/protocol/spanning-tree/mstp	Retrieves MSTP configuration information.
<base_URI>/config/running/protocol/spanning-tree/mstp/instance/(instance-id)	Retrieves MSTP configuration information for a particular instance.

POST URIs	Payload	Description
<base_URI>/config/running/protocol/spanning-tree/mstp	<instance><id>(unit32)</id><vlan>(unit32)</vlan></instance>	Configures MSTP instance.

PATCH URIs	Payload	Description
<base_URI>/config/running/protocol/spanning-tree/mstp/instance/(instance-id)/priority	<priority>(unit32)</priority>	Configures MSTP priority.

PUT URIs	Payload	Description
<base_URI>/config/running/protocol/spanning-tree/mstp/description	<description>(string)</description>	Configures MSTP description.
<base_URI>/config/running/protocol/spanning-tree/mstp/bridge-priority	<bridge-priority>(unit32)</bridge-priority>	Configures MSTP bridge priority.
<base_URI>/config/running/protocol/spanning-tree/mstp/cisco-interoperability	<cisco-interoperability>(enumeration)</cisco-interoperability>	Enable MSTP cisco interoperability.
<base_URI>/config/running/protocol/spanning-tree/mstp/error-disable-timeout/enable	<enable></enable>	Enables MSTP error disable timeout.

PUT URIs	Payload	Description
<base_URI>/config/running/protocol/spanning-tree/mstp/forward-delay	<forward-delay>(unit32)</forward-delay>	Configures MSTP forward delay.
<base_URI>/config/running/protocol/spanning-tree/mstp/hello-time	<hello-time>(unit32)</hello-time>	Configures MSTP hello time.
<base_URI>/config/running/protocol/spanning-tree/mstp/max-age	<max-age>(unit32)</max-age>	Configures MSTP max age.
<base_URI>/config/running/protocol/spanning-tree	max-hops>(unit32)</max-hops>	Configures max hops.
<base_URI>/config/running/protocol/spanning-tree/mstp/port-channel/path-cost	<path-cost>(string)</path-cost>	Configures MSTP port channel path cost.
<base_URI>/config/running/protocol/spanning-tree/mstp/region	<region>(string)</region>	Configures MSTP string.
<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>(unit32)</transmit-holdcount>	Configures MSTP transmit 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

DELETE URIs
<base_URI>/config/running/protocol/spanning-tree/mstp/revision
<base_URI>/config/running/protocol/spanning-tree/mstp/shutdown
<base_URI>/config/running/protocol/spanning-tree/mstp/transmit-holdcount
<base_URI>/config/running/protocol/spanning-tree/mstp/error-disable-timeout/interval

## Parameters

*description*

Specifies description.

*bridge-priority*

Specifies bridge priority.

*interval*

Specifies the interval.

*forward-delay*

Specifies the forward delay.

*max-age*

Specifies max age.

*path-cost*

Specifies the path cost.

*hello-time*

Specifies the hello time.

*transmit-holdcount*

Specifies transmit hold count.

## Usage Guidelines

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

## Examples

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

## URI

http://host:80/rest/config/running/protocol/spanning-tree/mstp

## Request Body

None

## Response Body

```
<spanning-tree xmlns="urn:brocade.com:mgmt:brocade-xstp" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/protocol/spanning-tree">\r
  <mstp y:self="/rest/config/running/protocol/spanning-tree/mstp">\r
    <error-disable-timeout y:self="/rest/config/running/protocol/spanning-tree/mstp/error-disable-timeout">\r
      </error-disable-timeout>\r
    <port-channel y:self="/rest/config/running/protocol/spanning-tree/mstp/port-channel">\r
      </port-channel>\r
    <instance y:self="/rest/config/running/protocol/spanning-tree/mstp/instance/1">\r
      <id>1</id>\r
      <vlan>5-10</vlan>\r
    </instance>\r
  </mstp>\r
</spanning-tree>\r
```

The following example uses the POST option to configure MSTP instance.

## URI

<http://host:80/rest/config/running/protocol/spanning-tree/mstp>

## Request Body

```
<instance>
  <id>2</id>
  <vlan>4</vlan>
</instance>
```

## Response Body

None

The following example uses the DELETE option to remove MSTP description.

## URI

<http://host:80/rest/config/running/protocol/spanning-tree/mstp/description>

## Request Body

None

## Response Body

None



## protocol/spanning-tree/pvst

Configures PVST.

### Resource URIs

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

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

POST URIs	Payload	Description
	<pvt />	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

Configures RPVST.

### Resource URIs

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

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

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



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

Configures, retrieves, and modifies RSTP.

### Resource URIs

URI	Description
<base_URI>/config/running/protocol/spanning-tree/rstp	Configures RSTP.

GET URIs	Description
<base_URI>/config/running/protocol/spanning-tree/rstp	Retrieves RSTP.
<base_URI>/config/running/protocol/spanning-tree/rstp/error-disable-timeout	Retrieves error disable timeout.
<base_URI>/config/running/protocol/spanning-tree/rstp/port-channel	Retrieves RSTP on port channel.

POST URIs	Payload	Description
<base_URI>/config/running/protocol/spanning-tree	<rstp></rstp>	Configures RSTP.
<base_URI>/config/running/protocol/spanning-tree/rstp/error-disable-timeout	<enable></enable>	Enables RSTP error disable.
<base_URI>/config/running/protocol/spanning-tree/rstp/port-channel	<shutdown></shutdown>	Shuts down.

PATCH URIs	Payload	Description
<base_URI>/config/running/protocol/spanning-tree/rstp/description	<description>(string)</description>	Configures RSTP description.
<base_URI>/config/running/protocol/spanning-tree/rstp/bridge-priority	<bridge-priority>(unit32)</bridge-priority>	Configures RSTP bridge priority.
<base_URI>/config/running/protocol/spanning-tree/rstp/error-disable-timeout/enable	<enable></enable>	Enables error disable timeout.
<base_URI>/config/running/protocol/spanning-tree/rstp/error-disable-timeout/interval	<interval>(unit32)</interval>	Configures error disable timeout interval.

PATCH URIs	Payload	Description
<base_URI>/config/running/protocol/spanning-tree/rstp/forward-delay	<forward-delay>(unit32)</forward-delay>	Configures forward delay.
<base_URI>/config/running/protocol/spanning-tree/rstp/max-age	<max-age>(unit32)</max-age>	Configures max age.
<base_URI>/config/running/protocol/spanning-tree/rstp/port-channel/path-cost	<path-cost>(string)</path-cost>	Configures path cost.
<base_URI>/config/running/protocol/spanning-tree/rstp/shutdown	<shutdown></shutdown>	Shuts down.
<base_URI>/config/running/protocol/spanning-tree/rstp/hello-time	<hello-time>(unit32)</hello-time>	Configures hello time.
<base_URI>/config/running/protocol/spanning-tree/rstp/transmit-holdcount	<transmit-holdcount>(unit32)</transmit-holdcount>	Configures transmit hold count.

PUT URIs	Payload	Description
<base_URI>/config/running/protocol/spanning-tree/rstp/description	<description>(string)</description>	Configures RSTP description.
<base_URI>/config/running/protocol/spanning-tree/rstp/bridge-priority	<bridge-priority>(unit32)</bridge-priority>	Configures RSTP bridge priority.
<base_URI>/config/running/protocol/spanning-tree/rstp/error-disable-timeout/enable	<enable></enable>	Enables error disable timeout.
<base_URI>/config/running/protocol/spanning-tree/rstp/error-disable-timeout/interval	<interval>(unit32)</interval>	Configures error disable timeout interval.
<base_URI>/config/running/protocol/spanning-tree/rstp/forward-delay	<forward-delay>(unit32)</forward-delay>	Configures forward delay.
<base_URI>/config/running/protocol/spanning-tree/rstp/max-age	<max-age>(unit32)</max-age>	Configures max age.
<base_URI>/config/running/protocol/spanning-tree/rstp/port-channel/path-cost	<path-cost>(string)</path-cost>	Configures path cost.
<base_URI>/config/running/protocol/spanning-tree/rstp/shutdown	<shutdown></shutdown>	Shuts down.

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

Configures STP.

### Resource URIs

URI	Description
<base_URI>/config/running/protocol/spanning-tree/stp	Configures STP.

GET URIs	Description
<base_URI>/config/running/protocol/spanning-tree/stp	Retrieves STP details.
<base_URI>/config/running/protocol/spanning-tree/stp/error-disable-timeout	Retrieves error disable timeout.
<base_URI>/config/running/protocol/spanning-tree/stp/port-channel	Retrieves port channel details.

POST URIs	Payload	Description
<base_URI>/config/running/protocol/spanning-tree/stp/error-disable-timeout	<enable>(enumeration)</enable>	Enables error disable timeout.
<base_URI>/config/running/protocol/spanning-tree/stp	<shutdown>(enumeration)</shutdown>	Shuts down.

PATCH URIs	Payload	Description
<base_URI>/config/running/protocol/spanning-tree/stp/description	<description>(string)</description>	Configures STP description.
<base_URI>/config/running/protocol/spanning-tree/stp/bridge-priority	<bridge-priority>(unit32)</bridge-priority>	Configures bridge priority.
<base_URI>/config/running/protocol/spanning-tree/stp/error-disable-timeout/enable	<enable>(enumeration)</enable>	Enables error disable timeout.
<base_URI>/config/running/protocol/spanning-tree/stp/error-disable-timeout/interval	<interval>(unit32)</interval>	Configures error disable timeout interval.
<base_URI>/config/running/protocol/spanning-tree/stp/forward-delay	<forward-delay>(unit32)</forward-delay>	Configures forward delay.

PATCH URIs	Payload	Description
<base_URI>/config/running/protocol/spanning-tree/stp/max-age	<max-age>(unit32)</max-age>	Configures max age.
<base_URI>/config/running/protocol/spanning-tree/stp/port-channel/path-cost	<path-cost>(enumeration)</path-cost>	Configures path cost.
<base_URI>/config/running/protocol/spanning-tree/stp/shutdown	<shutdown>(enumeration)</shutdown>	Shuts down.
<base_URI>/config/running/protocol/spanning-tree/stp/hello-time	<hello-time>(unit32)</hello-time>	Configures hello time.

PUT URIs	Payload	Description
<base_URI>/config/running/protocol/spanning-tree/stp/description	<description>(string)</description>	Configures STP description.
<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

DELETE URIs
<base_URI>/config/running/protocol/spanning-tree/stp/description
<base_URI>/config/running/protocol/spanning-tree/stp/bridge-priority
<base_URI>/config/running/protocol/spanning-tree/stp/error-disable-timeout
<base_URI>/config/running/protocol/spanning-tree/stp/error-disable-timeout/interval
<base_URI>/config/running/protocol/spanning-tree/stp/forward-delay
<base_URI>/config/running/protocol/spanning-tree/stp/max-age
<base_URI>/config/running/protocol/spanning-tree/stp/port-channel/path-cost
<base_URI>/config/running/protocol/spanning-tree/stp/shutdown
<base_URI>/config/running/protocol/spanning-tree/stp/hello-time

## Parameters

*description*

Specifies description.

*bridge-priority*

Specifies bridge priority.

*interval*

Specifies the interval.

*forward-delay*

Specifies the forward delay.

*max-age*

Specifies max age.

*path-cost*

Specifies the path cost.

*hello-time*

Specifies the hello time.

*transmit-holdcount*

Specifies transmit hold count.

## Usage Guidelines

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

## Examples

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

## URI

http://host:80/rest/config/running/protocol/spanning-tree/stp

## Request Body

None

## Response Body

```
<stp xmlns="urn:brocade.com:mgmt:brocade-xstp" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/protocol/spanning-tree/stp">
  <hello-time>3</hello-time>
  <forward-delay>14</forward-delay>
  <max-age>19</max-age>
  <bridge-priority>4096</bridge-priority>
  <error-disable-timeout y:self="/rest/config/running/protocol/spanning-tree/stp/error-
disable-timeout">
    <enable>true</enable>
    <interval>100</interval>
  </error-disable-timeout>
  <port-channel y:self="/rest/config/running/protocol/spanning-tree/stp/port-channel">
    <path-cost>custom</path-cost>
  </port-channel>
</stp>
```

The following example uses the POST option to enable error disable timeout.

## URI

http://host:80/rest/config/running/protocol/spanning-tree/stp/error-disable-timeout

## Request Body

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

## Response Body

None

The following example uses the DELETE option to remove STP description.

## URI

http://host:80/rest/config/running/protocol/spanning-tree/stp/description

## Request Body

None

## Response Body

None

## protocol/vrrp

Configures, modifies, or retrieves Virtual Router Redundancy Protocol (VRRP)

### Resource URIs

URI	Description
<base_URI>/config/running/protocol/vrrp	Configures Virtual Router Redundancy Protocol (VRRP)

GET URIs	Description
<base_URI>/config/running/protocol/vrrp	Retrieves Virtual Router Redundancy Protocol (VRRP)

PATCH URIs	Payload	Description
<base_URI>/config/running/protocol/vrrp	<vrrp>{enumeration}</vrrp>	Configures Virtual Router Redundancy Protocol (VRRP)

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

### Usage Guidelines

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

### Examples

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

### URI

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

### Request Body

None

### Response Body

```
<vrrp xmlns="urn:brocade.com:mgmt:brocade-vrrp" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/protocol/vrrp">true</vrrp>
```

The following example uses the PUT option to configure VRRP.

### URI

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

### Request Body

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

### Response Body

None

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

### URI

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

### Request Body

None

### Response Body

None



## protocol/vrrp-extended

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

### Resource URIs

URI	Description
<base_URI>/config/running/protocol/vrrp-extended	Configures Virtual Router Redundancy Protocol Extended (VRRP-E).

GET URIs	Description
<base_URI>/config/running/protocol/vrrp-extended	Retrieves Virtual Router Redundancy Protocol Extended (VRRP-E).

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

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

### Usage Guidelines

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

### Examples

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

### URI

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

### Request Body

None

## Response Body

```
<vrrp-extended xmlns="urn:brocade.com:mgmt:brocade-vrrp" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/protocol/vrrp-extended">true</vrrp-extended>
```

The following example uses the PUT option to configure VRRP-E.

## URI

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

## Request Body

```
<vrrp-extended>true</vrrp-extended>
```

## Response Body

None

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

## URI

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

## Request Body

None

## Response Body

None

## qos-mpls

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

### Resource URIs

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

GET URIs	Description
<base_URI>/config/running/qos-mpls	Retrieves and displays the information on all configured qos-mpls maps, and the details on applied maps.
<base_URI>/config/running/qos-mpls/map	Retrieves and displays the information on all configured qos-mpls maps.
<base_URI>/config/running/qos-mpls/map/exp-traffic-class/{exp-traffic-class-map-name}	Retrieves and displays the EXP-to-Traffic-Class map information for the map name specified in the URI.
<base_URI>/config/running/qos-mpls/map/exp-traffic-class/{exp-traffic-class-map-name}/exp/{exp-in-values}	Specify the map name and exp value in the URI to retrieve the configured traffic-class and drop-precedence value.
<base_URI>/config/running/qos-mpls/map/exp-traffic-class/{exp-traffic-class-map-name}/exp/{exp-in-values}/to	Specify the map name and exp value in the URI to retrieve the configured traffic-class and drop-precedence value.
<base_URI>/config/running/qos-mpls/map/traffic-class-exp/{traffic-class-exp-map-name}	Retrieves and displays Traffic-Class-to-EXP map information for the map name specified in the URI.
<base_URI>/config/running/qos-mpls/map/traffic-class-exp/{traffic-class-exp-map-name}/traffic-class/{priority-in-values},{drop-precedence}	Specify the map name, traffic-class and drop-precedence values in the URI to retrieve the configured exp value.
<base_URI>/config/running/qos-mpls/map/dscp-exp/{dscp-exp-map-name}	Retrieves and displays the DSCP-to-EXP map information for the map name specified in the URI.
<base_URI>/config/running/qos-mpls/map/dscp-exp/{dscp-exp-map-name}/dscp/{dscp-in-values}	Specify the map name and DSCP value in the URI to retrieve the configured exp value.
<base_URI>/config/running/qos-mpls/map/dscp-exp/{dscp-exp-map-name}/dscp/{dscp-in-values}/to	Specify the map name and DSCP value in the URI to retrieve the configured exp value.
<base_URI>/config/running/qos-mpls/map/exp-dscp/{exp-dscp-map-name}	Retrieves and displays the EXP-to-DSCP map information for the map name specified in the URI.
<base_URI>/config/running/qos-mpls/map/exp-dscp/{exp-dscp-map-name}/exp/{exp-in-values}	Specify the map name and exp value in the URI to retrieve the configured dscp value.

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

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

## Parameters

<exp-in-values>

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

<traffic-class>

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

<drop-precedence>

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

<exp>

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

<priority-in-values>

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

<dscp-in-values>

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

<dscp>

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

## Usage Guidelines

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

## Examples

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

## URI

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

## Request Body

None

## Response Body

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



```

        </to>
      </traffic-class>
      <traffic-class y:self="/rest/config/running/qos-mpls/map/traffic-class-exp/tc2e1/traffic-class/5%2C2">
        <priority-in-values>5</priority-in-values>
        <drop-precedence>2</drop-precedence>
        <to y:self="/rest/config/running/qos-mpls/map/traffic-class-exp/tc2e1/traffic-class/5%2C2/to">
          <exp>7</exp>
        </to>
      </traffic-class>
    </traffic-class-exp>
    <dscp-exp y:self="/rest/config/running/qos-mpls/map/dscp-exp/d2e1">
      <dscp-exp-map-name>d2e1</dscp-exp-map-name>
      <dscp y:self="/rest/config/running/qos-mpls/map/dscp-exp/d2e1/dscp/1">
        <dscp-in-values>1</dscp-in-values>
        <to y:self="/rest/config/running/qos-mpls/map/dscp-exp/d2e1/dscp/1/to">
          <exp>4</exp>
        </to>
      </dscp>
    </dscp-exp>
    <exp-dscp y:self="/rest/config/running/qos-mpls/map/exp-dscp/e2d1">
      <exp-dscp-map-name>e2d1</exp-dscp-map-name>
      <exp y:self="/rest/config/running/qos-mpls/map/exp-dscp/e2d1/exp/5">
        <exp-in-values>5</exp-in-values>
        <to y:self="/rest/config/running/qos-mpls/map/exp-dscp/e2d1/exp/5/to">
          <dscp>34</dscp>
        </to>
      </exp>
    </exp-dscp>
  </map>
  <map-apply xmlns="urn:brocade.com:mgmt:brocade-apply-qos-mpls" y:self="/rest/config/running/qos-mpls/map-apply">
    <exp-traffic-class y:self="/rest/config/running/qos-mpls/map-apply/exp-traffic-class">
      <map-name-cmd1>e2tc1</map-name-cmd1>
      <All>true</All>
    </exp-traffic-class>
    <traffic-class-exp y:self="/rest/config/running/qos-mpls/map-apply/traffic-class-exp">
      <map-name-cmd2>tc2e1</map-name-cmd2>
      <All>true</All>
    </traffic-class-exp>
    <dscp-exp y:self="/rest/config/running/qos-mpls/map-apply/dscp-exp">
      <map-name-cmd3>d2e1</map-name-cmd3>
      <All>true</All>
    </dscp-exp>
    <exp-dscp y:self="/rest/config/running/qos-mpls/map-apply/exp-dscp">
      <map-name-cmd4>e2d1</map-name-cmd4>
      <All>true</All>
    </exp-dscp>
  </map-apply>
</qos-mpls>

```

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

## URI

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

## Request Body

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

## Request Body

None

## Response Body

None

## radius-server

Configures, retrieves, and modifies Remote Authentication Dial-In User Service (RADIUS) server.

### Resource URIs

URI	Description
<base_URI>/config/running/radius-server	Configures RADIUS server.

GET URIs	Description
<base_URI>/config/running/radius-server	Configures RADIUS server.
<base_URI>/config/running/radius-server/host/{hostname},{use-vrf}	Configures the host name of the RADIUS server and specifies a VRF though which to communicate with the RADIUS server.
<base_URI>/config/running/radius-server/host/{hostname},{use-vrf}/auth-port	Configures UDP port for authentication (default=1812).
<base_URI>/config/running/radius-server/host/{hostname},{use-vrf}/protocol	Specifies the authentication protocol. Parameters include CHAP, PAP, or PEAP-MSCHAP. The default is CHAP.
<base_URI>/config/running/radius-server/host/{hostname},{use-vrf}/key	Specifies the text string that is used as the shared secret between the device and the RADIUS server. The default is sharedsecret .
<base_URI>/config/running/radius-server/host/{hostname},{use-vrf}/encryption-level	Designates the encryption level for the shared secret key operation.
<base_URI>/config/running/radius-server/host/{hostname},{use-vrf}/retries	Configures the number of attempts allowed to connect to a RADIUS server. The default is 5 attempts.
<base_URI>/config/running/radius-server/host/{hostname},{use-vrf}/timeout	Configures the time to wait for the RADIUS server to respond, in seconds. The default is 5 seconds.
<base_URI>/config/running/radius-server/host/{hostname},{use-vrf}/source-interface	Retrieves Source Interface information.
<base_URI>/config/running/radius-server/host/{hostname},{use-vrf}/source-interface/source-interface-value	Displays Source Interface.

PATCH URIs	Payload	Description
<base_URI>/config/running/radius-server/host/{hostname},{use-vrf}	<host><auth-port>{rad-auth-port}</auth-port></host>	Configures the host name of the RADIUS server and specifies a VRF though

PATCH URIs	Payload	Description
		which to communicate with the RADIUS server.
<base_URI>/config/running/radius-server/host/{hostname},{use-vrf}	<host><key>{string}</key></host>	Specifies the text string that is used as the shared secret between the device and the RADIUS server. The default is sharedsecret.
<base_URI>/config/running/radius-server/host/{hostname},{use-vrf}	<host><encryption-level>{enumeration}</encryption-level></host>	Designates the encryption level for the shared secret key operation.
<base_URI>/config/running/radius-server/host/{hostname},{use-vrf}	<host><retries>{uint32}</retries></host>	Configures the number of attempts allowed to connect to a RADIUS server.
<base_URI>/config/running/radius-server/host/{hostname},{use-vrf}	<host><timeout>{uint32}</timeout></host>	Configures the time to wait for the RADIUS server to respond, in seconds.
<base_URI>/config/running/radius-server/host/{hostname},{use-vrf}/source-interface	<source-interface><source-interface-name>{track-iftyp}</source-interface-name><source-interface-value>{track-ifname}</source-interface-value></source-interface>	Sets source-interface for the RADIUS packets.

PUT URIs	Payload	Description
<base_URI>/config/running/radius-server/host/{hostname},{use-vrf}/auth-port	<auth-port>{rad-auth-port}</auth-port>	Configures UDP port for authentication (default=1812).
<base_URI>/config/running/radius-server/host/{hostname},{use-vrf}/key	<key>{string}</key>	Specifies the text string that is used as the shared secret between the device and the RADIUS server. The default is sharedsecret.
<base_URI>/config/running/radius-server/host/{hostname},{use-vrf}/encryption-level	<encryption-level>{enumeration}</encryption-level>	Designates the encryption level for the shared secret key operation.
<base_URI>/config/running/radius-server/host/{hostname},{use-vrf}/retries	<retries>{uint32}</retries>	Configures the number of attempts allowed to connect to a RADIUS server.

PUT URIs	Payload	Description
<base_URI>/config/running/radius-server/host/{hostname},{use-vrf}/timeout	<timeout>{uint32}</timeout>	Configures the time to wait for the RADIUS server to respond, in seconds.
<base_URI>/config/running/radius-server/host/{hostname},{use-vrf}/source-interface	<source-interface><source-interface-name>{track-iftyp}</source-interface-name><source-interface-value>{track-ifname}</source-interface-value></source-interface>	Sets source-interface for the RADIUS packets.

DELETE URIs
<base_URI>/config/running/radius-server/host/{hostname},{use-vrf}
<base_URI>/config/running/radius-server/host/{hostname},{use-vrf}/auth-port
<base_URI>/config/running/radius-server/host/{hostname},{use-vrf}/protocol
<base_URI>/config/running/radius-server/host/{hostname},{use-vrf}/key
<base_URI>/config/running/radius-server/host/{hostname},{use-vrf}/encryption-level
<base_URI>/config/running/radius-server/host/{hostname},{use-vrf}/retries
<base_URI>/config/running/radius-server/host/{hostname},{use-vrf}/timeout
<base_URI>///running/radius-server/host/{hostname},{use-vrf}/source-interface

## Parameters

### *auth-port*

Specifies the UDP port for authentication (default=1812).

### *key*

Specifies the text string that is used as the shared secret between the device and the RADIUS server. The default is sharedsecret.

### *encryption-level*

Designates the encryption level for the shared secret key operation. The valid values are 0 and 7, with 0 being clear text and 7 being the most heavily encrypted. The default value is 7.

### *auth-port*

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

### *retries*

Specifies the number of attempts allowed to connect to a RADIUS server. The default is 5 attempts.

### *timeout*

Specifies the time to wait for the RADIUS server to respond, in seconds. The default is 5 seconds.

*source-interface*

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

## Usage Guidelines

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

## Examples

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

## URI

http://host:80/rest/config/running/radius-server

## Request Body

None

## Response Body

```
<radius-server xmlns="urn:brocade.com:mgmt:brocade-aaa" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/radius-server">
  <host y:self="/rest/config/running/radius-server/host/50.50.50.50%2Cdata-vrf-1">
    <hostname>50.50.50.50</hostname>
    <use-vrf>data-vrf-1</use-vrf>
  </host>
  <host y:self="/rest/config/running/radius-server/host/10.20.106.145%2Cdata-vrf">
    <hostname>10.20.106.145</hostname>
    <use-vrf>data-vrf</use-vrf>
  </host>
</radius-server>
```

The following example uses the PUT option to configure RADIUS server.

## URI

http://host:80/rest/config/running/config/running/radius-server/host/10.20.106.145/data-vrf/auth-port

## Request Body

```
<auth-port>11111</auth-port>
```

## Response Body

None

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

## URI

http://host:80/rest/config/running/radius-server/host/10.20.106.145/data-vrf

## Request Body

None

## Response Body

None

## resilient-hash-flowset-optimize

Enables optimal use of Resilient Hashing flowset space by allocating flowset resource only for ECMP routes.

## Resource URIs

URI	Description
<base-uri>/config/running/resilient-hash-flowset-optimize	Enables optimal use of Resilient Hashing flowset space by allocating flowset resource only for ECMP routes.

GET URIs	Description
<base-uri>/config/running/resilient-hash-flowset-optimize	Fetches the current configuration state for Resilient Hashing Flowset Optimization on the device.

PUT URIs	Payload	Description
<base-uri>/config/running	<resilient-hash-flowset-optimize>true</resilient-hash-flowset-optimize>	Enables / disable Resilient Hashing Flowset Optimization. Use <i>False</i> to disable, <i>True</i> to enable.

DELETE URIs
<base-uri>/config/running/resilient-hash-flowset-optimize

## Usage Guidelines

GET, PUT, and DELETE operations are supported.

## Examples

The following example uses the GET option to fetch the current state of the Resilient Hashing Flowset Optimization.

*URI*

http://host:80/rest/config/running/resilient-hash-flowset-optimize

*Request Body*

None

*Response Body*

```
<resilient-hash-flowset-optimize>true</resilient-hash-flowset-optimize>
```



## role

Configures, modifies, or retrieves role configurations.

### Resource URIs

URI	Description
<base_URI>/config/running/role	Role configuration.
<base_URI>/config/running/role/name	Name of the role.

### Parameters

*name*

Specifies the name of the role.

*desc*

Specifies the description of the role.

### Usage Guidelines

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

### Examples

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

### URI

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

### Request Body

None

### Response Body

```
<role xmlns="urn:brocade.com:mgmt:brocade-aaa" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/role">
  <name y:self="/rest/config/running/role/name/admin">
    <name>admin</name>
    <desc>Administrator</desc>
  </name>
  <name y:self="/rest/config/running/role/name/admin2">
    <name>admin2</name>
  </name>
  <name y:self="/rest/config/running/role/name/trial">
    <name>trial</name>
  </name>
  <name y:self="/rest/config/running/role/name/user">
    <name>user</name>
  </name>
</role>
```

```
<desc>User</desc>
</name>
</role>
```

The following is an example of the POST operation to add a role name and description.

## URI

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

## Request Body

```
<name>
  <name>user3</name>
  <desc>user</desc>
</name>
```

## Response Body

None

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

## URI

http://host:80/rest/config/running/role/name/user3

## Request Body

None

## Response Body

None

## route-map

Configures, retrieves, and modifies route-map instance.

### Resource URIs

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

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

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

Configures, modifies, or retrieves Border Gateway Protocol (BGP) configurations.

### Resource URIs

URI	Description
<base_URI>/config/running/router/bgp	Border Gateway Protocol (BGP).

GET URIs	Description
<base_URI>/config/running/router/bgp	Border Gateway Protocol (BGP).
<base_URI>/config/running/router/bgp/local-as	Displays local AS number.
<base_URI>/config/running/router/bgp/always-compare-med	Displays whether the device is set to always compare the Multi-Exit Discriminators (MEDs).
<base_URI>/config/running/router/bgp/compare-med-empty-aspath	Displays whether comparison of Multi-Exit Discriminators (MEDs) for internal routes is enabled.
<base_URI>/config/running/router/bgp/med-missing-as-worst	Considers routes missing MED attributes as least desirable.
<base_URI>/config/running/router/bgp/as-path-ignore	Displays whether the comparison of the autonomous system (AS) path lengths of otherwise equal paths is enabled.
<base_URI>/config/running/router/bgp/compare-routerid	Displays whether comparison of device IDs is enabled.
<base_URI>/config/running/router/bgp/install-igp-cost	Enables the device to use the IGP cost instead of the default BGP4 or BGP4+ Multi-Exit Discriminator (MED) value.
<base_URI>/config/running/router/bgp/cluster-id	Configures Route-Reflector Cluster-ID.
<base_URI>/config/running/router/bgp/default-local-preference	Specifies the local preference value. The value can range from 0 through 65535.
<base_URI>/config/running/router/bgp/distance/lcl-route-distance	Specifies the local BGP4 and BGP4+ distance. The value can range from 1 through 255
<base_URI>/config/running/router/bgp/capability	Displays capability configuration.
<base_URI>/config/running/router/bgp/capability/as4-enable	Enables 4-byte autonomous system number (ASN) capability.
<base_URI>/config/running/router/bgp/maxas-limit/in/num-as-in-path	Configures the number of autonomous systems in the AS-PATH attribute.
<base_URI>/config/running/router/bgp/enforce-first-as	Enforces the use of the first autonomous system (AS) path for external BGP (EBGP) routes.

GET URIs	Description
<base_URI>/config/running/router/bgp/fast-external-fallover	Resets the session if a link to an EBCP peer goes down.
<base_URI>/config/running/router/bgp/timers	Displays timers information.
<base_URI>/config/running/router/bgp/timers/hold-time	Displays the interval in seconds that a device waits to receive a keepalive message from a peer before declaring that peer dead.
<base_URI>/config/running/router/bgp/log-dampening-debug	Logs dampening debug messages.
<base_URI>/config/running/router/bgp/confederation	Displays confederation information.
<base_URI>/config/running/router/bgp/confederation/identifier	Specifies an autonomous system number (ASN).
<base_URI>/config/running/router/bgp/confederation/peers	Displays the autonomous system (AS) numbers for BGP peers that will belong to the confederation.
<base_URI>/config/running/router/bgp/neighbor	Displays neighbor router.
<base_URI>/config/running/router/bgp/neighbor/neighbor-peer-grp	Displays neighbor peer group.
<base_URI>/config/running/router/bgp/neighbor/peer-grps/neighbor-peer-grp/address	Displays neighbor address.
<base_URI>/config/running/router/bgp/neighbor/neighbor-peer-grp/{group-name}/shutdown	Displays peer group shutdown status.
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/redistribute/ospf	Displays OSPF redistribution status.
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/redistribute/isis	Displays IS-IS redistribution status.
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/redistribute/connected	Displays unicast connected mode configuration.
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/redistribute/static	Displays unicast static mode configuration.
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/vrf/{vrf-name}/redistribute/ospf	Displays OSPF redistribution status.
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/vrf/{vrf-name}/redistribute/connected	Displays connected redistribution.

GET URIs	Description
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/vrf/{vrf-name}/redistribute/static	Displays static redistribution.
<base_URI>/config/running/router/bgp/address-family/l2vpn/evpn/import/vpnv4/unicast/uniform-path-propagate	Displays the current enable/disable configuration of <i>uniform-path-propagate</i> for L2VPN EVPN address-family.
<base_URI>/config/running/router/bgp/address-family/vpnv4/unicast/import/l2vpn/evpn/uniform-path-propagate	Displays the current enable/disable configuration of <i>uniform-path-propagate</i> for VPNv4 address-family.

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/peer-group	<ipv6prefix-over-ipv4peer>	Enables the exchange of IPv6 routes with BGP neighbors over IPv4 session. This configuration only applies to BGP neighbors that are members of a peer-group.
<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-peer-grp/{group-name}/update-source	<sip-ipv4-address>{ipv4-address}</sip-ipv4-address>	Configures the update source IPv4 address for the neighbor BGP peer.
<base_URI>/config/running/router/bgp/neighbor/neighbor-peer-grp/{group-name}/update-source	<sip-ipv6-address>{ipv6-address}</sip-ipv6-address>	Configures the update source IPv6 address for the neighbor BGP peer.

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

POST URIs	Payload	Description
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/vrf/{vrf-name}/neighbor	<af-ipv4-neighbor-addr><address>{ip-address}</address><remote-as>{unit32}</remote-as><peer-group>{group-name}</peer-group></af-ipv4-neighbor-addr>	Configures neighbor.
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/vrf/{vrf-name}/neighbor/af-ipv4-neighbor-addr/{ip-address}/update-source	<loopback>{unit32}</loopback>	Configures loopback.
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/vrf/{vrf-name}/neighbor/af-ipv4-neighbor-addr/{ip-address}/next-hop-self	<next-hop-self-status>{enumeration}</next-hop-self-status>	Configures next hop self status.
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/vrf/{vrf-name}/neighbor/af-ipv4-neighbor-addr/{ip-address}/ebgp-multihop	<ebgp-multihop-count>{unit32}</ebgp-multihop-count>	Configures EBCP 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.



POST URIs	Payload	Description
<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.
<base_URI>/config/running/router/bgp/address-family/ipv6/unicast/neighbor	<af-ipv6u-ipv4-neighbor><address>{ipv4addr}</address><activate/></af-ipv6u-ipv4-neighbor>	Configures exchanging IPv6 routes over IPv4 session with BGP peer using the default-vrf.
<base_URI>/config/running/router/bgp/address-family/ipv6/unicast/neighbor/af-ipv6u-ipv4-neighbor/{ipv4addr}/additional-paths	<disable/>	Disables the inheritance of additional-paths capability from a specific bgp peer using default-vrf.
<base_URI>/config/running/router/bgp/address-family/ipv6/unicast/neighbor/af-ipv6u-ipv4-neighbor/{ipv4addr}/additional-paths	<send/>	Enables the device to send additional-paths for a specific peer in a BGP address family in default-vrf. Enables sending additional-path for a specific peer using default-vrf.
<base_URI>/config/running/router/bgp/address-family/ipv6/unicast/neighbor/af-ipv6u-ipv4-neighbor/{ipv4addr}/additional-paths	<receive/>	Enables receiving additional-paths for a specific peer in a BGP address family in default-vrf
<base_URI>/config/running/router/bgp/address-family/ipv6/unicast/neighbor/af-ipv6u-ipv4-neighbor/{ipv4addr}/additional-paths/advertise	<best>{uint8}</best>	Specifies the number of best paths allowed for selection as additional paths for a specific BGP peer session in default-vrf. The range is 2-16 best paths.
<base_URI>/config/running/router/bgp/address-family/ipv6/unicast/neighbor/af-ipv6u-ipv4-neighbor/{ipv4addr}/additional-paths/advertise	<all/>	Enables all routes to be eligible for selection as additional paths for a specific BGP peer session in default-vrf. A maximum of 16 routes are allowed.

POST URIs	Payload	Description
<base_URI>/config/running/ router/bgp/address-family/ ipv6/unicast/neighbor/af- ipv6u-ipv4-neighbor/ {ipv4addr}/additional-paths/ advertise	<group-best/>	Enables all group-best paths to be considered for selection as additional-paths for a specific BGP peer session in the default-vrf. Only routes with a rank less than or equal to 16 are allowed.
<base_URI>/config/running/ router/bgp/address-family/ ipv6/unicast/neighbor/af- ipv6u-ipv4-neighbor/ {ipv4addr}	<allowas-in>{uint32}</ allowas-in>	Disables the AS_PATH check function for routes learned from a specified peer in default-vrf so that BGP does not reject routes that contain the recipient BGP peer's AS number.
<base_URI>/config/running/ router/bgp/address-family/ ipv6/unicast/neighbor/af- ipv6u-ipv4-neighbor/ {ipv4addr}/capability/orf/ prefixlist	<prefixlist-status/>	Advertises outbound route filter (ORF) capabilities to peer routers in default-vrf. Configuring both send and receive will enable both ORF.
<base_URI>/config/running/ router/bgp/address-family/ ipv6/unicast/neighbor/af- ipv6u-ipv4-neighbor/ {ipv4addr}/default-originate	<default-originate-status/>	Configures the device to send the default route ::/0 to a BGP peer in default-vrf.
<base_URI>/config/running/ router/bgp/address-family/ ipv6/unicast/neighbor/af- ipv6u-ipv4-neighbor/ {ipv4addr}/default-originate	<route-map>{string}</ route-map>	Specifies the route-map to be applied for default-originated routes to a BGP peer in default-vrf.
<base_URI>/config/running/ router/bgp/address-family/ ipv6/unicast/neighbor/af- ipv6u-ipv4-neighbor/ {ipv4addr}	<enable-peer-as-check/>	Enables the outbound AS_PATH check function to ensure that a BGP sender does not send routes with an AS path that contains the ASN of the receiving BGP peer in default-vrf.
<base_URI>/config/running/ router/bgp/address-family/ ipv6/unicast/neighbor/af- ipv6u-ipv4-neighbor/ {ipv4addr}/filter-list	<filter-list-direction-in-acl- name>{string}</filter-list- direction-in-acl-name>	Specifies a filter list to be applied to incoming routes from the specified BGP peer in default-vrf.
<base_URI>/config/running/ router/bgp/address-family/ ipv6/unicast/neighbor/af- ipv6u-ipv4-neighbor/ {ipv4addr}/filter-list	<filter-list-direction-out-acl- name>{string}</filter-list- direction-out-acl-name>	Specifies a filter list to be applied to outgoing routes to the specified BGP peer in default-vrf.

POST URIs	Payload	Description
<base_URI>config/running/ router/bgp/address-family/ ipv6/unicast/neighbor/af- ipv6u-ipv4-neighbor/ {ipv4addr}/maximum-prefix	<max-prefix-limit>{uint32}</ max-prefix-limit>	Specifies the maximum number of IP network prefixes (routes) that can be learned from a specified BGP peer in default-vrf.
<base_URI>/config/running/ router/bgp/address-family/ ipv6/unicast/neighbor/af- ipv6u-ipv4-neighbor/ {ipv4addr}/prefix-list	<prefix-list-direction-in- prefix-name>{string}</ prefix-list-direction-in- prefix-name>	Filters the incoming route updates from a particular BGP peer in default-vrf according to IP address and mask length defined in prefix-list.
<base_URI>/config/running/ router/bgp/address-family/ ipv6/unicast/neighbor/af- ipv6u-ipv4-neighbor/ {ipv4addr}/prefix-list	<prefix-list-direction-out- prefix-name>{string}</ prefix-list-direction-out- prefix-name>	Filters the outgoing route updates to a particular BGP peer in default-vrf according to IP address and mask length defined in the prefix-list.
<base_URI>/config/running/ router/bgp/address-family/ ipv6/unicast/neighbor/af- ipv6u-ipv4-neighbor/ {ipv4addr}/route-map/in	<neighbor-route-map- name-direction-in>{string}</neighbor-route- map-name-direction-in>	Filters the incoming route updates from a particular BGP peer in default-vrf according to attributes defined in a route map.
<base_URI>/config/running/ router/bgp/address-family/ ipv6/unicast/neighbor/af- ipv6u-ipv4-neighbor/ {ipv4addr}/route-map/out	<neighbor-route- map-name-direction- out>{string}</neighbor- route-map-name-direction- out>	Filters the outgoing route updates to a particular BGP peer in default-vrf according to attributes defined in a route map.
<base_URI>/rest/config/ running/router/bgp/ address-family/ipv6/unicast/ neighbor/af-ipv6u-ipv4- neighbor/{ipv4addr}	<route-reflector-client/>	Configures a peer in default-vrf as a route-reflector client.
<base_URI>/config/running/ router/bgp/address-family/ ipv6/unicast/neighbor/af- ipv6u-ipv4-neighbor/ {ipv4addr}/send- community	<all/>	Enables sending all the community attribute in updates to the specified BGP peer in default-vrf.
<base_URI>/config/running/ router/bgp/address-family/ ipv6/unicast/neighbor/af- ipv6u-ipv4-neighbor/ {ipv4addr}/send- community	<standard/>	Enables sending standard community attribute in updates to the specified BGP peer in default-vrf.
<base_URI>/config/running/ router/bgp/address-family/ ipv6/unicast/neighbor/af- ipv6u-ipv4-neighbor/ {ipv4addr}/send- community	<extended/>	Enables sending extended community attribute in updates to the specified BGP peer in default-vrf.

POST URIs	Payload	Description
<base_URI>/config/running/router/bgp/address-family/ipv6/unicast/neighbor/af-ipv6u-ipv4-neighbor/{ipv4addr}/send-community	<large/>	Enables sending large community attribute in updates to the specified BGP peer in default-vrf.
<base_URI>/config/running/router/bgp/address-family/ipv6/unicast/neighbor/af-ipv6u-ipv4-neighbor/{ipv4addr}/unsuppress-map	<map-name>{string}</map-name>	Removes route suppression from BGP peer routes when those routes have been suppressed because of aggregation. All routes matching route-map rules are unsuppressed.
<base_URI>/config/running/router/bgp/address-family/ipv6/unicast/neighbor/af-ipv6u-ipv4-neighbor/{ipv4addr}	<weight>{uint32}</weight>	Specifies a weight that the device will add to routes that are received from the specified BGP peer in default-vrf
<base_URI>/config/running/router/bgp/address-family/ipv6/unicast/vrf/{vrf-name}/neighbor	<af-ipv6u-ipv4-neighbor><address>{ipv4addr}</address><activate/></af-ipv6u-ipv4-neighbor>	Allows the device to exchange IPv6 routes with BGP peer over IPv4 session in user-defined vrf.
<base_URI>/config/running/router/bgp/address-family/ipv6/unicast/vrf/{vrf-name}/neighbor/af-ipv6u-ipv4-neighbor/{ipv4addr}/additional-paths	<disable/>	Disables inheritance of additional-paths capability from the address family for a specific peer in a BGP address family in user-defined vrf.
<base_URI>/config/running/router/bgp/address-family/ipv6/unicast/vrf/{vrf-name}/neighbor/af-ipv6u-ipv4-neighbor/{ipv4addr}/additional-paths	<send/>	Enables device to send additional-paths for a specific peer in a BGP address family in user-defined vrf.
<base_URI>/config/running/router/bgp/address-family/ipv6/unicast/vrf/{vrf-name}/neighbor/af-ipv6u-ipv4-neighbor/{ipv4addr}/additional-paths	<receive/>	Enables device to receive additional-paths for a specific peer in a BGP address family in user-defined vrf
<base_URI>/config/running/router/bgp/address-family/ipv6/unicast/vrf/{vrf-name}/neighbor/af-ipv6u-ipv4-neighbor/{ipv4addr}/additional-paths/advertise	<best>{uint8}</best>	Specifies the number of best paths allowed for selection as additional paths for a specific BGP peer session in user-defined vrf . The number ranges from 2 through 16 .

POST URIs	Payload	Description
<base_URI>/config/running/ router/bgp/address-family/ ipv6/unicast/vrf/{vrf-name}/ neighbor/af-ipv6u-ipv4- neighbor/{ipv4addr}/ additional-paths/advertise	<all/>	Enables all routes to be eligible for selection as additional paths for a specific BGP peer session in user-defined vrf. A maximum of 16 routes are allowed.
<base_URI>/config/running/ router/bgp/address-family/ ipv6/unicast/vrf/{vrf-name}/ neighbor/af-ipv6u-ipv4- neighbor/{ipv4addr}/ additional-paths/advertise	<group-best/> ,	Causes all group-best paths to be eligible for selection as additional-paths for a specific BGP peer session in user-defined vrf. Only routes with a rank less than or equal to 16 are allowed. Even when it is the group-best, a route with a rank greater than 16 is not eligible for selection as an additional path.
<base_URI>/config/running/ router/bgp/address-family/ ipv6/unicast/vrf/{vrf-name}/ neighbor/af-ipv6u-ipv4- neighbor/{ipv4addr}	<allowas-in>{uint32}</ allowas-in>	Disables the AS_PATH check function for routes learned from a specified neighbor in user-defined vrf so that BGP peer does not reject routes that contain the recipient BGP peer's AS number
<base_URI>/config/running/ router/bgp/address-family/ ipv6/unicast/vrf/{vrf-name}/ neighbor/af-ipv6u-ipv4- neighbor/{ipv4addr}/ capability/orf/prefixlist	<prefixlist-status/>	Advertises outbound route filter (ORF) capabilities to peer routers in user-defined vrf. Configuring both send and receive will enable both ORFs.
<base_URI>/config/running/ router/bgp/address-family/ ipv6/unicast/vrf/{vrf-name}/ neighbor/af-ipv6u-ipv4- neighbor/{ipv4addr}/ default-originate	<default-originate-status/>	Configures the device to send the default route ::/0 to a BGP peer in user-defined vrf.
<base_URI>/config/running/ router/bgp/address-family/ ipv6/unicast/vrf/{vrf-name}/ neighbor/af-ipv6u-ipv4- neighbor/{ipv4addr}/ default-originate	<route-map>{string}</ route-map>	Specifies the route-map to be applied for default-originated routes to a BGP peer in user-defined vrf .
<base_URI>/config/running/ router/bgp/address-family/ ipv6/unicast/vrf/{vrf-name}/ neighbor/af-ipv6u-ipv4- neighbor/{ipv4addr}	<enable-peer-as-check/>	Enables the outbound AS_PATH check function so that a BGP peer does not send routes with an AS path that contains the ASN of the receiving BGP peer in user-defined vrf .

POST URIs	Payload	Description
<base_URI>/config/running/router/bgp/address-family/ipv6/unicast/vrf/{vrf-name}/neighbor/af-ipv6u-ipv4-neighbor/{ipv4addr}/filter-list	<filter-list-direction-in-acl-name>{string}</filter-list-direction-in-acl-name>	Specifies a filter list to be applied to incoming routes from the specified BGP peer in user-defined vrf.
<base_URI>/config/running/router/bgp/address-family/ipv6/unicast/neighbor/vrf/{vrf-name}/af-ipv6u-ipv4-neighbor/{ipv4addr}/filter-list	<filter-list-direction-out-acl-name>{string}</filter-list-direction-out-acl-name>	Specifies a filter list to be applied to outgoing routes to the specified BGP peer in user-defined vrf .
<base_URI>config/running/router/bgp/address-family/ipv6/unicast/vrf/{vrf-name}/neighbor/af-ipv6u-ipv4-neighbor/{ipv4addr}/maximum-prefix	<max-prefix-limit>{uint32}</max-prefix-limit>	Specifies the maximum number of IP network prefixes (routes) that can be learned from a specified BGP peer in user-defined vrf .
<base_URI>/config/running/router/bgp/address-family/ipv6/unicast/vrf/{vrf-name}/neighbor/af-ipv6u-ipv4-neighbor/{ipv4addr}/prefix-list	<prefix-list-direction-in-prefix-name>{string}</prefix-list-direction-in-prefix-name>	Filters the incoming route updates from a particular BGP peer in user-defined vrf according to IP address and mask length defined in the prefix-list.
<base_URI>/config/running/router/bgp/address-family/ipv6/unicast/vrf/{vrf-name}/neighbor/af-ipv6u-ipv4-neighbor/{ipv4addr}/prefix-list	<prefix-list-direction-out-prefix-name>{string}</prefix-list-direction-out-prefix-name>	Filters the outgoing route updates to a particular BGP peer in the user-defined vrf according to IP address and mask length defined in the prefix-list.
<base_URI>/config/running/router/bgp/address-family/ipv6/unicast/vrf/{vrf-name}/neighbor/af-ipv6u-ipv4-neighbor/{ipv4addr}/route-map/in	<neighbor-route-map-name-direction-in>{string}</neighbor-route-map-name-direction-in>	Filters the incoming route updates a particular BGP peer in the user-defined vrf according to attributes defined in a route map.
<base_URI>/config/running/router/bgp/address-family/ipv6/unicast/vrf/{vrf-name}/neighbor/af-ipv6u-ipv4-neighbor/{ipv4addr}/route-map/out	<neighbor-route-map-name-direction-out>{string}</neighbor-route-map-name-direction-out>	Filters the outgoing route updates to a particular BGP peer in the user-defined vrf according to attributes defined in a route map.
<base_URI>/rest/config/running/router/bgp/address-family/ipv6/unicast/vrf/{vrf-name}/neighbor/af-ipv6u-ipv4-neighbor/{ipv4addr}	<route-reflector-client/>	Configures a BGP peer in the user-defined vrf as a route-reflector client.

POST URIs	Payload	Description
<base_URI>/config/running/router/bgp/address-family/ipv6/unicast/vrf/{vrf-name}/neighbor/af-ipv6u-ipv4-neighbor/{ipv4addr}/send-community	<all/>	Enables sending all the community attribute in updates to the specified BGP peer in the user-defined vrf .
<base_URI>/config/running/router/bgp/address-family/ipv6/unicast/vrf/{vrf-name}/neighbor/af-ipv6u-ipv4-neighbor/{ipv4addr}/send-community	<standard/>	Enables sending standard community attribute in updates to the specified BGP peer in the user-defined vrf .
<base_URI>/config/running/router/bgp/address-family/ipv6/unicast/vrf/{vrf-name}/neighbor/af-ipv6u-ipv4-neighbor/{ipv4addr}/send-community	<extended/>	Enables sending extended community attribute in updates to the specified BGP peer in the user-defined vrf .
<base_URI>/config/running/router/bgp/address-family/ipv6/unicast/vrf/{vrf-name}/neighbor/af-ipv6u-ipv4-neighbor/{ipv4addr}/send-community	<large/>	Enables sending large community attribute in updates to the specified BGP peer in the user-defined vrf .
<base_URI>/config/running/router/bgp/address-family/ipv6/unicast/vrf/{vrf-name}/neighbor/af-ipv6u-ipv4-neighbor/{ipv4addr}/unsuppress-map	<map-name>{string}</map-name>	Removes route suppression from BGP peer routes when those routes have been suppressed because of aggregation. All routes matching route-map rules are unsuppressed.
<base_URI>/config/running/router/bgp/address-family/ipv6/unicast/vrf/{vrf-name}/neighbor/af-ipv6u-ipv4-neighbor/{ipv4addr}	<weight>{uint32}</weight>	Specifies a weight that the device will add to routes that are received from the specified BGP peer in the user-defined vrf .

PATCH URIs	Payload	Description
<base_URI>/config/running/router/bgp	<bgp></bgp>	Configures Router BGP.
<base_URI>/config/running/router/bgp/local-as	<local-as>{unit32}</local-as>	Configures local AS.
<base_URI>/config/running/router/bgp/local-as	<bgp><local-as>{unit32}</local-as></bgp>	Configures local AS.



PATCH URIs	Payload	Description
<base_URI>/config/running/router/bgp/neighbor/neighbor-peer-grp	<neighbor-peer-grp><address>{group-name}</address><peer-group>{enumeration}</peer-group></neighbor-peer-grp>	Configures peer group.
<base_URI>/config/running/router/bgp/neighbor/neighbor-peer-grp/{group-name}	<peerGroup1><remote-as>{enumeration}</remote-as></peerGroup1>	Configures peer group Remote AS.
<base_URI>/config/running/router/bgp/address-family/l2vpn/evpn/import/vpn/unicast	<unicast> <uniform-path-propagate>true</uniform-path-propagate> </unicast>	Enables or disable uniform-path-propagate for L2VPN EVPN address-family.
<base_URI>/config/running/router/bgp/address-family/vpnv4/unicast/import/l2vpn/evpn	<evpn> <uniform-path-propagate>true</uniform-path-propagate> </evpn>	Enables or disable uniform-path-propagate for VPNv4 address-family.

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.
<base_URI>/config/running/router/bgp/address-family/l2vpn/evpn/import/vpnv4/unicast/uniform-path-propagate	<uniform-path-propagate>true</uniform-path-propagate>	Configures uniform-path-propagate for L2VPN EVPN address-family.
<base_URI>/config/running/router/bgp/address-family/vpnv4/unicast/import/l2vpn/evpn/uniform-path-propagate	<uniform-path-propagate>true</uniform-path-propagate>	Configures uniform-path-propagate for VPNv4 address-family.

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



DELETE URIs
<base_URI>/config/running/router/bgp/neighbor/neighbor-peer-grp/{group-name}/update-source/sip-ipv4-address
<base_URI>/config/running/router/bgp/neighbor/neighbor-peer-grp/{group-name}/update-source/sip-ipv6-address
<base_URI>/config/running/router/bgp/neighbor/peer-grps/neighbor-peer-grp/address
<base_URI>/config/running/router/bgp/neighbor/neighbor-peer-grp/{group-name}/shutdown
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/network/{ip-address}
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/vrf/{vrf-name}/network/{ip-address}
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/network
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/redistribute/ospf
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/redistribute/isis
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/redistribute/connected
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/redistribute/static
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/vrf/{vrf-name}/redistribute/ospf
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/vrf/{vrf-name}/redistribute/connected
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/vrf/{vrf-name}/redistribute/static
<base_URI>/config/running/router/bgp/address-family/l2vpn/evpn/import/vpnv4/unicast/reoriginate
<base_URI>/config/running/router/bgp/address-family/l2vpn/evpn/import/vpnv4/unicast/uniform-path-propagate
<base_URI>/config/running/router/bgp/address-family/vpnv4/unicast/import/l2vpn/evpn/reoriginate
<base_URI>/config/running/router/bgp/address-family/vpnv4/unicast/import/l2vpn/evpn/uniform-path-propagate

## Parameters

*local-as*

Specifies the local ASN. The value can range from 1 through 4294967295.

*always-compare-med*

Enables the device to always compare the Multi-Exit Discriminators {MEDs}.

*compare-med-empty-aspath*

Enables comparison of Multi-Exit Discriminators {MEDs} for internal routes.

*med-missing-as-worst*

Considers routes missing MED attributes as least desirable.

*as-path-ignore*

Disables the comparison of the autonomous system {AS} path lengths of otherwise equal paths.

*compare-routerid*

Enables comparison of device IDs.

*install-igp-cost*

Enables the device to use the IGP cost instead of the default BGP4 or BGP4+ Multi-Exit Discriminator {MED} value.

*id*

Configures Route-Reflector Cluster-ID.

*default-local-preference*

Specifies the local preference value. The value can range from 0 through 65535.

*ext-route-distance*

Specifies the EBGp distance. The value can range from 1 through 255.

*int-route-distance*

Specifies the IBGp distance. The value can range from 1 through 255.

*lcl-route-distance*

Specifies the local BGP4 and BGP4+ distance. The value can range from 1 through 255.

*as4-enable*

Enables 4-byte autonomous system number {ASN} capability.

*ebgp-btsh*

Enables BGP time to live {TTL} security hack protection {BTSH} for eBGp.

*num-as-in-path*

Configures the number of autonomous systems in the AS-PATH attribute.

*enforce-first-as*

Enforces the use of the first autonomous system {AS} path for external BGP {EBGP} routes.

*fast-external-fallover*

Resets the session if a link to an EBGp peer goes down.

*keep-alive*

Specifies the frequency in seconds with which a device sends keepalive messages to a peer. The value can range from 0 through 65535 seconds. The default value is 60 seconds.

*hold-time*

Specifies the interval in seconds that a device waits to receive a keepalive message from a peer before declaring that peer dead. The value can range from 0 through 65535 seconds. The default value is 180 seconds.

*log-dampening-debug*

Logs dampening debug messages.

*identifier*

Specifies an autonomous system number {ASN}. The value can range from 1 through 4294967295.

*peers*

Specifies the autonomous system {AS} numbers for BGP peers that will belong to the confederation. The value can range from 1 through 4294967295.

*address*

Configures neighbor address.

*bgp-redistribute-internal*

Enables BGP4 route redistribution.

*redistribute-connected*

Redistributes directly connected routes.

*metric*

Configures metric for redistributed routes.

*redistribute-ospf*

Enables Open Shortest Path First {OSPF}.

*redistribute-static*

Enables Static routes.

*ebgp*

Specifies the number of EBGp paths. The value can range from 1 through 32. The default value is **all**.

*Ibgp*

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

*use-load-sharing*

Uses the maximum IP ECMP path value.

*always-propagate*

Configures the device to reflect BGP routes that are not installed in the RTM.

*default-information-originate*

Sets the device to originate and advertise a default BGP4 or BGP4+ route.

*activate*

Allows exchange of route in the current family mode.

*enable-peer-as-check*

Disables routes advertise between peers in same AS.

*rib-route-limit*

Configures limit BGP rib count in routing table.

*half-time*

Specifies the number of minutes after which the route penalty becomes half its value. The value can range from 1 through 45 minutes. The default time is 15 minutes.

*reuse-value*

Specifies the minimum penalty below which the route becomes usable again. The value can range from 1 through 20000. The default value is 750.

*start-suppress-time*

Specifies the maximum penalty above which the route is suppressed by the device. The value can range from 1 through 20000. The default value is 2000.

*max-suppress-time*

Specifies the maximum number of minutes a route can be suppressed by the device. The default value is 40.

*default-metric*

Specifies the metric value. The value can range from 0 through 4294967295. The default value is 1.

*update-time*

Configures IGP route update interval.

*metric*

Configures metric for redistributed routes.

*route-map*

Route map reference.

*bgp-redistribute-internal*

Allows redistribution of IBGP routes into IGP.

*route-map*

Specifies the route map name.

*aggregate-ip-prefix*

Specifies the IPv4 address.

*network-ipv6-address*

Specifies the IPv6 address.

*advertise-map*

Specifies a route map to be consulted.

*as-set*

Sets the device to aggregate AS-path information.

*attribute-map*

Specifies a route map to be consulted.

*summary-only*

Prevents the device from advertising more-specific routes contained within the aggregate route.

*suppress-map*

Specifies a route map to be consulted.

*ibgp*

Configures the IBGP distance.

*multi-as*

Enables load sharing of paths from different neighboring autonomous systems.

*network-ipv4-address*

Configures the IP address.

*weight*

Configures the weight to be added to routes in this network.

*backdoor*

Changes administrative distance of the route to this network from the EBGp administrative distance.

*allowas-in*

Disables the AS\_PATH check function for routes learned from a specified neighbor location so that BGP does not reject routes that contain the recipient BGP speaker's AS number.

*static-network-address*

Configures the static network address.

*auto-shutdown-new-neighbors*

Automatically shuts down new neighbors.

*activate*

Allows exchange of routes in the current family mode.

*additional-paths*

Enables the advertisement of additional paths for BGP neighbors. Possible configurations are:

**ipv6prefix-over-ipv4peer**

This enables the exchanging of IPv6 addresses over IPv4 BGP sessions. This configuration only applies to those BGP neighbors who are members of a peer group.

**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.

#### **uniform-path-propagate**

Enables preserving and propagating BGP source path attributes in EVPN routes when these routes are propagated over VPNv4 sessions and vice versa.

## 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>route1</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>route1</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>
    </unicast xmlns="urn:brocade.com:mgmt:brocade-bgp" xmlns:y="http://brocade.com/ns/

```



```

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

```

```

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

```

```

        <network-ipv6-address>131::1/128</network-ipv6-address>
    </network>
    <network y:self="/rest/config/running/router/bgp/default/address-family/ipv6/
unicast/network/
%22fd80:122:122:122:105:105:0:122/128%22">                <network-ipv6-
address>fd80:122:122:122:105:105:0:122/128
</network-ipv6-address>
    </network>
    <neighbor y:self="/rest/config/running/router/bgp/default/address-family/ipv6/
unicast/neighbor/vcs_2122">
        <address>vcs_2122</address>
    </neighbor>
    <neighbor y:self="/rest/config/running/router/bgp/default/address-family/ipv6/
unicast/neighbor/VCS_8192_rr">
        <address>VCS_8192_rr</address>
    </neighbor>
    <neighbor y:self="/rest/config/running/router/bgp/default/address-family/ipv6/
unicast/neighbor/fd80:2001:2040::40">
        <address>fd80:2001:2040::40</address>
    </neighbor>
    <neighbor xmlns="urn:brocade.com:mgmt:brocade-bgp" xmlns:y="http://brocade.com/ns/
rest"
y:self="/rest/config/running/router/bgp/address-family/ipv6/unicast/neighbor">
        <af-ipv6-neighbor-address y:self="/rest/config/running/router/bgp/address-
family/ipv6/unicast/neighbor/
af-ipv6-neighbor-address/2001:2018:8192::124">
            <address>2001:2018:8192::124</address>
            <send-community y:self="/rest/config/running/router/bgp/address-family/ipv6/
unicast/neighbor/
af-ipv6-neighbor-address/2001:2018:8192::124/send-community">
                </send-community>
                <capability y:self="/rest/config/running/router/bgp/address-family/ipv6/
unicast/neighbor/
af-ipv6-neighbor-address/2001:2018:8192::124/capability">
                    <orf y:self="/rest/config/running/router/bgp/address-family/ipv6/unicast/
neighbor/af-ipv6-neighbor-address/
2001:2018:8192::124/capability/orf">
                        <prefixlist y:self="/rest/config/running/router/bgp/address-family/ipv6/
unicast/neighbor/
af-ipv6-neighbor-address/2001:2018:8192::124/capability/orf/prefixlist">
                            </prefixlist>
                        </orf>
                        <additional-paths y:self="/rest/config/running/router/bgp/address-family/
ipv6/unicast/neighbor/
af-ipv6-neighbor-address/2001:2018:8192::124/capability/additional-paths">
                            </additional-paths>
                        </capability>
                        <additional-paths y:self="/rest/config/running/router/bgp/address-family/ipv6/
unicast/neighbor/
af-ipv6-neighbor-address/2001:2018:8192::124/additional-paths">
                            <advertise y:self="/rest/config/running/router/bgp/address-family/ipv6/
unicast/neighbor/
af-ipv6-neighbor-address/2001:2018:8192::124/additional-paths/advertise">
                                </advertise>
                            </additional-paths>
                            <activate>true</activate>
                            <allowas-in>3</allowas-in>
                            <enable-peer-as-check>true</enable-peer-as-check>
                            <filter-list y:self="/rest/config/running/router/bgp/address-family/ipv6/
unicast/neighbor/
af-ipv6-neighbor-address/2001:2018:8192::124/filter-list">
                                </filter-list>
                                <maximum-prefix y:self="/rest/config/running/router/bgp/address-family/ipv6/
unicast/neighbor/

```

```

af-ipv6-neighbor-address/2001:2018:8192::124/maximum-prefix">
    </maximum-prefix>
    <default-originate y:self="/rest/config/running/router/bgp/address-family/
ipv6/unicast/neighbor/
af-ipv6-neighbor-address/2001:2018:8192::124/default-originate">
    </default-originate>
    <prefix-list y:self="/rest/config/running/router/bgp/address-family/ipv6/
unicast/neighbor/
af-ipv6-neighbor-address/2001:2018:8192::124/prefix-list">
    </prefix-list>
    <route-map y:self="/rest/config/running/router/bgp/address-family/ipv6/
unicast/neighbor/
af-ipv6-neighbor-address/2001:2018:8192::124/route-map">
    <in y:self="/rest/config/running/router/bgp/address-family/ipv6/unicast/
neighbor/
af-ipv6-neighbor-address/2001:2018:8192::124/route-map/in">
    </in>
    <out y:self="/rest/config/running/router/bgp/address-family/ipv6/unicast/
neighbor/
af-ipv6-neighbor-address/2001:2018:8192::124/route-map/out">
    </out>
    </route-map>
    <unsuppress-map y:self="/rest/config/running/router/bgp/address-family/ipv6/
unicast/neighbor/
af-ipv6-neighbor-address/2001:2018:8192::124/unsuppress-map">
    </unsuppress-map>
    </af-ipv6-neighbor-address>
    </neighbor>
    <maximum-paths y:self="/rest/config/running/router/bgp/default/address-family/
ipv6/unicast/maximum-paths">
    <ebgp>2</ebgp>
    <ibgp>2</ibgp>
    <use-load-sharing>true</use-load-sharing>
    </maximum-paths>
    <multipath y:self="/rest/config/running/router/bgp/default/address-family/ipv6/
unicast/multipath"/>
    <always-propagate>true</always-propagate>
    <default-information-originate>true</default-information-originate>
    <rib-route-limit>1000</rib-route-limit>
    <dampening y:self="/rest/config/running/router/bgp/default/address-family/ipv6/
unicast/dampening">
    <half-time>30</half-time>
    <reuse-value>1100</reuse-value>
    <start-suppress-time>2100</start-suppress-time>
    <max-suppress-time>45</max-suppress-time>
    </dampening>
    <default-metric>2</default-metric>
    <table-map y:self="/rest/config/running/router/bgp/default/address-family/ipv6/
unicast/table-map"/>
    <update-time>10</update-time>
    <graceful-restart y:self="/rest/config/running/router/bgp/default/address-family/
ipv6/unicast/graceful-restart">
    <restart-time>1400</restart-time>
    <purge-time>1200</purge-time>
    <stale-routes-time>1600</stale-routes-time>
    </graceful-restart>
    <vrf y:self="/rest/config/running/router/bgp/address-family/ipv6/unicast/vrf/
vrf1">
    <vrf-name>vrf1</vrf-name>
    <redistribute y:self="/rest/config/running/router/bgp/address-family/ipv6/
unicast/vrf/vrf1/redistribute">
    <bgp y:self="/rest/config/running/router/bgp/address-family/ipv6/unicast/vrf/
vrf1/redistribute/bgp">
    <metric>500</metric>

```

```
<route-map>map2</route-map>
</bgp>
</redistribute>
</vrf>
</unicast>
</ipv6>
</address-family>
</bgp>
```

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

## URI

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

## Request Body

```
<neighbor-peer-grp>
<address>peerGroup1</address>
<peer-group>true</peer-group>
</neighbor-peer-grp>
```

## Response Body

None

The following is an example of the DELETE to remove router BGP configuration.

## URI

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

## Request Body

None

## Response Body

None

The following is an example of configuration of uniform-path-propagate for L2VPN EVPN address-family.

## URI

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

## Request Body

```
<address-family>
<l2vpn>
```

```
<evpn>
  <import>
    <vpn4-unicast>
      <vpn4-uniform-path-propagate>
        true
      </vpn4-uniform-path-propagate>
    </vpn4-unicast>
  </import>
</evpn>
</l2vpn>
</address-family>
```

## Response Body

None

## router/isis

Configures IS-IS protocol.

### Resource URIs

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

GET URIs	Description
<base_URI>/config/running/router/isis	Enables IS-IS.
<base_URI>/config/running/router/isis/net/{net-cmd}	Defines NSAP address.
<base_URI>/config/running/router/isis/auth-check	Authenticate incoming PDUs for LSPs, CSNP, and PSNP.
<base_URI>/config/running/router/isis/auth-check/level-1	Authenticate incoming PDUs for Level-1 LSPs, CSNP, and PSNP.
<base_URI>/config/running/router/isis/auth-check/level-1/disable	Disables authentication of incoming PDUs for Level-1 LSPs, CSNP, and PSNP.
<base_URI>/config/running/router/isis/auth-check/level-2	Authenticate incoming PDUs for Level-2 LSPs, CSNP, and PSNP.
<base_URI>/config/running/router/isis/auth-check/level-2/disable	Disables the authenticate incoming PDUs for Level-2 LSPs, CSNP, and PSNP.
<base_URI>/config/running/router/isis/auth-mode	Define authentication mode.
<base_URI>/config/running/router/isis/auth-mode/md5	HMAC-MD5 authentication.
<base_URI>/config/running/router/isis/auth-mode/md5/level-1	Authentication mode for Level-1 LSPs, CSNP, and PSNP.
<base_URI>/config/running/router/isis/auth-mode/md5/level-2	Authentication mode for Level-2 LSPs, CSNP, and PSNP.
<base_URI>/config/running/router/isis/auth-key	Define authentication key
<base_URI>/config/running/router/isis/auth-key/level-1	Auth-key for Level-1 ISIS Router
<base_URI>/config/running/router/isis/auth-key/level-2	Auth-key for Level-2 ISIS Router
<base_URI>/config/running/router/isis/csnp-interval	Rate of transmission of CSNPs
<base_URI>/config/running/router/isis/disable-inc-stct-spf-opt	Disables Incremental Shortcut SPF Optimizations; resorts to Full SPF
<base_URI>/config/running/router/isis/disable-incremental-spf-opt	Disables Incremental SPF Optimizations; resorts to Full SPF

GET URIs	Description
<base_URI>/config/running/router/isis/disable-partial-spf-opt	Disables Partial SPF Optimizations; resorts to Full SPF
<base_URI>/config/running/router/isis/fast-flood	Defines the number of LSPs to be flooded before SPF Run
<base_URI>/config/running/router/isis/fast-flood/fast-flood-value	The number of LSPs to be flooded before SPF Run. Range is 1-15; default is 4
<base_URI>/config/running/router/isis/graceful-restart	Enables the ISIS graceful restart capability
<base_URI>/config/running/router/isis/graceful-restart/helper-disable	Disables Helper Mode
<base_URI>/config/running/router/isis/hostname	Integrated IS-IS dynamic hostname
<base_URI>/config/running/router/isis/hostname/disable	Disables integrated IS-IS dynamic hostname
<base_URI>/config/running/router/isis/is-type	Define inter-area/intra area operation mode
<base_URI>/config/running/router/isis/log	Enable Logging IS-IS activities
<base_URI>/config/running/router/isis/log/adjacency	Logging Adjacency Changes
<base_URI>/config/running/router/isis/log/invalid-lsp-packets	Logging Invalid LSP Packets
<base_URI>/config/running/router/isis/lsp-gen-interval	Minimum interval between regenerating same LSP
<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.



GET URIs	Description
<base_URI>/config/running/router/isis/set-debug	Enabling isis debug configuration.
<base_URI>/config/running/router/isis/set-debug/nsr	Sets nsr debug.
<base_URI>/config/running/router/isis/set-overload-bit	Configures a device to signal other devices not to use it as an intermediate hop in their shortest path first (SPF) calculations if an IS's resources are overloaded and are preventing the IS from properly performing IS-IS routing.
<base_URI>/config/running/router/isis/set-overload-bit/on-startup	Set overload-bit only temporarily on reboot.
<base_URI>/config/running/router/isis/spf-interval/level-1	SPF calculation Timers
<base_URI>/config/running/router/isis/reverse-metric	Configure IS-IS reverse metric at the router level.
<base_URI>/config/running/router/isis/reverse-metric/reverse_metric_tlv	Configure reverse metric TLV.
<base_URI>/config/running/router/isis/reverse-metric/tlv-type	Configure reverse metric TLV type.
<base_URI>/config/running/router/isis/reverse-metric/rev-metric-val	Configure IS-IS reverse metric value.
<base_URI>/config/running/router/isis/reverse-metric/whole-lan	Change metric for whole LAN.
<base_URI>/config/running/router/isis/reverse-metric/te-def-metric	Update TE default metric sub-tlv.
<base_URI>/config/running/router/isis/address-family	Enter Address Family command mode.
<base_URI>/config/running/router/isis/address-family/ipv4	IPv4 address Family.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast	IPv4 unicast address Family.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/metric-style	Use narrow or wide metric type.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/metric-style/wide	Use new style of TLVs to carry wider metric.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/metric-style/wide/level-1	Level-1 only.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/metric-style/wide/level-2	Level-2 only.

GET URIs	Description
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/summary-address/{summary-ip},{summary-ip-mask}	Configure Integrated IS-IS address summaries
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/summary-address/{summary-ip},{summary-ip-mask}/level-1	Configure Integrated IS-IS address summaries.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/ldp-sync	Enable LDP-SYNC on all eligible ISIS interfaces.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/ldp-sync/hold-down	Length (in seconds) of hold-down timer. Range is 1-65535.
<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.

GET URIs	Description
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/connected/route-map	Route map reference.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/connected/metric-type	IS-IS metric type for redistributed routes.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/ospf	Specifies the OSPF protocol.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/ospf/match	Redistribution of OSPF routes.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/ospf/match/internal	Internal routes.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/ospf/match/external1	External type 1 routes.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/ospf/match/external2	External type 2 routes.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/ospf/metric	Metric for redistributed routes.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/ospf/route-map	Route map reference.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/ospf/metric-type	IS-IS metric type for redistributed routes.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/static	Static routes
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/static/metric	Metric for redistributed routes.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/static/route-map	Route map reference.
<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.

GET URIs	Description
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/bgp/metric	Metric for redistributed routes
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/bgp/route-map	Route map reference.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/bgp/metric-type	IS-IS metric type for redistributed routes.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/isis	ISIS routes
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/isis/level-1	Level-1 routes.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/isis/level-1/into	Level-1 routes information.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/isis/level-1/into/level-2	Level-1 routes into Level-2
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/isis/level-2	Level-2 routes
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/isis/level-2/into	Level-2 routes into level-1.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/isis/level-2/into/level-1	Level-2 routes into Level-1
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/isis/level-2/into/level-1/prefix-list	Select routes using prefix-list.
<base_URI>/config/running/router/isis/address-family/ipv6	IPv6 address Family.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast	IPv6 unicast address Family.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/disable-adjacency-check	Disables IPv6 Support consistency check.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/summary-prefix/{summary-prefix-ipv6}	Configure Integrated IS-IS address summaries
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/summary-prefix/{summary-prefix-ipv6}/level-2	Configure Integrated IS-IS address summaries for Level-2.

GET URIs	Description
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/default-link-metric	Default Link Metric.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/default-link-metric/level-1	Default Link Metric for Level-1.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/default-link-metric/level-2	Default Link Metric for Level-2.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/multi-topology	Enable/disable ISIS multi-topology extension for this address family.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/multi-topology/transition	Accept and generate both ISIS IPv6 and Multi-topology IPv6 TLVs.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/spf-interval/level-1	SPF calculation Timers
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/partial-spf-interval	Partial SPF Calculation Timers.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/partial-spf-interval/pspf-max-hold-time	Max hold time (msec) between two PSPF calculations. Range is 0-120000. Default is 5000.
<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.

GET URIs	Description
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute	Redistribute information from another routing protocol.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/connected	Connected.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/connected/metric	Metric for redistributed routes.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/connected/route-map	Route map reference.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/connected/metric-type	IS-IS metric type for redistributed routes.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/ospf	Open Shortest Path First.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/ospf/match	Redistribution of OSPF routes.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/ospf/match/internal	Internal routes.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/ospf/match/external1	External type 1 routes.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/ospf/match/external2	External type 2 routes.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/ospf/metric	Metric for redistributed routes.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/ospf/route-map	Route map reference.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/ospf/metric-type	IS-IS metric type for redistributed routes.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/static	Static routes.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/static/metric	Metric for redistributed routes.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/static/route-map	Route map reference.

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/is-type	<is-type>level-1</is-type>	Define inter-area/intra area operation mode
<base_URI>/config/running/router/isis/log/adjacency	<adjacency>{enumeration}</adjacency>	Logging Adjacency Changes
<base_URI>/config/running/router/isis/log/invalid-lsp-packets	<invalid-lsp-packets>{enumeration}</invalid-lsp-packets>	Logging Invalid LSP Packets
<base_URI>/config/running/router/isis/lsp-gen-interval	<lsp-gen-interval>{unit32}</lsp-gen-interval>	Minimum interval between regenerating same LSP
<base_URI>/config/running/router/isis/lsp-interval	<lsp-interval>{unit32}</lsp-interval>	Rate of transmission of LSPs
<base_URI>/config/running/router/isis/lsp-refresh-interval	<lsp-refresh-interval>{unit32}</lsp-refresh-interval>	LSP refresh interval
<base_URI>/config/running/router/isis/max-lsp-lifetime	<max-lsp-lifetime>{unit32}</max-lsp-lifetime>	Maximum LSP lifetime
<base_URI>/config/running/router/isis/nonstop-routing	<nonstop-routing>{enumeration}</nonstop-routing>	Enables the ISIS nonstop routing capability
<base_URI>/config/running/router/isis/partial-spf-interval/pspf-max-hold-time	<pspf-max-hold-time>{unit32}</pspf-max-hold-time>	Max hold time (msec) between two PSPF calculations. Range is 0-120000. Default is 5000.
<base_URI>/config/running/router/isis/partial-spf-interval/pspf-init-delay	<pspf-init-delay>{unit32}</pspf-init-delay>	Initial delay (msec) between receiving a LSP change to PSPF calculation. Range is 0-120000. Default is 2000.
<base_URI>/config/running/router/isis/partial-spf-interval/pspf-hold-time	<pspf-hold-time>{unit32}</pspf-hold-time>	Hold time (msec) between two PSPF calculations. Range is 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/router/isis/address-family/ipv4/unicast/distance	<distance>{unit32}</distance>	Defines an administrative distance.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/maximum-paths	<maximum-paths>{unit32}</maximum-paths>	Calculates multiple paths.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/connected/metric	<metric>{unit32}</metric>	Metric for redistributed routes.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/connected/metric-type	<metric-type>internal</metric-type>	IS-IS metric type for redistributed routes.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/connected/route-map	<route-map>{string}</route-map>	Route map reference.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/connected/level-1	<level-1>{enumeration}</level-1>	IS-IS Level-1 routes only
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/connected/level-2	<level-2>{enumeration}</level-2>	IS-IS Level-2 routes only
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/connected/level-1-2	<level-1-2>{enumeration}</level-1-2>	IS-IS Level-1-2 routes
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/ospf/match/internal	<internal>{enumeration}</internal>	Internal routes
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/ospf/match/external1	<external1>{enumeration}</external1>	External type 1 routes
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/ospf/match/external2	<external2>{enumeration}</external2>	External type 2 routes
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/ospf/metric	<metric>{unit32}</metric>	Metric for redistributed routes

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>isipv6-route-l2tol1</prefix-list>	Selects routes using prefix-list.

PATCH URIs	Payload	Description
<base_URI>/config/running/router/isis/auth-check/level-1	<level-1><disable>{enumeration}</disable></level-1>	Disables authentication of incoming PDUs for Level-1 LSPs, CSNP, and PSNP.
<base_URI>/config/running/router/isis/auth-check/level-2	<level-2><disable>{enumeration}</disable></level-2>	Disables the authentication of incoming PDUs for Level-2 LSPs, CSNP, and PSNP.
<base_URI>/config/running/router/isis/auth-mode/md5	<md5><level-1>{enumeration}</level-1></md5>	Authentication mode for Level-1 LSPs, CSNP, and PSNP.
<base_URI>/config/running/router/isis/auth-mode/md5	<md5><level-2>{enumeration}</level-2></md5>	Authentication mode for Level-2 LSPs, CSNP, and PSNP.
<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>{renumeration}</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</route-map></default-information-originate>	Uses route map.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast	<unicast><default-metric>{unit32}</default-metric></unicast>	Metric for route redistribution.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast	<unicast><distance>{unit32}</distance></unicast>	Defines an administrative distance.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast	<unicast><maximum-paths>{unit32}</maximum-paths></unicast>	Calculates multiple paths.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/connected/	<connected><metric>{unit32}</metric></connected>	Metric for redistributed routes.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/connected/	<connected><metric-type>internal</metric-type></connected>	IS-IS metric type for redistributed routes.
<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

Configures and manages the MPLS protocol.

### Resource URIs

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

Following are the supported URIs.



#### Note

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

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

POST URIs	Payload	Description
<BASE_URI>/config/running/router	<mpls />	MPLS Protocol
<BASE_URI>/config/running/router/mpls/cspf-group/{cspf-group-name}	<from><cspf-group-ip-address>{req_val}</cspf-group-ip-address></from>	Configure cspf group from ip address
<BASE_URI>/config/running/router/mpls/cspf-group/{cspf-group-name}	<link><cspf-group-link-from>{req_val}</cspf-group-link-from><to>{req_val}</to></link>	Configure cspf group from and to ip address
<BASE_URI>/config/running/router/mpls/cspf-group/{cspf-group-name}	<subnet><cspf-group-subnet-ip>{req_val}</cspf-group-subnet-ip></subnet>	Configure cspf group subnet address
<BASE_URI>/config/running/router/mpls/cspf-group/{cspf-group-name}	<node><cspf-group-node-ip>{req_val}</cspf-group-node-ip></node>	Configure cspf group node ip address
<BASE_URI>/config/running/router/mpls	<path><path-name>{req_val}</path-name></path>	Defines a path

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/mps/cspf-group	<percentage>{uint32}</percentage>	Bandwidth percentage when bandwidth is decreased or increased
<BASE_URI>/config/running/router/mps/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/mps/cspf-group

### Request Body

None

### Response Body

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

Configures, retrieves and modifies an autobandwidth template.

### Resource URIs

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

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

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

PATCH URIs	Payload	Description
<base_URI>/config/running/router/mpls/	<autobw-template><adjustment-	Configures the time interval after which the LSP

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

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

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

Configures, modifies and retrieves the autobandwidth 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

Configures, modifies or retrieves MPLS Bypass LSP information.

### Resource URIs

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

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

GET URIs	Descriptions
<base_URI>/config/running/router/mps/bypass-lsp/{bypass-lsp-name}/traffic-engineering/max-burst	Retrieves the max-burst in bytes. Range is 0-2147483647.
<base_URI>/config/running/router/mps/bypass-lsp/{bypass-lsp-name}/priority	Displays priority
<base_URI>/config/running/router/mps/bypass-lsp/{bypass-lsp-name}/priority/lsp-hold-priority	Displays LSP-hold priority. Range is 0 to 7. Deafult is 0.
<base_URI>/config/running/router/mps/bypass-lsp/{bypass-lsp-name}/exclude-any	Exclude any of the administrative groups.
<base_URI>/config/running/router/mps/bypass-lsp/{bypass-lsp-name}/include-any	Include any of the administrative groups
<base_URI>/config/running/router/mps/bypass-lsp/{bypass-lsp-name}/include-all	Include all of the administrative groups
<base_URI>/config/running/router/mps/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/mps/bypass-lsp/{bypass-lsp-name}/primary-path	Displays primary explicit path.
<base_URI>/config/running/router/mps/bypass-lsp/{bypass-lsp-name}/enable	Enables a bypass lsp.

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

PATCH URIs	Payload	Description
	address}</from></bypass-lsp>	
<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.

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

Configures, modifies or retrieves MPLS Dynamic Bypass LSP information.

### Resource URIs

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

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

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

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

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/mps/dynamic-bypass/max-bypasses-per-mp`

## Request Body

None

## Response Body

None

## router/mpls/ldp

Configures MPLS LDP.

### Resource URIs

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

Following are the supported URIs.

GET URIs	Description
<base_URI>/config/running/router/mpls/ldp	Configures MPLS LDP.
<base_URI>/config/running/router/mpls/ldp/load-sharing	Number of load-sharing paths.
<base_URI>/config/running/router/mpls/ldp/hello-interval-link	Global link hello interval.
<base_URI>/config/running/router/mpls/ldp/hello-interval-target	Target interval in seconds. Range is 1-32767. Default is 15.
<base_URI>/config/running/router/mpls/ldp/hello-timeout-link	IDP time out in seconds. Range is 2-65535. Default is 15.
<base_URI>/config/running/router/mpls/ldp/hello-timeout-target	IDP target time out in seconds. Range is 2-65535. Default is 45.
<base_URI>/config/running/router/mpls/ldp/ka-interval	Keep alive interval.
<base_URI>/config/running/router/mpls/ldp/ka-int-count	Ka Interval in seconds. Range is 1-65535. Default is 6.
<base_URI>/config/running/router/mpls/ldp/ka-timeout	Keep alive timeout.
<base_URI>/config/running/router/mpls/ldp/filter-fec-in	Apply filtering on inbound FECs.
<base_URI>/config/running/router/mpls/ldp/filter-fec-out	Apply filtering on inbound FECs.
<base_URI>/config/running/router/mpls/ldp/advertise-fec	Prefix-list specifying controls on destination prefixes.
<base_URI>/config/running/router/mpls/ldp/fec-128-for-auto-discovered	Use LDP FEC 128 for auto-discovered VPLS peers.
<base_URI>/config/running/router/mpls/ldp/lsr-id	LDP LSR ID.
<base_URI>/config/running/router/mpls/ldp/session/{ldp-session-ip}/filter-fec-out	Apply filtering on outbound FECs.

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

DELETE URIs
<base_URI>/config/running/router/mpls/ldp
<base_URI>/config/running/router/mpls/ldp/load-sharing
<base_URI>/config/running/router/mpls/ldp/hello-interval-link
<base_URI>/config/running/router/mpls/ldp/hello-interval-target
<base_URI>/config/running/router/mpls/ldp/hello-timeout-link
<base_URI>/config/running/router/mpls/ldp/hello-timeout-target
<base_URI>/config/running/router/mpls/ldp/ka-interval
<base_URI>/config/running/router/mpls/ldp/ka-int-count
<base_URI>/config/running/router/mpls/ldp/ka-timeout
<base_URI>/config/running/router/mpls/ldp/filter-fec-in
<base_URI>/config/running/router/mpls/ldp/filter-fec-out
<base_URI>/config/running/router/mpls/ldp/advertise-fec
<base_URI>/config/running/router/mpls/ldp/fec-128-for-auto-discovered
<base_URI>/config/running/router/mpls/ldp/lsr-id
<base_URI>/config/running/router/mpls/ldp/session/{ldp-session-ip}
<base_URI>/config/running/router/mpls/ldp/session/{ldp-session-ip}/filter-fec-out
<base_URI>/config/running/router/mpls/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*

efine LDP peer ip address.

*ldp-targeted-peer-ip*

Peer IP Address.

*load-sharing*

Number of load-sharing paths.

*hello-interval-link*

In seconds {1-32767, default 5}.

*hello-interval-target*

In seconds {1-32767, default 15}.

*hello-timeout-link*

In seconds {2-65535, default 15}.

*hello-timeout-target*

In seconds {2-65535, default 45}.

*ka-interval*

In seconds {1-65535 default 6}.

*ka-int-count*

In seconds {1-65535 default 6}.

*ka-timeout*

In seconds {1-65535}.

*filter-fec-in*

Apply filtering on inbound FECs.

*filter-fec-out*

Apply filtering on inbound FECs.

*advertise-fec*

In seconds {1-65535}.

*lsr-id*

IP address to be used as LSR id for LDP.

*filter-fec-out*

Apply filtering on outbound FECs.

*rx-label-silence-timer*

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

*key*

Enable TCP-MD5 authentication.

*rx-label-silence-timer*

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

*max-neighbor-reconnect-time*

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

*max-neighbor-recovery-time*

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

*reconnect-time*

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

*recovery-time*

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

*tx-label-silence-timer*

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

*notification-timer*

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

*tunnel-metric*

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

*label-withdrawal-delay*

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

## Usage Guidelines

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

## Examples

The following example uses the GET option.

### URI

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

### Request Body

None

### Response Body

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

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

### URI

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

### Request Body

```
<ldp />
```

### Response Body

None

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

### URI

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

### Request Body

None

### Response Body

None

## router/mpls/lsp

Defines LSP.

### Resource URIs

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

GET URIs	Description
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/to	Retrieves LSP destination address.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/cspf	Retrieves cspf.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/ipmtu	Retrieves IP Packet Maximum Transmission Unit configuration.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/metric	Retrieves the LSP metric configuration.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/revert-timer	Retrieves the lsp revert timer configuration.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/tie-breaking	Retrieves the tie breaking mode configuration for cspf.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/from	Retrieves LSP source address.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/primary-path	Retrieves primary explicit path.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/adaptive	Retrieves LSP/secpath adaptive configuration.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/reoptimize-timer	Retrieves Reoptimization timer configuration.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/commit	Retrieves adaptive LSP configuration.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/record	Retrieves the recording path routes configuration.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/cos	Retrieves class of service.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/hop-limit	Retrieves the limit of hops the LSP can traverse.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/cspf-computation-mode	Retrieves cspf-computation-mode configuration.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/traffic-engineering/mean-rate	Retrieves the mean rate in kbps. Range is 0-2147483647.



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.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/shortcuts	<ospf />	Configures OSPF shortcuts for an LSP.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/shortcuts/ospf	<ignore-lsp-metric/>	Configures ignoring the configured LSP metrics for an LSP.

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.

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

PATCH URIs	Payload	Description
<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.
<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>	Updates the lsp-frr-hold-priority number.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/frr/revertive/holdtime	<holdtime>{uint8}</holdtime>	Updates revertive hold time for the LSP.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/frr/revertive/global	<global>{enable-disable}</global>	Updates global revertive mode.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}	<secondary-path><standby /></secondary-path>	Updates secondary Path for the LSP.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}	<secondary-path><cs pf>{enable-disable}</cs pf></secondary-path>	Updates secondary Path name for the LSP.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}	<secondary-path><ipmtu>{uint32}</ipmtu></secondary-path>	Updates secondary path and IP packet maximum transmission unit for the LSP.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}	<secondary-path><adaptive /></secondary-path>	Updates LSP/secpath adaptive configuration.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}	<secondary-path><reoptimize-timer>{uint32}</reoptimize-timer></secondary-path>	Updates reoptimization timer.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}	<secondary-path><commit /></secondary-path>	Commit the changes to adaptive LSP.
rest/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}	<secondary-path><record>{enable-disable}</record></secondary-path>	Enable/disable recording path routes.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}	<secondary-path><cos>{uint32}</cos></secondary-path>	Updates class of service.

PATCH URIs	Payload	Description
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}	<secondary-path><hop-limit>{uint16}</hop-limit></secondary-path>	Updates limit of hops which the LSP can traverse.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}	<secondary-path><cspf-computation-mode>(cspf-computation-mode)</cspf-computation-mode></secondary-path>	Updates cspf-computation-mode.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}/traffic-engineering/mean-rate	<mean-rate>{uint32}</mean-rate>	Updates mean rate.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}/traffic-engineering/max-rate	<max-rate>{uint32}</max-rate>	Updates max rate.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}/traffic-engineering/max-burst	<max-burst>{uint32}</max-burst>	Updates max-burst.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}/priority/include-all	<lsp-setup-priority><include-all>{string}</include-all></lsp-setup-priority>	Updates administrative groups.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}	<secondary-path><soft-preemption /></secondary-path>	Updates LSP soft preemption capability.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}	<lsp-select-path-mode><primary /><lsp>()</lsp><enable /></lsp-select-path-mode>	Updates manual path select mode.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}	<lsp-select-path-mode><secondary>(leafref )</secondary><lsp>()</lsp><enable /></lsp-select-path-mode>	Updates a secondary path as selected path.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/frr/bandwidth	<bandwidth><lsp-frr-bandwidth>{uint32}</lsp-frr-bandwidth></bandwidth>	Updates the FRR bandwidth for an LSP.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/frr/bandwidth	<bandwidth><inherit>true</inherit></bandwidth>	Add bandwidth to an FRR path.



PATCH URIs	Payload	Description
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/frr	<frr><hop-limit>{uint8}</hop-limit></frr>	Configures the number of hops the LSP can traverse.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/frr	<frr><facility-backup>true</facility-backup></frr>	Configures MPLS fast reroute by using the one-to-one backup method for a defined LSP
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/frr/priority	<priority><lsp-frr-setup-priority>{uint32}</lsp-frr-setup-priority><lsp-frr-hold-priority>{uint32}</lsp-frr-hold-priority></priority>	Updates setup and hold priorities for the FRR detour routes within a specified LSP.

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



PUT URIs	Payload	Description
<base_URI>/config/running/router/mps/lsp/{lsp-name}/record	<record>{enable-disable}</record>	Enable/disable recording path routes.
<base_URI>/config/running/router/mps/lsp/{lsp-name}/cos	<cos>{uint32}</cos>	Configure class of service.
<base_URI>/config/running/router/mps/lsp/{lsp-name}/hop-limit	<hop-limit>{uint16}</hop-limit>	Limit of hops the LSP can traverse.
<base_URI>/config/running/router/mps/lsp/{lsp-name}/cspf-computation-mode	<cspf-computation-mode>{cspf-computation-mode}</cspf-computation-mode>	Specify cspf-computation-mode.
<base_URI>/config/running/router/mps/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/mps/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/mps/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/mps/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/mps/lsp/{lsp-name}/soft-preemption	<soft-preemption />	Set LSP soft preemption capability.
<base_URI>/config/running/router/mps/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/mps/lsp/{lsp-name}/frr/hop-limit	<include-all><hop-limit>{uint8}</hop-limit></include-all>	Set hop limit.
<base_URI>/config/running/router/mps/lsp/{lsp-name}/frr/link-protection	<link-protection />	Configures link protection for LSP.
<base_URI>/config/running/router/mps/lsp/{lsp-name}/frr/priority/lsp-frr-hold-priority	<lsp-frr-setup-priority><lsp-frr-hold-priority>{uint32}</lsp-frr-hold-priority></lsp-frr-setup-priority>	Fast Reroute priority number.

PUT URIs	Payload	Description
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/frr/revertive/holdtime	<holdtime>{uint8}</holdtime>	Configure revertive hold time for the LSP.
<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.

PUT URIs	Payload	Description
<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.
<base_URI>/config/running/router/mppls/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/mppls/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/mppls/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/mppls/lsp/{lsp-name}/secondary-path/{secpath-name}/soft-preemption	<soft-preemption />	Configures LSP soft preemption capability.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/enable	<lsp-select-path-mode><primary /><enable /></lsp-select-path-mode>	Configures LSP.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/enable	<lsp-select-path-mode><secondary>(leafref)</secondary><enable /></lsp-select-path-mode>	Configures a selected lsp path.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/frr/facility-backup	<facility-backup>true</facility-backup>	Enables facility backup
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/autobw	<autobw />	Configures autobandwidth
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/autobw/adjustment-interval	<adjustment-interval>{uint32}</adjustment-interval>	Time interval after which the LSP bandwidth should be adjusted
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/autobw/adjustment-threshold/threshold-percentage	<threshold-percentage>{uint32}</threshold-percentage>	Configures threshold percentage: Bandwidth will be adjusted only if percentage difference of Max-Sample-BW w.r.t current-BW is greater than this value. Range 1-100%. Default: 0%.

PUT URIs	Payload	Description
<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.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/autobw/max-bandwidth	<max-bandwidth>{uint32}</max-bandwidth>	Configures maximum bandwidth. The LSP bandwidth can never be greater than this value. max-bandwidth cannot be configured to be greater than the configured traffic-eng max-rate. Range 0 - 2147483647 kbps. Default: 0
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/autobw/min-bandwidth	<min-bandwidth>{uint32}</min-bandwidth>	Configures minimum bandwidth, The LSP bandwidth can never be lower than this value. Range 0 - 2147483647 kbps. Default: 0
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/autobw/mode	<mode>{autobw-mode}</mode>	Sets autobandwidth to either monitor-only or monitor-and-signal.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/autobw/overflow-limit	<overflow-limit>{uint32}</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/router/mpls/lsp/{lsp-name}/autobw/sample-recording	<sample-recording>{enable-disable}</sample-recording>	Disables or enables sample recording.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/autobw/template	<template>{leafref}</template>	Configures a primary LSP path to use an auto-bandwidth template.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/autobw/underflow-limit	<underflow-limit>{uint32}</underflow-limit>	Sets the number of samples that must be below the threshold to trigger a premature adjustment for primary path.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}/autobw	<autobw />	Configures a secondary LSP path to use an auto-bandwidth template.

PUT URIs	Payload	Description
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}/autobw/adjustment-interval	<adjustment-interval>{uint32}</adjustment-interval>	Time interval after which the LSP bandwidth should be adjusted
<base_URI>/config/running/router/mpls/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/mpls/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/mpls/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/mpls/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/mpls/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/mpls/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).

PUT URIs	Payload	Description
<base_URI>/config/running/router/mps/lsp/{lsp-name}/secondary-path/{secpath-name}/autobw/sample-recording	<sample-recording>{enable-disable}</sample-recording>	Enables or disables sample recording for a secondary path.
<base_URI>/config/running/router/mps/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/mps/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/mps/lsp/{lsp-name}
<base_URI>/config/running/router/mps/lsp/{lsp-name}/to
<base_URI>/config/running/router/mps/lsp/{lsp-name}/cspf
<base_URI>/config/running/router/mps/lsp/{lsp-name}/ipmtu
<base_URI>/config/running/router/mps/lsp/{lsp-name}/metric
<base_URI>/config/running/router/mps/lsp/{lsp-name}/revert-timer
<base_URI>/config/running/router/mps/lsp/{lsp-name}/tie-breaking
<base_URI>/config/running/router/mps/lsp/{lsp-name}/from
<base_URI>/config/running/router/mps/lsp/{lsp-name}/primary-path
<base_URI>/config/running/router/mps/lsp/{lsp-name}/adaptive
<base_URI>/config/running/router/mps/lsp/{lsp-name}/reoptimize-timer
<base_URI>/config/running/router/mps/lsp/{lsp-name}/commit
<base_URI>/config/running/router/mps/lsp/{lsp-name}/record
<base_URI>/config/running/router/mps/lsp/{lsp-name}/cos
<base_URI>/config/running/router/mps/lsp/{lsp-name}/hop-limit
<base_URI>/config/running/router/mps/lsp/{lsp-name}/cspf-computation-mode
<base_URI>/config/running/router/mps/lsp/{lsp-name}/traffic-engineering/mean-rate
<base_URI>/config/running/router/mps/lsp/{lsp-name}/traffic-engineering/max-rate
<base_URI>/config/running/router/mps/lsp/{lsp-name}/traffic-engineering/max-burst
<base_URI>/config/running/router/mps/lsp/{lsp-name}/priority/include-all
<base_URI>/config/running/router/mps/lsp/{lsp-name}/soft-preemption
<base_URI>/config/running/router/mps/lsp/{lsp-name}/frr
<base_URI>/config/running/router/mps/lsp/{lsp-name}/frr/hop-limit

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

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

## 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/mpls/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

Defines MPLS Interface.

### Resource URIs

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

GET URIs	Descriptions
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/ldp-enable	Enable LDP on Interface.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/ldp-params	Configure LDP parameters.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/ldp-params/hello-interval	Configure hello Interval.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/ldp-params/hello-timeout	Configure hello-timeout.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp	Configure RSVP parameters.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp/authentication/key	MD5 key.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp/hello	Enable RSVP Hello on the interface.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp/hello/interval	Interval between two RSVP Hello requests.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp/hello/tolerance	Number of unacknowledged RSVP Hello requests before timeout.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp/hello-disable	Disable RSVP Hello on the interface.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp/te-metric	Set te-metric for this interface.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp/admin-group	Administrative groups.

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/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass	<dynamic-bypass><max-bypasses>{uint32}</max-bypasses></dynamic-bypass>	Sets the limit for total number of dynamic bypass LSPs that can be created for this protected MPLS interface.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass	<dynamic-bypass><max-bypasses-per-mp>{uint32}</max-bypasses-per-mp></dynamic-bypass>	Sets the maximum number of dynamic bypass LSPs that can be created for this MPLS interface and reaching to any Merge Point.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass	<dynamic-bypass><reoptimize-timer>{uint32}</reoptimize-timer></dynamic-bypass>	Configures a reoptimization timer value for all the adaptive dynamic bypass LSPs that are being created on a protected interface.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass	<dynamic-bypass><cos>{uint32}</cos></dynamic-bypass>	Configures cos value (0-7) for dynamic bypass LSPs that will be created on an interface.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass	<dynamic-bypass><from>{inet:ip-address}</from></dynamic-bypass>	Configures LSP source address for an interface.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass	<dynamic-bypass><adaptive>{enable-disable}</adaptive></dynamic-bypass>	Enables or disables adaptiveness for dynamic bypass LSPs. Default: enable.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass	<dynamic-bypass><record-route>{enable-disable}</record-route></dynamic-bypass>	Enables or disables option to set record route option for the dynamic bypass LSPs.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass	<dynamic-bypass><hop-limit>{uint8}</hop-limit></dynamic-bypass>	Configures interface level hop-limit.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass	<dynamic-bypass><exclude-any>{string}</exclude-any></dynamic-bypass>	Sets exclude-any configuration for administrative groups for dynamic bypass LSPs.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass	<dynamic-bypass><include-any>{string}</include-any></dynamic-bypass>	Sets include-any configuration for administrative groups for dynamic bypass LSPs.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass	<dynamic-bypass><include-all>{string}</include-all></dynamic-bypass>	Sets include-all configuration for administrative groups for dynamic bypass LSPs.

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/mppls/mppls-interface/ethernet%2C%220/2%22/dynamic-bypass/max-bypasses

## Request Body

None

## Response Body

```
<max-bypasses xmlns="urn:brocade.com:mgmt:brocade-mppls" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/router/mppls/mppls-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

Configures MPLS policy.

### Resource URIs

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

GET URI	Description
<base_URI>/config/running/router/mpls/policy/backup-retry-time	Configures Backup retry time.
<base_URI>/config/running/router/mpls/policy/cspf-computation-mode/ignore-overload-bit	Ignores overload bit during CSPF computation.
<base_URI>/config/running/router/mpls/policy/cspf-computation-mode/metric-type	Selects metric type for CSPF computation.
<base_URI>/config/running/router/mpls/policy/cspf-group-computation/add-penalty	Adds penalty of all matching CSPF-groups to TE metric of TE link.
<base_URI>/config/running/router/mpls/policy/cspf-interface-constraint	Uses interface IP address for CSPF computation.
<base_URI>/config/running/router/mpls/policy/cspf-computation-mode/use-bypass-metric	Displays Bypass Path cost for FRR LSP backup path.
<base_URI>/config/running/router/mpls/policy/cspf-computation-mode/use-bypass-liberal	Displays information on Liberal mode of Bypass selection.
<base_URI>/config/running/router/mpls/policy/handle-isis-neighbor-down	Configures MPLS to handle ISIS neighbor down event.
<base_URI>/config/running/router/mpls/policy/handle-ospf-neighbor-down	Configures MPLS to handle OSPF neighbor down event.
<base_URI>/config/running/router/mpls/policy/retry-time	Configures LSP retry time.
<base_URI>/config/running/router/mpls/policy/retry-limit	Configures LSP retry limit.
<base_URI>/config/running/router/mpls/policy/rapid-retry	Configures Rapid retry.
<base_URI>/config/running/router/mpls/policy/rsvp-periodic-flooding-time	Set the interval for RSVP TE periodic flooding.
<base_URI>/config/running/router/mpls/policy/up	Bandwidth percentage when bandwidth is increased.

GET URI	Description
<base_URI>/config/running/router/mpls/policy/soft-preemption/cleanup-timer	Defines timer value for soft preemption to happen.
<base_URI>/config/running/router/mpls/policy/traffic-engineering/isis	IS-IS traffic engineering parameters.
<base_URI>/config/running/router/mpls/policy/qos-ttl-mode	Configures MPLS TTL and QOS propagation model.
<base_URI>/config/running/router/mpls/policy/ingress-tunnel-accounting	Enables Traffic Statistics for Tunnels.
<base_URI>/config/running/router/mpls/policy/transit-session-accounting	Enables Traffic Statistics for transit sessions.
<base_URI>/config/running/router/mpls/policy/auto-bandwidth	Displays auto-bandwidth details.
<base_URI>/config/running/router/mpls/policy/auto-bandwidth/sample-interval	Displays sample interval: the time after which the traffic rate is sampled.
<base_URI>/config/running/router/mpls/policy/auto-bandwidth/num-sample-record	Displays number of samples collected in the current adjustment-interval.
<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
	<backup-retry-time>{uint32}</backup-retry-time>	Configures Backup retry time.

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

PATCH URIs	Payload	Description
<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.
<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.

PUT URIs	Payload	Description
<base_URI>/config/running/router/mpls/policy/cspf-group-computation/add-penalty	<add-penalty />	Adds penalty of all matching CSPF-groups to TE metric of TE link.
<base_URI>/config/running/router/mpls/policy/cspf-interface-constraint	<cspf-interface-constraint />	Uses interface IP address for CSPF computation.
<base_URI>/config/running/router/mpls/policy/handle-isis-neighbor-down	<handle-isis-neighbor-down />	Configures MPLS to handle ISIS neighbor down event.
<base_URI>/config/running/router/mpls/policy/handle-ospf-neighbor-down	<handle-ospf-neighbor-down />	Configures MPLS to handle OSPF neighbor down event.
<base_URI>/config/running/router/mpls/policy/retry-time	<retry-time>{uint32}</retry-time>	Configures LSP retry time.
<base_URI>/config/running/router/mpls/policy/retry-limit	<retry-limit>{uint32}</retry-limit>	Configures LSP retry limit.
<base_URI>/config/running/router/mpls/policy/rapid-retry	<rapid-retry>{enable-disable}</rapid-retry>	Configures Rapid retry.
<base_URI>/config/running/router/mpls/policy/rsvp-periodic-flooding-time	<rsvp-periodic-flooding-time>{uint32}</rsvp-periodic-flooding-time>	Sets the interval for RSVP TE periodic flooding.
<base_URI>/config/running/router/mpls/policy/soft-preemption/cleanup-time	<cleanup-timer>{uint32}</cleanup-timer>	Defines timer value for soft preemption to happen.
<base_URI>/config/running/router/mpls/policy/traffic-engineering/isis	<all><isis>{enumeration}</isis></all>	Configures traffic engineering parameters.
<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.



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

DELETE URIs
<base_URI>/config/running/router/mpls/policy
<base_URI>/config/running/router/mpls/policy/admin-group/{admin-group-name}, {admin-group-number}
<base_URI>/config/running/router/mpls/policy/backup-retry-time
<base_URI>/config/running/router/mpls/policy/cspf-computation-mode/ignore-overload-bit
<base_URI>/config/running/router/mpls/policy/cspf-computation-mode/metric-type
<base_URI>/config/running/router/mpls/policy/cspf-computation-mode/use-bypass-metric
<base_URI>/config/running/router/mpls/policy/cspf-computation-mode/use-bypass-liberal
<base_URI>/config/running/router/mpls/policy/cspf-group-computation/add-penalty
<base_URI>/config/running/router/mpls/policy/cspf-interface-constraint
<base_URI>/config/running/router/mpls/policy/handle-isis-neighbor-down
<base_URI>/config/running/router/mpls/policy/handle-ospf-neighbor-down
<base_URI>/config/running/router/mpls/policy/retry-time
<base_URI>/config/running/router/mpls/policy/retry-limit

DELETE URIs
<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
<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.

*retryt-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

Configures MPLS RSVP.

### Resource URIs

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

Following are the supported URIs.

GET URIs	Description
<BASE_URI>/config/running/router/mpls/rsvp	MPLS RSVP configuration.
<BASE_URI>/config/running/router/mpls/rsvp/refresh-interval	RSVP Refresh interval.
<BASE_URI>/config/running/router/mpls/rsvp/refresh-multiple	RSVP Refresh multiple.
<BASE_URI>/config/running/router/mpls/rsvp/refresh-reduction/summary-refresh	Refresh Reduction Summary Refresh feature.
<BASE_URI>/config/running/router/mpls/rsvp/refresh-reduction/bundle-message	Refresh Reduction bundle messaging feature.
<BASE_URI>/config/running/router/mpls/rsvp/refresh-reduction/bundle-message/bundle-send-delay	Configures bundle send delay value.
<BASE_URI>/config/running/router/mpls/rsvp/reliable-messaging	RSVP Reliable messaging globally.
<BASE_URI>/config/running/router/mpls/rsvp/reliable-messaging/rapid-retrans-decay	Percentage increase in the rapid retransmission interval for each consecutive unacknowledged RSVP message.
<BASE_URI>/config/running/router/mpls/rsvp/reliable-messaging/rapid-retrans-interval	Interval for an unacknowledged message to be resent.
<BASE_URI>/config/running/router/mpls/rsvp/reliable-messaging/rapid-retry-limit	Maximum number of retries for an unacknowledged message.
<BASE_URI>/config/running/router/mpls/rsvp/hello	Enable RSVP Hello on all RSVP interfaces.
<BASE_URI>/config/running/router/mpls/rsvp/hello/interval	Interval between two RSVP Hello requests.
<BASE_URI>/config/running/router/mpls/rsvp/hello/tolerance	Number of unacknowledged RSVP Hello requests before timeout.

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/mps/rsvp/reliable-messaging/rapid-retry-limit	<rapid-retry-limit>{uint32}</rapid-retry-limit>	Maximum number of retries for an unacknowledged message.
<BASE_URI>/config/running/router/mps/rsvp/hello/interval	<interval>{uint32}</interval>	Interval between two RSVP Hello requests.
<BASE_URI>/config/running/router/mps/rsvp/hello/tolerance	<tolerance>{uint32}</tolerance>	Number of unacknowledged RSVP Hello requests before timeout.
<BASE_URI>/config/running/router/mps/rsvp/hello-acknowledgements	<hello-acknowledgements />	Acknowledge RSVP Hellos on interfaces supporting RSVP Hello and not having RSVP sessions.
<BASE_URI>/config/running/router/mps/rsvp/backup-bw-guarantee	<backup-bw-guarantee />	Setup a backup path requesting bandwidth only if bandwidth is available.

PUT URIs	Payload	Description
<BASE_URI>/config/running/router/mps/rsvp/refresh-interval	<refresh-interval>{uint32}</refresh-interval>	Configure RSVP Refresh interval.
<BASE_URI>/config/running/router/mps/rsvp/refresh-multiple	<refresh-multiple>{uint32}</refresh-multiple>	Configure RSVP Refresh multiple.
<BASE_URI>/config/running/router/mps/rsvp/refresh-reduction/summary-refresh	<summary-refresh />	Refresh Reduction Summary Refresh feature.
<BASE_URI>/config/running/router/mps/rsvp/refresh-reduction/bundle-message/bundle-send-delay	<bundle-send-delay>{uint32}</bundle-send-delay>	Configure bundle send delay value.
<BASE_URI>/config/running/router/mps/rsvp/reliable-messaging/rapid-retrans-decay	<rapid-retrans-decay>{uint32}</rapid-retrans-decay>	Percentage increase in the rapid retransmission interval for each consecutive unacknowledged RSVP message.
<BASE_URI>/config/running/router/mps/rsvp/reliable-messaging/rapid-retrans-interval	<rapid-retrans-interval>{uint32}</rapid-retrans-interval>	Interval for an unacknowledged message to be resent.

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

Configures, modifies, or retrieves Open Shortest Path First (OSPF) configurations.

### Resource URIs

URI	Description
<base_URI>/config/running/router/ospf	Open Shortest Path First (OSPF).

GET URIs	Description
<base_URI>/config/running/router/ospf	Retrieves OSPF configuration details.
<base_URI>/config/running/router/ospf/{vrf-name}	Retrieves OSPF configuration details for a particular VRF.
<base_URI>/config/running/router/ospf/{vrf-name}/database-overflow-interval	Retrieves database overflow interval.
<base_URI>/config/running/router/ospf/{vrf-name}/default-information-originate	Retrieves default route information
<base_URI>/config/running/router/ospf/{vrf-name}/default-passive-interface	Marks all OSPF interfaces passive by default.
<base_URI>/config/running/router/ospf/{vrf-name}/default-metric	Specifies the OSPF routing protocol metric value.
<base_URI>/config/running/router/ospf/{vrf-name}/external-lsdb-limit	Retrieves External Link State Database limit.
<base_URI>/config/running/router/ospf/{vrf-name}/log	Enables logging for OSPFv3 activities.
<base_URI>/config/running/router/ospf/{vrf-name}/metric-type	Displays Metric type (Type 1 or Type 2).
<base_URI>/config/running/router/ospf/{vrf-name}/neighbor/{neighbor-addr}	Displays non-broadcast neighbor IP Address in the format A.B.C.D.
<base_URI>/config/running/router/ospf/{vrf-name}/redistribute	Enables route redistribution.
<base_URI>/config/running/router/ospf/{vrf-name}/redistribute/connected	Redistributes directly connected routes.
<base_URI>/config/running/router/ospf/{vrf-name}/redistribute/connected/route-map	Redistributes directly connected routes and specifies a route map to be consulted before a route is added to the routing table.
<base_URI>/config/running/router/ospf/{vrf-name}/redistribute/static	Redistributes static routes.
<base_URI>/config/running/router/ospf/{vrf-name}/redistribute/static/route-map	Redistributes static routes and specifies a route map to be consulted before a route is added to the routing table.
<base_URI>/config/running/router/ospf/{vrf-name}/redistribute/bgp	Redistributes BGP routes.

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 (0x000001 - 0x00FFFFFFE). The default value is 16711680 (0x00FF0000).

*summary-lsa-val*

Specifies the summary metric value. The value can range from 1 through 16777214 (0x000001 - 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/\(vrf-name\)](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>
```

```

    </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

Retrieves basic global protocol-independent multicast (PIM) Sparse parameters on a device within the PIM Sparse domain.

### Resource URIs

URI	Description
<base_URI>/config/running/router/pim/	Configures basic global protocol-independent multicast (PIM) Sparse parameters on a device within the PIM Sparse domain.

GET URIs	Description
<base_URI>/config/running/router/pim/	Basic global protocol-independent multicast (PIM) Sparse parameters on a device within the PIM Sparse domain.
<base_URI>/config/running/router/pim/max-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).

GET URIs	Description
<base_URI>/config/running/router/pim/anycast-rp	Sets Anycast RP address and peers.
<base_URI>/config/running/router/pim/rp-address	Configures a device interface as a rendezvous point (RP).
<base_URI>/config/running/router/pim/rp-address/{IP-address}/prefix-list	Configures a device as a candidate rendezvous point (RP) for all multicast groups with the prefix 224.0.0.0/4, by default, and explicitly adds or deletes groups with other prefixes.
<base_URI>/config/running/router/pim/route-precedence	Specifies Route Selection criteria.

## Usage Guidelines

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

## Examples

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

## URI

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

## Request Body

None

## Response Body

```
<pim xmlns="urn:brocade.com:mgmt:brocade-pim" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/router/pim">
  <max-mcache>24000</max-mcache>
  <hello-interval>10</hello-interval>
  <prune-wait>10</prune-wait>
  <message-interval>30</message-interval>
  <spt-threshold>0</spt-threshold>
  <rpf y:self="/rest/config/running/router/pim/rpf">
    <ecmp y:self="/rest/config/running/router/pim/rpf/ecmp">
      <rebalance>true</rebalance>
    </ecmp>
  </rpf>
  <bsr-candidate y:self="/rest/config/running/router/pim/bsr-candidate">
    <interface y:self="/rest/config/running/router/pim/bsr-candidate/interface/
loopback%2C3">
      <bsr-cand-intf-type>loopback</bsr-cand-intf-type>
      <bsr-cand-intf-id>3</bsr-cand-intf-id>
    </interface>
  </bsr-candidate>
  <rp-candidate y:self="/rest/config/running/router/pim/rp-candidate">
    <interface y:self="/rest/config/running/router/pim/rp-candidate/interface/
```



```
loopback%2C3">
  <rp-cand-intf-type>loopback</rp-cand-intf-type>
  <rp-cand-intf-id>3</rp-cand-intf-id>
</interface>
<prefix y:self="/rest/config/running/router/pim/rp-candidate/prefix/pre1">
  <rp-cand-prefix-name>pre1</rp-cand-prefix-name>
</prefix>
</rp-candidate>
<anycast-rp y:self="/rest/config/running/router/pim/anycast-rp/1.1.1.1">
  <anycast-ip-addr>1.1.1.1</anycast-ip-addr>
</anycast-rp>
<rp-address y:self="/rest/config/running/router/pim/rp-address/135.135.135.135">
  <rp-ip-addr>135.135.135.135</rp-ip-addr>
</rp-address>
<route-precedence y:self="/rest/config/running/router/pim/route-precedence">
  <uc-default>true</uc-default>
  <uc-non-default>true</uc-non-default>
</route-precedence>
</pim>
```

## rmon

Configures, modifies, or retrieves Remote Monitoring Protocol (RMON) information.

### Resource URIs

URI	Description
<base_URI>/config/running/rmon	Remote Monitoring Protocol (RMON).

GET URIs	Description
<base_URI>/config/running/rmon	Remote Monitoring Protocol (RMON).
<base_URI>/config/running/rmon/event/{event-index}/description	Retrieves event description.
<base_URI>/config/running/rmon/event/{event-index}/log	Retrieves logged events.
<base_URI>/config/running/rmon/event/{event-index}/trap	Retrieves event trap information.
<base_URI>/config/running/rmon/event/{event-index}/owner	Retrieves event owner identity.
<base_URI>/config/running/rmon/alarm/{alarm-index}/event	Retrieves event for falling alarm.
<base_URI>/config/running/rmon/alarm/{alarm-index}/owner	Retrieves alarm owner identity.

POST URIs	Payload	Description
<base_URI>/config/running/rmon	<event><event-index>(int32)</event-index></event>	Configures RMON event.
<base_URI>/config/running/rmon	<alarm><alarm-index>(int32)</alarm-index><snmp-oid>(string)</snmp-oid><interval>(int32)</interval><type>(string)</type><rising-threshold>(unit32)</rising-threshold><event>(int32)</event></alarm>	Configures RMON alarm.

PATCH URIs	Payload	Description
<base_URI>/config/running/rmon/event/{event-index}	<event><description>(string)</description></event>	Configures RMON event description.
<base_URI>/config/running/rmon/event/{event-index}	<event><log>(string)</log></event>	Configures event log.

PATCH URIs	Payload	Description
<base_URI>/config/running/rmon/event/{event-index}	<event><trap>(string)</trap></event>	Configures event trap.
<base_URI>/config/running/rmon/event/{event-index}	<event><owner>(string)</owner></event>	Configures event owner.
<base_URI>/config/running/rmon/alarm/{alarm-index}	<alarm><snmp-oid>(string)</snmp-oid><interval>(int32)</interval><type>(string)</type><rising-threshold>(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

DELETE URIs
<base_URI>/config/running/rmon/event/{event-index}/owner
<base_URI>/config/running/rmon/alarm/{alarm-index}
<base_URI>/config/running/rmon/alarm/{alarm-index}/event
<base_URI>/config/running/rmon/alarm/{alarm-index}/owner

## Parameters

*alarm-index*

Configures RMON alarm. The range is from 1 to 65535.

*rising-threshold*

Configures rising threshold. The range is from 0 to 4294967295.

*falling-threshold*

Configures falling threshold. The range is from 0 to 4294967295.

*snmp-oid*

Configures SNMP OID.

*interval*

Configures alarm sample interval.

*event-index*

Configures RMON event. The range is from 1 to 65535.

## Usage Guidelines

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

## Examples

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

## URI

http://host:80/rest/config/running/rmon/event/200/description

## Request Body

None

## Response Body

```
<description xmlns="urn:brocade.com:mgmt:brocade-rmon" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/rmon/event/200/description">hi_32768</description>
```

The following example uses the POST option to configure alarm.

## URI

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

## Request Body

```
<alarm>
  <alarm-index>100</alarm-index>
  <snmp-oid>1.3.6.1.2.1.16.1.1.1.5.65535</snmp-oid>
  <interval>10</interval>
  <type>absolute</type>
  <rising-threshold>10000</rising-threshold>
  <event>100</event>
</alarm>
```

## Response Body

None

The following example uses the DELETE option to remove RMON event.

## URI

`http://host:80/rest/config/running/rmon/event/100`

## Request Body

None

## Response Body

None

## rule/{rule-name}/action

---

Creates role-based access permissions (RBAC) associated with a role.

### Resource URIs

URI	Description
<base_URI>/config/running/rule	Creates RBAC associated with a role.

### Parameters

*index*

Specifies a numeric identifier for the rule.

**action**

Specifies whether the user is accepted or rejected while attempting to execute the specified command.

**operation**

Specifies the type of operation permitted.

**role**

Specifies the name of the role.

**command**

Specifies the command for which access is defined.

### Usage Guidelines

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

The switch obtains its configuration from the principal node. Enabling this feature solves most node-segmentation issues.

### Examples

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

### URI

http://host:80/config/runnin/rule/5

### Request Body

None

## Response Body

```
<rule xmlns="urn:brocade.com:mgmt:brocade-aaa" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/rule/5">
  <index>5</index>
  <action>reject</action>
  <operation>read-write</operation>
  <role>testRole</role>
  <command y:self="/rest/config/running/rule/5/command">
    <show y:self="/rest/config/running/rule/5/command/show">
      <running-config y:self="/rest/config/running/rule/5/command/show/running-config">
        </running-config>
      </show>
    </command>
  </rule>
```

The following example uses the PATCH option to modify the RBAC associated with a role.

## URI

http://host:80/rest/config/running/rule/5

## Request Body

```
<rule>
  <index>5</index>
  <action>reject</action>
  <operation>read-write</operation>
  <role>testRole</role>
</rule>
```

## Response Body

None

The following example uses the DELETE option to delete the RBAC associated with a role.

## URI

http://host:80/rest/config/running/rule/5

## Request Body

None

## Response Body

None

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

Displays the running-config rule for a user.

### Resource URIs

URI	Description
<base_URI>/config/running/rule/{rule-name}/command/show running-config	Displays the running-config rule.

### Parameters

*index*

Specifies a numeric identifier for the rule.

**action**

Specifies whether the user is accepted or rejected while attempting to execute the specified command.

**operation**

Specifies the type of operation permitted.

**role**

Specifies the name of the role.

**command**

Specifies the command for which access is defined.

### Usage Guidelines

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

The switch obtains its configuration from the principal node. Enabling this feature solves most node-segmentation issues.

### Examples

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

### URI

http://host:80/config/runnin//rule/{rule-name}/command/show running-config

### Request Body

None



## Response Body

```
<rule xmlns="urn:brocade.com:mgmt:brocade-aaa" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/rule/5">
  <index>5</index>
  <action>reject</action>
  <operation>read-write</operation>
  <role>testRole</role>
  <command y:self="/rest/config/running/rule/5/command">
    <show y:self="/rest/config/running/rule/5/command/show">
      <running-config y:self="/rest/config/running/rule/5/command/show/running-config">
        </running-config>
      </show>
    </command>
  </rule>
```

The following example uses the PATCH option to modify the rule .

## URI

http://host:80/rest/config/running/rule/{rule-name}/command/show running-config

## Request Body

```
<rule>
  <index>5</index>
  <command>
    <show>
      <running-config>
      </running-config>
    </show>
  </command>
</rule>
```

## Response Body

None

The following example uses the DELETE option to delete the rule.

## URI

http://host:80/rest/config/running/rule/{rule-name}

## Request Body

None

## Response Body

None

## sflow

Configures, modifies, or retrieves sFlow configuration.

### Resource URIs

URI	Description
<base_URI>/config/running/sflow	sFlow configuration.

GET URIs	Description
<base_URI>/config/running/sflow	Retrieves sFlow configuration.
<base_URI>/config/running/sflow/agent-address	Retrieves sFlow agent-ID address.
<base_URI>/config/running/sflow/enable	Retrieves if sFlow is enabled globally or not.
<base_URI>/config/running/sflow/source-interface	Retrieves sFlow source IP interface.
<base_URI>/config/running/sflow/source-interface/interface-name	Retrieves the sFlow interface information.
<base_URI>/config/running/sflow/collector/{collector-ip-address}/{collector-port-number}/{use-vrf}	Retrieves sFlow collector configuration.
<base_URI>/config/running/sflow/polling-interval	Retrieves interface counter polling interval details.
<base_URI>/config/running/sflow/sample-rate	Retrieves interface sampling rate.
<base_URI>/config/running/sflow/update-destination-mac	Retrieves the state of Update Destination MAC for routed packets feature.

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-	Configures sFlow source interface.

PATCH URIs	Payload	Description
	type}</interface-type><interface-name>{loopback:intf-loopback-port-type}</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.
<base_URI>/config/running/sflow/update-destination-mac	<sflow><update-destination-mac>true</update-destination-mac></sflow>	Configures sFlow Update Destination MAC for routed packets.

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
<base_URI>/config/running/sflow/update-destination-mac

## 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>
</sflow>
```

```

    <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

Configures, modifies, or retrieves FRU threshold and alert setting.

### Resource URIs

GET URIs	Description
<base_URI>/config/running/system-monitor	Retrieves FRU threshold and alert setting.
<base_URI>/config/running/system-monitor/fan	Retrieves threshold and alert setting for component: FAN.
<base_URI>/config/running/system-monitor/power	Retrieves threshold and alert setting for component: POWER SUPPLY.
<base_URI>/config/running/system-monitor/temp	Retrieves threshold and alert setting for component: TEMPERATURE SENSOR.
<base_URI>/config/running/system-monitor/cid-card	Retrieves threshold and alert setting for component: CIS-CARD.
<base_URI>/config/running/system-monitor/sfp	Retrieves threshold and alert setting for component: SFP.
<base_URI>/config/running/system-monitor/compact-flash	Retrieves threshold component: COMPACT-FLASH.
<base_URI>/config/running/system-monitor/mm	Retrieves threshold setting for component: MM.
<base_URI>/config/running/system-monitor/linecard	Retrieves threshold and alert setting for component: LINECARD.
<base_URI>/config/running/system-monitor/sfm	Retrieves threshold setting for component: SFM.
<base_URI>/config/running/system-monitor/port	Retrieves threshold, alert and action settings for Port CRC Monitoring

PUT URIs	Payload	Description
<base_URI>/config/running/system-monitor/fan/threshold/marginal-threshold	<marginal-threshold>(unit32)</marginal-threshold>	Configures minimum number contributing to MARGINAL state of the Fan component.
<base_URI>/config/running/system-monitor/fan/threshold/down-threshold	<down-threshold>(unit32)</down-threshold>	Configures minimum number contributing to DOWN state of the Fan component.
<base_URI>/config/running/system-monitor/fan/alert/state	<state>removed</state>	Configures alerts for Fan state.
<base_URI>/config/running/system-monitor/fan/alert/action	<action>raslog</action>	Configure action to be taken.

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

Configures, modifies, or retrieves Transient Buffer Congestion Detection settings.

### Resource URIs

GET URIs	Description
<base_URI>/config/running/system-monitor/tm/discard-packet/threshold	Traffic Manager discard packet monitoring.
<base_URI>/config/running/system-monitor/tm/discard-packet/logging-interval	Traffic Manager discard packet monitoring.
<base_URI>/config/running/system-monitor/tm/discard-voq-packet/threshold	Traffic Manager VOQ discarded packets
<base_URI>/config/running/system-monitor/tm/discard-voq-packet/logging-interval	Traffic Manager VOQ discarded packets
<base_URI>/config/running/system-monitor/tm/delete-packet/threshold	Traffic Manager VOQ deleted packet monitoring
<base_URI>/config/running/system-monitor/tm/delete-packet/logging-interval	Traffic Manager VOQ deleted packet monitoring

PUT URIs	Payload	Description
<base_URI>/config/running/system-monitor/tm/discard-packet/threshold	<threshold>{uint32}</threshold>	Sets threshold for Traffic Manager discard packet monitoring.
<base_URI>/config/running/system-monitor/tm/discard-packet/logging-interval	<logging-interval>{uint16}</logging-interval>	Sets logging interval for Traffic Manager discard packet monitoring.
<base_URI>/config/running/system-monitor/tm/discard-voq-packet/threshold	<threshold>{uint32}</threshold>	Sets threshold for Traffic Manager VOQ discard packet monitoring.
<base_URI>/config/running/system-monitor/tm/discard-voq-packet/logging-interval	<logging-interval>{uint16}</logging-interval>	Sets logging interval for Traffic Manager VOQ discard packet monitoring.
<base_URI>/config/running/system-monitor/tm/delete-packet/threshold	<threshold>{uint32}</threshold>	Sets threshold for Traffic Manager deleted packet monitoring.
<base_URI>/config/running/system-monitor/tm/delete-packet/logging-interval	<logging-interval>{uint16}</logging-interval>	Sets logging interval for Traffic Manager deleted packet monitoring.

PATCH URIs	Payload	Description
<base_URI>/config/running/system-monitor/tm/discard-packet	<discard-packet><threshold>{uint32}	Sets threshold for Traffic Manager discard packet monitoring.

PATCH URIs	Payload	Description
	<code>}&lt;/threshold&gt;&lt;/discard-packet&gt;</code>	
<code>&lt;base_URI&gt;/config/running/system-monitor/tm/discard-packet</code>	<code>&lt;discard-packet&gt;&lt;logging-interval&gt;{uint16}&lt;/logging-interval&gt;&lt;/discard-packet&gt;</code>	Sets logging interval for Traffic Manager discard packet monitoring.
<code>&lt;base_URI&gt;/config/running/system-monitor/tm/discard-voq-packet</code>	<code>&lt;discard-voq-packet&gt;&lt;threshold&gt;{uint32}&lt;/threshold&gt;&lt;/discard-voq-packet&gt;</code>	Sets threshold for Traffic Manager VOQ discard packet monitoring.
<code>&lt;base_URI&gt;/config/running/system-monitor/tm/discard-voq-packet</code>	<code>&lt;discard-voq-packet&gt;&lt;logging-interval&gt;{uint16}&lt;/logging-interval&gt;&lt;/discard-voq-packet&gt;</code>	Sets logging interval for Traffic Manager VOQ discard packet monitoring.
<code>&lt;base_URI&gt;/config/running/system-monitor/tm/delete-packet</code>	<code>&lt;delete-packet&gt;&lt;threshold&gt;{uint32}&lt;/threshold&gt;&lt;/delete-packet&gt;</code>	Sets threshold for Traffic Manager deleted packet monitoring.
<code>&lt;base_URI&gt;/config/running/system-monitor/tm/delete-packet</code>	<code>&lt;delete-packet&gt;&lt;logging-interval&gt;{uint16}&lt;/logging-interval&gt;&lt;/delete-packet&gt;</code>	Sets logging interval for Traffic Manager deleted packet monitoring.

DELETE URIs
<code>&lt;base_URI&gt;/config/running/system-monitor/tm/discard-packet/threshold</code>
<code>&lt;base_URI&gt;/config/running/system-monitor/tm/discard-packet/logging-interval</code>
<code>&lt;base_URI&gt;/config/running/system-monitor/tm/discard-voq-packet/threshold</code>
<code>&lt;base_URI&gt;/config/running/system-monitor/tm/discard-voq-packet/logging-interval</code>
<code>&lt;base_URI&gt;/config/running/system-monitor/tm/delete-packet/threshold</code>
<code>&lt;base_URI&gt;/config/running/system-monitor/tm/delete-packet/logging-interval</code>

## 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

Configures, modifies, or retrieves FRU mail settings.

### Resource URIs

URI	Description
<base_URI>/config/running/system-monitor-mail	Configures the FRU email alerts.
<base_URI>/config/running/system-monitor-mail/fru	FRU mail settings. Refer to system-monitor-mail/fru for more information.
<base_URI>/config/running/system-monitor-mail/interface	Interface mail settings. Refer to system-monitor-mail/interface for more information.
<base_URI>/config/running/system-monitor-mail/relay	Relay IP mail settings. Refer to system-monitor-mail/relay for more information.
<base_URI>/config/running/system-monitor-mail/security	Security mail settings. Refer to system-monitor-mail/security for more information.
<base_URI>/config/running/system-monitor-mail/sfp	SFP mail settings. Refer to system-monitor-mail/sfp for more information.

POST URI	Payload	Description
/rest/config/running/system-monitor-mail	<relay><host-ip>{inet:host}</host-ip></relay>	Creates FRU email alerts.

### Parameters

*fru*

Configures FRU mail settings.

*interface*

Configures interface mail settings.

*relay*

Configures relay IP mail settings.

*security*

Configures security mail settings.

*sfp*

Configures SFP mail settings.

### Usage Guidelines

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



## Examples

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

### URI

http://host:80/rest/config/running/system-monitor-mail

### Request Body

None

### Response Body

```
<system-monitor-mail xmlns="urn:brocade.com:mgmt:brocade-system-monitor" xmlns:y="http://
brocade.com/ns/rest"
y:self="/rest/config/running/system-monitor-mail">
  <fru y:self="/rest/config/running/system-monitor-mail/fru"/>
  <sfp y:self="/rest/config/running/system-monitor-mail/sfp"/>
  <security y:self="/rest/config/running/system-monitor-mail/security"/>
  <interface y:self="/rest/config/running/system-monitor-mail/interface"/>
  <relay y:self="/rest/config/running/system-monitor-mail/relay/10.20.38.100"/>
</system-monitor-mail>
```

## system-monitor-mail/fru

Configures, modifies, or retrieves FRU mail settings.

### Resource URIs

URI	Description
<base_URI>/config/running/system-monitor-mail	Configures the FRU email alerts..
<base_URI>/config/running/system-monitor-mail/fru	FRU mail settings.

POST URI	Payload	Description
/rest/config/running/system-monitor-mail/fru	<email-list><email>(string)</email></email-list>	Configures email alerts for the FRUs.

PUT URI	Payload	Description
/rest/config/running/system-monitor-mail/fru/enable	<enable>true</enable>	Modifies email settings for the FRUs.

### Parameters

*email*

Specifies e-mail address for FRU alerts.

*enable*

Enables FRU e-mail alerts.

### Usage Guidelines

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

### Examples

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

### URI

http://host:80/rest/config/running/system-monitor-mail/fru

### Request Body

None

## Response Body

```
<fru y:self="/rest/config/running/system-monitor-mail/fru">
  <enable>true</enable>
  <email-list y:self="/rest/config/running/system-monitor-mail/fru/email-list/
abc@brocade.com">
    <email>abc@brocade.com</email>
  </email-list>
</fru>
```

## system-monitor-mail/interface

Configures, modifies, or retrieves interface mail settings.

### Resource URIs

URI	Description
<base_URI>/config/running/system-monitor-mail	Configures the FRU email alerts.
<base_URI>/config/running/system-monitor-mail/interface	Configures email alerts for the interface.

POST URI	Payload	Description
/rest/config/running/system-monitor-mail/interface	<email-list><email>(string)</email></email-list>	Configures email address for interface.

PUT URI	Payload	Description
/rest/config/running/system-monitor-mail/interface/enable	<enable>true</enable>	Modifies email settings for interface.

### Parameters

*email*

Specifies e-mail address for interface alerts.

*enable*

Enables interface e-mail alerts.

### Usage Guidelines

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

### Examples

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

### URI

http://host:80/rest/config/running/system-monitor-mail/interface

### Request Body

None

## Response Body

```
<interface y:self="/rest/config/running/system-monitor-mail/interface">
  <enable>true</enable>
  <email-list y:self="/rest/config/running/system-monitor-mail/interface/email-list/
abc1@brocade.com">
    <email>abc1@brocade.com</email>
  </email-list>
</interface>
```

## system-monitor-mail/relay

---

Configures, modifies, or retrieves relay IP mail settings.

### Resource URIs

URI	Description
<base_URI>/config/running/system-monitor-mail	Configures the FRU email alerts.
<base_URI>/config/running/system-monitor-mail/relay	Relay IP mail settings.

### Parameters

*host-ip*

Specifies host IP address.

*domain-name*

Specifies domain server name.

### Usage Guidelines

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

### Examples

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

### URI

http://host:80/rest/config/running/system-monitor-mail/relay

### Request Body

None

### Response Body

```
<relay y:self="/rest/config/running/system-monitor-mail/relay/10.20.38.100">  
  <host-ip>10.20.38.100</host-ip>  
  <domain-name>domain1</domain-name>  
</relay>
```

The following is an example of the POST operation to configure the relay host for e-mail to work in a non-DNS environment.

## URI

http://host:80/rest/config/running/system-monitor-mail

## Request Body

```
<relay>
  <host-ip>10.20.38.120</host-ip>
  <domain-name>domain1</domain-name>
</relay>
```

## Response Body

None

## system-monitor-mail/security

Configures, modifies, or retrieves security email settings.

### Resource URIs

URI	Description
<base_URI>/config/running/system-monitor-mail	Configures the FRU email alerts.
<base_URI>/config/running/system-monitor-mail/security	Security email settings.

POST URIs	Payload	Description
/rest/config/running/system-monitor-mail/security	<email-list><email>(string)</email></email-list>	Configures the security email alerts.

PUT URIs	Payload	Description
/rest/config/running/system-monitor-mail/security/enable	<enable>true</enable>	Modifies the security email alerts.

### Parameters

*email*

Specifies e-mail address for security alerts.

*enable*

Enables security e-mail alerts.

### Usage Guidelines

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

### Examples

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

### URI

http://host:80/rest/config/running/system-monitor-mail/security

### Request Body

None



## Response Body

```
<security y:self="/rest/config/running/system-monitor-mail/security">
  <enable>true</enable>
  <email-list y:self="/rest/config/running/system-monitor-mail/security/email-list/
abc@brocade.com">
    <email>abc@brocade.com</email>
  </email-list>
</security>
```

The following is an example of the DELETE operation to remove the security e-mail settings.

## URI

http://host:80/rest/config/running/system-monitor-mail/security

## Request Body

None

## Response Body

None

## system-monitor-mail/sfp

Configures, modifies, or retrieves SFP email settings.

### Resource URIs

URI	Description
<base_URI>/config/running/system-monitor-mail	Configures the FRU email alerts.
<base_URI>/config/running/system-monitor-mail/sfp	Configures email alerts for the SFP.

POST URIs	Payload	Description
/rest/config/running/system-monitor-mail/sfp	<email-list><email>(string)</email></email-list>	Configures a new email alerts for the SFP.

PUT URIs	Payload	Description
/rest/config/running/system-monitor-mail/sfp/enable	<enable>true</enable>	Modifies the SFP email alert.

### Parameters

*email*

Specifies e-mail address for SFP alerts.

*enable*

Enables sfp e-mail alerts.

### Usage Guidelines

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

### Examples

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

### URI

http://host:80/rest/config/running/system-monitor-mail/sfp

### Request Body

None

## Response Body

```
sfp y:self="/rest/config/running/system-monitor-mail/sfp">
  <enable>true</enable>
  <email-list y:self="/rest/config/running/system-monitor-mail/sfp/email-list/
abc1@brocade.com">
    <email>abc1@brocade.com</email>
  </email-list>
</sfp>
```

## tacacs-server

Configures, modifies, or retrieves TACACS+ server configuration.

### Resource URIs

URI	Description
<base_URI>/config/running/tacacs-server	TACACS+ server.

### Parameters

*hostname*

Specifies the IP address or domain name of the TACACS+ server. IPv4 and IPv6 addresses are supported.

*use-vrf*

Specifies the VRF name.

*encryption-level*

Specifies the level of encryption of the key.

*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

Configures topology VLAN group for L2 protocols.

### Resource URIs

URI	Description
<base_URI>/config/running/topology-group	Configures topology vlan group for L2 protocols.

GET URIs	Description
<base_URI>/config/running/topology-group	Retrieves topology group configuration details.
<base_URI>/config/running/topology-group/{group-id}	Retrieves information for a particular topology group.
<base_URI>/config/running/topology-group/{group-id}/master-vlan	Retrieves information about master VLAN.
<base_URI>/config/running/topology-group/{group-id}/member-vlan	Retrieves information about member VLAN.

POST URIs	Payload	Description
<base_URI>/config/running/topology-group	<topology-group><topology-group-id>(unit32)</topology-group-id></topology-group>	Configures topology group.

PATCH URIs	Payload	Description
<base_URI>/config/running/topology-group/{group-id}/master-vlan	<master-vlan>(unit32)</master-vlan>	Configures master VLAN.
<base_URI>/config/running/topology-group/{group-id}/member-vlan	<member-vlan><add>(unit32)</add></member-vlan>	Adds member VLAN.
<base_URI>/config/running/topology-group/{group-id}/member-vlan	<member-vlan><remove>(unit32)</remove></member-vlan>	Removes member VLAN.
<base_URI>/config/running/topology-group/{group-id}/member-vlan/remove	<remove>(unit32)</remove>	Removes member VLAN.

PUT URIs	Payload	Description
	<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

Manages username and other related settings for the system default accounts, *root*, *admin*, *user*, and other user created accounts.

### Resource URIs

URI	Description
/rest/config/running/data/username	Username configuration and management.

POST URIs	Payload	Description
/rest/config/running/data/username	<name> <{name}> </name> <password> <{password}> </password> <role> <{role}> </role>	Configures the username, password, and role for a user account. The system default accounts, <i>root</i> , <i>admin</i> , <i>user</i> , and user defined accounts can be configured.

DELETE URIs
/rest/config/running/data/username

### Usage Guidelines

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

### Parameters

**name**

The name of the user account being configured. Can be one of the system default accounts, *root*, *admin* and *user*. User created accounts can also be managed through this REST call.

**password**

The password for the account being managed.

**role**

The role of the account being managed.

### Examples

The following example configures the system default *admin* account for the device.

### URI

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

## Request Body

```
<name>
  admin
</name>
<password>
  passwordadmin
</password>
<role>
  admin
</role>
```

## Response Body

None

## vlan

Configures a VLAN.

### Resource URIs

URI	Description
<base_URI>/config/running/vlan	Configures a VLAN.

GET URIs	Description
<base_URI>/config/running/vlan/{vlan-num}/ip/pim	Configures IP PIM on a VLAN.
<base_URI>/config/running/vlan/{vlan-num}/ip/pim/snooping	Configures IP PIM snooping on a VLAN.
<base_URI>/config/running/vlan/{vlan-num}/ip/pim/snooping/enable	Enables IP PIM snooping on a VLAN.
<base_URI>/config/running/vlan/{vlan-num}/ip/igmp	Configures IGMP.
<base_URI>/config/running/vlan/{vlan-num}/ip/igmp/snooping	Configures IGMP snooping on a VLAN.
<base_URI>/config/running/vlan/{vlan-num}/ip/igmp/snooping/version	Enables IGMP snooping on a VLAN.
<base_URI>/config/running/vlan/{vlan-num}/ip/igmp/snooping/last-member-query-interval	Configures the IGMP snooping last-member query interval.
<base_URI>/config/running/vlan/{vlan-num}/ip/igmp/snooping/query-interval	Configures the IGMP snooping query interval.
<base_URI>/config/running/vlan/{vlan-num}/ip/igmp/snooping/query-max-response-time	Configures the maximum response time for IGMP snooping queries.
<base_URI>/config/running/vlan/{vlan-num}/ip/igmp/snooping/enable	Enables IGMP snooping on a VLAN.
<base_URI>/config/running/vlan/{vlan-num}/ip/igmp/snooping/fast-leave	Enables IGMP snooping fast-leave processing for a VLAN. This allows the removal of an interface from the forwarding table without sending out group-specific queries to the interface.
<base_URI>/config/running/vlan/{vlan-num}/ip/igmp/snooping/querier	Configures the IGMP snooping querier on a VLAN.

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/{igmpl3-sg-addr}/interface/{igmps-interface-type},{interface-name}

## Parameters

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

Specifies the the IGMP snooping last-member query interval time in milliseconds. Range is from 100 through 25500 milliseconds. The default is 1000.

### *query-interval*

Specifies the IGMP query interval time in seconds. Range is from 1 through 18000 seconds. The default is 125.

### *query-max-response-time*

Specifies the maximum response time for IGMP queries for an interface in seconds. Range is from 1 through 25 seconds. The default is 10.

### *version*

Specifies the IGMP version number on a device: 1, 2, or 3. Version 2 is the default.

## Usage Guidelines

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

## Examples

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

### URI

http://host:80/rest/config/running/vlan/11/ip/igmp

### Request Body

None

### Response Body

```
<igmp xmlns="urn:brocade.com:mgmt:brocade-igmp-snooping" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/vlan/11/ip/igmp">
  <snooping y:self="/rest/config/running/vlan/11/ip/igmp/snooping">
    <version>3</version>
    <querier y:self="/rest/config/running/vlan/11/ip/igmp/snooping/querier">
    </querier>
    <mrouter y:self="/rest/config/running/vlan/11/ip/igmp/snooping/mrouter">
    </mrouter>
  </snooping>
</igmp>
```

The following is an example of the POST operation to configure a VLAN port member to be a multicast router interface.

### URI

http://host:80/rest/config/running/vlan/11/ip/igmp/snooping/mrouter

### Request Body

```
<interface><igmps-if-type>ethernet</igmps-if-type><value>3/12</value></interface>
```

### Response Body

None

The following is an example of the DELETE operation to remove IGMP snooping last-member query interval.



## URI

http://host:80/rest/config/running/vlan/{vlan-num}/ip/igmp/snooping/last-member-query-interval

## Request Body

None

## Response Body

None

## vlan/dot1q

Configures, modifies, or retrieves VLAN dot1q commands.

### Resource URIs

URI	Description
<base_URI>/config/running/vlan	VLAN commands.

GET URIs	Description
<base_URI>/config/running/vlan	VLAN commands.
<base_URI>/config/running/vlan/dot1q	Dot1q parameters.
<base_URI>/config/running/vlan/dot1q/tag/native	Retrieves Dot1q parameter.

PUT URI	Payload	Description
<base_URI>/config/running/vlan/dot1q/tag/native	<native></native>	Configures Dot1q parameter.

DELETE URIs
<base_URI>/config/running/vlan/dot1q/tag/native

### Parameters

*native*

Enables tagged behavior for native-VLANs.

### Usage Guidelines

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

### Examples

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

### URI

http://host:80/rest/config/running/vlan/dot1q/tag/native

### Request Body

None

## Response Body

```
<native xmlns="urn:brocade.com:mgmt:brocade-vlan" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/vlan/dot1q/tag/native">true</native>\r
```

The following example uses the PUT option to configure native tag.

## URI

http://host:80/rest/config/running/vlan/dot1q/tag/native

## Request Body

```
<native></native>
```

## Response Body

None

The following example uses the DELETE option to remove Dot1q configuration.

## URI

http://host:80/rest/config/running/vlan/dot1q/tag/native

## Request Body

None

## Response Body

None

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

Configures, modifies, or retrieves VLAN-mode Loop Detection configuration.

### Resource URIs

URI	Description
<base_URI>/config/running/vlan/{vlan-name}/loop-detection	Configures, modifies, or retrieves VLAN-mode Loop Detection status.

GET URIs	Description
<base_URI>/config/running/vlan/{vlan-name}/loop-detection	Displays VLAN-mode Loop Detection configuration details.

PATCH URIs	Payload	Description
<base_URI>/config/running/vlan/{vlan-name}	<vlan><loop-detection>true</loop-detection></vlan>	Enables Loop Protection at the VLAN level.

PUT URIs	Payload	Description
<base_URI>/config/running/vlan/{vlan-name}/loop-detection	<loop-detection>true</loop-detection>	Enables Loop Protection at the VLAN level.

### Parameters

*vlan-name*

Displays the administrative name of the VLAN.

### Usage Guidelines

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

### Examples

The following example uses the GET option to retrieve the loop detection status.

### URI

http://host:80/rest/config/running/vlan/40/loop-detection

### Request Body

None

## Response Body

```
<loop-detection xmlns="urn:brocade.com:mgmt:brocade-interface" xmlns:y="http://  
brocade.com/ns/rest"  
y:self="/rest/config/running/vlan/40/loop-detection">true</loop-detection>
```

The following example uses the PUT option to enable loop detection.

## URI

http://host:80/rest/config/running/vlan/40/loop-detection

## Request Body

```
<loop-detection>true</loop-detection>
```

## Response Body

none

## vlan/{vlan-name}/mac

---

Configures MAC access group.

### Resource URIs

URI	Description
http://host:80/rest/config/running/vlan/{vlan-name}/mac	Configures MAC access group.

### Usage Guidelines

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

### Examples

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

#### URI

http://host:80/rest/config/running/vlan/445/mac

#### Request Body

None

#### Response Body

```
<access-group xmlns="urn:brocade.com:mgmt:brocade-mac-access-list" xmlns:y="http://  
brocade.com/ns/rest"  
y:self="/rest/config/running/vlan/445/mac/access-group/mac_1%2Cin">  
  <mac-access-list>mac_1</mac-access-list>  
  <mac-direction>in</mac-direction>  
</access-group>
```

The following example uses the POST option to configure MAC access-group.

#### URI

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

#### Request Body

```
<access-group>  
  <mac-access-list>mac_1</mac-access-list>  
  <mac-direction>out</mac-direction>  
</access-group>
```

## Response Body

None

The following example uses the DELETE a MAC access-group.

## URI

`http://host:80/rest/config/running/vlan/345/mac/access-group/mac-1/out`

## Request Body

None

## Response Body

None

## vrf

Configures, modifies, or retrieves VRF configurations.

### Resource URIs

URI	Description
<base_URI>/config/running/vrf	VRF configurations.

GET URIs	Description
<base_URI>/config/running/vrf/{vrf-name}	VRF configurations.
<base_URI>/config/running/vrf/{vrf-name}/address-family/ipv4/unicast	Retrieves IPv4 address family configurations.
<base_URI>/config/running/vrf/{vrf-name}/address-family/ipv4/unicast/max-route	Retrieves IPv4 address family max route.
<base_URI>/config/running/vrf/{vrf-name}/address-family/ipv6/unicast	Retrieves IPv6 address family configurations.
<base_URI>/config/running/vrf/{vrf-name}/address-family/ipv6/unicast/max-route	Retrieves IPv6 address family max route.
/config/running/vrf/{vrf-name}/rd	Configures route-distinguisher to identify a VRF.
/config/running/vrf/{vrf-name}/vpn-statistics	Enables VPN statistics for a VRF.
/config/running/vrf/{vrf-name}/address-family/ipv4/unicast/import/map	Imports a map.
/config/running/vrf/{vrf-name}/address-family/ipv4/unicast/export/map	Exports a map.
<base_URI>/config/running/vrf/{vrf-name}/ip/router-id	Retrieves IP route details.

POST URIs	Payload	Description
<base_URI>/config/running/	<vrf>(name)</vrf>	Configures VRF.
<base_URI>/config/running/vrf/{vrf-name}/address-family/ipv4	<unicast />	Configures unicast IPv4 address family.
<base_URI>/config/running/vrf/{vrf-name}/address-family/ipv6	<unicast />	Configures unicast IPv6 address family.

PUT URIs	Payload	Description
	<router-id>(ip-address)</router-id>	Configures IP route.



PUT URIs	Payload	Description
<base_URI>/config/running/vrf/{vrf-name}/ip/router-id		
<base_URI>/config/running/vrf/{vrf-name}/address-family/ipv4/unicast/max-route	<max-route>(unit32)</max-route>	Configures unicast IPv4 address family max-route.
<base_URI>/config/running/vrf/{vrf-name}/address-family/ipv6/unicast/max-route	<max-route>(unit32)</max-route>	Configures unicast IPv6 address family max route.
<base_URI>/config/running/vrf/{vrf-name}	<rd>(ASN:NN)</rd>	Configures the route distinguisher.

DELETE URIs
<base_URI>/config/running/vrf/{vrf-name}/ip/router-id
<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

Displays IS-IS neighbor information

### Resource URIs

URI	Description
<base_URI>/operational-state/adj-neighbor-entries-state	Displays IS-IS neighbors adjacencies.
<base_URI>/operational-state/adj-neighbor-entries-state/adj-neighbor	Displays IS-IS specific neighbor adjacencies.
<base_URI>/operational-state/adj-neighbor-entries-state/adj-neighbor/val_neighbor-id_val/adj-state-change-time	Displays Adjacency State Change Time in Seconds.
<base_URI>/operational-state/adj-neighbor-entries-state/adj-neighbor/val_neighbor-id_val/adj-type	Displays Type of ISIS Adjacency.
<base_URI>/operational-state/adj-neighbor-entries-state/adj-neighbor/val_neighbor-id_val/adj-state	Displays Adjacency State.
<base_URI>/operational-state/adj-neighbor-entries-state/adj-neighbor/val_neighbor-id_val/circuit-intf-name	Displays Circuit Interface Name.
<base_URI>/operational-state/adj-neighbor-entries-state/adj-neighbor/val_neighbor-id_val/snpa	Displays Subnetwork Point of Attachment.
<base_URI>/operational-state/adj-neighbor-entries-state/adj-neighbor/val_neighbor-id_val/adj-holding-time	Displays Adjacency Holding Time.
<base_URI>/operational-state/adj-neighbor-entries-state/adj-neighbor/val_neighbor-id_val/adj-priority	Displays Adjacency Priority.

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-unknown</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-unknown</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>
```

## bd-mac-br-state

Displays brief mac bridge-domain information

### 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

Displays the VC peer state.

### Resource URIs

URI	Description
<base_URI> /rest/operational-state/bd-vc-peer-state	Displays the VC peer state.

### Usage Guidelines

Only GET operation is supported. 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

---

Displays the bridge-domain MAC state.

### Resource URIs

URI	Description
<base_URI>/operational-state/bridge-domain-mac-state/{bd-id}	Displays the bridge-domain MAC state.

### Usage Guidelines

Only GET operation is supported. 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

Displays the bridge-domain state.

### Resource URIs

URI	Description
<base_URI>/operational-state/bridge-domain-state	Displays the bridge-domain state.

### Usage Guidelines

Only GET operation is supported. 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>
  </bridge-domain-list>
</bridge-domain-state>
```

```
<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

Displays the bridge-domain list.

### Resource URIs

URI	Description
<base_URI>/operational-state/bridge-domain-state/bridge-domain-list	Displays the bridge-domain list.

### Usage Guidelines

Only GET operation is supported. 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

Retrieves CFM information.

### Resource URIs

URI	Description
<base_URI>/rest/operational-state/cfm-state	Retrieves CFM operational information.
<base_URI>/rest/operational-state/cfm-state/cfm-detail	Retrieves detailed CFM operations information.
<base_URI>/rest/operational-state/cfm-state/cfm-detail/domain	Retrieves CFM domain information.
<base_URI>/rest/operational-state/cfm-state/cfm-detail/domain/(domain-name)/md-level	Retrieves domain level information.
<base_URI>/rest/operational-state/cfm-state/cfm-detail/domain/(domain-name)/ma	Retrieves CFM MA details.
<base_URI>/rest/operational-state/cfm-state/cfm-detail/domain/(domain-name)/ma/(ma-name)/ma-idx	Retrieves MA index details.
<base_URI>/rest/operational-state/cfm-state/cfm-detail/domain/(domain-name)/ma/(ma-name)/ma-type	Retrieves MA type details.
<base_URI>/rest/operational-state/cfm-state/cfm-detail/domain/(domain-name)/ma/(ma-name)/ccm-interval	Retrieves CCM interval information.
<base_URI>/rest/operational-state/cfm-state/cfm-detail/domain/(domain-name)/ma/(ma-name)/vlan-id	Retrieves VLAN ID.
<base_URI>/rest/operational-state/cfm-state/cfm-detail/domain/(domain-name)/ma/(ma-name)/priority	Retrieves MA priority.
<base_URI>/rest/operational-state/cfm-state/cfm-detail/domain/(domain-name)/ma/(ma-name)/mep	Retrieves MEP details.
<base_URI>/rest/operational-state/cfm-state/cfm-detail/domain/(domain-name)/ma/(ma-name)/mep/(mep-id)/mep-direction	Retrieves MEP direction.
<base_URI>/rest/operational-state/cfm-state/cfm-detail/domain/(domain-name)/ma/(ma-name)/mep/(mep-id)/mep-mac	Retrieves MEP MAC.

URI	Description
<base_URI>/rest/operational-state/cfm-state/cfm-detail/domain/(domain-name)/ma/(ma-name)/mep/(mep-id)/mep-port	Retrieves MEP port.
<base_URI>/rest/operational-state/cfm-state/cfm-detail/domain/(domain-name)/ma/(ma-name)/mep/(mep-id)/port-state	Retrieves MEP port state TLV.
<base_URI>/rest/operational-state/cfm-state/cfm-detail/domain/(domain-name)/ma/(ma-name)/mep/(mep-id)/rmep	Retrieves RMEP details.
<base_URI>/rest/operational-state/cfm-state/cfm-detail/domain/(domain-name)/ma/(ma-name)/mep/(mep-id)/rmep/(rmep-id)/rmep-mac	Retrieves 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.

URI	Description
<base_URI>/operational-state/cfm-state/cfm-detail/domain/{md-name}/ma/{ma-name}/mep/{mep-id}/inner-vlan-id	Retrieves inner VLAN ID.
<base_URI>/rest/operational-state/cfm-state/cfm-connectivity/domain/(domain-name)/ma/(ma-name)/priority	Retrieves priority.
<base_URI>/rest/operational-state/cfm-state/cfm-connectivity/domain/(domain-name)/ma/(ma-name)/mep	Retrieves MEP information.
<base_URI>/rest/operational-state/cfm-state/cfm-connectivity/domain/(domain-name)/ma/(ma-name)/mep/(mep-id)/mep-direction	Retrieves MEP direction.
<base_URI>/rest/operational-state/cfm-state/cfm-connectivity/domain/(domain-name)/ma/(ma-name)/mep/(mep-id)/mep-mac	Retrieves MEP MAC.
<base_URI>/rest/operational-state/cfm-state/cfm-connectivity/domain/(domain-name)/ma/(ma-name)/mep/(mep-id)/mep-port	Retrieves MEP port.
<base_URI>/rest/operational-state/cfm-state/cfm-connectivity/domain/(domain-name)/ma/(ma-name)/mep/(mep-id)/port-state	Retrieves MEP port state TLV.
<base_URI>/rest/operational-state/cfm-state/cfm-connectivity/domain/(domain-name)/ma/(ma-name)/mep/(mep-id)/rmep-fail	Retrieves RMEP fail information.
<base_URI>/rest/operational-state/cfm-state/cfm-connectivity/domain/(domain-name)/ma/(ma-name)/mep/(mep-id)/rmep/(rmep-id)/rmep-mac	Retrieves RMEP MAC.
<base_URI>/rest/operational-state/cfm-state/cfm-connectivity/domain/(domain-name)/ma/(ma-name)/mep/(mep-id)/rmep/(rmep-id)/vlan-id	Retrieves RMEP VLAN ID.
<base_URI>/operational-state/cfm-state/cfm-detail/domain/{md-name}/ma/{ma-name}/mep/{mep-id}/rmep/{rmep-id}/inner-vlan-id	Retrieves inner VLAN ID.
<base_URI>/rest/operational-state/cfm-state/cfm-connectivity/domain/(domain-name)/ma/(ma-name)/mep/(mep-id)/rmep/(rmep-id)/rmep-state	Retrieves RMEP state.

## Usage Guidelines

Only GET operation is supported. 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>
```

## cluster-ext-state

Displays cluster client 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

Displays cluster bridge state information

### 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

Displays VLAN and VxLAN information

### 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

Displays 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

Displays IS-IS counter information.

### Resource URIs

URI	Description
<base_URI>/operational-state/counts-state	Display IS-IS counters information
<base_URI>/operational-state/counts-state/areamis	Displays Area Mismatch count
<base_URI>/operational-state/counts-state/maxareamis	Displays Max Area Mismatch count
<base_URI>/operational-state/counts-state/badidlen	Displays System ID Length Mismatch count
<base_URI>/operational-state/counts-state/seqskip	Displays LSP Sequence Number Skipped count
<base_URI>/operational-state/counts-state/seqerr	Displays LSP Sequence error counts
<base_URI>/operational-state/counts-state/l1dbol	Displays Level-1 Database Overload count
<base_URI>/operational-state/counts-state/l2dbol	Displays Level-2 Database Overload count
<base_URI>/operational-state/counts-state/ownpurge	Displays Our LSP Purged count
<base_URI>/operational-state/counts-state/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

Displays CPU utilization statistics of the overall system

### 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>"hsldagtd" </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;bgsd&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

Displays IS-IS debug information

### 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

Displays the status of dhcp snooping option and interface specific information like Circuit and Remote IDs

### 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

Displays dhcp snooping information

### 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>" NONE"</enabled-vlans>
    <trusted-interfaces>" NONE"</trusted-interfaces>
  </dhcp-snooping-state>
</data>
```

## History

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

## erp-clear-state

Clears ERP statistics

### 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

Debug ERP module

### 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

Displays debug information for ERP module

### 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

Displays ERP module operational information

### 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

Displays hardware route information

### 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

Displays IGMP snooping enabled broadcast domain information

### 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-
vlangs/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>

```



```

</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>&quot;&quot;</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>&quot;Ve 4009&quot;</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>&quot;Ve 3250&quot;</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; 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%2Cvlan3100/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%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; 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%2Cvlan3102/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%2Cvlan3104">
      <group-addr>226.0.0.1</group-addr>
      <interface-name>vlan3104</interface-name>

```

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    <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

Displays ISIS operational information.

### 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/is-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

URI	Description
<base_URI>/operational-state/isis-state/global-isis-info/v6-default-redis-metric	Admin Distance
<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



URI	Description
<base_URI>/operational-state/isis-state/global-isis-info/pspf-optimization	PSPF Optimization
<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

URI	Description
<base_URI>/operational-state/isis-state/global-isis-info/pspf6-max-wait	PSPF Max Wait
<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-ptp	Hello Padding for Point-to-Point
<base_URI>/operational-state/isis-state/global-isis-info/ptp-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

URI	Description
<base_URI>/operational-state/isis-state/global-isis-info/nsr-enabled	NSR Enabled
<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

Displays ISIS LSP 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

Displays IS-IS Dynamic Host Name Mapping

### 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

Displays ISIS interface information in brief mode

### 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/is-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/is-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/is-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

Displays IS-IS Interface information

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

URI	Description
<base_URI>/operational-state/isis-state/ interface-detail/isis-intf/val_intf-type_val/ val_intf-number_val/mpls-info/max-reserv- bw	Displays max reserve bandwidth.
<base_URI>/operational-state/isis-state/ interface-detail/isis-intf/val_intf-type_val/ val_intf-number_val/reverse-metric-info/is- global-config	Displays True if reverse metric is enabled at global level.
<base_URI>/operational-state/isis-state/ interface-detail/isis-intf/val_intf-type_val/ val_intf-number_val/reverse-metric-info/ reverse-metric-value	Displays Reverse Metric value
<base_URI>/operational-state/isis-state/ interface-detail/isis-intf/val_intf-type_val/ val_intf-number_val/reverse-metric-info/ rev-metric-whole-lan	Displays whether Reverse Metric is enabled for the whole LAN or not
<base_URI>/operational-state/isis-state/ interface-detail/isis-intf/val_intf-type_val/ val_intf-number_val/reverse-metric-info/ rev-metric-te-def-metric	Displays TE Default metric sub-TLV.
<base_URI>/operational-state/isis-state/ interface-detail/isis-intf/val_intf-type_val/ val_intf-number_val/ldp-sync-info	Displays LDP sync information.
<base_URI>/operational-state/isis-state/ interface-detail/isis-intf/val_intf-type_val/ val_intf-number_val/ldp-sync-info/ldp- sync-enabled	Displays whether LDP sync is enabled or not.
<base_URI>/operational-state/isis-state/ interface-detail/isis-intf/val_intf-type_val/ val_intf-number_val/ldp-sync-info/ldp- sync-hold-down	Displays LDP sync hold-down timer.
<base_URI>/operational-state/isis-state/ interface-detail/isis-intf/val_intf-type_val/ val_intf-number_val/ldp-sync-info/ldp-in- sync	Displays LDP sync status.
<base_URI>/operational-state/isis-state/ interface-detail/isis-intf/val_intf-type_val/ val_intf-number_val/ldp-sync-info/remain- hd-time	Displays Remain HD Timer value.
<base_URI>/operational-state/isis-state/ interface-detail/isis-intf/val_intf-type_val/ val_intf-number_val/ldp-sync-info/ldp- sync-hd-expired	Displays LDP sync HD expired value.
<base_URI>/operational-state/isis-state/ interface-detail/isis-intf/val_intf-type_val/ 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-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>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>
    <llauthfail>0</llauthfail>
    <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/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/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-levell1">
    <level>isis-levell1</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/mppls-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>
</mppls-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/mpls-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>
  </isis-intf>

```

```

    <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

Displays IS-IS IPv4 route information

### 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

URI	Description
<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%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%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.
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.
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>
<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

Displays IS-IS IPv6 route information

### 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/
```

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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-

```

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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">
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  <ipv6-prefix-len>128</ipv6-prefix-len>
  <level>1</level>
  <cost>10</cost>
  <tag>0</tag>
  <flags>0</flags>

```

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    <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-
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    <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

Displays IS-IS configuration

### 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-ntp	Displays Hello padding for ntp
<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/is-address-family-v4/redis-static	Displays redistribution of static route information.
<base_URI>/operational-state/isis-state/router-isis-config/is-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/is-address-family-v4/redis-static/redis-level	Displays static route redistribution level.
<base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v4/redis-static/redis-metric	Displays metric for redistributed static route.
<base_URI>/operational-state/isis-state/router-isis-config/is-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/is-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/is-address-family-v4/redis-connected	Displays redistribution of connected route information.
<base_URI>/operational-state/isis-state/router-isis-config/is-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/is-address-family-v4/redis-connected/redis-level	Displays connected route redistribution level.
<base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v4/redis-connected/redis-metric	Displays metric for redistributed connected route.
<base_URI>/operational-state/isis-state/router-isis-config/is-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/is-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/is-address-family-v4/redis-bgp	Displays redistribution of BGP route information.
<base_URI>/operational-state/isis-state/router-isis-config/is-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/is-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/redis-bgp/redis-enabled	Displays whether redistribution of BGP route is enabled or disabled.
<base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v6/redis-bgp/redis-level	Displays BGP route redistribution level.
<base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v6/redis-bgp/redis-metric	Displays metric for redistributed BGP route.
<base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v6/redis-bgp/redis-metric-type	Displays IS-IS metric type for redistributed BGP routes.
<base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v6/redis-bgp/redis-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/redis-isis	Displays ISIS redistribution information.
<base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v6/redis-isis/redis-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/redis-isis/redis-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/redis-isis/redis-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/redis-isis/redis-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/redis-ospf	Displays redistribution of OSPF route information.
<base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v6/redis-ospf/redis-enabled	Displays whether redistribution of OSPF route is enabled or disabled.
<base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v6/redis-ospf/redis-level	Displays OSPF redistribution level.
<base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v6/redis-ospf/redis-metric	Displays IS-IS metric type for redistributed OSPF routes.
<base_URI>/operational-state/isis-state/router-isis-config/is-address-family-v6/redis-ospf/redis-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-levell-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/is-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/is-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/is-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/is-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/is-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/is-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/is-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

Displays LINK-OAM operational information

### 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

Displays logical interface information

### 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>&quot;&quot;</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

Displays memory utilization statistics of the overall system

### 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

Displays the MCT client operational information.

### Resource URIs

URI	Description
<base_URI>/operational-state/mctd-client-state-state	Displays the MCT client operational information.
<base_URI>/operational-state/mctd-client-state-state/show-cluster-mctd-client	Displays MCT cluster client states.
<base_URI>/operational-state/mctd-client-state-state/show-cluster-mem-vlan/1/num-vlans	Displays the number of VLANs configured.

### Usage Guidelines

Only GET operation is supported. 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

Displays the complete member-vlan information

### Resource URIs

URI	Description
<base_URI>/operational-state/mct-l2ys-state	Displays the complete member-vlan information
<base_URI>/operational-state/mct-l2ys-state/show-cluster-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

Displays MCT operational information.

### Resource URIs

URI	Description
<base_URI>/operational-state/mct-state	Displays MCT operational information.
<base_URI>/operational-state/mct-state/show-cluster/{cluster-id}	Displays the complete client-information list, which includes cluster-id, client-id, client-name, client-esi, client-interface, client-state, active vlan list, configured vlan list
<base_URI>/operational-state/mct-state/show-cluster/{cluster-id}/cluster-name	Displays the cluster name configured.
<base_URI>/operational-state/show-cluster/{cluster-id}/cluster-status	Provides the cluster status: True for Up status, False for Down status.
<base_URI>/operational-state/show-cluster/{cluster-id}/client-isolation-status	Provides the configured client-isolation status(strict mode or Loose mode).
<base_URI>/operational-state/mct-state/show-cluster/1/num-peers	Displays number of peers.
<base_URI>/operational-state/mct-state/show-cluster/1/num-clients	Displays number of clients.
<base_URI>/operational-state/mct-state/show-cluster/1/num-config-vlans	Displays number of configured VLANs.
<base_URI>/operational-state/mct-state/show-cluster/1/num-active-vlans	Displays number of active VLANs.
<base_URI>/operational-state/show-cluster/{cluster-id}/ client-info-list/{cluster-id},{client-id}/client-name	Displays the client-name information.
<base_URI>/operational-state/show-cluster/{cluster-id}/ client-info-list/{cluster-id},{client-id}/client-interface	Displays the configured client-interface information.
<base_URI>/operational-state/mct-state/show-cluster/1/client-info-list/1/1/client-state	Displays client state.
<base_URI>/operational-state/mct-state/show-cluster/1/client-info-list/1/1/num-config-vlans	Displays number of VLANs.

### Usage Guidelines

Only GET operation is supported. 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

Displays the MPLS status.

### 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

Configures, modifies and updates a template of auto-bandwidth parameters that can be applied to a path of an LSP.

### 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/mps-state/auto-bandwidth-template/{name}/associated-paths/{lsp-name}/path-name	Displays the path currently selected for a particular LSP.
<base_URI>/operational-state/mps-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/mps-state/auto-bandwidth-template/aaa

## Request Body

None

## Response Body

```
<auto-bandwidth-template xmlns="urn:brocade.com:mgmt:brocade-mps-operational"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/operational-state/mps-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

Displays the threshold table with the range of current-bandwidth and the corresponding absolute adjustment-threshold.

### 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

This command displays the autobandwidth-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

Displays MPLS dynamic bypass configuration.

### 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.

URI	Description
<base_URI>/operational-state/mpls-state/dynamic-bypass/dynamic-bypass-interface/<if-index>/hop-limit	Displays hop limit.
<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.

URI	Description
<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.
<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

Displays information on forward 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

Displays the MPLS 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>&quot;Ve 101&quot;</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 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

Retrieves LDP information.

### 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>"</inbound-fecs-filtering-prefix-list>
    <inbound-fecs-filtering-prefix-list-exists>>false</inbound-fecs-filtering-prefix-list-exists>
    <outbound-fecs-filtering-prefix-list>"</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

Displays LDP FEC summary.

### 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

Displays information on the LDP FEC prefix of prefixes.

### 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

Displays the 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

Displays the 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

Displays information on the 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

---

LDP interface information.

### 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>"Ve 101"</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

Displays information on the 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>"</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>"</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/mppls-state/ldp/ldp-session/4.4.3.2:0/
session-ldp-stats">
  <ldp-protocol-errors-instance-total y:self="/rest/operational-state/mppls-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/mppls-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

Displays the 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

Displays the MPLS traffic 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/mppls-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/mppls-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/mppls-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/mppls-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/mppls-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/mppls-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/mppls-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/mppls-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/mppls-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/mppls-
state/ldp/statistics/
ldp-protocol-errors-instance-since-clear">
  <protocol-errors y:self="/rest/operational-state/mppls-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/mppls-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/mppls-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/mppls-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/mppls-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/mppls-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/mppls-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/mppls-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/mppls-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/mppls-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

Displays the MPLS 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

Displays MPLS LDP tunnel information.

## 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%2C32">
  <tunnel-destination>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

Displays the MPLS LSP information.

### 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.

URI	Description
<base_URI>/operational-state/mppls-state/lsp/{lsp-name}/auto-bandwidth/is-maximum-bandwidth-inherited	Displays whether maximum bandwidth is inherited.
<base_URI>/operational-state/mppls-state/lsp/{lsp-name}/auto-bandwidth/is-minimum-bandwidth-inherited	Displays whether minimum bandwidth is inherited.
<base_URI>/operational-state/mppls-state/lsp/{lsp-name}/auto-bandwidth/is-overflow-limit-inherited	Displays whether overflow limit is inherited.
<base_URI>/operational-state/mppls-state/lsp/{lsp-name}/auto-bandwidth/is-underflow-limit-inherited	Displays whether underflow limit is inherited.
<base_URI>/operational-state/mppls-state/lsp/{lsp-name}/auto-bandwidth/is-mode-inherited	Displays whether mode is inherited.
<base_URI>/operational-state/mppls-state/lsp/{lsp-name}/auto-bandwidth/is-sample-recording-inherited	Displays whether sample recording is inherited.
<base_URI>/operational-state/mppls-state/lsp/{lsp-name}/auto-bandwidth/working-status	Displays working status.
<base_URI>/operational-state/mppls-state/lsp/{lsp-name}/auto-bandwidth/num-samples-collected	Displays the number of samples collected.
<base_URI>/operational-state/mppls-state/lsp/{lsp-name}/auto-bandwidth/last-sample-traffic-rate	Displays the sampled-bandwidth.
<base_URI>/operational-state/mppls-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/mppls-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/mppls-state/lsp/{lsp-name}/auto-bandwidth/overflow-count	Displays the overflow count.
<base_URI>/operational-state/mppls-state/lsp/{lsp-name}/auto-bandwidth/underflow-count	Displays the underflow count.
<base_URI>/operational-state/mppls-state/lsp/{lsp-name}/auto-bandwidth/time-to-adjustment	Displays the time remaining for the current adjust-interval.
<base_URI>/operational-state/mppls-state/lsp/{lsp-name}/auto-bandwidth/adjustment-status	Displays the adjustment status.

URI	Description
<base_URI>/operational-state/mpls-state/lsp/{lsp-name}/auto-bandwidth/previous-bandwidth	Displays the previous bandwidth.
<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.

URI	Description
<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.
<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
\\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
\\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>"Ve 101"</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>"Ve 101"</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>
<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>
<config-isis-announce-metric>0</config-isis-announce-metric>
<config-path-configured>true</config-path-configured>
<config-path>vel01</config-path>
<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>false</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>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>
<config-setup-prority>7</config-setup-prority>
<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>
<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>
<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>

```

```

<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>0.0.0.0</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>1207959653</instance-out-port-id>
<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>
<cspf-path-hops y:self="/rest/operational-state/mpls-state/lsp/tor4_1140/instances/
1%2C317/cspf-path-hops/
1%2C16.16.16.2">
  <hop-index>1</hop-index>
  <hop-address>16.16.16.2</hop-address>
  <type>strict</type>
</cspf-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>
<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>
<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>
<config-isis-announce-metric>0</config-isis-announce-metric>
<config-path-configured>true</config-path-configured>
<config-path>ve171</config-path>
<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>
<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>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>0.0.0.0</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>  
  </rsdp-session-rro-hops>  
</instances>  
</lsp>
```

## mpls-state/memory

Displays the MPLS memory information.

### 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/mppls-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/mppls-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/mppls-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/mppls-state/memory/pools/1">
  <pool-index>1</pool-index>
  <sub-pools y:self="/rest/operational-state/mppls-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/mppls-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/mppls-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/mpis-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/mpis-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/mpis-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/mpis-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/mpis-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/mpis-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/mpis-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/mpis-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/mpis-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/mpis-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/mpis-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/mpis-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/mpis-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/mpis-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/mpis-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/mpsls-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/mpsls-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/mpsls-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/mpsls-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/mpsls-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/mpsls-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/mpsls-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/mpis-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/mpis-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/mpis-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/mpis-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/mpis-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/mpis-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/mpis-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/mpis-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/mpis-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/mpis-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/mpis-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/mpis-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/mpis-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/mpis-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/mppls-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/mppls-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/mppls-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/mppls-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/mppls-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/mppls-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>CSPP-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

Displays RSVP path information.

## 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/6.6.6.6">
    <hop-address>6.6.6.6</hop-address>
    <hop-type>1</hop-type>
  </path-hops>
  <path-hops y:self="/rest/operational-state/mpls-state/path/vishal/path-hops/3.3.3.3">
    <hop-address>3.3.3.3</hop-address>
    <hop-type>1</hop-type>
  </path-hops>
</path>
```

## mpls-state/policy

Displays the MPLS 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

---

Displays the MPLS admin group entry

### 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

---

Displays routes installed by MPLS.

### 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>&quot;Ve 101&quot;</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

Displays the MPLS RSVP operational information.

### 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>
    <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>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>
    <resverr-rx-since-last-clear>0</resverr-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>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/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>
<interfaces 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/mpls-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>
  </error-counters>
</interfaces>

```

```

    <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>
    <resverr-tx>0</resverr-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>
    <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>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>
    <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>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>
    <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>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>
  </psbs>
</sessions>

```

```

    <session-out-interface>&quot;Ve 101&quot;</session-out-interface>
    <lsp-id>1</lsp-id>
    <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/mppls-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/mppls-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/mppls-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/mppls-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/mppls-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>&quot;Ve 101&quot;</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>&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>
</rsvp>

```

## mpls-state/rsvp/igp-sync

---

Displays the MPLS RSVP IGP synchronization information.

### 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

Displays the LDP interface information.

### 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>&quot;&quot;</interface-tunnel-name>
<bypass-tunnel-interface-name>&quot;&quot;</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/mpls-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>
  <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

Displays the RSVP neighbor operational information.

### 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

Displays MPLS RSVP global 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-statempls-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>
<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>5940294</path-tx>
  <resv-tx>5494960</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>52140</sumrefresh-tx>
  <hello-tx>2747</hello-tx>
  <path-rx>5498060</path-rx>
  <resv-rx>5941541</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>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>
  <resverr-tx-since-last-clear>0</resverr-tx-since-last-clear>
  <pathtear-tx-since-last-clear>3800</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>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>
  <resverr-rx-since-last-clear>0</resverr-rx-since-last-clear>
  <pathtear-rx-since-last-clear>3</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>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

Displays RSVP 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>
<pathtear-tx-since-last-clear>3800</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>52156</sumrefresh-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>
<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>3</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>52216</sumrefresh-rx-since-last-clear>
<hello-rx-since-last-clear>2747</hello-rx-since-last-clear>
</packet-counters>
```

## mpls-state/rsvp/statistics/packet-error-counters

Displays the RSVP error packet 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>
<resvtgear-errors>0</resvtgear-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>
<resvtgear-errors-since-last-clear>0</resvtgear-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

Displays the OAM packet statistics.

### 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/mpis-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/mpis-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/mpis-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/mpis-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/mpis-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/mpis-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/mpis-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/mpis-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/mpis-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/mpis-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>
<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

Displays the MPLS 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

Displays MPLS traffic engineering operational information.

### 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>
    </area>
  </database>
</te>
```

```

    <node y:self="/rest/operational-state/mppls-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/mppls-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/mppls-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

Displays the MPLS TE database SRLG or CSPF group operational information.

### 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

Displays Vxlan transit information.

## Resource URIs

URI	Description
<base_URI>/operational-state/overlay-transit-state/{name}/binded-overlay-acl	Displays Vxlan transit information.

## Usage Guidelines

Only GET operation is supported. 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

Displays packet encapsulation processing information

### 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

Displays the MPLS Quality of Service status.

### 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

Displays the queue entries for an OpenFlow port.

### Resource URIs

URI	Description
<base_URI>/operational-state/queues-state	Displays the queue entries for an OpenFlow port.
<base_URI>/operational-state/queues-state/queue-interface-list	Displays the queue entries for an interface for an OpenFlow port.

### Usage Guidelines

Only GET operation is supported. 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>
```

```

    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 1/1%22/queue-info-list/%22Eth
1/1%22%2C2">
    <interface>Eth 1/1</interface>
    <num>2</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 1/1%22/queue-info-list/%22Eth
1/1%22%2C3">
    <interface>Eth 1/1</interface>
    <num>3</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 1/1%22/queue-info-list/%22Eth
1/1%22%2C4">
    <interface>Eth 1/1</interface>
    <num>4</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 1/1%22/queue-info-list/%22Eth
1/1%22%2C5">
    <interface>Eth 1/1</interface>
    <num>5</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 1/1%22/queue-info-list/%22Eth
1/1%22%2C6">
    <interface>Eth 1/1</interface>
    <num>6</num>
    <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>

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    <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>

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        <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-interface-list>
  </rest>

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    <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>

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</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>

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        <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>

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    <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>

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        <num>6</num>
        <tx-packets>0</tx-packets>
        <tx-bytes>0</tx-bytes>
      </queue-info-list>
      <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 2/2%22/queue-info-list/%22Eth
2/2%22%2C7">
        <interface>Eth 2/2</interface>
        <num>7</num>
        <tx-packets>8693</tx-packets>
        <tx-bytes>669355</tx-bytes>
      </queue-info-list>
    </queue-interface-list>
    <queue-interface-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 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>

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    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 2/12%22/queue-info-list/%22Eth
2/12%22%2C6">
    <interface>Eth 2/12</interface>
    <num>6</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 2/12%22/queue-info-list/%22Eth
2/12%22%2C7">
    <interface>Eth 2/12</interface>
    <num>7</num>
    <tx-packets>8683</tx-packets>
    <tx-bytes>685957</tx-bytes>
    </queue-info-list>
  </queue-interface-list>
  <queue-interface-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 2/31%22">
    <interface-value>Eth 2/31</interface-value>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 2/31%22/queue-info-list/%22Eth
2/31%22%2C0">
    <interface>Eth 2/31</interface>
    <num>0</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 2/31%22/queue-info-list/%22Eth
2/31%22%2C1">
    <interface>Eth 2/31</interface>
    <num>1</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 2/31%22/queue-info-list/%22Eth
2/31%22%2C2">
    <interface>Eth 2/31</interface>
    <num>2</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 2/31%22/queue-info-list/%22Eth
2/31%22%2C3">
    <interface>Eth 2/31</interface>
    <num>3</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 2/31%22/queue-info-list/%22Eth
2/31%22%2C4">
    <interface>Eth 2/31</interface>
    <num>4</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 2/31%22/queue-info-list/%22Eth
2/31%22%2C5">
    <interface>Eth 2/31</interface>

```

```

        <num>5</num>
        <tx-packets>0</tx-packets>
        <tx-bytes>0</tx-bytes>
      </queue-info-list>
      <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 2/31%22/queue-info-list/%22Eth
2/31%22%2C6">
        <interface>Eth 2/31</interface>
        <num>6</num>
        <tx-packets>0</tx-packets>
        <tx-bytes>0</tx-bytes>
      </queue-info-list>
      <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 2/31%22/queue-info-list/%22Eth
2/31%22%2C7">
        <interface>Eth 2/31</interface>
        <num>7</num>
        <tx-packets>8683</tx-packets>
        <tx-bytes>685957</tx-bytes>
      </queue-info-list>
    </queue-interface-list>
    <queue-interface-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 2/32%22">
      <interface-value>Eth 2/32</interface-value>
      <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 2/32%22/queue-info-list/%22Eth
2/32%22%2C0">
        <interface>Eth 2/32</interface>
        <num>0</num>
        <tx-packets>0</tx-packets>
        <tx-bytes>0</tx-bytes>
      </queue-info-list>
      <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 2/32%22/queue-info-list/%22Eth
2/32%22%2C1">
        <interface>Eth 2/32</interface>
        <num>1</num>
        <tx-packets>0</tx-packets>
        <tx-bytes>0</tx-bytes>
      </queue-info-list>
      <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 2/32%22/queue-info-list/%22Eth
2/32%22%2C2">
        <interface>Eth 2/32</interface>
        <num>2</num>
        <tx-packets>0</tx-packets>
        <tx-bytes>0</tx-bytes>
      </queue-info-list>
      <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 2/32%22/queue-info-list/%22Eth
2/32%22%2C3">
        <interface>Eth 2/32</interface>
        <num>3</num>
        <tx-packets>0</tx-packets>
        <tx-bytes>0</tx-bytes>
      </queue-info-list>
      <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 2/32%22/queue-info-list/%22Eth
2/32%22%2C4">
        <interface>Eth 2/32</interface>
        <num>4</num>
        <tx-packets>0</tx-packets>
        <tx-bytes>0</tx-bytes>
      </queue-info-list>

```

```

    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 2/32%22/queue-info-list/%22Eth
2/32%22%2C5">
    <interface>Eth 2/32</interface>
    <num>5</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 2/32%22/queue-info-list/%22Eth
2/32%22%2C6">
    <interface>Eth 2/32</interface>
    <num>6</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 2/32%22/queue-info-list/%22Eth
2/32%22%2C7">
    <interface>Eth 2/32</interface>
    <num>7</num>
    <tx-packets>8683</tx-packets>
    <tx-bytes>685957</tx-bytes>
    </queue-info-list>
</queue-interface-list>
<queue-interface-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 2/35%22">
    <interface-value>Eth 2/35</interface-value>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 2/35%22/queue-info-list/%22Eth
2/35%22%2C0">
    <interface>Eth 2/35</interface>
    <num>0</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 2/35%22/queue-info-list/%22Eth
2/35%22%2C1">
    <interface>Eth 2/35</interface>
    <num>1</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 2/35%22/queue-info-list/%22Eth
2/35%22%2C2">
    <interface>Eth 2/35</interface>
    <num>2</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 2/35%22/queue-info-list/%22Eth
2/35%22%2C3">
    <interface>Eth 2/35</interface>
    <num>3</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 2/35%22/queue-info-list/%22Eth
2/35%22%2C4">
    <interface>Eth 2/35</interface>

```

```

    <num>4</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
  </queue-info-list>
  <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 2/35%22/queue-info-list/%22Eth
2/35%22%2C5">
    <interface>Eth 2/35</interface>
    <num>5</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
  </queue-info-list>
  <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 2/35%22/queue-info-list/%22Eth
2/35%22%2C6">
    <interface>Eth 2/35</interface>
    <num>6</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
  </queue-info-list>
  <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 2/35%22/queue-info-list/%22Eth
2/35%22%2C7">
    <interface>Eth 2/35</interface>
    <num>7</num>
    <tx-packets>8687</tx-packets>
    <tx-bytes>686273</tx-bytes>
  </queue-info-list>
</queue-interface-list>
<queue-interface-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 2/48%22">
  <interface-value>Eth 2/48</interface-value>
  <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 2/48%22/queue-info-list/%22Eth
2/48%22%2C0">
    <interface>Eth 2/48</interface>
    <num>0</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
  </queue-info-list>
  <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 2/48%22/queue-info-list/%22Eth
2/48%22%2C1">
    <interface>Eth 2/48</interface>
    <num>1</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
  </queue-info-list>
  <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 2/48%22/queue-info-list/%22Eth
2/48%22%2C2">
    <interface>Eth 2/48</interface>
    <num>2</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
  </queue-info-list>
  <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 2/48%22/queue-info-list/%22Eth
2/48%22%2C3">
    <interface>Eth 2/48</interface>
    <num>3</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
  </queue-info-list>

```

```

    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 2/48%22/queue-info-list/%22Eth
2/48%22%2C4">
    <interface>Eth 2/48</interface>
    <num>4</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 2/48%22/queue-info-list/%22Eth
2/48%22%2C5">
    <interface>Eth 2/48</interface>
    <num>5</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 2/48%22/queue-info-list/%22Eth
2/48%22%2C6">
    <interface>Eth 2/48</interface>
    <num>6</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 2/48%22/queue-info-list/%22Eth
2/48%22%2C7">
    <interface>Eth 2/48</interface>
    <num>7</num>
    <tx-packets>8691</tx-packets>
    <tx-bytes>686583</tx-bytes>
    </queue-info-list>
  </queue-interface-list>
  <queue-interface-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 2/66%22">
    <interface-value>Eth 2/66</interface-value>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 2/66%22/queue-info-list/%22Eth
2/66%22%2C0">
    <interface>Eth 2/66</interface>
    <num>0</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 2/66%22/queue-info-list/%22Eth
2/66%22%2C1">
    <interface>Eth 2/66</interface>
    <num>1</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 2/66%22/queue-info-list/%22Eth
2/66%22%2C2">
    <interface>Eth 2/66</interface>
    <num>2</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 2/66%22/queue-info-list/%22Eth
2/66%22%2C3">
    <interface>Eth 2/66</interface>

```



```

    <num>3</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
  </queue-info-list>
  <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 2/66%22/queue-info-list/%22Eth
2/66%22%2C4">
    <interface>Eth 2/66</interface>
    <num>4</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
  </queue-info-list>
  <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 2/66%22/queue-info-list/%22Eth
2/66%22%2C5">
    <interface>Eth 2/66</interface>
    <num>5</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
  </queue-info-list>
  <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 2/66%22/queue-info-list/%22Eth
2/66%22%2C6">
    <interface>Eth 2/66</interface>
    <num>6</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
  </queue-info-list>
  <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 2/66%22/queue-info-list/%22Eth
2/66%22%2C7">
    <interface>Eth 2/66</interface>
    <num>7</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
  </queue-info-list>
</queue-interface-list>
<queue-interface-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 2/68%22">
  <interface-value>Eth 2/68</interface-value>
  <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 2/68%22/queue-info-list/%22Eth
2/68%22%2C0">
    <interface>Eth 2/68</interface>
    <num>0</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
  </queue-info-list>
  <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 2/68%22/queue-info-list/%22Eth
2/68%22%2C1">
    <interface>Eth 2/68</interface>
    <num>1</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
  </queue-info-list>
  <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 2/68%22/queue-info-list/%22Eth
2/68%22%2C2">
    <interface>Eth 2/68</interface>
    <num>2</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
  </queue-info-list>

```

```

    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 2/68%22/queue-info-list/%22Eth
2/68%22%2C3">
      <interface>Eth 2/68</interface>
      <num>3</num>
      <tx-packets>0</tx-packets>
      <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 2/68%22/queue-info-list/%22Eth
2/68%22%2C4">
      <interface>Eth 2/68</interface>
      <num>4</num>
      <tx-packets>0</tx-packets>
      <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 2/68%22/queue-info-list/%22Eth
2/68%22%2C5">
      <interface>Eth 2/68</interface>
      <num>5</num>
      <tx-packets>0</tx-packets>
      <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 2/68%22/queue-info-list/%22Eth
2/68%22%2C6">
      <interface>Eth 2/68</interface>
      <num>6</num>
      <tx-packets>0</tx-packets>
      <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/
%22Eth 2/68%22/queue-info-list/%22Eth
2/68%22%2C7">
      <interface>Eth 2/68</interface>
      <num>7</num>
      <tx-packets>0</tx-packets>
      <tx-bytes>0</tx-bytes>
    </queue-info-list>
  </queue-interface-list>
</queues-state>
</data>

```

## sfm-state

Retrieves Switch Fabric Module (SFM) state information.

### Resource URIs

URI	Description
<base_URI>/operational-state/sfm-state	Displays Switch Fabric Module (SFM) state information.
<base_URI>/operational-state/sfm-state/mcast	Displays fabric mcast entries.
<base_URI>/operational-state/sfm-state/statistics	Displays fabric global counters.
<base_URI>/operational-state/sfm-state/links	Displays fabric links.
<base_URI>/operational-state/sfm-state/queue	Displays fabric queues.
<base_URI>/operational-state/sfm-state/thresholds	Displays fabric thresholds.
<base_URI>/operational-state/sfm-state/connectivity	Displays fabric connectivity.
<base_URI>/operational-state/sfm-state/serdesmode	Displays fabric serdes-mode.

### Usage Guidelines

Only GET operation is supported. 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>
```

## Extreme SLX-OS

Extreme SLX-OS  
REST API Guide, 20.8.1 **917**

```

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 36 24 24 24 26
8 0 10 0 10 2
0 2 2 4 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

Displays ISIS IPv4 or IPv6 SPF LOG information.

### Resource URIs

URI	Description
<base_URI>/rest/operational-state/spf-log-state	Displays ISIS IPv4 or IPv6 SPF LOG information.
<base_URI>/rest/operational-state/spf-log-state/{spf-log-version}/spf-log-levels	ISIS SPF LOG Level (Level-1 and level-2
<base_URI>/rest/operational-state/spf-log-state/{spf-log-version}/spf-log-levels/{level}/log-counts	Number of logs
<base_URI>/rest/operational-state/spf-log-state/{spf-log-version}/spf-log-levels/{level}/spf-trigger-count	Number of SPF triggers and run currenty
<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-pspf-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

Displays SR operational information

### 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

Displays bridge domain statistics.

### Resource URIs

URI	Description
<base_URI>/operational-state/sub-interface-statistics-state/bridge-domain-statistics	Displays bridge domain statistics.

### Usage Guidelines

Only GET operation is supported. 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

Displays the bridge domain lif statistics.

Resource URIs

URI	Description
<base_URI>/operational-state/sub-interface-statistics-state/bridge-domain-statistics/lif-statistics	Displays the bridge domain lif statistics.

Usage Guidelines

Only GET operation is supported. 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

Displays TM statistics.

### Resource URIs

URI	Description
<base_URI>/operational-state/tm-state	Displays TM statistics.
<base_URI>/operational-state/tm-state/tmvoq	Displays VOQ information.
<base_URI>/operational-state/tm-state/tmvoqingvalegrvalprioal	Displays ingress, egress and priority.
<base_URI>/operational-state/tm-state/tmdevicestat	Displays device statistics.
<base_URI>/operational-state/tm-state/non-empty-voq	Displays non-empty voqs in the system.
<base_URI>/operational-state/tm-state/tmcpustatsslot	Displays TM voq stats for CPU port per slot.
<base_URI>/operational-state/tm-state/tmcpustatsslotallgrp	Displays TM voq stats for CPU port per slot for all CPU group.
<base_URI>/operational-state/tm-state/tm-top-discard-pkt-data	Displays TM voq stats to get list of top discarded packets.
<base_URI>/operational-state/tm-state/tm-top-max-queue-depth-data	Displays TM voq stats to get list of top max queue depth.
<base_URI>/operational-state/tm-state/tm-max-buff-util-data	Displays snapshot of maximum TM buffer utilization.
<base_URI>/operational-state/tmdevicestatscommon-state	Displays common TM device stats.
<base_URI>/operational-state/tm-state/tmvoqstatistics	Displays a summary of traffic management VOQ maximum queue depth statistics.
<base_URI>/operational-state/tm-state/cngn-mon-dev	Displays device monitoring information.
<base_URI>/operational-state/tm-state/cngn-mon-dev/discard-pkt-threshold	Displays discard packet monitoring threshold.
<base_URI>/operational-state/tm-state/cngn-mon-dev/discard-log-interval	Displays discard packet logging interval.
<base_URI>/operational-state/tm-state/cngn-mon-voq	Displays VOQ monitoring information.
<base_URI>/operational-state/tm-state/cngn-mon-voq/discard-voq-pkt-threshold	Displays VOQ discard packet monitoring threshold.
<base_URI>/operational-state/tm-state/cngn-mon-voq/discard-voq-log-interval	Displays VOQ discard packet logging interval.
<base_URI>/operational-state/tm-state/cngn-mon-del-pkt	Displays delete packet monitoring information.

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

Displays topology group information

### 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

Displays information about IS-IS packet counts.

### Resource URIs

URI	Description
<base_URI>/rest/operational-state/traffic-state	Displays information about IS-IS packet counts
<base_URI>/rest/operational-state/traffic-state/l1-hello-rx	Displays the number of Level-1 hello PDUs received by the device.
<base_URI>/rest/operational-state/traffic-state/l1-hello-tx	Displays the number of Level-1 hello PDUs sent by the device.
<base_URI>/rest/operational-state/traffic-state/l2-hello-rx	Displays the number of Level-2 hello PDUs received by the device.
<base_URI>/rest/operational-state/traffic-state/l2-hello-tx	Displays the number of PTP hello PDUs sent by the device.
<base_URI>/rest/operational-state/traffic-state/pp-hello-rx	Displays the number of PTP hello PDUs received by the device.
<base_URI>/rest/operational-state/traffic-state/pp-hello-tx	Displays the number of Level-1 hello PDUs sent by the device.
<base_URI>/rest/operational-state/traffic-state/l1-lsp-rx	Displays the number of Level-1 link-state PDUs received by the device.
<base_URI>/rest/operational-state/traffic-state/l1-lsp-tx	Displays the number of Level-1 link-state PDUs sent by the device.
<base_URI>/rest/operational-state/traffic-state/l2-lsp-rx	Displays the number of Level-2 link-state PDUs received by the device.
<base_URI>/rest/operational-state/traffic-state/l2-lsp-tx	Displays the number of Level-2 link-state PDUs sent by the device.
<base_URI>/rest/operational-state/traffic-state/l1-csnp-rx	Displays the number of Level-1 Complete Sequence Number PDUs (CSNPs) received by the device.
<base_URI>/rest/operational-state/traffic-state/l1-csnp-tx	Displays the number of Level-1 Complete Sequence Number PDUs (CSNPs) sent by the device.
<base_URI>/rest/operational-state/traffic-state/l2-csnp-rx	Displays the number of Level-2 Complete Sequence Number PDUs (CSNPs) received by the device.
<base_URI>/rest/operational-state/traffic-state/l2-csnp-tx	Displays the number of Level-2 Complete Sequence Number PDUs (CSNPs) sent by the device.
<base_URI>/rest/operational-state/traffic-state/l1-psnp-rx	Displays the number of Level-1 Partial Sequence Number PDUs (PSNPs) received by the device.

URI	Description
<base_URI>/rest/operational-state/traffic-state/l1-psnp-tx	Displays the number of Level-1 Partial Sequence Number PDUs (PSNPs) sent by the device.
<base_URI>/rest/operational-state/traffic-state/l2-psnp-rx	Displays the number of Level-2 Partial Sequence Number PDUs (PSNPs) received by the device.
<base_URI>/rest/operational-state/traffic-state/l2-psnp-tx	Displays the number of Level-2 Partial Sequence Number PDUs (PSNPs) sent by the device.

## Usage Guidelines

Only GET operation is supported. 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

Displays the bd-vc peer state.

### Resource URIs

URI	Description
<base_URI>/operational-state/vc-peer-state	Displays the VC peer state.

### Usage Guidelines

Only GET operation is supported. 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-proto-tnnl>
  </vc-peer-data>
</vc-peer-state>
</data>
```

```
<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

Displays VPN statistics

### 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/l3vpn-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/l3vpn-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/l3vpn-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/l3vpn-106">
      <vrf-name>l3vpn-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/l3vpn-101">
      <vrf-name>l3vpn-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/l3vpn-10">
      <vrf-name>l3vpn-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/l3vpn-103">
      <vrf-name>l3vpn-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/l3vpn-105">
      <vrf-name>l3vpn-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/l3vpn-102">
      <vrf-name>l3vpn-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/l3vpn-104">
      <vrf-name>l3vpn-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/l3vpn-108">
      <vrf-name>l3vpn-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/l3vpn-109">
      <vrf-name>l3vpn-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/l3vpn-11">
      <vrf-name>l3vpn-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/l3vpn-110">
      <vrf-name>l3vpn-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/l3vpn-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/l3vpn-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/l3vpn-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/l3vpn-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/l3vpn-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/l3vpn-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/l3vpn-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/l3vpn-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/l3vpn-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/l3vpn-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/l3vpn-13">
  <vrf-name>l3vpn-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/l3vpn-19">
  <vrf-name>l3vpn-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/l3vpn-14">
  <vrf-name>l3vpn-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/l3vpn-17">
  <vrf-name>l3vpn-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/l3vpn-15">
  <vrf-name>l3vpn-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

Displays Vxlan ACL information.

### Resource URIs

URI	Description
<base_URI>/operational-state/vxlan-acl-state/extended-data/{aclname}/	Displays Vxlan ACL information.

### Usage Guidelines

Only GET operation is supported. 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

---

Retrieves the firmware activation status.

### Resource URIs

URI	Description
<base_URI>/operations/activate-status	Retrieves the firmware activation status.

### Parameters

*overall-status*

Displays overall activation status on the switch.

### Usage Guidelines

Only POST operation is supported.

### Examples

#### URI

`http://host:80/rest/operations/activate-status`

## Request Body

```
<activate-status></activate-status>
```

## Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-firmware'>  
  <overall-status>0</overall-status>  
  <status>0</status>  
</output>
```

## bna-config-cmd

---

Copies configuration data to or from the system.

### 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

Retrieves the status of a previous configuration command.

### 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

Clears all LDP neighbors or a specified LDP neighbor.

### Resource URIs

URI	Description
<base_URI>/operations/clear-mpls-ldp-neighbor	Clears all LDP neighbors or a specified LDP neighbor.

### Parameters

*mpls-clear-all-ldp-sessions*

Specifies to clear all LDP neighbors.

*mpls-clear-one-ldp-sessions*

Specifies the LDP neighbor's IP to be cleared.

### Usage Guidelines

Only POST operation is supported.

### Examples

#### URI

http://host:80/rest/operations/clear-mpls-ldp-neighbor

### Request Body

```
<clear-mpls-ldp-neighbor><mpls-clear-all-ldp-sessions>true</mpls-clear-all-ldp-sessions></clear-mpls-ldp-neighbor>
```

```
<clear-mpls-ldp-neighbor><mpls-clear-one-ldp-sessions>15.15.1.1</mpls-clear-one-ldp-sessions></clear-mpls-ldp-neighbor>
```

### Response Body

None

## clear-mpls-ldp-statistics

---

Clears MPLS LDP control plane statistics.

### Resource URIs

URI	Description
<base_URI>/operations/clear-mpls-ldp-statistics	Clears MPLS LDP control plane statistics.

### Usage Guidelines

Only POST operation is supported.

### Examples

#### URI

http://host:80/rest/operations/clear-mpls-ldp-statistics

### Request Body

```
<clear-mpls-ldp-statistics></clear-mpls-ldp-statistics>
```

### Response Body

None

## clear-mpls-lsp

---

Resets and re-enables tunnel

### Resource URIs

URI	Description
<base_URI>/operations/clear-mpls-lsp	Resets and re-enables tunnel.

### Parameters

*mpls-clear-lsp-name-in*  
Specifies the LSP name.

### Usage Guidelines

Only POST operation is supported.

### Examples

#### URI

http://host:80/rest/operations/clear-mpls-lsp

### Request Body

```
<clear-mpls-lsp><mpls-clear-lsp-name-in>16</mpls-clear-lsp-name-in></clear-mpls-lsp>
```

### Response Body

None



## clear-mpls-rsvp-statistics

---

Clears MPLS RSVP control plane statistics.

### Resource URIs

URI	Description
<base_URI>/operations/clear-mpls-rsvp-statistics	Clears MPLS RSVP control plane statistics.

### Usage Guidelines

Only POST operation is supported.

### Examples

#### URI

http://host:80/rest/operations/clear-mpls-rsvp-statistics

### Request Body

```
<clear-mpls-rsvp-statistics></clear-mpls-rsvp-statistics>
```

### Response Body

None

## clear-mpls-rsvp-statistics-neighbor

Clears all RSVP neighbors or a specified RSVP neighbor.

### Resource URIs

URI	Description
<base_URI>/operations/clear-mpls-rsvp-statistics-neighbor	Clears all RSVP neighbors or a specified RSVP neighbor.

### Parameters

*clear-mpls-rsvp-statistics-neighbor-all*

Specifies to clear all RSVP neighbors.

*clear-mpls-rsvp-statistics-neighbor-address*

Specifies the RSVP neighbor IP to be cleared.

### Usage Guidelines

Only POST operation is supported.

### Examples

#### URI

http://host:80/rest/operations/clear-mpls-rsvp-statistics-neighbor

### Request Body

```
<clear-mpls-rsvp-statistics-neighbor><clear-mpls-rsvp-statistics-neighbor-all>true</clear-mpls-rsvp-statistics-neighbor-all>
</clear-mpls-rsvp-statistics-neighbor>
```

```
<clear-mpls-rsvp-statistics-neighbor><clear-mpls-rsvp-statistics-neighbor-address>6.15.1.15
</clear-mpls-rsvp-statistics-neighbor-address></clear-mpls-rsvp-statistics-neighbor>
```

### Response Body

None

## clear-mpls-statistics

---

Clears MPLS statistics.

### Resource URIs

URI	Description
<base_URI>/operations/clear-mpls-statistics	Clears MPLS statistics.

### Parameters

*mpls-clear-statistics-type*

Specifies one of the following statistics to be cleared - OAM, tunnel, or transit traffic statistics.

*tunnel-name*

Specifies the tunnel name.

### Usage Guidelines

Only POST operation is supported.

### Examples

#### URI

http://host:80/rest/operations/clear-mpls-statistics

### Request Body

```
<clear-mpls-statistics><mpls-clear-statistics-type>3</mpls-clear-statistics-type><tunnel-name>t2</tunnel-name></clear-mpls-statistics>
```

### Response Body

None

## clear-tm-voq-stat-ing-all-egr-all

---

Clears all voq statistics.

### 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-ifname

---

Clears per port voq statistics on all devices.

### Resource URIs

URI	Description
<base_URI>/operations/clear-tm-voq-stat-ing-all-egr-ifname	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-ifname

## Request Body

```
<clear-tm-voq-stat-ing-all-egr-ifname></clear-tm-voq-stat-ing-all-egr-ifname>
```

## clear-tm-voq-stat-slot-id-egr-all

Clears all voq statistics for selected slot.

## Resource URIs

URI	Description
<base_URI>/operations/clear-tm-voq-stat-slot-id-egr-all	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

Clears per port voq statistics for selected slots.

## Resource URIs

URI	Description
<base_URI>/operations/clear-tm-voq-slot-id-egress-port-name	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

Retrieves the firmware level commands.

### Resource URIs

URI	Description
<base_URI>/operations/firmware-download	Retrieves the firmware level commands.

### Parameters

*fwdl-status*

Displays the status. 0 or 1 - Success. Any negative value is error.

*fwdl-msg*

0 - Success but disruptive/non-ISSU upgrade, 1 - Success and ISSU upgrade. Any negative value is error.

### Usage Guidelines

Only POST operation is supported.

### Examples

#### URI

http://host:80/rest/operations/firmware-download

### Request Body (for coldboot)

```
<firmware-download>
  <scp>
    <user>fvt</user>
    <password>pray4green</password>
    <host>10.31.2.25</host>
    <directory>/buildsjc/sre/SQA/nos/slxl6r.1.00/slxl6r.1.00_bld20</directory>
  </scp>
  <coldboot></coldboot>
</firmware-download>
```

### Request Body (for ISSU)

```
<firmware-download xmlns="urn:brocade.com:mgmt:brocade-firmware">
  <ftp>
    <user>fvt</user>
    <password>pray4green</password>
    <host>10.31.2.27</host>
    <directory>/proj/sj_eng/defects/gpai/clone_dist</directory>
  </ftp>
```

```
<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

---

Retrieves the firmware download status.

### Resource URIs

URI	Description
<base_URI>/operations/fwdl-status	Retrieves the firmware download status.

### Parameters

*fwdl-state*

Displays the firmware download state.

*number-of-entries*

Specifies the number of status entries.

*index*

Displays the sequence number for the message.

*blade-name*

Displays the name of the blade.

*message-id*

Displays the message identifier.

*date-and-time-info*

Displays the date and time of the message. The format is YYYY-MM-DD/HH:MM:SS.SSSS.

*message*

Displays the textual description of the status.

### Usage Guidelines

Only POST operation is supported.

### Examples

#### URI

http://host:80/rest/operations/fwdl-status

### Request Body

```
<fwdl-status></fwdl-status>
```

## Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-firmware'>
  <fwdl-state>completed</fwdl-state>
  <number-of-entries>18</number-of-entries>
  <fwdl-entries>
    <index>1</index>
    <blade-name>SW/0</blade-name>
    <message-id>0</message-id>
    <date-and-time-info>2014-06-23/19:31:31</date-and-time-info>
    <message>Firmware install begins.</message>
  </fwdl-entries>
  <fwdl-entries>
    <index>2</index>
    <blade-name>SW/0</blade-name>
    <message-id>0</message-id>
    <date-and-time-info>2014-06-23/19:34:44</date-and-time-info>
    <message>Firmware install ends.</message>
  </fwdl-entries>
  <fwdl-entries>
    <index>3</index>
    <blade-name>SW/1</blade-name>
    <message-id>0</message-id>
    <date-and-time-info>2014-06-23/19:34:44</date-and-time-info>
    <message>Firmware install begins.</message>
  </fwdl-entries>
</output>
```

## get-arp

---

Retrieves the ARP cache information.

### Resource URIs

URI	Description
<base_URI>/operations/get-arp	Retrieves the ARP cache details.

### Parameters

*ip-address*

Displays the IP address of the ARP entry.

*mac-address*

Displays the MAC address of the ARP entry.

*interface-type*

Displays the interface type.

*interface-name*

Displays the interface name.

*is-resolved*

Indicates whether the ARP entry is resolved or not.

*age*

Displays the age of the ARP entry.

*entry-type*

Displays the type of the ARP entry.

### Usage Guidelines

Only POST operation is supported.

### Examples

#### URI

http://host:80/rest/operations/get-arp

### Request Body

```
<get-arp></get-arp>
```

## Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-arp'>
  <arp-entry>
    <ip-address>20.0.0.122</ip-address>
    <mac-address>0005.3379.407a</mac-address>
    <interface-type>unknown</interface-type>
    <interface-name></interface-name>
    <is-resolved>true</is-resolved>
    <age>03:16:05</age>
    <entry-type>dynamic</entry-type>
  </arp-entry>
</output>
```

## get-contained-in-ID

---

Retrieves enclosure related information on embedded platforms.

### Resource URIs

URI	Description
<base_URI>/operations/get-contained-in-ID	Retrieves enclosure related information on embedded platforms.

### Parameters

*contained-in-ID*

Provides present slot ID of switch.

### Usage Guidelines

Only POST operation is supported.

### Examples

#### URI

http://host:80/rest/operations/get-contained-in-ID

### Request Body

```
<get-contained-in-ID></get-contained-in-ID>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-Enclosure-show'>
  <contained-in-ID>Bay 7</contained-in-ID>
</output>
```

## get-interface-detail

Retrieves operational data for all the VLANs, physical interfaces and port-channels.

### Resource URIs

URI	Description
<base_URI>/operations/get-interface-detail	Retrieves operational data for a given VLAN and enumeration of all the interfaces belonging to this VLAN.

### Parameters

*interface-type*

Displays the interface type.

*interface-name*

Displays the interface name.

*port-mode*

Displays the operational mode of the particular interface. This is applicable only for physical interfaces or port-channel interfaces.

*if-name*

Displays the interface display name as in MIB-II's ifTable. However interface-name and interface-type values of this instance forms fully qualified name for this interface.

*if-state*

Displays the current operational state of this interface.

*line-protocol-state*

Displays the 'Line protocol' state of the interface.

*line-protocol-state-info*

Displays the reason for the current line protocol state of the interface.

*hardware-type*

Displays the type of the interface.

*current-hardware-address*

Displays the address of the interface at its protocol sub-layer.

*logical-hardware-address*

Displays the address of the interface at its protocol sub-layer.

*ifindex*

A unique value, greater than zero, for each interface.

*mtu*

Displays the IP MTU value of the interface.

*actual-line-speed*

Displays the actual line speed of this interface.

*configured-line-speed*

Displays the administratively configured line speed of the interface.

*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.

*fec-mode*

Displays the current FEC mode of the interface. FEC mode can be *FC-FEC*, *RS-FEC*, or *Disabled*.

*ifFecCorrectedBlocks*

Displays the number of corrected Blocks. Displays Zero (0) when FEC is *Disabled* or is not supported.

*ifFecUncorrectedBlocks*

Displays the number of uncorrected Blocks. Displays Zero (0) when FEC is *Disabled* or is not supported.

## Usage Guidelines

Only POST operation is supported.

## Examples

## URI

http://host:80/rest/operations/get-interface-detail

## Request Body

```
<get-interface-detail></get-interface-detail>
```

## Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-interface-ext'>
  <interface>
    <interface-type>port-channel</interface-type>
    <interface-name>1</interface-name>
    <port-mode>unknown</port-mode>
    <if-name>Port-channel 1</if-name>
    <if-state>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>
<fec-mode>RC-FEC</fec-mode>
<ifFecCorrectedBlock>10</ifFecCorrectedBlock>
<ifFecUncorrectedBlock>4</ifFecUncorrectedBlock>
</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>
  <fec-mode>RC-FEC</fec-mode>
  <ifFecCorrectedBlock>10</ifFecCorrectedBlock>
  <ifFecUncorrectedBlock>4</ifFecUncorrectedBlock>
</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

Retrieves switch-port/Layer 2 characteristics of the interfaces configured as switchport in the managed device.

### Resource URIs

URI	Description
<base_URI>/operations/get-interface-switchport	Returns switch-port or Layer 2 characteristics of all the interfaces in the managed device.

### Parameters

<i>interface-name</i>	Displays the Interface value.
<i>interface-type</i>	Displays the type of the interface.
<i>mode</i>	Displays the mode of the port-channel.
<i>fcoe-port-enabled</i>	Displays the FCoE capability is enabled on the interface.
<i>ingress-filter-enabled</i>	Indicates if the 'Ingress filtering' is enabled for the interface.
<i>acceptable-frame-type</i>	Displays the switch-port ingress Frame admission policy - whether only tagged Frames are allowed or all.
<i>default-vlan</i>	Displays the 'default vlan' identifier value for this switch-port.
<i>vlanid</i>	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

Retrieves the IP interface details.

## 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

---

Retrieves the time stamp of the last configuration change on the system.

### Resource URIs

URI	Description
<base_URI>/operations/get-last-config-update-time	Retrieves the time stamp of the last configuration change.

### Parameters

*last-config-update-time*

Displays the time stamp of the last configuration change.

### Usage Guidelines

Only POST operation is supported.

### Examples

#### URI

http://host:80/rest/operations/get-last-config-update-time

### Request Body

```
<get-last-config-update-time></get-last-config-update-time>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-vcs'>
  <last-config-update-time>1402481614</last-config-update-time>
</output>
```

## get-last-config-update-time-for-xpaths

Retrieves the time stamp of the last configuration change for xpaths.

### Resource URIs

URI	Description
<base_URI>/operations/get-last-config-update-time-for-xpaths	Retrieves the time stamp of the last configuration change for xpaths.

### Parameters

*xpath-string*

Displays the xpath string.

*last-config-update-time*

Indicates the time stamp of the last configuration change for xpath.

### Usage Guidelines

Only POST operation is supported.

### Examples

#### URI

http://host:80/rest/operations/get-last-config-update-time-for-xpaths

### Request Body

```
<get-last-config-update-time-for-xpaths></get-last-config-update-time-for-xpaths>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-vcs'>
  <last-config-update-time-for-xpaths>
    <xpath-string></xpath-string>
    <last-config-update-time>1402481614</last-config-update-time>
  </last-config-update-time-for-xpaths>
  <last-config-update-time-for-xpaths>
    <xpath-string>/cee-map</xpath-string>
    <last-config-update-time>1401508522</last-config-update-time>
  </last-config-update-time-for-xpaths>
</output>
```



## get-lldp-neighbor-detail

Retrieves the neighbor details of all the interfaces of the managed entity.

### Resource URIs

URI	Description
<base_URI>/operations/get-lldp-neighbor-detail	Retrieves the neighbor details of all the interfaces of the managed entity.

### Parameters

*local-interface-name*

Indicates the local interface display name.

*local-interface-ifindex*

Indicates the local interface IfIndex.

*local-interface-mac*

Indicates the local interface MAC address.

*remote-interface-name*

Indicates the remote interface display name.

*remote-interface-mac*

Indicates the remote interface MAC address.

*dead-interval*

Indicates the dead interval.

*remaining-life*

Indicates the remaining life period.

*remote-chassis-id*

Indicates the remote chassis ID.

*lldp-pdu-transmitted*

Displays the number of LLDP PDUs transmitted from the interface.

*lldp-pdu-received*

Displays the number of LLDP PDUs received by the interface.

*remote-system-name*

Indicates the remote system name.

### Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operations/get-lldp-neighbor-detail

### Request Body

```
<get-lldp-neighbor-detail></get-lldp-neighbor-detail>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-lldp-ext'>
  <lldp-neighbor-detail>
    <local-interface-name>Te 7/0/1</local-interface-name>
    <local-interface-ifindex>201334784</local-interface-ifindex>
    <local-interface-mac>0005.33ee.8006</local-interface-mac>
    <remote-interface-name>port-channel 14/1/10</remote-interface-name>
    <remote-interface-mac>0005.3379.6de7</remote-interface-mac>
    <dead-interval>120</dead-interval>
    <remaining-life>117</remaining-life>
    <remote-chassis-id>0005.3379.6d58</remote-chassis-id>
    <lldp-pdu-transmitted>373</lldp-pdu-transmitted>
    <lldp-pdu-received>372</lldp-pdu-received>
    <remote-system-name>M4</remote-system-name>
  </lldp-neighbor-detail>
  <lldp-neighbor-detail>
    <local-interface-name>Te 7/0/3</local-interface-name>
    <local-interface-ifindex>201351168</local-interface-ifindex>
    <local-interface-mac>0005.33ee.8008</local-interface-mac>
    <remote-interface-name>port1</remote-interface-name>
    <remote-interface-mac>0005.3348.8e4f</remote-interface-mac>
    <dead-interval>120</dead-interval>
    <remaining-life>92</remaining-life>
    <remote-chassis-id>0005.3348.8e4f</remote-chassis-id>
    <lldp-pdu-transmitted>373</lldp-pdu-transmitted>
    <lldp-pdu-received>366</lldp-pdu-received>
  </lldp-neighbor-detail>
  <lldp-neighbor-detail>
    <local-interface-name>Te 7/0/31</local-interface-name>
    <local-interface-ifindex>201580544</local-interface-ifindex>
    <local-interface-mac>0005.33ee.8024</local-interface-mac>
    <remote-interface-name>port-channel 6/0/31</remote-interface-name>
    <remote-interface-mac>0005.33e7.2803</remote-interface-mac>
    <dead-interval>120</dead-interval>
    <remaining-life>116</remaining-life>
    <remote-chassis-id>0005.33e7.27e0</remote-chassis-id>
    <lldp-pdu-transmitted>373</lldp-pdu-transmitted>
    <lldp-pdu-received>373</lldp-pdu-received>
    <remote-system-name>RIGEL-MOR</remote-system-name>
  </lldp-neighbor-detail>
  <has-more>false</has-more>
</output>
```

## get-mac-acl-for-intf

Retrieves the MAC ACL applied on the interfaces.

### Resource URIs

URI	Description
<base_URI>/operations/get-mac-acl-for-intf	Retrieves the MAC ACL applied on the interfaces.

### Parameters

*interface-name*

Displays the interface name.

*interface-type*

Displays the interface type.

*policy-name*

Displays the MAC ACL policy name.

### Usage Guidelines

Only POST operation is supported.

### Examples

#### URI

http://host:80/rest/operations/get-mac-acl-for-intf

### Request Body

```
<get-mac-acl-for-intf></get-mac-acl-for-intf>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-mac-access-list'>
  <interface>
    <interface-name>l/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

Retrieves the operational data for a given MAC entry with MAC type and interface (name and type).

## Resource URIs

URI	Description
<base_URI>/operations/get-mac-address-table	Returns operational data for a given MAC entry and the corresponding details of that MAC entry.

## Parameters

- vlanid*  
Displays the VLAN ID.
- mac-address*  
Displays the MAC address.
- mac-type*  
Displays the MAC type.
- mac-state*  
Displays the MAC state.
- interface-type*  
Displays the interface type.
- interface-name*  
Displays the interface name.

## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operations/get-mac-address-table

### Request Body

### 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

---

Retrieves the media properties of all the interfaces.

### Resource URIs

URI	Description
<base_URI>/operations/get-media-detail	Retrieves the media properties of all the interfaces.

### Parameters

*interface-type*

Displays the interface type.

*interface-name*

Displays the interface name.

*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>
</output>
```

```
</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

Retreives the maintenance 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>
```

## get-netconf-client-capabilities

Retrieves the session details, vendor details, IP details, time etc for all connected NETCONF clients.

### Resource URIs

URI	Description
<base_URI>/operations/get-netconf-client-capabilities	Retrieves the vendor information of all the NETCONF clients.

### Parameters

*session-id*

Displays the session ID of the NETCONF client session.

*user-name*

Displays the login name of the user for the NETCONF client session.

*vendor*

Displays the vendor name of the NETCONF client session.

*product*

Displays the product name of the NETCONF client session.

*version*

Displays the product version of the NETCONF client session.

*identity*

Displays the identity of the NETCONF client session.

*host-ip*

Displays the IP address of NETCONF client session.

*time*

Displays the login time of NETCONF client session.

### Usage Guidelines

Only POST operation is supported.

### Examples

#### URI

http://host:80/rest/operations/get-netconf-client-capabilities

## Request Body

```
<get-netconf-client-capabilities></get-netconf-client-capabilities>
```

## Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-netconf-ext'>
  <session>
    <session-id>532</session-id>
    <user-name>admin</user-name>
    <vendor>BROCADE</vendor>
    <product>Network Advisor</product>
    <version>12.3.3 build 18</version>
    <identity>Administrator</identity>
    <af-type>IPv4</af-type>
    <host-ip>10.20.237.24</host-ip>
    <time>2015-01-12T11:02:42+00:00</time>
  </session>
</output>
```

# get-port-channel-detail

Retrieves the Link Aggregation Control Protocol (LACP) configuration parameters for all the port-channels in the system.

## Resource URIs

URI	Description
<base_URI>/operations/get-port-channel-detail	Retrieves the Link Aggregation Control Protocol (LACP) information for all port-channel.

## Parameters

- aggregator-id*  
Displays the aggregator ID.
- aggregator-type*  
Displays the aggregator type.
- 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

Displays Link Aggregation Control Protocol (LACP) configuration parameters for an Aggregation Port.

## Resource URIs

URI	Description
<base_URI>/operations/get-portchannel-info-by-intf	Displays Link Aggregation Control Protocol (LACP) configuration parameters for an Aggregation Port.

## Parameters

- interface-type*  
Displays the interface type.
- interface-name*  
Displays the interface name.
- actor-port*  
Displays the actor port number.
- system-priority*  
Displays the System Priority.
- actor-system-id*  
Displays the Actor system ID.
- partner-oper-priority*  
Displays the partner operational priority.
- partner-system-id*  
Displays the Partner system ID.
- actor-priority*  
Displays the Actor Priority.
- admin-key*  
Displays the Admin key.
- oper-key*  
Displays the Opertional 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

Displays spanning tree information.

## Resource URIs

URI	Description
<base_URI>/operations/get-stp-brief-info	Displays spanning tree information.

## Parameters

- stp-mode*  
Displays the type of the Spanning Tree Protocol configured on the switch.
- priority*  
Displays the Bridge priority.
- hello-time*  
Displays the interval between two transmissions of BPDU packets sent by the Root Bridge to tell all other switches that it is indeed the Root Bridge (1 to 10 sec).
- max-age*  
Displays the Max Age may be set to ensure that old information does not endlessly circulate through redundant paths in the network, preventing the effective propagation of new information (6 to 40 sec).
- forward-delay*  
Displays the port on the Switch spends this time in the listening state while moving from the blocking state to the forwarding state (4 to 30 sec).
- interface-type*  
Displays the interface type.
- interface-name*  
Displays the interface name.
- spanningtree-enabled*  
Enables spanning tree.
- if-index*  
Displays the interface index.
- interface-id*  
Displays the interface ID.
- if-role*  
Displays the interface role.
- if-state*  
Displays the interface state.
- external-path-cost*

Designated external path cost.

*internal-path-cost*

Designated internal path cost.

*configured-path-cost*

Displays the configured path cost.

*designated-port-id*

Displays the designated port ID.

*port-priority*

Displays the Port priority.

*designated-bridge-id*

Displays the designated bridge ID.

*port-hello-time*

Displays the Port hello time.

*forward-transitions-count*

Displays the number of forward transitions.

*received-stp-type*

Displays the received (rx) STP type.

*transmitted-stp-type*

Displays the transmitted (tx) STP type.

*edge-port*

Displays the edge port mode.

*auto-edge*

Displays the auto edge.

*admin-edge*

Displays the admin edge.

*edge-delay*

Displays the edge delay.

*configured-root-guard*

Displays the configured root guard.

*oper-root-guard*

Displays the operational root guard.

*boundary-port*

Displays the Is boundary.

*oper-bpdu-guard*

Displays the operational BPDU guard.

*oper-bpdu-filter*

Displays the operational BPDU filter.

*link-type*

Displays the spanning tree link type.

*rx-bpdu-count*

Displays the received BPDU count.

*tx-bpdu-count*

Displays the transmitted BPDU count.

## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operations/get-stp-brief-info

## Request Body

```
<get-stp-brief-info></get-stp-brief-info>
```

## Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-xstp-ext'>
  <spanning-tree-info>
    <stp-mode>stp</stp-mode>
    <stp>
      <root-bridge>
        <priority>32768</priority>
        <bridge-id>8000.01e0.5200.0193</bridge-id>
        <hello-time>2</hello-time>
        <max-age>20</max-age>
        <forward-delay>15</forward-delay>
      </root-bridge>
      <bridge>
        <priority>32768</priority>
        <bridge-id>8000.01e0.5200.0193</bridge-id>
        <hello-time>2</hello-time>
        <max-age>20</max-age>
        <forward-delay>15</forward-delay>
      </bridge>
    </stp>
  </spanning-tree-info>
  <has-more>false</has-more>
</output>
```

# get-stp-mst-detail

Retrieves RPC to return MSTP details.

## Resource URIs

URI	Description
<base_URI>/operations/get-stp-mst-detail	Retrieves RPC to return MSTP details.

## Parameters

- cist-root-id*  
Displays the CIST Root ID.
- cist-bridge-id*  
Displays the CIST bridge ID.
- cist-reg-root-id*  
Displays the CIST regional root ID.
- root-forward-delay*  
Displays the CIST root forward delay.
- hello-time*  
Displays the CIST root hello time.
- max-age*  
Displays the CIST root maximum age.
- max-hops*  
Displays the hops the BPDU will be valid.
- migrate-time*  
Displays the migration time.
- interface-type*  
Displays the interface type.
- interface-name*  
Displays the interface name.
- spanningtree-enabled*  
Displays if the spanning tree enabled.
- if-index*  
Displays the interface index.
- interface-id*  
Displays the interface ID.
- if-role*  
Displays the interface role.

*if-state*

Displays the interface state.

*internal-path-cost*

Displays the designated internal path cost.

*external-path-cost*

Displays the designated external path cost.

*configured-path-cost*

Displays the configured path cost.

*designated-port-id*

Displays the designated port ID.

*port-priority*

Displays the port priority.

*designated-bridge-id*

Displays the designated bridge ID.

*forward-transitions-count*

Displays the number of forward transitions.

*port-hello-time*

Displays the Port hello time.

*received-stp-type*

Displays the received (rx) stp type.

*transmitted-stp-type*

Displays the transmitted (tx) stp type.

*edge-port*

Displays the Edge Port mode.

*auto-edge*

Displays the Auto Edge.

*edge-delay*

Displays the Edge delay.

*admin-edge*

Displays the Admin Edge.

*boundary-port*

Displays the Is boundary.

*configured-root-guard*

Displays the configured root guard.

*oper-root-guard*

Displays the operational root guard.

*oper-bpdu-guard*

Displays the operational BPDU guard.

*oper-bpdu-filter*

Displays the operational BPDU filter.

*link-type*

Displays the point-to-point - enable rapid transition.

*rx-bpdu-count*

Displays the received BPDU count.

*tx-bpdu-count*

Displays the transmitted BPDU count.

*instance-id*

Displays the instance ID of the last received spanning-tree instance.

*msti-root-id*

Displays the MSTI Root ID.

*msti-bridge-id*

Displays the MSTI bridge ID.

*msti-bridge-priority*

Displays the MSTI bridge priority.

*vlan-id*

Displays the VLAN ID.

## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operations/get-stp-mst-detail

## Request Body

```
<get-stp-mst-detail></get-stp-mst-detail>
```

## Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-xstp-ext'>
  <cist>
    <cist-root-id>8000.01e0.5200.05bf</cist-root-id>
    <cist-bridge-id>8000.01e0.5200.05bf</cist-bridge-id>
    <cist-reg-root-id>8000.01e0.5200.05bf</cist-reg-root-id>
    <root-forward-delay>15</root-forward-delay>
    <hello-time>2</hello-time>
    <max-age>20</max-age>
    <max-hops>20</max-hops>
    <migrate-time>3</migrate-time>
```

```

<port>
  <interface-type>port-channel</interface-type>
  <interface-name>2/0/12</interface-name>
  <spanningtree-enabled>>false</spanningtree-enabled>
  <if-index>403046411</if-index>
  <interface-id>32768</interface-id>
  <if-role>disabled</if-role>
  <if-state>forwarding</if-state>
  <internal-path-cost>0</internal-path-cost>
  <external-path-cost>0</external-path-cost>
  <configured-path-cost>20000000</configured-path-cost>
  <designated-port-id>0</designated-port-id>
  <port-priority>128</port-priority>
  <designated-bridge-id>0000.0000.0000.0000</designated-bridge-id>
  <forward-transitions-count>0</forward-transitions-count>
  <port-hello-time>2</port-hello-time>
  <received-stp-type>none</received-stp-type>
  <transmitted-stp-type>mstp</transmitted-stp-type>
  <edge-port>off</edge-port>
  <auto-edge>no</auto-edge>
  <edge-delay>3</edge-delay>
  <admin-edge>no</admin-edge>
  <boundary-port>yes</boundary-port>
  <configured-root-guard>off</configured-root-guard>
  <oper-root-guard>off</oper-root-guard>
  <oper-bpdu-guard>off</oper-bpdu-guard>
  <oper-bpdu-filter>off</oper-bpdu-filter>
  <link-type>point-to-point</link-type>
  <rx-bpdu-count>0</rx-bpdu-count>
  <tx-bpdu-count>0</tx-bpdu-count>
</port>
</cist>
<msti>
  <instance-id>1</instance-id>
  <msti-root-id>8001.01e0.5200.05bf</msti-root-id>
  <msti-bridge-id>8001.01e0.5200.05bf</msti-bridge-id>
  <msti-bridge-priority>32769</msti-bridge-priority>
  <port>
    <interface-type>port-channel</interface-type>
    <interface-name>2/0/12</interface-name>
    <spanningtree-enabled>>false</spanningtree-enabled>
    <if-index>403046411</if-index>
    <interface-id>32768</interface-id>
    <if-role>disabled</if-role>
    <if-state>forwarding</if-state>
    <internal-path-cost>0</internal-path-cost>
    <configured-path-cost>20000000</configured-path-cost>
    <designated-port-id>0</designated-port-id>
    <port-priority>128</port-priority>
    <designated-bridge-id>0000.0000.0000.0000</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

Retrieves the time since this managed entity was last re-initialized.

### Resource URIs

URI	Description
<base_URI>/operations/get-system-uptime	Retrieves the time since this managed entity was last re-initialized.

### Parameters

*days*

Displays the number of days the managed node is up since its last re-initialization.

*hours*

Displays the number of hours the managed node is up since its last re-initialization.

*minutes*

Displays the number of minutes the managed node is up since its last re-initialization.

*seconds*

Displays the number of seconds the managed node is up since its last re-initialization.

### Usage Guidelines

Only POST operation is supported.

### Examples

#### URI

http://host:80/rest/operations/get-system-uptime

### Request Body

```
<get-system-uptime></get-system-uptime>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-system'>
  <show-system-uptime>
    <days>0</days>
    <hours>11</hours>
```

```
<minutes>15</minutes>
<seconds>37</seconds>
</show-system-uptime>
</output>
```

## get-tunnel-info

Retrieves the summary of one or more tunnels from the switch.

### 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

Retrieves tunnel statistics - count of bytes and frames transmitted and received.

### 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

---

Retrieves the operational data for a given VLAN and enumeration of all the interfaces belonging to the VLAN.

### Resource URIs

URI	Description
<base_URI>/operations/get-vlan-brief	Retrieves the operational data for a given VLAN and enumeration of all the interfaces belonging to the VLAN.

### Parameters

*vlan-id*

Displays the VLAN ID.

*vlan-type*

Displays the VLAN type.

*vlan-name*

Displays the administrative name of the VLAN.

*vlan-state*

Displays the operational state of the VLAN.

*last-vlan-id*

Displays the last VLAN record that has been fetched.

### Usage Guidelines

Only POST operation is supported.

### Examples

#### URI

http://host:80/rest/operations/get-vlan-brief

### Request Body

```
<get-vlan-brief></get-vlan-brief>
```

If the entire information cannot be retrieved in a single execution, the last 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

Enables the OSPF graceful restart capability.

### 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

---

Directs the router to consider configuration changes made to an LSP and to optimize the LSP path based on those changes.

### Resource URIs

URI	Description
<base_URI>/operations/mpls-reopt-lsp	Direct the router to consider configuration changes made to an LSP and to optimize the LSP path based on those changes.

### Parameters

*mpls-reoptimize-lsp-name-in*

Specifies the LSP name.

### Usage Guidelines

Only POST operation is supported.

### Examples

#### URI

http://host:80/rest/operations/mpls-reopt-lsp

### Request Body

```
<mpls-reopt-lsp><mpls-reoptimize-lsp-name-in>rest1</mpls-reoptimize-lsp-name-in></mpls-reopt-lsp>
```

### Response Body

None

## optimized-replication

Configures and retrieves optimized replication under an overlay gateway instance.

### 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

---

Reloads the device.

### Resource URIs

URI	Description
<base_URI>/operations/reload	Reloads the device.

### Usage Guidelines

Only POST operation is supported.

### Examples

#### URI

http://host:80/rest/operations/reload

### Request Body

```
<reload></reload>
```

### Response Body

None

## set-http-application-url

Updates the HTTP application URL.

### Resource URIs

URI	Description
<base_URI>/operations/set-http-application-url	Update HTTP application URL.

### Parameters

*status-code*

Displays the status code as URL updated successfully - 0, Error not able to update configuration - 1 or Error not able to remove configuration - 2.

*status-string*

Displays the error in string format.

### Usage Guidelines

Only POST operation is supported.

### Examples

#### URI

http://host:80/rest/operations/set-http-application-url

### Request Body

```
<set-http-application-url>
  <config-http-app-url>
    <url>www.google.com</url>
    <op-type>0</op-type>
  </config-http-app-url>
</set-http-application-url>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-http-redirect'>
  <status-code>0</status-code>
  <status-string>Success</status-string>
</output>
```

## show/selinux/status

Retrieves the current SE Linux 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/infra/chassis

Displays detailed information related to the chassis.

### Resource URIs

URI	Description
<base_URI>/operations/show/infra/chassis	Displays detailed information related to the chassis.

### Usage Guidelines

Only POST operation is supported

### Examples

#### REST URL -curl command

```
curl -v -X POST -u admin:password http://10.38.99.38:80/restconf/operations/show/infra/chassis
Example:
bash-4.2$ curl -v -X POST -u admin:password http://10.38.99.38:80/restconf/operations/show/infra/chassis
```

### URI

http://host:80/rest/operations/show/infra/chassis

### Response Body

```
<chassis-info>
  <switch-type>4005</switch-type>
  <max-port>325</max-port>
  <vendor>EXTREME</vendor>
  <vendor-version></vendor-version>
  <supplier-serial-number></supplier-serial-number>
  <vendor-part-number>none</vendor-part-number>
  <brocade-part-number>800959-00-03</brocade-part-number>
  <fru>
    <tag>1124073472</tag>
    <part-number>800959-00-03</part-number>
    <serial-number>1949Q-21461</serial-number>
    <field-replacable>false</field-replacable>
    <slot-number>0</slot-number>
    <logical-slot-number>0</logical-slot-number>
    <blade-type-id>221</blade-type-id>
    <slot-eth-port-cnt>0</slot-eth-port-cnt>
    <manufacturer-date>2024-02-26Z</manufacturer-date>
    <update-date>2024-02-23Z</update-date>
    <version></version>
    <manufacturer>EXTREME</manufacturer>
    <vendor-equipment-type>switch-blade</vendor-equipment-type>
    <operational-status>on</operational-status>
    <vendor>EXTREME</vendor>
    <vendor-part-number>none</vendor-part-number>
```



```

    <vendor-serial-number></vendor-serial-number>
  </fru>
  <fru>
    <tag>1141637120</tag>
    <part-number></part-number>
    <serial-number></serial-number>
    <field-replacable>true</field-replacable>
    <slot-number>3</slot-number>
    <manufacturer-date>0000-00-00Z</manufacturer-date>
    <update-date>0000-00-00Z</update-date>
    <version></version>
    <manufacturer></manufacturer>
    <vendor-equipment-type>power-supply</vendor-equipment-type>
    <operational-status>faulty</operational-status>
    <vendor></vendor>
    <vendor-part-number></vendor-part-number>
    <vendor-serial-number></vendor-serial-number>
  </fru>
  <fru>
    <tag>1141899264</tag>
    <part-number></part-number>
    <serial-number></serial-number>
    <field-replacable>true</field-replacable>
    <slot-number>4</slot-number>
    <manufacturer-date>0000-00-00Z</manufacturer-date>
    <update-date>0000-00-00Z</update-date>
    <version></version>
    <manufacturer>ACBEL POWE</manufacturer>
    <vendor-equipment-type>power-supply</vendor-equipment-type>
    <operational-status>on</operational-status>
    <vendor>ACBEL POWE</vendor>
    <vendor-part-number>FSG059-930G</vendor-part-number>
    <vendor-serial-number>B1944004260</vendor-serial-number>
  </fru>
  <fru>
    <tag>1157890048</tag>
    <part-number></part-number>
    <serial-number></serial-number>
    <field-replacable>true</field-replacable>
    <slot-number>1</slot-number>
    <manufacturer-date>0000-00-00Z</manufacturer-date>
    <update-date>0000-00-00Z</update-date>
    <version></version>
    <manufacturer></manufacturer>
    <vendor-equipment-type>fan</vendor-equipment-type>
    <operational-status>on</operational-status>
    <vendor></vendor>
    <vendor-part-number></vendor-part-number>
    <vendor-serial-number></vendor-serial-number>
  </fru>
  <fru>
    <tag>1158152192</tag>
    <part-number></part-number>
    <serial-number></serial-number>
    <field-replacable>true</field-replacable>
    <slot-number>2</slot-number>
    <manufacturer-date>0000-00-00Z</manufacturer-date>
    <update-date>0000-00-00Z</update-date>
    <version></version>
    <manufacturer></manufacturer>
    <vendor-equipment-type>fan</vendor-equipment-type>
    <operational-status>on</operational-status>
    <vendor></vendor>
    <vendor-part-number></vendor-part-number>

```

```
<vendor-serial-number></vendor-serial-number>
</fru>
<fru>
  <tag>1158414336</tag>
  <part-number></part-number>
  <serial-number></serial-number>
  <field-replacable>true</field-replacable>
  <slot-number>3</slot-number>
  <manufacturer-date>0000-00-00Z</manufacturer-date>
  <update-date>0000-00-00Z</update-date>
  <version></version>
  <manufacturer></manufacturer>
  <vendor-equipment-type>fan</vendor-equipment-type>
  <operational-status>on</operational-status>
  <vendor></vendor>
  <vendor-part-number></vendor-part-number>
  <vendor-serial-number></vendor-serial-number>
</fru>
<fru>
  <tag>1158676480</tag>
  <part-number></part-number>
  <serial-number></serial-number>
  <field-replacable>true</field-replacable>
  <slot-number>4</slot-number>
  <manufacturer-date>0000-00-00Z</manufacturer-date>
  <update-date>0000-00-00Z</update-date>
  <version></version>
  <manufacturer></manufacturer>
  <vendor-equipment-type>fan</vendor-equipment-type>
  <operational-status>on</operational-status>
  <vendor></vendor>
  <vendor-part-number></vendor-part-number>
  <vendor-serial-number></vendor-serial-number>
</fru>
<fru>
  <tag>1174667264</tag>
  <part-number>800959-00-03</part-number>
  <serial-number>1949Q-21461</serial-number>
  <field-replacable>true</field-replacable>
  <slot-number>1</slot-number>
  <manufacturer-date>2019-11-29Z</manufacturer-date>
  <update-date>2024-02-23Z</update-date>
  <version></version>
  <manufacturer>EXTREME</manufacturer>
  <vendor-equipment-type>wnn</vendor-equipment-type>
  <operational-status>on</operational-status>
  <vendor>EXTREME</vendor>
  <vendor-part-number>none</vendor-part-number>
  <vendor-serial-number></vendor-serial-number>
</fru>
</chassis-info>
```

## show/snmp-server/status

Displays the status of SNMP server on all configured VRFs.

### 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

---

Retrieves the current time for the cluster or specified switch.

### Resource URIs

URI	Description
<base_URI>/operations/show-clock	Retrieves current time for the cluster or specified switch.

### Parameters

*current-time*

Displays the switch date and time.

*timezone*

Displays the region/city or region/state/city.

### Usage Guidelines

Only POST operation is supported.

### Examples

#### URI

http://host:80/rest/operations/show-clock

### Request Body

```
<show-clock></show-clock>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-clock'>
  <clock-time>
    <current-time>2017-03-17T05:13:28+00:00</current-time>
    <timezone>Etc/GMT</timezone>
  </clock-time>
</output>
```

## show-fabric-trunk-info

Retrieves all ISL trunk information in a fabric.

### 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

Retrieves the firmware version information.

## Resource URIs

URI	Description
<base_URI>/operations/show-firmware-version	Retrieves the firmware version information.

## Parameters

- os-name*  
Displays the name of the Firmware version.
- os-version*  
Displays the version of the Firmware.
- copy-right-info*  
Displays the copyright information of the Firmware.
- build-time*  
Displays the time information on the build of Firmware.
- firmware-full-version*  
Displays the full version string of Firmware.
- control-processor-vendor*  
Displays the information on the control processor.
- control-processor-chipset*  
Displays the information on the control processor.
- control-processor-memory*  
Displays the information on the control processor.
- slot-no*  
Displays the slot number.
- node-instance-no*  
Displays the instance number.
- Node-type*  
Displays the node type.
- 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

---

Retrieves NTP server information.

### Resource URIs

URI	Description
<base_URI>/operations/show-ntp	Retrieves NTP server information.

### Parameters

*LOCL*

Indicates whether the LOCL is true or false.

### Usage Guidelines

Only POST operation is supported.

### Examples

#### URI

http://host:80/rest/operations/show-ntp

### Request Body

```
<show-ntp></show-ntp>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-ntp'>
  <node-active-server>
    <LOCL>true</LOCL>
  </node-active-server>
</output>
```

## show-raslog

Retrieves the entries of RASLOG.

### Resource URIs

URI	Description
<base_URI>/operations/show-raslog	Retrieves the entries of RASLOG.

### Parameters

- number-of-entries*  
Displays the number of recent events to be fetched from the RASLOG entries.
- index*  
Displays the sequence number for the message.
- message-id*  
Displays the message identifier.
- date-and-time-info*  
Displays the date and time of the message. The format is: YYYY-MM-DD/HH:MM:SS.SSSS (micro seconds).
- severity*  
Displays the severity of the message. Valid values include: INFO, WARNING, ERROR, and CRITICAL.
- log-type*  
Specifies if the message is a SYSTEM or DCE log.
- repeat-count*  
Displays the number of times the particular event has occurred.
- message*  
Displays the textual description of the event.
- message-flag*  
Displays the type of the message.
- switch-or-chassis-name*  
Displays the switch name or chassis name for the generator of the message..

### Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operations/show-raslog

### Request Body

```
<show-raslog></show-raslog>
```

The API can be used to retrieve some number of last entries by providing the following tags as in the 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

---

Retrieves the information on the status of a recent support save request.

### Resource URIs

URI	Description
<base_URI>/operations/show-support-save-status	Retrieves the information on the status of a recent support save request.

### Parameters

*status*

Displays the status of recent support save.

*message*

Displays the textual description of status of recent support save.

*percentage-of-completion*

Displays the value of percentage of completion.

### Usage Guidelines

Only POST operation is supported.

### Examples

#### URI

http://host:80/rest/operations/show-support-save-status

### 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

---

Retrieves the system information.

### Resource URIs

URI	Description
<base_URI>/operations/show-system-info	Retrieves the system information.

### Parameters

*stack-mac*

Displays the MAC address of the switch.

### Usage Guidelines

Only POST operation is supported.

### Examples

#### URI

http://host:80/rest/operations/show-system-info

### Request Body

```
<show-system-info></show-system-info>
```

### Response Body

```
<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

Retrieves the overall status for a selected switch.

### Resource URIs

URI	Description
<base_URI>/operations/show-system-monitor	Retrieves the overall status for a selected switch.

### Parameters

- switch-name*  
Displays the name of the switch.
- switch-ip*  
Displays the IP address of the switch.
- switch-state*  
Displays the switch status based on components.
- switch-state-reason*  
Displays the component reason for switch status.
- report-time*  
Displays the switch report time stamp.
- component-name*  
Displays the component name.
- component-state*  
Displays the component status based on thresholds.
- port-area*  
Displays the port identifier.
- port-name*  
Displays the port name.
- port-state*  
Displays the port state.

### Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operations/show-system-monitor

### Request Body

```
<show-system-monitor></show-system-monitor>
```

### Response Body

```
<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>
```