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Network OS

REST API Guide

Supporting Network OS v5.0.0

BROCADE

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Brocade Communications Systems, Incorporated

Corporate and Latin American Headquarters
Brocade Communications Systems, Inc.
130 Holger Way
San Jose, CA 95134
Tel: 1-408-333-8000
Fax: 1-408-333-8101
E-mail: info@brocade.com

Asia-Pacific Headquarters
Brocade Communications Systems China HK, Ltd.
No. 1 Guanghua Road
Chao Yang District
Units 2718 and 2818
Beijing 100020, China
Tel: +8610 6588 8888
Fax: +8610 6588 9999
E-mail: china-info@brocade.com

European Headquarters
Brocade Communications Switzerland Sàrl
Centre Swissair
Tour B - 4ème étage
29, Route de l'Aéroport
Case Postale 105
CH-1215 Genève 15
Switzerland
Tel: +41 22 799 5640
Fax: +41 22 799 5641
E-mail: emea-info@brocade.com

Asia-Pacific Headquarters
Brocade Communications Systems Co., Ltd. (Shenzhen WFOE)
Citic Plaza
No. 233 Tian He Road North
Unit 1308 - 13th Floor
Guangzhou, China
Tel: +8620 3891 2000
Fax: +8620 3891 2111
E-mail: china-info@brocade.com

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About This Document

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How this document is organized

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

The document contains the following components:

- [Chapter 1, “Overview of the Network OS REST API,”](#) provides a high-level overview of the API.
- [Chapter 2, “Using the Brocade Network OS REST API,”](#) explains how to use the API.
- [Chapter 3, “Use Cases,”](#) explains the operations in the API with examples.
- [Chapter 4, “API Reference,”](#) describes the calls supported by the API.

Document conventions

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

Text formatting

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

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

For readability, command names in the narrative portions of this guide are presented in mixed lettercase: for example, **switchShow**. In actual examples, command lettercase is all lowercase.

Command syntax conventions

Command syntax in this manual follows these conventions:

Convention	Description
[]	Keywords or arguments that appear within square brackets are optional. For example: command [active standby disabled] = One (and only one) of this set of keywords may be used. command [active] [standby] [disabled] = Three independent options, and one or more may be used on the same command line.
{x y z}	A choice of required keywords appears in braces separated by vertical bars. You must select one. For example: command {active standby disabled} = One (and only one) of this set of keywords must be used.
screen font	Examples of information displayed on the screen.
< >	Nonprinting characters, for example, passwords, appear in angle brackets.
[]	Default responses to system prompts appear in square brackets.
<i>italic text</i>	Identifies variables.
bold text	Identifies literal command options and keywords.

NOTE

In standalone mode, interfaces are identified using *slot/port* notation. In Brocade VCS technology[®] mode, interfaces are identified using *switch/slot/port* notation.

Nesting square brackets and curly braces

When reading a command entry, optional keywords are surrounded by square brackets and mandatory keywords are surrounded by curly braces. Refer to “[Command syntax conventions](#)” on page x for complete details.

In some cases, these brackets can be nested. In the following example, **rbridge-id** is optional as denoted by the square brackets, but if you use it, then you must follow it with either a specific *rbridge-id* or the word “all.”

```
command [rbridge-id {rbridge-id | all}]
```

However, square brackets can appear within curly braces, showing that while a keyword is mandatory, supporting operands may be optional, as shown in the following example:

```
command {security [active] [standby] [disabled]}
```

```
command {security [active | standby | disabled]}
```

Notes, cautions, and warnings

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

NOTE

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

ATTENTION

An Attention statement indicates potential damage to hardware or data.



CAUTION

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



DANGER

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

Key terms

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

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

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

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

Additional information

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

Brocade resources

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

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

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

For additional Brocade documentation, visit the Brocade website:

<http://www.brocade.com>

Release notes are available on the MyBrocade website.

Other industry resources

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

<http://www.t11.org>

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

<http://www.fibrechannel.org>

Getting technical help

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

1. General Information

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

2. Switch Serial Number

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



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

3. World Wide Name (WWN)

Use the **show license id** command to display the WWN of the chassis.

If you cannot use the **show license id** command because the switch is inoperable, you can get the WWN from the same place as the serial number, except for the Brocade DCX. For the Brocade DCX, access the numbers on the WWN cards by removing the Brocade logo plate at the top of the nonport side of the chassis.

Document feedback

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

documentation@brocade.com

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

Overview of the Network OS REST API

In this chapter

- Network OS REST API 1
- Resources 2
- Protocol support 4
- URIs 4

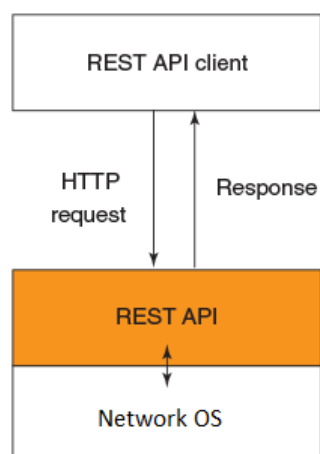
Network OS REST API

REST web service is the northbound interface to the Network OS platform, used to manage the nodes across the cluster. It supports all Create, Read, Update, and Delete (CRUD) operations on the configuration data and supports the YANG-RPC commands. REST service-based manageability is supported in the following three modes:

- Standalone
- Cluster
- Management cluster

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

FIGURE 1 Network OS REST API architecture



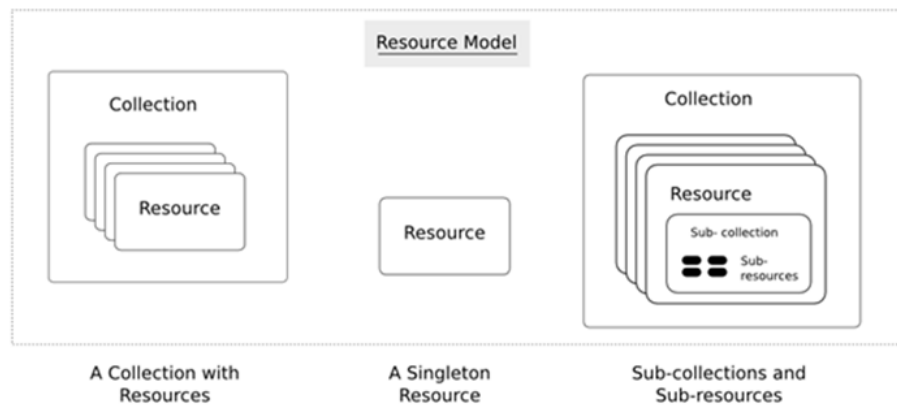
Resources

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



The following three types of resources are supported to represent the configuration data and YANG-RPC operations:

- Base resource
- Configuration resource
- YANG-RPC Operations resource

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", and 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 the following first-level child resources:

- Configuration resource (/config)
- YANG-RPC Operations resource (/operational-state)

Configuration resource (/rest/config)

The /rest/config resource represents the configuration resource. The URI `http://host:80/rest/config` is used to identify the configuration resource and retrieves the supported configuration datastore as its first-level child resource. The type of datastore is:

- Running configuration datastore - The URI is `<BASE-URI>/config/running`. This identifies the "running configuration" resources.

YANG-RPC Operations resource (/rest/operational-state)

The YANG-RPC Operations resource represents the RPC commands defined in the YANG model using the YANG-RPC statement. The following child resources are supported:

- /get-arp
- /get-vlan-brief
- /get-interface-detail

To access or manipulate the operational resource, the request should be issued with the POST method, and should contain the payload, even if there is no input to the request. The request should contain an empty payload, even if there are no input request parameters.

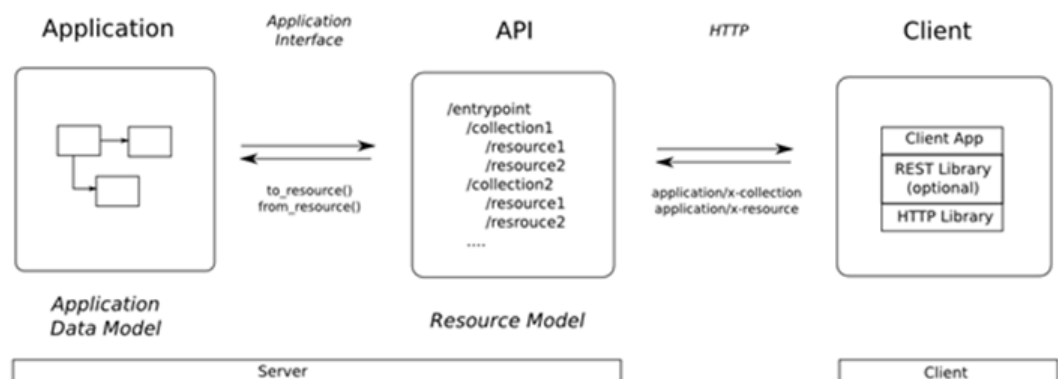
Relationship of YANG and resource data models

The resource data model is based on the YANG data model. All top-level containment statements, such as "List" and "Container," present in the YANG data model are the resources, with few exceptions.

- List: A "List" statement is a collection of resources that contains the same type of resources, which are ordered; the entries, such as the "Container" statement inside the "List" statement, are also a resource.
- Container: A "Container" statement in the YANG model is represented as singleton resource, or a group of resources of different types.
- Leaf: "Leaf" statements inside the "List" or "Container" resource are the attributes of the resources. A "Leaf" is a sub-resource of the "List" or "Container." That is, it cannot be identified without either the "List" or "Container" resource.

The following diagram shows the relationship of the YANG and resource data models.

FIGURE 3 YANG and Resource data model relationship



Protocol support

The Network OS REST API supports HTTP.

By default, the HTTP port number is 80.

URIs

A Uniform Resource Identifier (URI) is a link to the resource. The URI is used to identify the resource. It is the only means for clients and servers to exchange the representations.

URIs consists of two parts:

- Base URI: The base URI is specific to the Network 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 or OPTIONS request.

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

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

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/{key}/path3/...).

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

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

Similarly, the URI "/rest/config/running/interface/vlan/100" identifies the VLAN resource containing the VLAN ID 100.

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

1 URIs

Using the Brocade Network OS REST API

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Before you begin

Before you can use the Brocade Network OS REST API:

Obtain a user name and password for accessing Network OS through the REST API.

Logging in and out

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

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

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

Supported operations

All create, read, update, and delete (CRUD) operations are supported and performed by using the standard HTTP methods: GET, POST, PUT, PATCH, DELETE, HEAD, and OPTIONS.

GET

This GET method is used to retrieve the representation of the resource (for example, base, configuration) including the metadata information.

2 Supported operations

For example, the following GET method requests the client to retrieve the LDAP server.

```
GET /rest/config/running/ldap-server HTTP/1.1
Authorization: Basic YWRtaW46cGFzc3dvcmQ=
User-Agent: curl/7.19.7 (x86_64-redhat-linux-gnu) libcurl/7.19.7NSS/3.12.9.0
zlib/1.2.3 libidn/1.18 libssh2/1.2.2
Host: 192.168.10.2
Accept: application/vnd.configuration.resource+xml
Resource-Depth:2
```

The following response contains XML representation of the target resource.

```
HTTP/1.1 200 OK
Date: 2014-06-24 10:31:15
Server: NOS Wave WWW
Cache-control: private, no-cache, must-revalidate, proxy-revalidate
Content-Type: application/vnd.configuration.resource+xml
Content-Length: 705
Connection: close

<ldap-server xmlns="urn:brocade.com:mgmt:brocade-aaa"
xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/ldap-server">
  <host y:self="/rest/config/running/ldap-server/host/inetaddress">
    <hostname>inetaddress</hostname>
    <port>400</port>
    <retries>6</retries>
    <timeout>10</timeout>
    <basedn>test</basedn>
  </host>
  <host y:self="/rest/config/running/ldap-server/host/test">
    <hostname>test</hostname>
  </host>
  <maprole y:self="/rest/config/running/ldap-server/maprole">
    <group y:self="/rest/config/running/ldap-server/maprole/group/administrator">
      <ad-group>administrator</ad-group>
      <role>admin</role>
    </group>
  </maprole>
</ldap-server>
```

NOTE

A request payload is not required for a GET operation.

POST

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

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

Request header

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

Content-Length: 51

Request message body

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

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

Response

```
HTTP/1.1 100 Continue
HTTP/1.1 201 Created
Date: Tue, 24 Jun 2014 10:38:15 GMT
Server: NOS Wave WWW
Location: http://192.168.10.2/rest/config/running/ldap-server/host/test_API
Cache-control: private, no-cache, must-revalidate, proxy-revalidate
Content-Length: 0
Content-Type: text/html
```

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.

2 Supported operations

Response

```
HTTP/1.1 100 Continue
HTTP/1.1 204 No Content
Date: Tue, 24 Jun 2014 11:03:55 GMT
Server: NOS Wave WWW
Cache-control: private, no-cache, must-revalidate, proxy-revalidate
Content-Length: 0
Content-Type: text/html
```

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/1.1 100 Continue
HTTP/1.1 204 No Content
Date: Tue, 24 Jun 2014 11:15:48 GMT
Server: NOS Wave WWW
Cache-control: private, no-cache, must-revalidate, proxy-revalidate
Content-Length: 0
Content-Type: text/html
```

NOTE

A request payload is required for a PATCH operation.

DELETE

The DELETE method is used to delete the known resource.

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

Request header

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

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

Response

```
HTTP/1.1 204 No Content
Date: Tue, 24 Jun 2014 10:50:33 GMT
Server: NOS Wave WWW
Cache-control: private, no-cache, must-revalidate, proxy-revalidate
Content-Length: 0
Content-Type: text/html
```

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 YWRtaW46cGFzc3dvcnQ=
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.

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 "reserved-vlan" 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>
```

Media types

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

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

TABLE 1 Media types

Media type	Resources
application/vnd.base.resource+xml	Represents the high-level base resources such as configuration datastore and operational state resource
application/vnd.configuration.resource+xml	Represents resources defined for the configuration command derived from a YANG module
application/vnd.operational-state.resource+xml	Represents the defined YANG-RPC operations

HTTP header

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

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

TABLE 2 Methods and supported media types

Method	Media types
HEAD	All
OPTIONS	All
GET	All
POST	application/vnd.configuration.resource+xml application/vnd.operational-state.resource+xml
PUT	application/vnd.configuration.resource+xml
PATCH	application/vnd.configuration.resource+xml
DELETE	application/vnd.configuration.resource+xml

Request header

Standard request header - The following table contains the supported standard request headers.

TABLE 3 Standard HTTP request header

Standard HTTP header
Cache-Control
Date
Authorization

TABLE 3 Standard HTTP request header (Continued)

Standard HTTP header
Accept-Charset
Accept-Encoding
Accept-Language
Connection
Host
Accept
User-Agent
Content-Length

NOTE

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

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

TABLE 4 Header details

Header name	Description	Header value; Methods; Media types
Resource-Depth	Used in the client request to inform the server to retrieve the nested child resources in the same response as inline.	Header value: <1..max> Methods: GET Media types: All, except application/vnd.operational-state.resource+xml

Response headers

Standard response header - The following table contains the supported standard response headers.

TABLE 5 HTTP response header

Response header
Allow
Cache-Control
Connection
Content-Encoding
Content-Language
Content-Length
Content-Location
Content-Type
Note: All Brocade Network OS REST API requests that return data support only XML format.
Date
Location

TABLE 5 HTTP response header (Continued)

Response header
Server
Status
WWW-Authenticate
Transfer-Encoding

HTTP status code and messages

Both success and error status are reported to the client byway 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
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

2 HTTP status code and messages

Use Cases

In this chapter

- [Sample use cases for Network OS REST API](#) 17
- [LDAP server configuration](#) 17
- [ACL configuration](#) 21

Sample use cases for Network OS REST API

This chapter discusses common use cases for the Brocade Network OS REST API.

NOTE

The information provided in this chapter may not cover the end-to-end configuration. Refer to the *Network OS Administrator's Guide* for the complete set of configuration tasks.

LDAP server configuration

Lightweight Directory Access Protocol (LDAP) is an open-source protocol for accessing distributed directory services that act in accordance with X.500 data and service models. LDAP assumes that one or more servers jointly provide access to a Directory Information Tree (DIT) where data is stored and organized as entries in a hierarchical fashion. Each entry has a name called the distinguished name that uniquely identifies it. LDAP can also be used for centralized authentication through directory service.

Active Directory (AD) is a directory service which supports a number of standardized protocols such as LDAP, Kerberos authentication, and DNS, to provide various network services. AD uses a structured datastore as the basis for a logical, hierarchical organization of directory information. AD includes user profiles and groups as the part of directory information, so it can be used as a centralized database for authenticating the third-party resources.

If you are in logical chassis cluster mode, the configuration is applied to all nodes in the cluster.

NOTE

The complete configuration is not given here. Refer to the *Network OS Administrator's guide* for the complete configuration tasks.

Configuring LDAP

Configuring support for LDAP requires configuring both the client and the server. This section shows how to configure an Active Directory server on the client side.

You can use the REST API to carry out the configuration.

Adding an LDAP server

1. Establish a REST session with Network OS.
2. Create the add_server.xml file with the payload information consisting of the name of the LDAP server host. For the complete schema, refer to the GET operation example in the “[ldap-server](#)” section.
3. Perform the POST operation by calling the following URI.

<BASE_URI>/config/running/ldap-server

Sample request payload

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

Sample response header

The following example shows the response header of a successful operation.

```
< HTTP/1.1 100 Continue
< HTTP/1.1 201 Created
< Date: Tue, 24 Jun 2014 10:38:15 GMT
< Server: NOS Wave WWW
< Location: http://192.168.10.2/rest/config/running/ldap-server/host/test_API
< Cache-control: private, no-cache, must-revalidate, proxy-revalidate
< Content-Length: 0
< Content-Type: text/html
< Connection: close
```

There is no response body in the case of a POST operation.

Setting the Active Directory parameters for the newly created server

1. Establish a REST session with Network OS.
2. Create the set_ad_params.xml file with the payload information consisting of the Active Directory parameters that you want to configure, For the complete schema, refer to the GET operation example in the “[ldap-server](#)” section.
3. Perform the PUT operation by calling the following URI.

<BASE_URI>/config/running/ldap-server/host/test_API

Sample request payload

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

Sample response header

The following example shows the response header of a successful operation.

```
< HTTP/1.1 100 Continue
< HTTP/1.1 204 No Content
< Date: Tue, 24 Jun 2014 11:03:55 GMT
```



```
< Server: NOS Wave WWW
< Cache-control: private, no-cache, must-revalidate, proxy-revalidate
< Content-Length: 0
< Content-Type: text/html
< Connection: close
```

There is no response body in the case of a PUT operation.

Retrieving the LDAP server information

1. Establish a REST session with Network OS.
2. Perform the GET operation by calling the following URI.

```
<BASE_URI>/config/running/ldap-server
```

There is no request payload for a GET operation.

Sample response header

The following example shows the response header of a successful operation.

```
< HTTP/1.1 200 OK
< Date: 2014-06-24 11:16:07
< Server: NOS Wave WWW
< Cache-control: private, no-cache, must-revalidate, proxy-revalidate
< Content-Type: application/vnd.configuration.resource+xml
< Content-Length: 924
< Connection: close
```

Sample 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">
    <hostname>inetaddress</hostname>
    <port>500</port>
    <retries>50</retries>
    <timeout>60</timeout>
    <basedn>sample</basedn>
  </host>
  <host y:self="/rest/config/running/ldap-server/host/test">
    <hostname>test</hostname>
  </host>
  <host y:self="/rest/config/running/ldap-server/host/test_API">
    <hostname>test_API</hostname>
    <port>500</port>
    <retries>50</retries>
    <timeout>60</timeout>
    <basedn>sample_test</basedn>
  </host>
  <maprole y:self="/rest/config/running/ldap-server/maprole">
    <group y:self="/rest/config/running/ldap-server/maprole/group/administrator">
      <ad-group>administrator</ad-group>
      <role>admin</role>
    </group>
  </maprole>
</ldap-server>
```

Updating the Active Directory parameter values

1. Establish a REST session with Network OS.
2. Create the update_ad_params.xml file with the payload information consisting of the Active Directory parameters that you want to configure, For the complete schema, refer to the GET operation example in the “[ldap-server](#)” section.
3. Perform the PATCH operation by calling the following URI.

<BASE_URI>/config/running/ldap-server/host/test_API

Sample request payload

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

Sample response header

The following example shows the response header of a successful operation.

```
< HTTP/1.1 100 Continue
< HTTP/1.1 204 No Content
< Date: Tue, 24 Jun 2014 11:15:48 GMT
< Server: NOS Wave WWW
< Cache-control: private, no-cache, must-revalidate, proxy-revalidate
< Content-Length: 0
< Content-Type: text/html
< Connection: close
```

There is no response body in the case of a PATCH operation.

Removing an LDAP server

1. Establish a REST session with Network OS.
2. Perform the DELETE operation by calling the following URI (test_API is the name of the LDAP server that you want to delete).

<BASE_URI>/config/running/ldap-server/host/test_API

There is no request payload for a DELETE operation.

Sample response header

The following is an example response header on successful operation.

```
< HTTP/1.1 204 No Content
< Date: Tue, 24 Jun 2014 10:50:33 GMT
< Server: NOS Wave WWW
< Cache-control: private, no-cache, must-revalidate, proxy-revalidate
< Content-Length: 0
< Content-Type: text/html
< Connection: close
```

There is no response body in the case of a DELETE operation.

ACL configuration

ACLs filter traffic for the Brocade VDX hardware platforms and permit or deny frames on ingress interfaces that have the ACLs applied to them.

Each ACL is a unique collection of “permit” and “deny” statements (rules) that apply to frames. When a frame is received on an interface, the switch compares the fields in the frame against any ACLs applied to the interface to verify that the frame has the required permissions to be forwarded. The switch compares the frame sequentially against each rule in the ACL, and either forwards the frame or drops the frame.

The switch examines ACLs associated with options configured on a given interface. As frames enter the switch on an interface, ACLs associated with all inbound options configured on that interface are examined.

NOTE

Only few sample configurations are given in this section.

Creating a standard MAC ACL

A MAC ACL does not take effect until it is applied to a Layer 2 interface.

1. Establish a REST session with Network OS.
2. Create a standard MAC ACL using the POST operation by calling the following URI.

```
<BASE_URI>/config/running/mac/access-list
```

Sample request payload

```
<standard>
  <name>acl01</name>
</standard>
```

Sample response header

The following example shows the response header of a successful operation.

```
< HTTP/1.1 100 Continue
< HTTP/1.1 201 Created
< Date: Tue, 24 Jun 2014 10:38:15 GMT
< Server: NOS Wave WWW
< Location:
http://192.168.10.2/rest/config/running/mac/access-list/standard/acl01
< Cache-control: private, no-cache, must-revalidate, proxy-revalidate
< Content-Length: 0
< Content-Type: text/html
< Connection: close
```

There is no response body in the case of a POST operation.

3. Create MAC ACL rules in a specific sequence using the POST operation by calling the following URI.

```
<BASE_URI>/config/running/mac/access-list/standard/acl01/seq
```

Sample request payload

```
<seq>
  <seq-id>100</seq-id>
```

3 ACL configuration

```
<action>permit</action>
<source>0011.2222.3333</source>
<count>>true</count>
</seq>
```

Sample response header

The following example shows the response header of a successful operation.

```
< HTTP/1.1 100 Continue
< HTTP/1.1 201 Created
< Date: Tue, 24 Jun 2014 10:38:15 GMT
< Server: NOS Wave WWW
< Location:
http://192.168.10.2/rest/config/running/mac/access-list/standard/acl01/seq/100
< Cache-control: private, no-cache, must-revalidate, proxy-revalidate
< Content-Length: 0
< Content-Type: text/html
< Connection: close
```

There is no response body in the case of a POST operation.

Applying a MAC ACL to a VLAN interface

Ensure that the ACL that you want to apply exists and is configured to filter traffic in the manner that you need for this VLAN interface.

1. Establish a REST session with Network OS.
2. Specify the MAC ACL that is to be applied to the VLAN interface in the ingress direction using the POST operation by calling the following URI.

```
<BASE_URI>/config/running/interface/vlan/1/mac
```

Sample request payload

```
<access-group>
  <mac-access-list>list01</mac-access-list>
  <mac-direction>in</mac-direction>
</access-group>
```

Sample response header

The following example shows the response header of a successful operation.

```
< HTTP/1.1 100 Continue
< HTTP/1.1 201 Created
< Date: Tue, 24 Jun 2014 10:38:15 GMT
< Server: NOS Wave WWW
< Location:
http://192.168.10.2/rest/config/running/interface/vlan/1/mac/list01%2Cin
< Cache-control: private, no-cache, must-revalidate, proxy-revalidate
< Content-Length: 0
< Content-Type: text/html
< Connection: close
```

There is no response body in the case of a POST operation.

Modifying MAC ACL rules

You cannot modify the existing rules of a MAC ACL. However, you can remove the rule and then recreate it with the desired changes.

1. Establish a REST session with Network OS.
2. Remove the exiting rule using the DELETE operation by calling the following URI.
<BASE_URI>/config/running/mac/access-list/standard/acl01/seq/100
3. Perform the POST operation by calling the following URI. Refer to [step 3](#) of the “[Creating a standard MAC ACL](#)” section.

<BASE_URI>/config/running/mac/access-list/standard/acl01/seq

Removing a MAC ACL

A MAC ACL cannot be removed from the system unless the access-group applying the MAC ACL to a DCB or a VLAN interface is first removed.

1. Establish a REST session with Network OS.
2. Remove the MAC ACL using the DELETE operation by calling the following URI.

<BASE_URI>/config/running/mac/access-list/standard/acl01

3 ACL configuration

API Reference

In this chapter

- [Configuration APIs](#) 25
- [Operational APIs](#) 248

Configuration APIs

The URI `http://host:80/rest/config` is used to identify the configuration resource and retrieves the supported configuration datastore as its first-level child resource.

aaa

Configures, modifies, or retrieves AAA server configuration.

Resource URIs

URI	Description
<base_URI>/config/running/aaa	Types of AAA server
<base_URI>/config/running/aaa/accounting	Login or command accounting
<base_URI>/config/running/aaa/accounting/commands	Command accounting
<base_URI>/config/running/aaa/accounting/exec	Login accounting
<base_URI>/config/running/aaa/authentication	Order for authentication
<base_URI>/config/running/aaa/authentication/login	Order of sources for login

Parameters

Name	Description
<i>login</i>	The type of server that will be used for authentication, authorization, and accounting (AAA) on the switch. The local server is the default.
<i>first</i>	<ul style="list-style-type: none"> • ldap • radius • tacacs+
<i>second</i>	<ul style="list-style-type: none"> • local • local-auth-fallback
<i>server-type</i>	<ul style="list-style-type: none"> • none - Disable accounting • tacacs+ - Use TACACS+ servers

Usage guidelines

GET, OPTIONS, and HEAD operations are supported.

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

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

Request body

None

Response body

```
<aaa xmlns="urn:brocade.com:mgmt:brocade-aaa"
xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/aaa">
  <authentication y:self="/rest/config/running/aaa/authentication">
    <login y:self="/rest/config/running/aaa/authentication/login">
      <first>tacacs+</first>
```



```
        <second>local-auth-fallback</second>
    </login>
</authentication>
<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>
```

alias-config

Configures, modifies, or retrieves alias configuration.

Resource URIs

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

Parameters

Name	Description
<i>name</i>	The global or user alias name or user name
<i>expansion</i>	The global or user alias expansion

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 is an example of the GET operation 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">
    <name>alias1</name>
    <expansion>alias_exp1</expansion>
  </alias>
  <user y:self="/rest/config/running/alias-config/user/user0">
    <name>user0</name>
    <alias y:self="/rest/config/running/alias-config/user/user0/alias/alias0">
      <name>alias0</name>
    </alias>
  </user>
  <user y:self="/rest/config/running/alias-config/user/user1">
    <name>user1</name>
```

```
<alias
y:self="/rest/config/running/alias-config/user/user1/alias/alias_user1">
  <name>alias_user1</name>
  <expansion>alias_exp3</expansion>
</alias>
</user>
<user y:self="/rest/config/running/alias-config/user/user2">
  <name>user2</name>
  <alias y:self="/rest/config/running/alias-config/user/user2/alias/user3">
    <name>user3</name>
  </alias>
</user>
</alias-config>
```

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

URI

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

Request body

```
<name>alias1</name>
<expansion>alias_exp1</expansion>
```

Response body

None

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

URI

`http://host:80/rest/config/running/alias-config/user/user2`

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

Name	Description
<i>login</i>	Login banner text
<i>motd</i>	Message of the day banner
<i>incoming</i>	Set incoming terminal line banner

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the banner messages.

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

bp-rate-limit

Configures, modifies, or retrieves the BP rate limit.

Resource URIs

URI	Description
<base_URI>/config/running/bp-rate-limit	BP rate limit

Parameters

Name	Description
bp-rate-limit-slot-num	The slot number

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

```
http://host:80/rest/config/running/bp-rate-limit
```

Request body

None

Response body

```
<bp-rate-limit xmlns="urn:brocade.com:mgmt:brocade-bprate-limit"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/bp-rate-limit">
  <heavy y:self="/rest/config/running/bp-rate-limit/heavy">
    <slot y:self="/rest/config/running/bp-rate-limit/heavy/slot/2">
      <bp-rate-limit-slot-num>2</bp-rate-limit-slot-num>
    </slot>
    <slot y:self="/rest/config/running/bp-rate-limit/heavy/slot/4">
      <bp-rate-limit-slot-num>4</bp-rate-limit-slot-num>
    </slot>
  </heavy>
</bp-rate-limit>
```

The following is an example of the POST operation to configure the BP rate limit slot number.

URI

```
http://host:80/rest/config/running/bp-rate-limit/heavy/slot
```

Request body

```
<bp-rate-limit-slot-num>7</bp-rate-limit-slot-num>
```

Response body

None

The following is an example of the DELETE operation to remove the BP rate limit slot number.

URI

`http://host:80/rest/config/running/bp-rate-limit/heavy/slot/7`

Request body

None

Response body

None

cee-map

Configures, modifies, or retrieves CEE map commands.

Resource URIs

URI	Description
<base_URI>/config/running/cee-map	CEE map command
<base_URI>/config/running/cee-map/default	The map name
<base_URI>/config/running/cee-map/default/priority-group-table	Priority group table
<base_URI>/config/running/cee-map/default/priority-table	Priority table
<base_URI>/config/running/cee-map/default/remap	Class of service to be remapped

Parameters

Name	Description
<i>name</i>	CEE map name
<i>precedence</i>	Precedence value
<i>priority-group-table</i>	Priority group table (PGID 0-7, 15.0-15.7)
<i>weight</i>	Percentage of bandwidth; PDID 0-7
<i>pf</i>	<ul style="list-style-type: none"> on (enabled) off (disabled)
<i>priority-table</i>	Mapping CoS 0 to 7 to priority group table
<i>fabric-priority</i>	CoS for fabric priority
<i>lossless-priority</i>	CoS for lossless priority
<i>priority</i>	Fabric-priority or lossless-priority remapped CoS value

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

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

Request body

None

Response body

```

<cee-map xmlns="urn:brocade.com:mgmt:brocade-cee-map"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/cee-map/default">
  <name>default</name>
  <precedence>40</precedence>
  <priority-group-table
y:self="/rest/config/running/cee-map/default/priority-group-table/1">
    <PGID>1</PGID>
    <weight>12</weight>
    <pfc>on</pfc>
  </priority-group-table>
  <priority-group-table
y:self="/rest/config/running/cee-map/default/priority-group-table/15.0">
    <PGID>15.0</PGID>
    <pfc>off</pfc>
  </priority-group-table>
  <priority-group-table
y:self="/rest/config/running/cee-map/default/priority-group-table/2">
    <PGID>2</PGID>
    <weight>60</weight>
    <pfc>off</pfc>
  </priority-group-table>
  <priority-table y:self="/rest/config/running/cee-map/default/priority-table">
    <map-cos0-pgid>2</map-cos0-pgid>
    <map-cos1-pgid>2</map-cos1-pgid>
    <map-cos2-pgid>2</map-cos2-pgid>
    <map-cos3-pgid>1</map-cos3-pgid>
    <map-cos4-pgid>2</map-cos4-pgid>
    <map-cos5-pgid>2</map-cos5-pgid>
    <map-cos6-pgid>2</map-cos6-pgid>
    <map-cos7-pgid>15.0</map-cos7-pgid>
  </priority-table>
  <remap y:self="/rest/config/running/cee-map/default/remap">
    <fabric-priority
y:self="/rest/config/running/cee-map/default/remap/fabric-priority">
      <priority>1</priority>
    </fabric-priority>
    <lossless-priority
y:self="/rest/config/running/cee-map/default/remap/lossless-priority">
      <priority>2</priority>
    </lossless-priority>
  </remap>
</cee-map>

```

The following is an example of the POST operation to add a priority group table in a CEE map.

URI

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

Request body

```

<priority-group-table>
  <PGID>5</PGID>
  <weight>10</weight>
  <pfc>on</pfc>
</priority-group-table>

```

4 Configuration APIs

Response body

None

The following is an example of the DELETE operation to remove a priority group table from a CEE map.

URI

`http://host:80/rest/config/running/cee-map/default/priority-group-table/5`

Request body

None

Response body

None

class-map

Configures, modifies, or retrieves class map configurations.

Resource URIs

URI	Description
<base_URI>/config/running/class-map	Class map
<base_URI>/config/running/class-map/match/access-group	Class map match criteria

Parameters

Name	Description
<i>name</i>	Class map name
<i>access-group-name</i>	Name for the access list

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

```
http://host:80/rest/config/running/class-map
```

Request body

None

Response body

```
<class-map xmlns="urn:brocade.com:mgmt:brocade-policer"
xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/class-map/c1">
  <name>c1</name>
  <match y:self="/rest/config/running/class-map/c1/match">
    <access-group y:self="/rest/config/running/class-map/c1/match/access-group">
      <access-group-name>acl1</access-group-name>
    </access-group>
  </match>
</class-map>
<class-map xmlns="urn:brocade.com:mgmt:brocade-policer"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/class-map/class1">
  <name>class1</name>
  <match y:self="/rest/config/running/class-map/class1/match">
    <access-group
y:self="/rest/config/running/class-map/class1/match/access-group"/>
  </match>
</class-map>
```

4 Configuration APIs

```
<class-map xmlns="urn:brocade.com:mgmt:brocade-policer"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/class-map/default">
  <name>default</name>
</class-map>
<class-map xmlns="urn:brocade.com:mgmt:brocade-policer"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/class-map/user12">
  <name>user12</name>
  <match y:self="/rest/config/running/class-map/user12/match">
    <access-group
y:self="/rest/config/running/class-map/user12/match/access-group"/>
  </match>
</class-map>
```

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

URI

`http://host:80/rest/config/running/class-map/c5`

Request body

None

Response body

None

diag

Configures, modifies, or retrieves diagnostics configurations.

Resource URIs

URI	Description
<base_URI>/config/running/diag	Diagnostics
<base_URI>/config/running/diag/post/rbridge-id	RBridge ID

Parameters

Name	Description
<i>rbridge-id</i>	The RBridge ID
<i>enable</i>	Enables power-on self-test (POST)

Usage guidelines

GET, OPTIONS, and HEAD operations are supported.

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

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

Request body

None

Response body

```
<diag xmlns="urn:brocade.com:mgmt:brocade-diagnostics"
xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/diag">
  <post y:self="/rest/config/running/diag/post">
    <rbridge-id y:self="/rest/config/running/diag/post/rbridge-id/54">
      <rbridge-id>54</rbridge-id>
      <enable>true</enable>
    </rbridge-id>
    <rbridge-id y:self="/rest/config/running/diag/post/rbridge-id/55">
      <rbridge-id>55</rbridge-id>
      <enable>true</enable>
    </rbridge-id>
    <rbridge-id y:self="/rest/config/running/diag/post/rbridge-id/122">
      <rbridge-id>122</rbridge-id>
      <enable>true</enable>
    </rbridge-id>
  </post>
</diag>
```

dot1x

Configures, modifies, or retrieves dot1x configurations.

Resource URIs

URI	Description
<base_URI>/config/running/dot1x	IEEE 802.1X Port-Based Access Control
<base_URI>/config/running/dot1x/test	Timeout for dot1x readiness check

Parameters

Name	Description
enable	Enables global port authentication
timeout	Timeout for dot1x readiness check

Usage guidelines

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

Examples

The following is an example of the GET operation 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>30</timeout>
  </test>
</dot1x>
```

The following is an example of the PUT operation to add or modify the timeout value for dot1x.

URI

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

Request body

```
<test>
  <timeout>45</timeout>
</test>
```

Response body

None

The following is an example of the DELETE operation to change the timeout value back to the default value.

URI

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

Request body

None

Response body

None

dpod

Configures, modifies, or retrieves Dynamic Ports on Demand (DPOD) license assignments.

Resource URIs

URI	Description
<base_URI>/config/running/dpod	Manage and display DPOD license assignments

Parameters

Name	Description
<i>operation</i>	<ul style="list-style-type: none"> • reserve • release
<i>port-id</i>	The port ID in rbridge-id/slot/port

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

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

Request body

None

Response body

```
<dpod xmlns="urn:brocade.com:mgmt:brocade-license"
xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/dpod">
  <port-id y:self="/rest/config/running/dpod/port-id/%2254/0/1%22">
    <port-id>54/0/1</port-id>
    <operation>reserve</operation>
  </port-id>
  <port-id y:self="/rest/config/running/dpod/port-id/%2254/0/9%22">
    <port-id>54/0/9</port-id>
  </port-id>
  <port-id y:self="/rest/config/running/dpod/port-id/%2254/0/10%22">
    <port-id>54/0/10</port-id>
  </port-id>
</dpod>
```

The following is an example of the POST operation to add a port ID to the DPOD license and set the operation.

URI

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


Request body

```
<port-id>  
  <port-id>55/0/1</port-id>  
  <operation>reserve</operation>  
</port-id>
```

Response body

None

The following is an example of the DELETE operation to remove a port ID to the DPOD license.

URI

```
http://host:80/rest/config/running/dpod/port-id/%2255/0/1%22
```

Request body

None

Response body

None

fabric

Configures, modifies, or retrieves fabric-related parameters.

Resource URIs

URI	Description
<base_URI>/config/running/fabric	Fabric-related parameters
<base_URI>/config/running/fabric/route/mcast/rbridge-id /{rbridge-id}/priority	Multicast priority for this RBridge

Parameters

Name	Description
rbridge-id	The RBridge ID
priority	Multicast priority value of the switch

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

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

Request body

None

Response body

```
<fabric xmlns="urn:brocade.com:mgmt:brocade-fabric-service"
xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/fabric">
  <route y:self="/rest/config/running/fabric/route">
    <mcast y:self="/rest/config/running/fabric/route/mcast">
      <rbridge-id y:self="/rest/config/running/fabric/route/mcast/rbridge-id/54">
        <rbridge-id>54</rbridge-id>
        <priority>58</priority>
      </rbridge-id>
      <rbridge-id y:self="/rest/config/running/fabric/route/mcast/rbridge-id/55">
        <rbridge-id>55</rbridge-id>
        <priority>30</priority>
      </rbridge-id>
      <rbridge-id
y:self="/rest/config/running/fabric/route/mcast/rbridge-id/122">
        <rbridge-id>122</rbridge-id>
        <priority>255</priority>
      </rbridge-id>
    </mcast>
```

```
</route>  
</fabric>
```

The following is an example of the DELETE operation to set the priority to the default.

URI

`http://host:80/rest/config/running/fabric/route/mcast/rbridge-id/55/priority`

Request body

None

Response body

None

fcoe

Configures, modifies, or retrieves FCoE configuration commands.

Resource URIs

URI	Description
<base_URI>/config/running/fcoe	FCoE commands
<base_URI>/config/running/fcoe/fabric-map	FCoE Fabric-map parameters
<base_URI>/config/running/fcoe/fcf-map	FCF maps

Parameters

Name	Description
<i>fcoe-fabric-map-name</i>	Fabric-map name. Only "default" is supported.
<i>priority</i>	Priority for the FCoE Fabric-map
<i>vlan</i>	The VLAN for the FCoE Fabric-map
<i>virtual-fabric</i>	This specifies the Virtual Fabric ID for the Fabric-map
<i>fcmap</i>	Configures the FCMAP for an FCoE Fabric-map
<i>interval</i>	Advertisement interval for the FCoE Fabric-map mode
<i>keep-alive</i>	Sets the interval for KEEPALIVE messages
<i>timeout</i>	Sets the timeout for KEEPALIVE messages
<i>map</i>	Map name
<i>fcoe-map-name</i>	FCoE map name
<i>fcoe-map-fabric-map-name</i>	Specifies the FCoE Fabric-map name
<i>fcoe-map-cee-map-leaf</i>	Map-cee-map name
<i>fcf-map</i>	FCMAP value for a FCoE Fabric-map
<i>fcf-map-name</i>	Specifies the FCF map name
<i>fcf-rbid</i>	FCF's RBridge ID in the FCF map

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

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

Request body

None

Response body

```

<fcoe xmlns="urn:brocade.com:mgmt:brocade-fcoe"
xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/fcoe">
  <fabric-map y:self="/rest/config/running/fcoe/fabric-map/default">
    <fcoe-fabric-map-name>default</fcoe-fabric-map-name>
    <vlan>1100</vlan>
    <priority>3</priority>
    <virtual-fabric>128</virtual-fabric>
    <fcmap>0E:FC:00</fcmap>
    <advertisement
y:self="/rest/config/running/fcoe/fabric-map/default/advertisement">
      <interval>8000</interval>
    </advertisement>
    <keep-alive y:self="/rest/config/running/fcoe/fabric-map/default/keep-alive">
      <timeout>>true</timeout>
    </keep-alive>
  </fabric-map>
  <map y:self="/rest/config/running/fcoe/map/default">
    <fcoe-map-name>default</fcoe-map-name>
    <fabric-map
y:self="/rest/config/running/fcoe/map/default/fabric-map/default">
      <fcoe-map-fabric-map-name>default</fcoe-map-fabric-map-name>
    </fabric-map>
    <cee-map y:self="/rest/config/running/fcoe/map/default/cee-map">
      <fcoe-map-cee-map-leaf>default</fcoe-map-cee-map-leaf>
    </cee-map>
  </map>
  <fcf-map y:self="/rest/config/running/fcoe/fcf-map/fcfmap">
    <fcf-map-name>fcfmap</fcf-map-name>
    <fcf-rbid>11</fcf-rbid>
  </fcf-map>
</fcoe>

```

The following is an example of the DELETE operation to change the advertisement interval back to the default value.

URI

```

http://host:80/rest/config/running/fcoe/fabric-map/default/advertisement/
interval

```

Request body

None

Response body

None

fsb

Enable or disable the FSB mode.

Resource URIs

URI	Description
<base_URI>/config/running/fsb	Enables or disables the FSB mode

Parameters

Name	Description
enable	Enable FSB mode

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

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

Request body

None

Response body

```
<fsb xmlns="urn:brocade.com:mgmt:brocade-fcoe"
xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/fsb">
  <enable>true</enable>
</fsb>
```

The following is an example of the PUT operation to enable the FSB mode.

URI

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

Request body

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

Response body

None

hardware

Configures, modifies, or retrieves hardware management configuration.

Resource URIs

URI	Description
<base_URI>/config/running/hardware	Hardware management configuration
<base_URI>/config/running/hardware/connector	Connector
<base_URI>/config/running/hardware/connector/{rbridge-id/slot/port}/sfp	SFP
<base_URI>/config/running/hardware/connector-group	Connector group
<base_URI>/config/running/hardware/flexport	Option to change the Ethernet port to a Fibre Channel port
<base_URI>/config/running/hardware/port-group	Port group

Parameters

Name	Description
<i>connector</i>	Configure a connector
<i>name</i>	The connector name
<i>sfp</i>	Configure SFP
<i>breakout</i>	Displays the QSFP port breakout configurations
<i>flexport</i>	Option to change the Ethernet port to a Fibre Channel port
<i>id</i>	Interface name in [rbridge-id]/slot/port format
<i>type</i>	The type to be configured
<i>connector-group</i>	Configure a connector group
<i>speed</i>	Configure the speed of the connector group <ul style="list-style-type: none"> HighMixed LowMixed
<i>FibreChannel</i>	2, 4, 8, or 16 Gbps Fibre Channel
<i>port-group</i>	Configure a port group

Usage guidelines

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

Examples

The following is an example of the GET operation 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">
  <connector y:self="/rest/config/running/hardware/connector/%22122/8/9%22">
    <name>122/8/9</name>
    <sfp y:self="/rest/config/running/hardware/connector/%22122/8/9%22/sfp">
      <breakout>true</breakout>
    </sfp>
  </connector>
  <flexport y:self="/rest/config/running/hardware/flexport/%2254/0/6%22">
    <id>54/0/6</id>
    <type>ethernet</type>
  </flexport>
  <connector-group
y:self="/rest/config/running/hardware/connector-group/%2254/0/1%22">
    <id>54/0/1</id>
    <speed>HighMixed</speed>
  </connector-group>
  <connector-group
y:self="/rest/config/running/hardware/connector-group/%2254/0/3%22">
    <id>54/0/3</id>
    <speed>LowMixed</speed>
  </connector-group>
  <port-group y:self="/rest/config/running/hardware/port-group/%2254/0/54%22">
    <id>54/0/54</id>
    <type>ethernet</type>
  </port-group>
</hardware>
```

The following is an example of the POST operation to add a connector to the hardware configuration.

URI

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

Request body

```
<connector>
  <name>1/0/49</name>
</connector>
```

Response body

None

interface

Configures, modifies, or retrieves all the interface-related configurations or data.

Resource URIs

URI	Description
<base_URI>/config/running/interface	Interface-related configuration or data
<base_URI>/config/running/interface/fcoe	The list of FCoE logical interfaces
<base_URI>/config/running/interface/fibrechannel	The list of Fibre Channel interfaces
<base_URI>/config/running/interface/fortygigabitethernet	The list of FortyGigabitEthernet interfaces
<base_URI>/config/running/interface/gigabitethernet	The list of GigabitEthernet interfaces
<base_URI>/config/running/interface/hundredgigabitethernet	The list of HundredGigabitEthernet interfaces
<base_URI>/config/running/interface/management	The list of management interfaces
<base_URI>/config/running/interface/port-channel	The list of port-channels
<base_URI>/config/running/interface/tengigabitethernet	The list of TenGigabitEthernet interfaces
<base_URI>/config/running/interface/ve	The list of global VEs
<base_URI>/config/running/interface/vlan	The list of VLANs

Parameters

Name	Description
<i>name</i>	VLAN interface number
<i>gve-name</i>	VE interface number
<i>name</i>	Interface name rbridge-id/port format- Applicable for management- rbridge-id/slot/port format - Applicable for: Tengigabitethernet, Gigabitethernet, Hundredgigabitethernet, Fortygigabitethernet)
<i>cee</i>	Apply default CEE map 'default'
<i>load-balance</i>	Load balancing commands
<i>mtu</i>	Set MTU value to interface
<i>minimum-links</i>	Least number of operationally UP links to declare port-channel UP
<i>rspan-vlan</i>	Configure the VLAN as RSPAN VLAN
<i>bpdu-drop</i>	Drop received BPDUs. Refer to interface/{interface-type}/{interface-name}/bpdu-drop for information
<i>channel-group</i>	LACP channel commands. Refer to interface/{interface-type}/{interface-name}/channel-group for information
<i>description</i>	Interface-specific description
<i>dot1x</i>	IEEE 802.1X Port-Based Access Control. Refer to interface/{interface-type}/{interface-name}/dot1x for information

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Name	Description
<i>edge-loop-detection</i>	Enable edge-loop-detection on the selected interface. Refer to interface/{interface-type}/{interface-name}/edge-loop-detection for information
<i>fabric</i>	Configure the Fabric Protocol parameters. Refer to interface/{interface-type}/{interface-name}/fabric for information
<i>fcoeport</i>	Configure the port to be an FCoE port. Refer to interface/{interface-type}/{interface-name}/fcoeport for information
<i>ip</i>	The Internet Protocol (IP). Refer to interface/{interface-type}/{interface-name}/ip for information
<i>ipv6</i>	The Internet Protocol version 6 (IPv6). Refer to interface/{interface-type}/{interface-name}/ipv6 for information
<i>lACP</i>	LACP commands. Refer to interface/{interface-type}/{interface-name}/lACP for information
<i>lldp</i>	The Link Layer Discovery Protocol (LLDP). Refer to interface/{interface-type}/{interface-name}/lldp for information
<i>long-distance-isl</i>	Configure the link as long-distance-link. <ul style="list-style-type: none"> • 2000 - 2000 meter distance link (Warning: It may disable other ISLs in the port group) • 5000 - 5000 meter distance link (Warning: It may disable other ISLs in the port group) • 10000 - 10,000 meter distance link (Warning: It may disable other ISLs in the port group) • 30000 - 30,000 meter distance link (Warning: It may disable other ISLs in the port group and DCB/FCoE capabilities will no longer be supported) <p>Note: Supported in tengigabitethernet only.</p>
<i>mac</i>	Configure MAC parameters. Refer to interface/{interface-type}/{interface-name}/mac for information
<i>mac-learning</i>	MAC learning. Refer to interface/{interface-type}/{interface-name}/mac-learning for information
<i>port-profile-port</i>	Set the interface to AMPP profile mode. Refer to interface/{interface-type}/{interface-name}/port-profile-port for information
<i>priority-tag</i>	Configure 802.1p priority tagging. Supported interface types are: <ul style="list-style-type: none"> • Port-Channel • FortyGigabitEthernet • GigabitEthernet • HundredGigabitEthernet • TenGigabitEthernet
<i>qos</i>	Quality of Service (QoS). Refer to interface/{interface-type}/{interface-name}/qos for information
<i>rmon</i>	Remote Monitoring Protocol (RMON). Refer to interface/{interface-type}/{interface-name}/rmon for information
<i>service-policy</i>	Attach Input/Output policy map. Refer to interface/{interface-type}/{interface-name}/service-policy for information
<i>sflow</i>	sFlow configuration. Refer to interface/{interface-type}/{interface-name}/sflow for information
<i>shutdown</i>	Shut down the selected interface

Name	Description
<i>spanning-tree</i>	Spanning tree commands. Refer to interface/{interface-type}/{interface-name}/spanning-tree for information
<i>speed</i>	Set speed informational parameter
<i>storm-control</i>	BUM Storm Control. Refer to interface/{interface-type}/{interface-name}/storm-control for information
<i>switchport</i>	Set the switching characteristics of the Layer 2 interface. Refer to interface/{interface-type}/{interface-name}/switchport for information
<i>track</i>	Track interface. Refer to interface/{interface-type}/{interface-name}/track for information
<i>tunnel</i>	Tunneling parameters. Refer to interface/{interface-type}/{interface-name}/tunnel for information
<i>udld</i>	UDLD commands. Refer to interface/{interface-type}/{interface-name}/udld for information
<i>vlan</i>	VLAN commands. Refer to interface/{interface-type}/{interface-name}/vlan for information
<i>vrf</i>	Assign VRF to this Ethernet interface. Refer to interface/{interface-type}/{interface-name}/vrf for information
<i>vrrp-group</i>	Start VRRP configuration. Refer to interface/{interface-type}/{interface-name}/vrrp-group for information
<i>private-vlan</i>	Configure VLAN as private VLAN. Refer to interface/vlan/{vlan-number}/private-vlan for information
<i>transport-service</i>	Set tldid for Transparent VLAN. Refer to interface/vlan/{vlan-number}/transport-service for information
<i>attach</i>	Configure attachments. Refer to interface/ve/{ve-number}/attach for information
<i>vlag</i>	Virtual LAG. Refer to interface/port-channel/{port-channel-number}/vlag for information

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

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

Request body

None

Response body

```
<interface xmlns="urn:brocade.com:mgmt:brocade-interface"
xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/interface">
  <Vlan y:self="/rest/config/running/interface/Vlan/1">
    <name>1</name>
    <rspan-vlan xmlns="urn:brocade.com:mgmt:brocade-span">true</rspan-vlan>
    <private-vlan y:self="/rest/config/running/interface/Vlan/1/private-vlan">
      <association
y:self="/rest/config/running/interface/Vlan/1/private-vlan/association"/>
```

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```
</private-vlan>
</Vlan>
<Ve y:self="/rest/config/running/interface/Ve/10">
  <gve-name>10</gve-name>
  <attach xmlns="urn:brocade.com:mgmt:brocade-anycast-gateway"
y:self="/rest/config/running/interface/Ve/10/attach"/>
</Ve>
<Management y:self="/rest/config/running/interface/Management/%22122/1%22">
  <name>122/1</name>
  <tcp y:self="/rest/config/running/interface/Management/%22122/1%22/tcp"/>
  <vrf y:self="/rest/config/running/interface/Management/%22122/1%22/vrf"/>
  <line-speed
y:self="/rest/config/running/interface/Management/%22122/1%22/line-speed"/>
</Management>
<TenGigabitEthernet
y:self="/rest/config/running/interface/TenGigabitEthernet/%2254/0/2%22">
  <name>54/0/2</name>
  <cee>default</cee>
  <long-distance-isl>2000</long-distance-isl>
  <priority-tag xmlns="urn:brocade.com:mgmt:brocade-qos">2000</priority-tag>
  <track
y:self="/rest/config/running/interface/TenGigabitEthernet/%2254/0/2%22/track"/>
  <port-profile-port xmlns="urn:brocade.com:mgmt:brocade-port-profile"
y:self="/rest/config/running/interface/TenGigabitEthernet/%2254/0/2%22/port-prof
ile-port"/>
  <service-policy xmlns="urn:brocade.com:mgmt:brocade-policer"
y:self="/rest/config/running/interface/TenGigabitEthernet/%2254/0/2%22/service-p
olicy"/>
  <ip xmlns="urn:brocade.com:mgmt:brocade-ip-policy"
y:self="/rest/config/running/interface/TenGigabitEthernet/%2254/0/2%22/ip"/>
  <mtu>2555</mtu>
  <description>interfacel</description>
  <fabric xmlns="urn:brocade.com:mgmt:brocade-fcoe"
y:self="/rest/config/running/interface/TenGigabitEthernet/%2254/0/2%22/fabric"/>
  <switchport
y:self="/rest/config/running/interface/TenGigabitEthernet/%2254/0/2%22/switchpor
t"/>
  <edge-loop-detection
y:self="/rest/config/running/interface/TenGigabitEthernet/%2254/0/2%22/edge-loop
-detection"/>
  <channel-group
y:self="/rest/config/running/interface/TenGigabitEthernet/%2254/0/2%22/channel-g
roup"/>
  <qos xmlns="urn:brocade.com:mgmt:brocade-qos"
y:self="/rest/config/running/interface/TenGigabitEthernet/%2254/0/2%22/qos"/>
  <vlan xmlns="urn:brocade.com:mgmt:brocade-vlan"
y:self="/rest/config/running/interface/TenGigabitEthernet/%2254/0/2%22/vlan"/>
  <bpdu-drop xmlns="urn:brocade.com:mgmt:brocade-xstp"
y:self="/rest/config/running/interface/TenGigabitEthernet/%2254/0/2%22/bpdu-drop
"/>
  <tunnel xmlns="urn:brocade.com:mgmt:brocade-xstp"
y:self="/rest/config/running/interface/TenGigabitEthernet/%2254/0/2%22/tunnel"/>
  <spanning-tree xmlns="urn:brocade.com:mgmt:brocade-xstp"
y:self="/rest/config/running/interface/TenGigabitEthernet/%2254/0/2%22/spanning-
tree"/>
  <lldp xmlns="urn:brocade.com:mgmt:brocade-lldp"
y:self="/rest/config/running/interface/TenGigabitEthernet/%2254/0/2%22/lldp"/>
  <lacp xmlns="urn:brocade.com:mgmt:brocade-lacp"
y:self="/rest/config/running/interface/TenGigabitEthernet/%2254/0/2%22/lacp"/>
```

```

    <storm-control xmlns="urn:brocade.com:mgmt:brocade-bum-storm-control"
y:self="/rest/config/running/interface/TenGigabitEthernet/%2254/0/2%22/storm-con
trol"/>
    <dot1x xmlns="urn:brocade.com:mgmt:brocade-dot1x"
y:self="/rest/config/running/interface/TenGigabitEthernet/%2254/0/2%22/dot1x"/>
    <mac-learning
y:self="/rest/config/running/interface/TenGigabitEthernet/%2254/0/2%22/mac-learn
ing"/>
    <vrf
y:self="/rest/config/running/interface/TenGigabitEthernet/%2254/0/2%22/vrf"/>
    <mac xmlns="urn:brocade.com:mgmt:brocade-mac-access-list"
y:self="/rest/config/running/interface/TenGigabitEthernet/%2254/0/2%22/mac"/>
    <ipv6
y:self="/rest/config/running/interface/TenGigabitEthernet/%2254/0/2%22/ipv6"/>
    <fcoeport xmlns="urn:brocade.com:mgmt:brocade-fcoe"
y:self="/rest/config/running/interface/TenGigabitEthernet/%2254/0/2%22/fcoeport"
/>
    <sflow xmlns="urn:brocade.com:mgmt:brocade-sflow"
y:self="/rest/config/running/interface/TenGigabitEthernet/%2254/0/2%22/sflow"/>
    <rmon xmlns="urn:brocade.com:mgmt:brocade-rmon"
y:self="/rest/config/running/interface/TenGigabitEthernet/%2254/0/2%22/rmon"/>
    <udld xmlns="urn:brocade.com:mgmt:brocade-udld"
y:self="/rest/config/running/interface/TenGigabitEthernet/%2254/0/2%22/udld"/>
  </TenGigabitEthernet>
  <FortyGigabitEthernet
y:self="/rest/config/running/interface/FortyGigabitEthernet/%22125/4/6%22">
    <name>125/4/6</name>
  </FortyGigabitEthernet>
  <Port-channel y:self="/rest/config/running/interface/Port-channel/6144">
    <name>6144</name>
    <vlag y:self="/rest/config/running/interface/Port-channel/6144/vlag"/>
    <fcoeport xmlns="urn:brocade.com:mgmt:brocade-fcoe"
y:self="/rest/config/running/interface/Port-channel/6144/fcoeport"/>
    <minimum-links>2</minimum-links>
    <load-balance>dst-mac-vid</load-balance>
  </Port-channel>
  <FibreChannel xmlns="urn:brocade.com:mgmt:brocade-interface"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/interface/FibreChannel/%2254/0/6%22">
    <name>54/0/6</name>
    <trunk-enable>true</trunk-enable>
    <config-mode>nport</config-mode>
    <fec-enable>true</fec-enable>
    <shutdown>true</shutdown>
  </FibreChannel>
  <Fcoe xmlns="urn:brocade.com:mgmt:brocade-fcoe"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/interface/Fcoe/%221/122/59%22">
    <fcoe-interface-name>1/122/59</fcoe-interface-name>
    <bind y:self="/rest/config/running/interface/Fcoe/%221/122/59%22/bind"/>
  </Fcoe>
</interface>

```

interface/{interface-type}/{interface-name}/bpu-drop

Configures, modifies, or retrieves all drop received BPDUs.

Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/bpu-drop	Drop received BPDUs Supported interface types are: <ul style="list-style-type: none"> • Port-channel • FortyGigabitEthernet • GigabitEthernet • HundredGigabitEthernet • TenGigabitEthernet

Parameters

Name	Description
<i>enable</i>	Drop all STP/RSTP/MSTP and PVST/RPVST incoming BPDUs
<i>direction</i>	<ul style="list-style-type: none"> • all - Drops all STP/RSTP/MSTP and PVST/RPVST BPDUs • rx - Drops all STP/RSTP/MSTP and PVST/RPVST incoming BPDUs • tx - Drops all STP/RSTP/MSTP and PVST/RPVST outgoing BPDUs

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

```
http://host:80/rest/config/running/interface/FortyGigabitEthernet/%22125/4/12%22/bpu-drop
```

Request body

None

Response body

```
<bpu-drop xmlns="urn:brocade.com:mgmt:brocade-xstp"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/interface/FortyGigabitEthernet/%22125/4/12%22/bpu-drop" />
  <enable>true</enable>
  <direction>all</direction>
</bpu-drop>
```

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

Configures, modifies, or retrieves LACP channel commands.

Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/channel-group	LACP channel commands Supported interface types are: <ul style="list-style-type: none"> FortyGigabitEthernet GigabitEthernet HundredGigabitEthernet TenGigabitEthernet

Parameters

Name	Description
<i>port-int</i>	Channel group number
<i>mode</i>	The mode of the port-channel <ul style="list-style-type: none"> active on passive
<i>type</i>	The type of the port-channel <ul style="list-style-type: none"> brocade standard

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

```
http://host:80/rest/config/running/interface/FortyGigabitEthernet/%22195/2/10%22/channel-group
```

Request body

None

Response body

```
<channel-group xmlns="urn:brocade.com:mgmt:brocade-interface"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/interface/FortyGigabitEthernet/%22195/2/10%22/channel-group">
  <port-int>55</port-int>
  <mode>active</mode>
  <type>standard</type>
</channel-group>
```

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

Configures, modifies, or retrieves IEEE 802.1X Port-Based Access Control.

Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/dot1x	IEEE 802.1X Port-Based Access Control Supported interface types are: <ul style="list-style-type: none"> FortyGigabitEthernet GigabitEthernet HundredGigabitEthernet TenGigabitEthernet

Parameters

Name	Description
<i>authentication</i>	Enable dot1x on a port
<i>port-control</i>	Port control commands
<i>protocol-version</i>	Set the protocol version
<i>quiet-period</i>	Quiet period in the HELD state
<i>reauthMax</i>	Number of reauthentication attempts before becoming unauthorized
<i>reauthentication</i>	Enable reauthentication on a port
<i>timeout</i>	Set a timeout parameter
<i>re-authperiod</i>	Reauthentication interval in seconds (default = 3600)
<i>server-timeout</i>	Server timeout in seconds (default = 30)
<i>supp-timeout</i>	Supplicant response timeout (default = 30)
<i>tx-period</i>	Transmission period in seconds (default = 30)

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

```
http://host:80/rest/config/running/interface/FortyGigabitEthernet/%22195/2/10%22/dot1x
```

Request body

None

Response body

```
<dot1x xmlns="urn:brocade.com:mgmt:brocade-dot1x"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/interface/FortyGigabitEthernet/%22195/2/10%22/dot1x
">
  <authentication>true</authentication>
  <port-control>force-unauthorized</port-control>
  <protocol-version>1</protocol-version>
  <quiet-period>65</quiet-period>
  <reauthMax>3</reauthMax>
  <reauthentication>true</reauthentication>
  <timeout
y:self="/rest/config/running/interface/FortyGigabitEthernet/%22195/2/10%22/dot1x
/timeout">
    <re-authperiod>3605</re-authperiod>
    <server-timeout>35</server-timeout>
    <supp-timeout>40</supp-timeout>
    <tx-period>45</tx-period>
  </timeout>
</dot1x>
```

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

Configures, modifies, or retrieves edge-loop-detection on the selected interface.

Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/edge-loop-detection	Enable edge-loop-detection on the selected interface Supported interface types are: <ul style="list-style-type: none"> • Port-Channel • FortyGigabitEthernet • GigabitEthernet • HundredGigabitEthernet • TenGigabitEthernet

Parameters

Name	Description
<i>port-priority</i>	Set ELD-priority value to interface
<i>vlan</i>	Enable for specific VLAN on selected interface

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

```
http://host:80/rest/config/running/interface/FortyGigabitEthernet/%22195/2/10%22/edge-loop-detection
```

Request body

None

Response body

```
<edge-loop-detection xmlns="urn:brocade.com:mgmt:brocade-interface"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/interface/FortyGigabitEthernet/%22195/2/10%22/edge-loop-detection">
  <port-priority>120</port-priority>
  <vlan>1</vlan>
</edge-loop-detection>
```

interface/{interface-type}/{interface-name}/fabric

Configures, modifies, or retrieves the Fabric Protocol parameters.

Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/fabric	<p>Fabric Protocol parameters</p> <p>Supported interface types are:</p> <ul style="list-style-type: none"> FortyGigabitEthernet GigabitEthernet HundredGigabitEthernet TenGigabitEthernet <p>Note: GigabitEthernet supports neighbor discovery only.</p>

Parameters

Name	Description
<i>isl</i>	Fabric ISL status
<i>enable</i>	Enable fabric ISL status or fabric trunk status
<i>neighbor-discovery</i>	Neighbor discovery at this port
<i>disable</i>	Disable neighbor discovery at this port
<i>trunk</i>	Fabric trunk status

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

```
http://host:80/rest/config/running/interface/FortyGigabitEthernet/%22195/2/11%22/fabric
```

Request body

None

Response body

```
<fabric xmlns="urn:brocade.com:mgmt:brocade-fcoe"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/interface/FortyGigabitEthernet/%22195/2/11%22/fabric">
  <isl
y:self="/rest/config/running/interface/FortyGigabitEthernet/%22195/2/11%22/fabric/isl">
    <enable>true</enable>
```

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```
</isl>
<trunk
y:self="/rest/config/running/interface/FortyGigabitEthernet/%22195/2/11%22/fabri
c/trunk">
  <enable>true</enable>
  </trunk>
  <neighbor-discovery
y:self="/rest/config/running/interface/FortyGigabitEthernet/%22195/2/11%22/fabri
c/neighbor-discovery">
    <disable>true</disable>
  </neighbor-discovery>
</fabric>
```

interface/{interface-type}/{interface-name}/fcoeport

Configures, modifies, or retrieves the port to be an FCoE port.

Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/fcoeport	Configure the port to be an FCoE port Supported interface types are: <ul style="list-style-type: none"> • Port-Channel • FortyGigabitEthernet • HundredGigabitEthernet • TenGigabitEthernet

Parameters

Name	Description
fcoeport-map	FCoE map name

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

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

Request body

None

Response body

```
<fcoeport xmlns="urn:brocade.com:mgmt:brocade-fcoe"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/fcoeport">
  <fcoeport-map>default</fcoeport-map>
</fcoeport>
```

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

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

Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip	<p>The Internet Protocol (IP)</p> <p>Supported interface types are:</p> <ul style="list-style-type: none"> • Port-Channel • Management • FortyGigabitEthernet • GigabitEthernet • HundredGigabitEthernet • TenGigabitEthernet • VLAN • VE

Parameters

Name	Description
<i>ip-access-list</i>	Access list name
<i>ip-direction</i>	<ul style="list-style-type: none"> • in - Ingress direction • out - Egress direction
<i>arp-aging-timeout</i>	ARP aging timeout
<i>address</i>	IP address of the DHCP server
<i>route-map-name</i>	Route-map name
<i>use-vrf</i>	VRF name of the DHCP server
<i>directed-broadcast</i>	Enable directed IP broadcasts forwarding
<i>mtu</i>	Set IP MTU value to interface
<i>proxy-arp</i>	Enable Proxy-ARP on the interface
<i>echo-reply</i>	Enables the generation of an Internet Control Message Protocol (ICMP) Echo Reply message
<i>rate-limiting</i>	Rate limit ICMP error messages
<i>unreachable</i>	Prohibits routers from forwarding an Internet Control Message Protocol (ICMP) Destination Unreachable Code 3 (port unreachable) message on a point-to-point link back onto the ingress port
<i>last-member-query-interval</i>	Last member query interval
<i>query-interval</i>	Query interval
<i>query-max-response-time</i>	IGMP maximum query response time
<i>immediate-leave</i>	Removes a group from the IGMP table immediately when receiving a Leave Group request
<i>pim-sparse</i>	Sparse Mode (PIM-SM)

Name	Description
<i>ttl-threshold</i>	Set TTL threshold
<i>multicast-boundary</i>	Set switch as multicast boundary
<i>dr-priority</i>	DR priority value
<i>dead-interval</i>	OSPF dead interval
<i>hello-interval</i>	OSPF hello interval
<i>retransmit-interval</i>	OSPF retransmit interval
<i>transmit-delay</i>	OSPF transmit-delay
<i>ospf-ignore</i>	OSPF active address on the specific interface
<i>ospf-passive</i>	OSPF passive address on the specific interface
<i>secondary</i>	Secondary IP address on the specific interface
<i>static-group</i>	Static group to be joined
<i>active</i>	Active information

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

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

Request body

None

Response body

```
<ip xmlns="urn:brocade.com:mgmt:brocade-ip-policy"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ip">
  <address xmlns="urn:brocade.com:mgmt:brocade-ip-config"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ip/addresses/%22192.168.10.1/24%22">
    <address>192.168.10.1/24</address>
    <ospf-ignore>true</ospf-ignore>
  </address>
  <policy
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ip/policy">
    <route-map
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ip/policy/route-map">
      <route-map-name>map12</route-map-name>
    </route-map>
  </policy>
```

4 Configuration APIs

```
<access-group xmlns="urn:brocade.com:mgmt:brocade-ip-access-list"
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ip/acces
s-group/acl8%2Cin">
  <ip-access-list>acl8</ip-access-list>
  <ip-direction>in</ip-direction>
</access-group>
<ospf xmlns="urn:brocade.com:mgmt:brocade-ospf"
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ip/ospf"
>
  <area
y:self="/rest/config/running/rbridge-id/122/router/ospf/default-vrf/area/0.0.0.0
">
    <area-id>0.0.0.0</area-id>
  </area>
  <auth-change-wait-time
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ip/ospf/
auth-change-wait-time"/>
    <authentication-key
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ip/ospf/
authentication-key"/>
      <cost
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ip/ospf/
cost"/>
        <mtu-ignore
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ip/ospf/
mtu-ignore"/>
          <md5-authentication
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ip/ospf/
md5-authentication">
            <key-id
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ip/ospf/
md5-authentication/key-id"/>
              </md5-authentication>
            <database-filter
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ip/ospf/
database-filter"/>
              <dead-interval
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ip/ospf/
hello-interval"/>
                <hello-interval
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ip/ospf/
authentication-key"/>
                  <network
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ip/ospf/
network"/>
                    <passive
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ip/ospf/
passive"/>
                      <priority
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ip/ospf/
priority"/>
                        <retransmit-interval
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ip/ospf/
retransmit-interval"/>
                          <transmit-delay
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ip/ospf/
transmit-delay"/>
                            </ospf>
                          <icmp
y:self="/rest/config/running/interface/Management/%22195/1/7%22/ip/icmp">
```



```

    <unreachable>true</unreachable>
    <echo-reply>true</echo-reply>
    <rate-limiting>10</rate-limiting>
  </icmp>
  <dhcp xmlns="urn:brocade.com:mgmt:brocade-dhcp"
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ip/dhcp"
  >
    <relay
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ip/dhcp/
relay">
      <servers
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ip/dhcp/
relay/servers/10.24.25.26%2Cmgmt-vrf">
        <address>10.24.25.26</address>
        <use-vrf>mgmt-vrf</use-vrf>
      </servers>
    </relay>
  </dhcp>
  <mtu xmlns="urn:brocade.com:mgmt:brocade-ip-config">1600</mtu>
  <directed-broadcast
xmlns="urn:brocade.com:mgmt:brocade-ip-config">true</directed-broadcast>
  <proxy-arp xmlns="urn:brocade.com:mgmt:brocade-ip-config">true</proxy-arp>
  <arp-aging-timeout
xmlns="urn:brocade.com:mgmt:brocade-ip-config">10</arp-aging-timeout>
  <pim-sparse xmlns="urn:brocade.com:mgmt:brocade-pim">true</pim-sparse>
  <pim xmlns="urn:brocade.com:mgmt:brocade-pim"
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ip/pim">
    <dr-priority>15</dr-priority>
    <t1-threshold>10</t1-threshold>
  </pim>
  <multicast-boundary
xmlns="urn:brocade.com:mgmt:brocade-pim">true</multicast-boundary>
  <igmp xmlns="urn:brocade.com:mgmt:brocade-igmp"
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ip/igmp"
  />
    <last-member-query-interval>600</last-member-query-interval>
    <query-interval>500</query-interval>
    <query-max-response-time>20</query-max-response-time>
    <immediate-leave>true</immediate-leave>
  </igmp>
</ip>

```

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

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

Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6	<p>The Internet Protocol version 6 (IPv6)</p> <p>Supported interface types are:</p> <ul style="list-style-type: none"> • Port-Channel • Management • FortyGigabitEthernet • GigabitEthernet • HundredGigabitEthernet • TenGigabitEthernet • VLAN • VE

Parameters

Name	Description
<i>ipv6-access-list</i>	Access list name
<i>ip-direction</i>	<ul style="list-style-type: none"> • in - Ingress direction • out - Egress direction
<i>route-map-name</i>	Route-map name
<i>use-link-local-only</i>	Configure automatically computed link-local address
<i>mtu</i>	Set IPv6 MTU value to interface
<i>expire</i>	Configures the time interval after which the cache is deleted or refreshed
<i>attempts</i>	Number of neighbor solicitations to send as part of duplicate address detection
<i>time</i>	Retransmit time interval for neighbor solicitations, sent as part of duplicate address detection
<i>hoplimit</i>	Hop limit to be advertised in RA
<i>managed-config-flag</i>	Set managed config flag in router advertisement
<i>mtu</i>	MTU to be advertised in RA. Applicable in ipv6/nd
<i>ns-interval</i>	Interval between neighbor solicitations
<i>other-config-flag</i>	Set other config flag in router advertisement
<i>proxy</i>	Enable proxy flag
<i>max-interval</i>	Maximum interval in seconds (default 600)
<i>min</i>	Minimum interval between sending RA messages
<i>ra-lifetime</i>	Router lifetime in router advertisement
<i>reachable-time</i>	The duration node is considered reachable, sent in RA messages
<i>retrans-timer</i>	Configure RA retransmission timer, sent in RA messages
<i>all</i>	Suppress response to RS in addition to not sending RAS

Name	Description
<i>mtu</i>	Disable sending MTU in router advertisement messages
<i>vrrp-suppress-interface-ra</i>	Suppress interface RA for VRRPv3
<i>address</i>	IPv6 address of the DHCPv6 server
<i>prefix-ipv6-address</i>	IPv6 prefix
<i>infinite</i>	Infinite valid lifetime
<i>preferred-lifetime</i>	Preferred lifetime
<i>ipv6-address</i>	Displays assigned IPv6 addresses
<i>ra-guard</i>	IPv6 router advertisement guard configuration
<i>priority</i>	Interface priority
<i>vrid</i>	Virtual router identifier
<i>virtual-ipaddr</i>	Virtual IPv4 address
<i>interface-type</i>	The interface type
<i>interface-name</i>	The interface name
<i>track-priority</i>	Track priority
<i>enable</i>	Enable session
<i>hold-time</i>	Configure hold time for this session
<i>preempt-mode</i>	Set preempt mode for the session
<i>description</i>	Characters describing this interface
<i>advertise-backup</i>	Enable periodic backup advertisement messages
<i>nd-advertisement-timer</i>	Neighbor discovery advertisement
<i>advertisement-interval-scale</i>	IPv4 session advertisement interval scale factor
<i>backup-advertisement-interval</i>	Set backup advertisement interval
<i>vrrp-advertisement-interval</i>	VRRP advertisement interval
<i>revert-priority</i>	Set revert priority
<i>address</i>	IPv6 address
<i>anycast</i>	IPv6 address as anycast
<i>use-vrf</i>	VRF name
<i>interface</i>	Interface name
<i>hardware-address</i>	Hardware address

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

```
http://host:80/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ipv6
```

Request body

None

Response body

```

<ipv6 xmlns="urn:brocade.com:mgmt:brocade-interface"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ipv6">
  <vrrp-suppress-interface-ra
xmlns="urn:brocade.com:mgmt:brocade-ipv6-nd-ra">true</vrrp-suppress-interface-ra
>
  <nd xmlns="urn:brocade.com:mgmt:brocade-ipv6-nd-ra"
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ipv6/nd"
>
    <managed-config-flag>true</managed-config-flag>
    <other-config-flag>true</other-config-flag>
    <ra-lifetime>1900</ra-lifetime>
    <reachable-time>1</reachable-time>
    <mtu>1600</mtu>
    <retrans-timer>2</retrans-timer>
    <hoplimit>65</hoplimit>
    <ns-interval>2</ns-interval>
    <proxy>true</proxy>
    <suppress-ra
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ipv6/nd/
suppress-ra">
      <all>true</all>
    </suppress-ra>
    <ra-interval
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ipv6/nd/
ra-interval">
      <max-interval>650</max-interval>
      <min>250</min>
    </ra-interval>
    <dad
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ipv6/nd/
dad">
      <attempts>3</attempts>
      <time>2</time>
    </dad>
    <prefix xmlns="urn:brocade.com:mgmt:brocade-ipv6-nd-ra"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ipv6/nd/
prefix/%222ffe:1111::/64%22">
      <prefix-ipv6-address>2ffe:1111::/64</prefix-ipv6-address>
      <infinite>true</infinite>
      <preferred-lifetime>10</preferred-lifetime>
    </prefix>
    <cache
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ipv6/nd/
cache">

```

```

        <expire>220</expire>
    </cache>
</nd>
    <access-group xmlns="urn:brocade.com:mgmt:brocade-ipv6-access-list"
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ipv6/acc
ess-group/acl1%2Cin">
        <ipv6-access-list>acl1</ipv6-access-list>
        <ip-direction>in</ip-direction>
    </access-group>
    <policy
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ipv6/pol
icy">
        <route-map
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ipv6/pol
icy/route-map">
            <route-map-name>map12</route-map-name>
        </route-map>
    </policy>
    <ra-guard xmlns="urn:brocade.com:mgmt:brocade-ipv6-config">true</ra-guard>
    <dhcp xmlns="urn:brocade.com:mgmt:brocade-dhcpv6"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ipv6/dhc
p">
        <relay
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ipv6/dhc
p/relay">
            <servers
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ipv6/dhc
p/relay/servers/1::1">
                <address>1::1</address>
                <use-vrf>mgmt-vrf</use-vrf>
                <interface
y:self="/rest/config/running/interface/TenGigabitEthernet/%221/1/32%22/ipv6/dhcp
/relay/servers/1::1/interface">
                    <interface>fortygigabitethernet</interface>
                </interface>
            </servers>
        </relay>
    </dhcp>
    <address xmlns="urn:brocade.com:mgmt:brocade-ipv6-config"
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ipv6/add
ress">
        <ipv6-address
y:self="/rest/config/running/interface/FortyGigabitEthernet/%221/2/2%22/ipv6/add
ress/ipv6-address/%221:2::2:1/24%22">
            <address>1:2::2:1/24</address>
            <anycast>true</anycast>
        </ipv6-address>
        <use-link-local-only>true</use-link-local-only>
    </address>
    <neighbor xmlns="urn:brocade.com:mgmt:brocade-ipv6-nd-ra"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ipv6/nei
ghbor/2ffe:1111::">
        <ipv6-address>2ffe:1111::</ipv6-address>
        <hardware-address>0011.2222.2233</hardware-address>
    </neighbor>
    <mtu xmlns="urn:brocade.com:mgmt:brocade-ipv6-config">1600</mtu>

```

4 Configuration APIs

```
<ospf xmlns="urn:brocade.com:mgmt:brocade-ospfv3"
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ipv6/osp
f">
  <authentication
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ipv6/osp
f/authentication">
    <ipsec
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ipv6/osp
f/authentication/ipsec"/>
    </authentication>
    <area
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ipv6/osp
f/area"/>
    <authentication-key
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ipv6/osp
f/authentication-key"/>
    <cost
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ipv6/osp
f/cost"/>
    <dead-interval
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ipv6/osp
f/hello-interval"/>
    <hello-interval
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ipv6/osp
f/authentication-key"/>
    <hello-jitter
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ipv6/osp
f/hello-jitter"/>
    <instance
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ipv6/osp
f/instance"/>
    <mtu-ignore
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ipv6/osp
f/mtu-ignore"/>
    <network
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ipv6/osp
f/network"/>
    <passive
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ipv6/osp
f/passive"/>
    <priority
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ipv6/osp
f/priority"/>
    <retransmit-interval
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ipv6/osp
f/retransmit-interval"/>
    <suppress-linklsa
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ipv6/osp
f/suppress-linklsa"/>
    <transmit-delay
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ipv6/osp
f/transmit-delay"/>
  </ospf>
  <vrrpv3e-group
y:self="/rest/config/running/TenGigabitEthernet/%22195/1/7%22/vrrpv3-group">
    <priority>110</priority>
    <vrid>2</vrid>
    <virtual-ip>
      <virtual-ipaddr>2000::1</virtual-ipaddr>
    </virtual-ip>
```

```
<track
y:self="/rest/config/running/TenGigabitEthernet/%22195/1/7%22/vrrpv3-group/track
">
  <interface>
    <interface-type>tengigabitethernet</interface-type>
    <interface-name>3/2</interface-name>
    <track-priority>20</track-priority>
  </interface>
</track>
<enable></enable>
<hold-time>20</hold-time>
<preempt-mode></preempt-mode>
<description>test</description>
<advertise-backup></advertise-backup>
<nd-advertisement-timer>10</nd-advertisement-timer>
<advertisement-interval-scale>5</advertisement-interval-scale>
<backup-advertisement-interval>70</backup-advertisement-interval>
<vrrpe-advertisement-interval>2</vrrpe-advertisement-interval>
<short-path-forwarding
y:self="/rest/config/running/TenGigabitEthernet/%22195/1/7%22/vrrpv3-group/short
-path-forwarding">
  <basic></basic>
  <revert-priority>10</revert-priority>
</short-path-forwarding>
</vrrpv3e-group>
</ipv6>
```

interface/{interface-type}/{interface-name}/lacp

Configures, modifies, or retrieves LACP commands.

Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/lacp	LACP commands Supported interface types are: <ul style="list-style-type: none"> FortyGigabitEthernet GigabitEthernet HundredGigabitEthernet TenGigabitEthernet

Parameters

Name	Description
timeout	<ul style="list-style-type: none"> long - Set LACP long timeout short - Set LACP short timeout
std_port-priority	LACP port priority
default-up	To bring up the interface in LACP default state

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

```
http://host:80/rest/config/running/interface/FortyGigabitEthernet/%221/2/3%22/lacp
```

Request body

None

Response body

```
<lacp xmlns="urn:brocade.com:mgmt:brocade-lacp"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/interface/FortyGigabitEthernet/%221/2/3%22/lacp">
  <timeout>short</timeout>
  <std_port-priority>32768</std_port-priority>
  <default-up>true</default-up>
</lacp>
```


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

Configures, modifies, or retrieves the Link Layer Discovery Protocol (LLDP).

Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/lldp	The Link Layer Discovery Protocol (LLDP) Supported interface types are: <ul style="list-style-type: none"> FortyGigabitEthernet GigabitEthernet HundredGigabitEthernet TenGigabitEthernet

Parameters

Name	Description
<i>dcbx-version</i>	Set up DCBX version
<i>disable</i>	Disable LLDP on the Interface.
<i>iscsi-priority</i>	Configure the Ethernet priority to advertise for iSCSI on this interface
<i>profile</i>	The LLDP profile on the interface

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

```
http://host:80/rest/config/running/interface/FortyGigabitEthernet/%22195/2/11%22/lldp
```

Request body

None

Response body

```
<lldp xmlns="urn:brocade.com:mgmt:brocade-lldp"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/interface/FortyGigabitEthernet/%22195/2/11%22/lldp"
>
  <dcbx-version>cee</dcbx-version>
  <disable>>true</disable>
  <iscsi-priority>2</iscsi-priority>
  <profile>profile1</profile>
</lldp>
```

interface/{interface-type}/{interface-name}/mac

Configures, modifies, or retrieves MAC parameters.

Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/mac	MAC parameters Supported interface types are: <ul style="list-style-type: none"> • Port-Channel • FortyGigabitEthernet • GigabitEthernet • HundredGigabitEthernet • TenGigabitEthernet • VLAN

Parameters

Name	Description
mac-access-list	Access list name
mac-direction	<ul style="list-style-type: none"> • in - Ingress direction • out - Egress direction

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

http://host:80/rest/config/running/interface/TenGigabitEthernet/%2254/0/1%22/mac

Request body

None

Response body

```
<mac xmlns="urn:brocade.com:mgmt:brocade-mac-access-list"
y:self="/rest/config/running/interface/TenGigabitEthernet/%2254/0/1%22/mac">
  <access-group
y:self="/rest/config/running/interface/TenGigabitEthernet/%2254/0/1%22/mac/access-group/acl2%2Cin">
    <mac-access-list>acl2</mac-access-list>
    <mac-direction>in</mac-direction>
  </access-group>
</mac>
```

interface/{interface-type}/{interface-name}/mac-learning

Configures, modifies, or retrieves MAC learning.

Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/mac-learning	MAC learning Supported interface types are: <ul style="list-style-type: none"> • Port-Channel • FortyGigabitEthernet • GigabitEthernet • HundredGigabitEthernet • TenGigabitEthernet

Parameters

Name	Description
add	Range of VLANs to add
remove	Range of VLANs to remove

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

```
http://host:80/rest/config/running/interface/TenGigabitEthernet/%221/0/47%22/mac-learning
```

Request body

None

Response body

```
<mac-learning
y:self="/rest/config/running/interface/TenGigabitEthernet/%221/0/47%22/mac-learning">
  <disable
y:self="/rest/config/running/interface/TenGigabitEthernet/%221/0/47%22/mac-learning/disable">
    <vlan
y:self="/rest/config/running/interface/TenGigabitEthernet/%221/0/47%22/mac-learning/disable/vlan">
      <add>1000</add>
    </vlan>
  </disable>
</mac-learning>
```

interface/{interface-type}/{interface-name}/port-profile-port

Configures, modifies, or retrieves the interface set to AMPP profile mode.

Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/port-profile-port	Set the interface to AMPP profile mode Supported interface types are: <ul style="list-style-type: none"> • Port-Channel • FortyGigabitEthernet • GigabitEthernet • HundredGigabitEthernet • TenGigabitEthernet

Parameters

Name	Description
profile-domain-name	Port-profile domain name

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

```
http://host:80/rest/config/running/interface/FortyGigabitEthernet/%221/2/3%22/port-profile-port
```

Request body

None

Response body

```
<port-profile-port xmlns="urn:brocade.com:mgmt:brocade-port-profile"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/interface/FortyGigabitEthernet/%221/2/3%22/port-profile-port">
  <domain
y:self="/rest/config/running/interface/FortyGigabitEthernet/%221/2/3%22/port-profile-port/domain">
    <profile-domain-name>default</profile-domain-name>
  </domain>
</port-profile-port>
```

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

Configures, modifies, or retrieves Quality of Service (QoS).

Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos	Quality of Service (QoS) Supported interface types are: <ul style="list-style-type: none"> • Port-Channel • FortyGigabitEthernet • GigabitEthernet • HundredGigabitEthernet • TenGigabitEthernet

Parameters

Name	Description
cos	Default Class of Service (CoS)
cos-mutation	CoS-to-CoS mutation
dscp-mutation	DSCP-to-COS map
cos-traffic-class	CoS-to-Traffic Class map
dscp-cos	DSCP-to-COS map
dscp-traffic-class	DSCP-to-Traffic Class map
red-tc-value	Traffic class to configure RED on
trust-cos	Trust L2 CoS field in incoming packets for deriving internal Traffic Class
trust-dscp	Trust L3 DSCP field in incoming packets for deriving internal Traffic Class
pfc-cos	CoS value
pfc-tx	<ul style="list-style-type: none"> • off - Pause generation disabled • on - Pause generation enabled
pfc-rx	<ul style="list-style-type: none"> • off - Pause generation disabled • on - Pause generation enabled
tx	<ul style="list-style-type: none"> • off - Pause generation disabled • on - Pause generation enabled
rx	<ul style="list-style-type: none"> • off - Pause generation disabled • on - Pause generation enabled

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

http://host:80/rest/config/running/interface/FortyGigabitEthernet/%221/2/3%22/qos

Request body

None

Response body

```
<qos xmlns="urn:brocade.com:mgmt:brocade-qos"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/interface/FortyGigabitEthernet/%221/2/3%22/qos">
  <cos>1</cos>
  <trust xmlns="urn:brocade.com:mgmt:brocade-qos"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/interface/FortyGigabitEthernet/%221/2/3%22/qos/trus
t">
    <trust-cos>true</trust-cos>
    <trust-dscp>true</trust-dscp>
  </trust>
  <cos-mutation>map1</cos-mutation>
  <cos-traffic-class>map2</cos-traffic-class>
  <dscp-mutation>map4</dscp-mutation>
  <dscp-cos>map3</dscp-cos>
  <dscp-traffic-class>map5</dscp-traffic-class>
  <random-detect
y:self="/rest/config/running/interface/FortyGigabitEthernet/%221/2/3%22/qos/rand
om-detect">
    <traffic-class
y:self="/rest/config/running/interface/FortyGigabitEthernet/%221/2/3%22/qos/rand
om-detect/traffic-class/2">
      <red-tc-value>2</red-tc-value>
    </traffic-class>
  </random-detect>
  <flowcontrol
y:self="/rest/config/running/interface/FortyGigabitEthernet/%221/2/3%22/qos/flow
control">
    <pfc>
      <pfc-cos>1</pfc-cos>
      <pfc-tx>on</pfc-tx>
      <pfc-rx>on</pfc-rx>
    </pfc>
    <flowcontrolglobal>
      <tx>on</tx>
      <rx>on</rx>
    </flowcontrolglobal>
  </flowcontrol>
</qos>
```

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

Configures, modifies, or retrieves Remote Monitoring Protocol (RMON).

Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/rmon	Remote Monitoring Protocol (RMON) Supported interface types are: <ul style="list-style-type: none"> • FortyGigabitEthernet • GigabitEthernet • HundredGigabitEthernet • TenGigabitEthernet

Parameters

Name	Description
<i>ether-stats-index</i>	Statistics index
<i>owner</i>	Owner identity
<i>history-control-index</i>	History index
<i>buckets</i>	Buckets (default 50)
<i>interval</i>	Polling Interval (default 1800)

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

```
http://host:80/rest/config/running/interface/FortyGigabitEthernet/%22195/2/11%22/rmon
```

Request body

None

Response body

```
<rmon xmlns="urn:brocade.com:mgmt:brocade-rmon"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/interface/FortyGigabitEthernet/%22195/2/11%22/rmon"
>
  <collection
y:self="/rest/config/running/interface/FortyGigabitEthernet/%22195/2/11%22/rmon/
collection">
    <stats
y:self="/rest/config/running/interface/FortyGigabitEthernet/%22195/2/11%22/rmon/
collection/stats/255">
```

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```
        <ether-stats-index>255</ether-stats-index>
        <owner>admin</owner>
    </stats>
    <history
y:self="/rest/config/running/interface/FortyGigabitEthernet/%22195/2/11%22/rmon/
collection/history/25">
        <history-control-index>25</history-control-index>
        <interval>2000</interval>
        <owner>admin</owner>
        <buckets>10</buckets>
    </history>
</collection>
</rmon>
```


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

Configures, modifies, or retrieves Input/Output policy map.

Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/service-policy	Attach Input/Output policy map Supported interface types are: <ul style="list-style-type: none"> • Port-Channel • FortyGigabitEthernet • GigabitEthernet • HundredGigabitEthernet • TenGigabitEthernet

Parameters

Name	Description
<i>in</i>	Input policy map
<i>out</i>	Output policy map

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

```
http://host:80/rest/config/running/interface/FortyGigabitEthernet/%221/2/3%22%22/service-policy
```

Request body

None

Response body

```
<service-policy xmlns="urn:brocade.com:mgmt:brocade-policer"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/interface/FortyGigabitEthernet/%221/2/3%22/service-policy">
  <in>polycymap1</in>
  <out>polycymap1</out>
</service-policy>
```

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	sFlow configuration Supported interface types are: <ul style="list-style-type: none"> FortyGigabitEthernet GigabitEthernet HundredGigabitEthernet TenGigabitEthernet

Parameters

Name	Description
enable	Enable port sFlow
polling-interval	Interface counter polling interval
sample-rate	Interface sampling rate

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

```
http://host:80/rest/config/running/interface/FortyGigabitEthernet/%22195/2/11%22/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/interface/FortyGigabitEthernet/%22195/2/11%22/sflow">
  <enable>true</enable>
  <polling-interval>25</polling-interval>
  <sample-rate>32760</sample-rate>
</sflow>
```

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

Configures, modifies, or retrieves Spanning Tree Protocol commands.

Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree	Spanning tree commands Supported interface types are: <ul style="list-style-type: none"> • Port-Channel • FortyGigabitEthernet • GigabitEthernet • HundredGigabitEthernet • TenGigabitEthernet • VLAN

Parameters

Name	Description
<i>cost</i>	Changes an interface's spanning-tree port path cost
<i>bpdu-filter</i>	Sets the edge port Bridge Protocol Data Unit (BPDU) filter for the port
<i>bpdu-guard</i>	Guards the port against the reception of BPDUs
<i>portfastbasic</i>	Enables the Port Fast feature on an interface to allow the interface to quickly transition to forwarding state
<i>bpdu-mac</i>	Sets the MAC address of the Bridge Protocol Data Unit (BPDU)
<i>root</i>	Enables the guard root to restrict which interface is allowed to be the spanning-tree root port or the path-to-the-root for the switch
<i>priority</i>	Specifies the port priority for a bridge
<i>link-type</i>	Enables and disables the rapid transition for the Spanning Tree Protocol (STP)
<i>restricted-role</i>	Specifies to restrict the role of a port
<i>restricted-tcn</i>	Restricts the topology change notification Bridge Protocol Data Units (BPDUs) sent on the port
<i>shutdown</i>	Enables or disables spanning tree on the interface
<i>id</i>	Specifies the MSTP instance
<i>autoedge</i>	Enables automatic edge detection
<i>hello-time</i>	Configures the hello-time in seconds on the interface
<i>edgeportbasic</i>	Enables the edge port on an interface to allow the interface to quickly transition to the forwarding state

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

```
http://host:80/rest/config/running/interface/TenGigabitEthernet/%2214/1/9%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/protocol/spanning-tree">
  <cost>50</cost>
  <portfast
y:self="/rest/config/running/interface/TenGigabitEthernet/%2214/1/9%22/spanning-
tree/portfast">
    <bpdu-filter>true</bpdu-filter>
    <portfastbasic>true</portfastbasic>
    <bpdu-guard>true</bpdu-guard>
  </portfast>
  <bpdu-mac>0100.0ccc.cccd</bpdu-mac>
  <guard
y:self="/rest/config/running/interface/TenGigabitEthernet/%2214/1/9%22/spanning-
tree/guard">
    <root>true</root>
  </guard>
  <autoedge>true</autoedge>
  <priority>240</priority>
  <hello-time>10</hello-time>
  <link-type>shared</link-type>
  <restricted-role>true</restricted-role>
  <restricted-tcn>true</restricted-tcn>
  <edgeport
y:self="/rest/config/running/interface/TenGigabitEthernet/%2214/1/9%22/spanning-
tree/edgeport">
    <bpdu-filter>true</bpdu-filter>
    <edgeportbasic>true</edgeportbasic>
    <bpdu-guard>true</bpdu-guard>
  </edgeport>
  <shutdown>true</shutdown>
  <instance xmlns="urn:brocade.com:mgmt:brocade-xstp"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/interface/TenGigabitEthernet/%2214/1/9%22/spanning-
tree/instance/11">
    <id>11</id>
    <priority>240</priority>
    <cost>60</cost>
    <restricted-role>true</restricted-role>
    <restricted-tcn>true</restricted-tcn>
  </instance>
  <vlan xmlns="urn:brocade.com:mgmt:brocade-xstp"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/interface/TenGigabitEthernet/%2214/1/9%22/spanning-
tree/vlan/4000">
    <id>4000</id>
```

```
    <priority>250</priority>
    <cost>70</cost>
    <guard
y:self="/rest/config/running/interface/TenGigabitEthernet/%2214/1/9%22/spanning-
tree/vlan/4000/guard">
      <root>true</root>
    </guard>
  </vlan>
</spanning-tree>
```

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

Configures, modifies, or retrieves BUM Storm Control.

Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/storm-control	BUM Storm Control Supported interface types are: <ul style="list-style-type: none"> FortyGigabitEthernet GigabitEthernet HundredGigabitEthernet TenGigabitEthernet

Parameters

Name	Description
<i>protocol-type</i>	Configure traffic rate limiting parameters <ul style="list-style-type: none"> broadcast multicast unknown-unicast
<i>rate-format</i>	<ul style="list-style-type: none"> limit-bps - Configure the rate limit in bits per second (bps) limit-percent - Configure the rate limit in percentage of the line rate
<i>rate-bps</i>	Rate limit value
<i>bum-action</i>	<ul style="list-style-type: none"> monitor - Monitor port for violations shutdown - Shut down port in case of violation

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

```
http://host:80/rest/config/running/interface/FortyGigabitEthernet/%22195/2/11%22/storm-control
```

Request body

None

Response body

```
<storm-control xmlns="urn:brocade.com:mgmt:brocade-bum-storm-control"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/interface/FortyGigabitEthernet/%22195/2/11%22/storm-control">
```

```
<ingress
y:self="/rest/config/running/interface/FortyGigabitEthernet/%22195/2/11%22/storm
-control/ingress/broadcast">
  <protocol-type>broadcast</protocol-type>
  <rate-format>limit-bps</rate-format>
  <rate-bps>10000</rate-bps>
  <bum-action>monitor</bum-action>
</ingress>
<ingress
y:self="/rest/config/running/interface/FortyGigabitEthernet/%22195/2/11%22/storm
-control/ingress/multicast">
  <protocol-type>multicast</protocol-type>
  <rate-format>limit-percent</rate-format>
  <rate-percent>23</rate-percent>
  <bum-action>shutdown</bum-action>
</ingress>
<ingress
y:self="/rest/config/running/interface/FortyGigabitEthernet/%22195/2/11%22/storm
-control/ingress/unknown-unicast">
  <protocol-type>unknown-unicast</protocol-type>
  <rate-format>limit-bps</rate-format>
  <rate-bps>50000</rate-bps>
  <bum-action>monitor</bum-action>
</ingress>
</storm-control>
```

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	Set the switching characteristics of the Layer 2 interface Supported interface types are: <ul style="list-style-type: none"> • Port-Channel • FortyGigabitEthernet • GigabitEthernet • HundredGigabitEthernet • TenGigabitEthernet

Parameters

Name	Description
<i>switchport</i>	Puts the interface in Layer 2 mode
<i>max</i>	Maximum number of allowed MAC addresses
<i>native-vlan</i>	Set the native VLAN characteristics of the Layer 2 trunk interface for classifying untagged traffic
<i>trunk-basic</i>	Set the Layer 2 interface as private-vlan trunk basic
<i>trunk-promiscuous</i>	Set the Layer 2 interface as private-vlan trunk promiscuous
<i>trunk-host</i>	Set the Layer 2 interface as private-vlan trunk host
<i>accessvlan</i>	Specifies the access VLAN for this interface
<i>rspan-access-vlan</i>	Specify RSPANVLAN ID to set as access VLAN
<i>pvlan_all</i>	Allow all VLANs to Xmit/Rx through the Layer 2 interface
<i>pvlan_none</i>	Allow no VLANs to Xmit/Rx through the Layer 2 interface
<i>pvlan_add</i>	Add a VLAN to Xmit/Rx through the Layer 2 interface
<i>pvlan_except</i>	Allow all VLANs except VID to Xmit/Rx through Layer 2 interface
<i>pvlan_remove</i>	Remove a VLAN that Xmit/Rx through the Layer 2 interface
<i>pvlanNativevlan</i>	VLAN interface number
<i>pvlan-native-vlan-ctag-id</i>	Associate a Ctag
<i>host-pri-pvlan</i>	VLAN interface number
<i>host-sec-pvlan</i>	VLAN interface number
<i>trunk-pri-pvlan</i>	Primary VLAN ID
<i>trunk-sec-pvlan</i>	Secondary VLAN ID
<i>promis-pri-pvlan</i>	Primary VLAN ID
<i>oper</i>	<ul style="list-style-type: none"> • add - Add Secondary VLAN IDs • delete - Remove secondary VLAN IDs

Name	Description
<i>promis-sec-pvlan-range</i>	VLAN ID/VLAN Range
<i>all</i>	Specify all Dot1q VLANs
<i>none</i>	Specify 'no dot1q vlans'
<i>add</i>	Specifies list of VLANs to be added
<i>except</i>	Specifies exception list of VLANs
<i>remove</i>	Specifies the list of VLANs to be removed
<i>add-rspan-trunk-vlan</i>	Specify RSPAN VLAN ID
<i>remove-rspan-trunk-vlan</i>	Specifies the list of RSPAN VLANs to be removed
<i>trunk-vlan-id</i>	VLAN ID
<i>trunk-ctag-id</i>	Ctag ID

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

```
http://host:80/rest/config/running/interface/FortyGigabitEthernet/%22195/2/2%22/switchport
```

Request body

None

Response body

```
<switchport xmlns="urn:brocade.com:mgmt:brocade-interface"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/interface/FortyGigabitEthernet/%22195/2/2%22/switch
port">
  <switchport>true</switchport>
  <mode
y:self="/rest/config/running/interface/FortyGigabitEthernet/%22195/2/2%22/switch
port/mode">
    <private-vlan
y:self="/rest/config/running/interface/FortyGigabitEthernet/%22195/2/2%22/switch
port/mode/private-vlan">
      <trunk
y:self="/rest/config/running/interface/FortyGigabitEthernet/%22195/2/2%22/switch
port/mode/private-vlan/trunk">
        <trunk-basic>true</trunk-basic>
        <trunk-promiscuous>true</trunk-promiscuous>
        <trunk-host>true</trunk-host>
      </trunk>
    </private-vlan>
  </mode>
```

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```
<port-security
y:self="/rest/config/running/interface/FortyGigabitEthernet/%22195/2/2%22/switch
port/port-security">
  <max>5</max>
</port-security>
<access
y:self="/rest/config/running/interface/FortyGigabitEthernet/%22195/2/2%22/switch
port/access">
  <accessvlan>2000</accessvlan>
  <rspan-access
y:self="/rest/config/running/interface/FortyGigabitEthernet/%22195/2/2%22/switch
port/access/rspan-access">
  <rspan-access-vlan>1000</rspan-access-vlan>
</rspan-access>
</access>
  <private-vlan
y:self="/rest/config/running/interface/FortyGigabitEthernet/%22195/2/2%22/switch
port/private-vlan">
  <trunk
y:self="/rest/config/running/interface/FortyGigabitEthernet/%22195/2/2%22/switch
port/private-vlan/trunk">
  <allowed
y:self="/rest/config/running/interface/FortyGigabitEthernet/%22195/2/2%22/switch
port/private-vlan/trunk/allowed">
  <vlan
y:self="/rest/config/running/interface/FortyGigabitEthernet/%22195/2/2%22/switch
port/private-vlan/trunk/allowed/vlan">
  <pvlan_all>true</pvlan_all>
  <pvlan_none>true</pvlan_none>
  <pvlan_add>10</pvlan_add>
  <pvlan_except>2000</pvlan_except>
  <pvlan_remove>12</pvlan_remove>
  </vlan>
  </allowed>
  <native
y:self="/rest/config/running/interface/FortyGigabitEthernet/%22195/2/2%22/switch
port/private-vlan/trunk/native">
  <pvlanNativevlan>2000</pvlanNativevlan>
  <pvlan-native-vlan-ctag-id>3000</pvlan-native-vlan-ctag-id>
  </native>
  </trunk>
  <host-association
y:self="/rest/config/running/interface/FortyGigabitEthernet/%22195/2/2%22/switch
port/private-vlan/host-association">
  <host-pri-pvlan>1000</host-pri-pvlan>
  <host-sec-pvlan>2000</host-sec-pvlan>
  </host-association>
  <association
y:self="/rest/config/running/interface/FortyGigabitEthernet/%22195/2/2%22/switch
port/private-vlan/association">
  <trunk
y:self="/rest/config/running/interface/FortyGigabitEthernet/%22195/2/2%22/switch
port/private-vlan/association/trunk">
  <trunk-pri-pvlan>100</trunk-pri-pvlan>
  <trunk-sec-pvlan>300</trunk-sec-pvlan>
  </trunk>
  </asspcoation>
  <mapping
y:self="/rest/config/running/interface/FortyGigabitEthernet/%22195/2/2%22/switch
port/private-vlan/mapping">
```

```

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

```

interface/{interface-type}/{interface-name}/track

Configures, modifies, or retrieves the track interface.

Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/track	Track interface Supported interface types are: TenGigabitEthernet

Parameters

Name	Description
enable	Enable tracking interface
track-interface-type	<ul style="list-style-type: none"> track-interface-type-port-channel - Track Port-Channel interface track-interface-type-track-ethernet - Track external physical interface
track-interface-name	Interface name

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

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

Request body

None

Response body

```
<track xmlns="urn:brocade.com:mgmt:brocade-interface"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/track">
  <interface
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/track/in
terface/track-interface-type-port-channel%2Ctengigabitethernet">
    <track-interface-type>track-interface-type-port-channel</track-interface-type>
    <track-interface-name>tengigabitethernet</track-interface-name>
  </interface>
</track>
```

interface/{interface-type}/{interface-name}/tunnel

Configures, modifies, or retrieves tunneling parameters.

Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/tunnel	Tunneling parameters Supported interface types are: <ul style="list-style-type: none"> • Port-Channel • FortyGigabitEthernet • GigabitEthernet • HundredGigabitEthernet • TenGigabitEthernet

Parameters

Name	Description
tagged-ieee-bpdu	Enable tunneling of tagged IEEE BPDUs though VCS fabric

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

```
http://host:80/rest/config/running/interface/FortyGigabitEthernet/%22195/2/2%22/tunnel
```

Request body

None

Response body

```
<tunnel xmlns="urn:brocade.com:mgmt:brocade-xstp"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/interface/FortyGigabitEthernet/%22195/2/2%22/tunnel">
  <tagged-ieee-bpdu>true</tagged-ieee-bpdu>
</tunnel>
```

interface/{interface-type}/{interface-name}/udld

Configures, modifies, or retrieves UDLD commands.

Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/udld	UDLD commands Supported interface types are: <ul style="list-style-type: none"> • FortyGigabitEthernet • GigabitEthernet • HundredGigabitEthernet • TenGigabitEthernet

Parameters

Name	Description
enable	Enable UDLD protocol on the interface

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

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

Request body

None

Response body

```
<udld xmlns="urn:brocade.com:mgmt:brocade-udld"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/udld">
  <enable>true</enable>
</udld>
```

interface/{interface-type}/{interface-name}/vlan

Configures, modifies, or retrieves VLAN commands.

Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vlan	VLAN commands. Supported interface types are: <ul style="list-style-type: none"> • Port-Channel • FortyGigabitEthernet • GigabitEthernet • HundredGigabitEthernet • TenGigabitEthernet

Parameters

Name	Description
groupid	VLAN classifier group ID
vlan-name	VLAN name
vlan	VLAN

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

```
http://host:80/rest/config/running/interface/FortyGigabitEthernet/%221/2/3%22/vlan
```

Request body

None

Response body

```
<vlan xmlns="urn:brocade.com:mgmt:brocade-vlan"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/interface/FortyGigabitEthernet/%221/2/3%22/vlan">
  <classifier>
    <activate>
      <group>
        <groupid>1</groupid>
        <vlan-name>vlan</vlan-name>
        <vlan>2</vlan>
      </group>
    </activate>
  </classifier>
</vlan>
```

interface/{interface-type}/{interface-name}/vrf

Configures, modifies, or retrieves VRF.

Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrf	Assign VRF to this Ethernet interface Supported interface types are: <ul style="list-style-type: none"> FortyGigabitEthernet GigabitEthernet HundredGigabitEthernet TenGigabitEthernet

Parameters

Name	Description
forwarding	Name of VRF

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

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

Request body

None

Response body

```
<vrf xmlns="urn:brocade.com:mgmt:brocade-interface"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/vrf">
  <forwarding>mgmt-vrf</forwarding>
</vrf>
```


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

Configures, modifies, or retrieves VRRP configuration.

Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-group	Start VRRP configuration Supported interface types are: <ul style="list-style-type: none"> FortyGigabitEthernet GigabitEthernet HundredGigabitEthernet TenGigabitEthernet

Parameters

Name	Description
<i>vrid</i>	Virtual router identifier
<i>version</i>	VRRP version

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

```
http://host:80/rest/config/running/interface/TenGigabitEthernet/%22102/5/1%22/vrrp-group
```

Request body

None

Response body

```
<vrrp-group
y:self="/rest/config/runninginterface/TenGigabitEthernet/%22102/5/1%22/vrrp-group/>
  <vrid>2</vrid>
  <version>2</version>
</vrrp-group>
```

interface/vlan/{vlan-number}/private-vlan

Configures, modifies, or retrieves private VLAN.

Resource URIs

URI	Description
<base_URI>/config/running/interface/vlan/{vlan-number}/private-vlan	Configure VLAN as private VLAN

Parameters

Name	Description
<i>pvlan-type-leaf</i>	<ul style="list-style-type: none"> community - Set the VLAN interface as comunity VLAN isolated - Set the VLAN interface as Isolated VLAN primary - Set the VLAN interface as Primary VLAN
<i>add</i>	VLAN to add
<i>remove</i>	VLAN to remove

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

http://host:80/rest/config/running/interface/vlan/1/private-vlan

Request body

None

Response body

```
<private-vlan xmlns="urn:brocade.com:mgmt:brocade-interface"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/interface/Vlan/1/private-vlan">
  <pvlan-type-leaf>isolated</pvlan-type-leaf>
  <association
y:self="/rest/config/running/interface/Vlan/1/private-vlan/association">
    <add>1000</add>
    <remove>4098</remove>
  </association>
</private-vlan>
```

interface/vlan/{vlan-number}/transport-service

Configures, modifies, or retrieves the transport LAN service ID (tlsid) for transparent VLAN

Resource URIs

URI	Description
<base_URI>/config/running/interface/vlan/{vlan-number}/transport-service	Set tlsid for transparent VLAN

Parameters

Name	Description
<i>name</i>	tlsid number
<i>transport-service</i>	Associates a service VF with a trunk port interface as a transport VF

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

```
http://host:80/rest/config/running/interface/vlan/8000/transport-service
```

Request body

None

Response body

```
<Vlan xmlns="urn:brocade.com:mgmt:brocade-interface"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/interface/Vlan/8000">
  <name>8000</name>
  <transport-service>10</transport-service>
</Vlan>
```

interface/ve/{ve-number}/attach

Configures, modifies, or retrieves attachments.

Resource URIs

URI	Description
<base_URI>/config/running/interface/ve/{ve-number}/attach	Configure attachments

Parameters

Name	Description
add	Range of RBridge IDs to add
remove	Range of RBridge IDs to remove

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

```
http://host:80/rest/config/running/interface/ve/1/attach
```

Request body

None

Response body

```
<attach xmlns="urn:brocade.com:mgmt:brocade-anycast-gateway"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/interface/Ve/1/attach">
  <rbridge-id y:self="/rest/config/running/interface/Ve/1/attach/rbridge-id">
    <add>195</add>
  </rbridge-id>
</attach>
```

interface/port-channel/{port-channel-number}/vlag

Configures, modifies, or retrieves Virtual LAG.

Resource URIs

URI	Description
<base_URI>/config/running/interface/port-channel/{port-channel-number}/vlag	Virtual LAG

Parameters

Name	Description
<i>ignore-split</i>	VLAG ignore-split-recovery

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

```
http://host:80/rest/config/running/interface/Port-channel/6144/vlag
```

Request body

None

Response body

```
<vlag xmlns="urn:brocade.com:mgmt:brocade-interface"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/interface/Port-channel/6144/vlag">
  <ignore-split>true</ignore-split>
</vlag>
```

ip

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

Resource URIs

URI	Description
<base_URI>/config/running/ip	The Internet Protocol
<base_URI>/config/running/ip/access-list/standard	Standard IP ACL
<base_URI>/config/running/ip/access-list/standard/{ACL-name}/seq	Sequence number
<base_URI>/config/running/ip/access-list/extended	Extended IP ACL
<base_URI>/config/running/ip/access-list/extended/{ACL-name}/seq	Sequence number
<base_URI>/config/running/ip/dns	Domain name system configuration
<base_URI>/config/running/ip/igmp/snooping	Layer 2 snooping

Parameters

Name	Description
<i>name</i>	Access list name
<i>seq</i>	Sequence number
<i>seq-id</i>	Specifies the sequence number for the rule
<i>action</i>	<ul style="list-style-type: none"> deny hard-drop permit
<i>src-host-any-sip</i>	Specifies any source host IP address
<i>src-host-ip</i>	Specifies the source host IP address
<i>src-mask</i>	Source IP address mask
<i>count</i>	Enables the counting of the packets matching the rule
<i>log</i>	Packets matching the filter are sent to the CPU and a corresponding log entry is generated by enabling the logging mechanism. This parameter is only available with permit and deny.
<i>protocol-type</i>	The type of protocol used
<i>dst-host-any-dip</i>	Specifies any destination host IP address
<i>dst-host-ip</i>	Specifies the destination host IP address
<i>vlan</i>	VLAN interface number
<i>dscp</i>	Specifies the DSCP field value in IP header when a packet matches a flow
<i>snooping</i>	Any source IP address
<i>enable</i>	Enables the IGMP snooping
<i>domain-name</i>	Domain name
<i>name-server</i>	Name server configurations

Name	Description
<i>urg</i>	TCP flags
<i>ack</i>	TCP flags
<i>push</i>	TCP flags
<i>fin</i>	TCP flags
<i>rst</i>	TCP flags
<i>sync</i>	TCP flags

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

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

Request body

None

Response body

```
<ip xmlns="urn:brocade.com:mgmt:brocade-ip-access-list"
xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/ip">
  <access-list y:self="/rest/config/running/ip/access-list">
    <standard y:self="/rest/config/running/ip/access-list/standard/acl15">
      <name>acl15</name>
      <seq y:self="/rest/config/running/ip/access-list/standard/acl15/seq/10">
        <seq-id>10</seq-id>
        <action>deny</action>
        <src-host-any-sip>host</src-host-any-sip>
        <src-host-ip>10.12.14.17</src-host-ip>
        <count>true</count>
        <log>true</log>
      </seq>
      <seq y:self="/rest/config/running/ip/access-list/standard/acl15/seq/20">
        <seq-id>20</seq-id>
        <action>hard-drop</action>
        <src-host-any-sip>10.14.16.98</src-host-any-sip>
        <src-mask>10.54.58.74</src-mask>
        <count>true</count>
        <log>true</log>
      </seq>
      <seq y:self="/rest/config/running/ip/access-list/standard/acl15/seq/30">
        <seq-id>30</seq-id>
        <action>permit</action>
        <src-host-any-sip>host</src-host-any-sip>
        <src-host-ip>10.24.15.17</src-host-ip>
        <count>true</count>
        <log>true</log>
      </seq>
    </access-list>
  </ip>
```

4 Configuration APIs

```
<seq y:self="/rest/config/running/ip/access-list/standard/acl15/seq/100">
  <seq-id>100</seq-id>
  <action>hard-drop</action>
  <src-host-any-sip>any</src-host-any-sip>
  <count>true</count>
  <log>true</log>
</seq>
</standard>
<standard y:self="/rest/config/running/ip/access-list/standard/exit">
  <name>exit</name>
  <seq y:self="/rest/config/running/ip/access-list/standard/exit/seq/10">
    <seq-id>10</seq-id>
    <action>hard-drop</action>
    <src-host-any-sip>host</src-host-any-sip>
    <src-host-ip>10.20.34.100</src-host-ip>
    <count>true</count>
    <log>true</log>
  </seq>
  <seq y:self="/rest/config/running/ip/access-list/standard/exit/seq/20">
    <seq-id>20</seq-id>
    <action>permit</action>
    <src-host-any-sip>host</src-host-any-sip>
    <src-host-ip>10.14.88.100</src-host-ip>
    <count>true</count>
    <log>true</log>
  </seq>
  <seq y:self="/rest/config/running/ip/access-list/standard/exit/seq/20000">
    <seq-id>20000</seq-id>
    <action>hard-drop</action>
    <src-host-any-sip>any</src-host-any-sip>
    <count>true</count>
    <log>true</log>
  </seq>
</standard>
<extended y:self="/rest/config/running/ip/access-list/extended/acl1">
  <name>acl1</name>
  <seq y:self="/rest/config/running/ip/access-list/extended/acl1/seq/10">
    <seq-id>10</seq-id>
    <action>hard-drop</action>
    <protocol-type>ip</protocol-type>
    <src-host-any-sip>host</src-host-any-sip>
    <src-host-ip>10.60.20.54</src-host-ip>
    <dst-host-any-dip>any</dst-host-any-dip>
    <vlan>300</vlan>
    <count>true</count>
    <log>true</log>
  </seq>
  <seq y:self="/rest/config/running/ip/access-list/extended/acl1/seq/20">
    <seq-id>20</seq-id>
    <action>permit</action>
    <protocol-type>udp</protocol-type>
    <src-host-any-sip>host</src-host-any-sip>
    <src-host-ip>10.11.12.40</src-host-ip>
    <dst-host-any-dip>any</dst-host-any-dip>
    <vlan>300</vlan>
    <count>true</count>
    <log>true</log>
  </seq>
  <seq y:self="/rest/config/running/ip/access-list/extended/acl1/seq/30">
    <seq-id>30</seq-id>
```



```

    <action>permit</action>
    <protocol-type>ip</protocol-type>
    <src-host-any-sip>any</src-host-any-sip>
    <dst-host-any-dip>any</dst-host-any-dip>
    <vlan>100</vlan>
    <count>>true</count>
    <log>>true</log>
  </seq>
</extended>
<extended y:self="/rest/config/running/ip/access-list/extended/acl13">
  <name>acl13</name>
  <seq y:self="/rest/config/running/ip/access-list/extended/acl13/seq/5">
    <seq-id>5</seq-id>
    <action>deny</action>
    <protocol-type>udp</protocol-type>
    <src-host-any-sip>host</src-host-any-sip>
    <src-host-ip>10.25.24.74</src-host-ip>
    <dst-host-any-dip>any</dst-host-any-dip>
    <dscp>af22</dscp>
    <vlan>500</vlan>
    <count>>true</count>
    <log>>true</log>
  </seq>
  <seq y:self="/rest/config/running/ip/access-list/extended/acl13/seq/10">
    <seq-id>10</seq-id>
    <action>deny</action>
    <protocol-type>icmp</protocol-type>
    <src-host-any-sip>any</src-host-any-sip>
    <dst-host-any-dip>host</dst-host-any-dip>
    <dst-host-ip>10.20.24.25</dst-host-ip>
    <vlan>1100</vlan>
    <count>>true</count>
    <log>>true</log>
  </seq>
  <seq y:self="/rest/config/running/ip/access-list/extended/acl13/seq/20">
    <seq-id>20</seq-id>
    <action>hard-drop</action>
    <protocol-type>ip</protocol-type>
    <src-host-any-sip>host</src-host-any-sip>
    <src-host-ip>10.20.26.58</src-host-ip>
    <dst-host-any-dip>any</dst-host-any-dip>
    <dscp>cs7</dscp>
    <vlan>300</vlan>
    <count>>true</count>
    <log>>true</log>
  </seq>
  <seq y:self="/rest/config/running/ip/access-list/extended/acl13/seq/30">
    <seq-id>30</seq-id>
    <action>permit</action>
    <protocol-type>tcp</protocol-type>
    <src-host-any-sip>10.25.36.96</src-host-any-sip>
    <src-mask>10.24.21.17</src-mask>
    <dst-host-any-dip>host</dst-host-any-dip>
    <dst-host-ip>10.25.52.56</dst-host-ip>
    <vlan>300</vlan>
    <count>>true</count>
    <log>>true</log>
  </seq>
</extended>
</access-list>

```

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```
<igmp xmlns="urn:brocade.com:mgmt:brocade-igmp-snooping"
y:self="/rest/config/running/ip/igmp">
  <snooping y:self="/rest/config/running/ip/igmp/snooping">
    <enable>true</enable>
  </snooping>
</igmp>
<dns xmlns="urn:brocade.com:mgmt:brocade-ip-administration"
y:self="/rest/config/running/ip/dns">
  <domain-name>domain1</domain-name>
  <name-server y:self="/rest/config/running/ip/dns/name-server/10.20.34.100">
    <name-server-ip>10.20.34.100</name-server-ip>
  </name-server>
</dns>
</ip>
```

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

URI

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

Request body

```
<standard>
  <name>test</name>
</standard>
```

Response body

None

The following is an example of the DELETE operation to disable IGMP snooping or to disable restricting unknown multicast traffic.

URI

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

Request body

None

Response body

None

ipv6

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

Resource URIs

URI	Description
<base_URI>/config/running/ipv6	The Internet Protocol
<base_URI>/config/running/ipv6/access-list/standard	Standard IP ACL
<base_URI>/config/running/ipv6/access-list/standard/{ACL-name}/seq	Sequence number
<base_URI>/config/running/ipv6/access-list/extended	Extended IP ACL
<base_URI>/config/running/ipv6/access-list/extended/{ACL-name}/seq	Sequence number
<base_URI>/config/running/ipv6/mld/snooping	Layer 2 snooping

Parameters

Name	Description
<i>mld</i>	Multicast Listener Discovery (MLD) Snooping
<i>enable</i>	MLD Snooping Enable
<i>restrict-unknown-multicast</i>	Restrict Unknown Multicast traffic
<i>name</i>	Access list name
<i>seq</i>	Sequence number
<i>seq-id</i>	Specifies the sequence number for the rule
<i>action</i>	<ul style="list-style-type: none"> deny hard-drop permit
<i>src-host-any-sip</i>	Specifies any source host IP address
<i>src-host-ip</i>	Specifies the source host IP address
<i>count</i>	Enables the counting of the packets matching the rule
<i>log</i>	Packets matching the filter are sent to the CPU and a corresponding log entry is generated by enabling the logging mechanism. This parameter is only available with permit and deny.
<i>protocol-type</i>	The type of protocol used
<i>dst-host-any-dip</i>	Specifies any destination host IP address
<i>dst-host-ip</i>	Specifies the destination host IP address
<i>vlan</i>	VLAN interface number

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

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

Request body

None

Response body

```

<ipv6 xmlns="urn:brocade.com:mgmt:brocade-mld-snooping"
xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/ipv6">
  <mld y:self="/rest/config/running/ipv6/mld">
    <snooping y:self="/rest/config/running/ipv6/mld/snooping">
      <enable>true</enable>
      <restrict-unknown-multicast>true</restrict-unknown-multicast>
    </snooping>
  </mld>
  <access-list xmlns="urn:brocade.com:mgmt:brocade-ipv6-access-list"
y:self="/rest/config/running/ipv6/access-list">
    <standard y:self="/rest/config/running/ipv6/access-list/standard/ipv6acl1">
      <name>ipv6acl1</name>
      <seq
y:self="/rest/config/running/ipv6/access-list/standard/ipv6acl1/seq/10">
        <seq-id>10</seq-id>
        <action>hard-drop</action>
        <src-host-any-sip>host</src-host-any-sip>
        <src-host-ip>10:20:45:30:15:75:100:110</src-host-ip>
        <count>true</count>
        <log>true</log>
      </seq>
      <seq
y:self="/rest/config/running/ipv6/access-list/standard/ipv6acl1/seq/20">
        <seq-id>20</seq-id>
        <action>permit</action>
        <src-host-any-sip>any</src-host-any-sip>
        <count>true</count>
        <log>true</log>
      </seq>
      <seq
y:self="/rest/config/running/ipv6/access-list/standard/ipv6acl1/seq/50000">
        <seq-id>50000</seq-id>
        <action>hard-drop</action>
        <src-host-any-sip>any</src-host-any-sip>
        <count>true</count>
        <log>true</log>
      </seq>
    </standard>
    <extended y:self="/rest/config/running/ipv6/access-list/extended/acl16">
      <name>acl16</name>
      <seq y:self="/rest/config/running/ipv6/access-list/extended/acl16/seq/10">
        <seq-id>10</seq-id>
        <action>deny</action>
        <protocol-type>ipv6</protocol-type>
        <src-host-any-sip>host</src-host-any-sip>
        <src-host-ip>10:20:14:45:56:58:45:78</src-host-ip>
      </seq>
    </extended>
  </access-list>
</ipv6>

```

```

    <dst-host-any-dip>any</dst-host-any-dip>
    <vlan>100</vlan>
    <count>>true</count>
    <log>>true</log>
  </seq>
  <seq y:self="/rest/config/running/ipv6/access-list/extended/acl16/seq/20">
    <seq-id>20</seq-id>
    <action>hard-drop</action>
    <protocol-type>ipv6</protocol-type>
    <src-host-any-sip>any</src-host-any-sip>
    <dst-host-any-dip>host</dst-host-any-dip>
    <dst-host-ip>10:45:78:54:45:78:52:87</dst-host-ip>
    <vlan>1100</vlan>
    <count>>true</count>
    <log>>true</log>
  </seq>
  <seq y:self="/rest/config/running/ipv6/access-list/extended/acl16/seq/30">
    <seq-id>30</seq-id>
    <action>permit</action>
    <protocol-type>tcp</protocol-type>
    <src-host-any-sip>any</src-host-any-sip>
    <dst-host-any-dip>host</dst-host-any-dip>
    <dst-host-ip>10:78:85:74:78:45:78:45</dst-host-ip>
    <vlan>1200</vlan>
    <count>>true</count>
    <log>>true</log>
  </seq>
  <seq
y:self="/rest/config/running/ipv6/access-list/extended/acl16/seq/4500">
    <seq-id>4500</seq-id>
    <action>hard-drop</action>
    <protocol-type>ipv6</protocol-type>
    <src-host-any-sip>any</src-host-any-sip>
    <dst-host-any-dip>any</dst-host-any-dip>
    <vlan>4500</vlan>
    <count>>true</count>
    <log>>true</log>
  </seq>
</extended>
<extended y:self="/rest/config/running/ipv6/access-list/extended/ip_acl_1">
  <name>ip_acl_1</name>
  <seq
y:self="/rest/config/running/ipv6/access-list/extended/ip_acl_1/seq/10">
    <seq-id>10</seq-id>
    <action>deny</action>
    <protocol-type>ipv6</protocol-type>
    <src-host-any-sip>2001:2002:1234:1::/64</src-host-any-sip>
    <dst-host-any-dip>2001:1001:1234:1::/64</dst-host-any-dip>
    <count>>true</count>
  </seq>
  <seq
y:self="/rest/config/running/ipv6/access-list/extended/ip_acl_1/seq/20">
    <seq-id>20</seq-id>
    <action>deny</action>
    <protocol-type>ipv6</protocol-type>
    <src-host-any-sip>2002:2003:1234:1::/64</src-host-any-sip>
    <dst-host-any-dip>2001:3001:1234:1::/64</dst-host-any-dip>
    <count>>true</count>
  </seq>
</extended>

```

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```
    </access-list>  
</ipv6>
```

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

URI

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

Request body

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

Response body

None

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

URI

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

Request body

None

Response body

None

lACP

Configures, modifies, or retrieves LACP commands.

Resource URIs

URI	Description
<base_URI>/config/running/lACP	LACP commands

Parameters

Name	Description
system-priority	LACP system priority

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

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

Request body

None

Response body

```
<lACP xmlns="urn:brocade.com:mgmt:brocade-lACP"
xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/lACP">
  <system-priority>32799</system-priority>
</lACP>
```

The following is an example of the PUT operation to set the system priority.

URI

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

Request body

```
<lACP>
  <system-priority>32200</system-priority>
</lACP>
```

Response body

None

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

4 Configuration APIs

URI

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

Request body

None

Response body

None

ldap-server

Configures, modifies, or retrieves LDAP server settings.

Resource URIs

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

Parameters

Name	Description
<i>hostname</i>	LDAP server host name
<i>port</i>	TCP authentication port
<i>retries</i>	Number of retries for this server connection
<i>timeout</i>	Wait time for this server to respond
<i>basedn</i>	Base domain name
<i>group</i>	Map AD Group to switch role
<i>ad-group</i>	AD group belongs to user on the AD Server
<i>role</i>	Role name

Usage guidelines

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

Examples

The following is an example of the GET operation 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">
    <hostname>inetaddress</hostname>
    <port>400</port>
    <retries>6</retries>
    <timeout>10</timeout>
    <basedn>test</basedn>
  </host>
</ldap-server>
```

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```
</host>
<host y:self="/rest/config/running/ldap-server/host/test">
  <hostname>test</hostname>
</host>
<maprole y:self="/rest/config/running/ldap-server/maprole">
  <group y:self="/rest/config/running/ldap-server/maprole/group/administrator">
    <ad-group>administrator</ad-group>
    <role>admin</role>
  </group>
</maprole>
</ldap-server>
```

The 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

line

Configures, modifies, or retrieves CLI session configuration.

Resource URIs

URI	Description
<base_URI>/config/running/line	CLI session

Parameters

Name	Description
sessionid	Terminal type
exec-timeout	CLI session maximum idle time before automatic logout

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

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

Request body

None

Response body

```
<line xmlns="urn:brocade.com:mgmt:brocade-terminal"
xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/line/vty">
  <sessionid>vty</sessionid>
  <exec-timeout>10</exec-timeout>
</line>
```

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

URI

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

Request body

None

Response body

None

logging

Configures, modifies, or retrieves logging configuration (RASLOG or syslog).

Resource URIs

URI	Description
<base_URI>/config/running/logging	Logging configuration: RASLOG or syslog
<base_URI>/config/running/logging/auditlog	Audit log
<base_URI>/config/running/logging/raslog	RASLOG message/module
<base_URI>/config/running/logging/syslog-client	Syslog Client
<base_URI>/config/running/logging/syslog-facility	Syslog facility

Parameters

Name	Description
<i>console</i>	Configure RASLOG console severity
<i>syslogip</i>	The IPv4 or IPv6 address
<i>port</i>	Port number on which the syslog server is listening
<i>secure</i>	Indicates if transport is secure
<i>class</i>	Configure auditlog classes
<i>localip</i>	Configure local IP type
<i>local</i>	Configure syslog facility

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

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

Request body

None

Response body

```
<logging xmlns="urn:brocade.com:mgmt:brocade-ras"
xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/logging">
  <raslog y:self="/rest/config/running/logging/raslog">
    <console>WARNING</console>
  </raslog>
  <syslog-server
y:self="/rest/config/running/logging/syslog-server/10.20.58.160">
```

```

    <syslogip>10.20.58.160</syslogip>
    <secure>true</secure>
    <port>65050</port>
  </syslog-server>
  <auditlog y:self="/rest/config/running/logging/auditlog">
    <class y:self="/rest/config/running/logging/auditlog/class/SECURITY">
      <class>SECURITY</class>
    </class>
    <class y:self="/rest/config/running/logging/auditlog/class/CONFIGURATION">
      <class>CONFIGURATION</class>
    </class>
    <class y:self="/rest/config/running/logging/auditlog/class/FIRMWARE">
      <class>FIRMWARE</class>
    </class>
  </auditlog>
  <syslog-facility y:self="/rest/config/running/logging/syslog-facility">
    <local>LOG_LOCAL3</local>
  </syslog-facility>
  <syslog-client y:self="/rest/config/running/logging/syslog-client">
    <localip>CHASSIS_IP</localip>
  </syslog-client>
</logging>

```

The following is an example of the POST operation to add a syslog server configuration.

URI

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

Request body

```

  <syslog-server>
    <syslogip>10.20.58.162</syslogip>
  </syslog-server>

```

Response body

None

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

URI

`http://host:80/rest/config/running/logging/syslog-server/10.20.58.179`

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

Parameters

Name	Description
<i>name</i>	Access list name
<i>seq</i>	Sequence number
<i>seq-id</i>	The sequence ID
<i>action</i>	Displays all rules with the specified action <ul style="list-style-type: none"> deny hard-drop permit
<i>source</i>	Source details
<i>dst</i>	Specifies details on the destination
<i>dsthost</i>	Specifies the destination host
<i>ethertype</i>	Filters extended ACLs traffic based on ethertype
<i>vlan</i>	Specifies the VLAN number
<i>log</i>	Log
<i>count</i>	Displays the count of forwarding entries
<i>srchost</i>	Specifies the source host

Usage guidelines

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

Examples

The following is an example of the GET operation 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>
    </standard>
    <standard y:self="/rest/config/running/mac/access-list/standard/acl2">
      <name>acl2</name>
    </standard>
    <standard y:self="/rest/config/running/mac/access-list/standard/stdmac">
      <name>stdmac</name>
    </standard>
    <extended y:self="/rest/config/running/mac/access-list/extended/MM">
      <name>MM</name>
    </extended>
    <extended y:self="/rest/config/running/mac/access-list/extended/acl12">
      <name>acl12</name>
      <seq y:self="/rest/config/running/mac/access-list/extended/acl12/seq/10">
        <seq-id>10</seq-id>
        <action>permit</action>
        <source>any</source>
        <dst>host</dst>
        <dsthost>0011.2222.2233</dsthost>
        <ethertype>arp</ethertype>
        <vlan>300</vlan>
        <log>true</log>
      </seq>
    </extended>
    <extended y:self="/rest/config/running/mac/access-list/extended/acl4">
      <name>acl4</name>
      <seq y:self="/rest/config/running/mac/access-list/extended/acl4/seq/10">
        <seq-id>10</seq-id>
        <action>deny</action>
        <source>any</source>
        <dst>any</dst>
        <ethertype>arp</ethertype>
        <count>true</count>
      </seq>
    </extended>
    <extended y:self="/rest/config/running/mac/access-list/extended/acl5">
      <name>acl5</name>
      <seq y:self="/rest/config/running/mac/access-list/extended/acl5/seq/10">
        <seq-id>10</seq-id>

```

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```
        <action>permit</action>
        <source>any</source>
        <dst>any</dst>
        <vlan>100</vlan>
        <log>true</log>
    </seq>
    <seq y:self="/rest/config/running/mac/access-list/extended/ac15/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/ac12
```

Request body

None

Response body

None

mac-address-table

Configures, modifies, or retrieves MAC forwarding table information.

Resource URIs

URI	Description
<base_URI>/config/running/mac-address-table	MAC forwarding table information
<base_URI>/config/running/mac-address-table/aging-time	Conversational aging time
<base_URI>/config/running/mac-address-table/static	Static

Parameters

Name	Description
<i>mac-address</i>	Specifies the MAC address
<i>forward</i>	Forwards the MAC address to the interface
<i>interface-type</i>	The interface type
<i>interface-name</i>	The interface name
<i>vlanid</i>	Specifies the VLAN number
<i>learning-mode</i>	Conversational learning mode
<i>aging-time</i>	Specifies the time in seconds that a learned MAC address will persist after the last update. If the aging time is set to zero (0), it means that aging is disabled. For standalone mode, valid values range from 10 through 100000. For Brocade VCS Fabric mode, valid values range from 60 through 100000
<i>legacy-time-out</i>	Seconds in standalone mode
<i>aging-time</i>	Conversational aging time

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

```
http://host:80/rest/config/running/mac-address-table
```

Request body

None

Response body

```
<mac-address-table xmlns="urn:brocade.com:mgmt:brocade-mac-address-table"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/mac-address-table">
```

```
<static
y:self="/rest/config/running/mac-address-table/static/0011.2222.3333%2Cforward%2
Cport-channel%2C25%2Cvlan%2C100">
  <mac-address>0011.2222.3333</mac-address>
  <forward>forward</forward>
  <interface-type>port-channel</interface-type>
  <interface-name>25</interface-name>
  <vlan>vlan</vlan>
  <vlanid>100</vlanid>
</static>
<learning-mode>conversational</learning-mode>
<aging-time y:self="/rest/config/running/mac-address-table/aging-time">
  <legacy-time-out>350</legacy-time-out>
</aging-time>
</mac-address-table>
```

The following is an example of the PATCH operation to edit the legacy timeout.

URI

http://host:80/rest/config/running/mac-address-table

Request body

```
<mac-address-table>
  <aging-time>
    <legacy-time-out>360</legacy-time-out>
  </aging-time>
</mac-address-table>
```

Response body

None

The following is an example of the DELETE operation to remove the learning mode.

URI

http://host:80/rest/config/running/mac-address-table

Request body

None

Response body

None

monitor

Configures, modifies, or retrieves SPAN sessions.

Resource URIs

URI	Description
<base_URI>/config/running/monitor	Entering SPAN sessions

Parameters

Name	Description
<i>session-number</i>	Specifies a session identification number
<i>destination</i>	The destination port
<i>source</i>	The source port
<i>description</i>	Description string of session
<i>fortygigabitethernet</i>	Interface Fortygigabit Ethernet
<i>gigabitethernet</i>	Interface Gigabit Ethernet
<i>hundredgigabitethernet</i>	Interface Hundredgigabit Ethernet
<i>rspan-vlan</i>	Remote VLAN
<i>tengigabitethernet</i>	Interface Tengigabit Ethernet

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

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

Request body

None

Response body

```
<monitor xmlns="urn:brocade.com:mgmt:brocade-span"
xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/monitor">
  <session y:self="/rest/config/running/monitor/session/10">
    <session-number>10</session-number>
    <destination>destination</destination>
    <dest-tengigabitethernet>fortygigabitethernet</dest-tengigabitethernet>
    <dest-tengigabitethernet-val>54/0/49</dest-tengigabitethernet-val>
  </session>
  <session y:self="/rest/config/running/monitor/session/20">
    <session-number>20</session-number>
```

```
<source>source</source>
<src-tengigabitethernet>fortygigabitethernet</src-tengigabitethernet>
<src-tengigabitethernet-val>54/0/50</src-tengigabitethernet-val>
<destination>destination</destination>
<dest-tengigabitethernet>fortygigabitethernet</dest-tengigabitethernet>
<dest-tengigabitethernet-val>54/0/49</dest-tengigabitethernet-val>
<direction>both</direction>
</session>
</monitor>
```

The following is an example of the POST operation to add a session to the monitor.

URI

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

Request body

```
<session>
  <session-number>50</session-number>
</session>
```

Response body

None

The following is an example of the DELETE operation to remove a session from the monitor session.

URI

`http://host:80/rest/config/running/monitor/session/25`

Request body

None

Response body

None

nas

Configures, modifies, or retrieves network attached storage configurations.

Resource URIs

URI	Description
<base_URI>/config/running/nas	Network attached storage
<base_URI>/config/running/nas/auto-qos	Automatic quality of service
<base_URI>/config/running/nas/auto-qos/set	Class of service and Differentiated services code point
<base_URI>/config/running/nas/server-ip	NAS server

Parameters

Name	Description
cos	Class of service value
dscp	Differentiated services code point value
server-ip	NAS server IP address
vlan-number	Virtual LAN
vrf-name	Virtual routing and forwarding

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

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

Request body

None

Response body

```
<nas xmlns="urn:brocade.com:mgmt:brocade-qos"
xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/nas">
  <auto-qos y:self="/rest/config/running/nas/auto-qos">
    <set y:self="/rest/config/running/nas/auto-qos/set">
      <cos>4</cos>
      <dscp>55</dscp>
    </set>
  </auto-qos>
  <server-ip
y:self="/rest/config/running/nas/server-ip/%2210.192.100.100/32%22">
    <server-ip>10.192.100.100/32</server-ip>
```

```
<vrf
y:self="/rest/config/running/nas/server-ip/%2210.192.100.100/32%22/vrf/vrf1">
  <vrf-name>vrf1</vrf-name>
</vrf>
<vlan
y:self="/rest/config/running/nas/server-ip/%2210.192.100.100/32%22/vlan/100">
  <vlan-number>100</vlan-number>
</vlan>
</server-ip>
</nas>
```

The following is an example of the POST operation to add the server IP details.

URI

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

Request body

```
<server-ip>
  <server-ip>10.192.100.100/32</server-ip>
  <vlan>
    <vlan-number>100</vlan-number>
  </vlan>
</server-ip>
```

Response body

None

The following is an example of the DELETE operation to remove Automatic Quality of Service.

URI

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

Request body

None

Response body

None

ntp

Configures, modifies, or retrieves NTP commands.

Resource URIs

URI	Description
<base_URI>/config/running/ntp	NTP commands
<base_URI>/config/running/ntp/authentication-key	Authentication key
<base_URI>/config/running/ntp/server	NTP server

Parameters

Name	Description
keyid	ID for an authentication key
md5	String for the MD5 message-digest algorithm
ip	NTP server IPv4 or IPv6 IP address
key	Key from the key list to be associated with the specified server

Usage guidelines

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

Examples

The following is an example of the GET operation 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">
  <authentication-key y:self="/rest/config/running/ntp/authentication-key/55">
    <keyid>55</keyid>
    <md5>checking</md5>
  </authentication-key>
  <server y:self="/rest/config/running/ntp/server/10.24.234.86">
    <ip>10.24.234.86</ip>
    <key>55</key>
  </server>
</ntp>
```

The following is an example of the POST operation to add an authentication key ID.

URI

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

Request body

```
<authentication-key>
  <keyid>65</keyid>
  <md5>test</md5>
</authentication-key>
```

Response body

None

The following is an example of the DELETE operation to remove an NTP server IP address.

URI

`http://host:80/rest/config/running/ntp/server/10.25.65.58`

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

Parameters

Name	Description
<i>admin-lockout</i>	Enable lockout for admin role accounts after maximum retry failed login attempts
<i>min-length</i>	The minimum length of the password
<i>max-retry</i>	Number of failed password logins permitted before a user is locked out
<i>lower</i>	Number of lowercase alphabetic characters that must occur in the password
<i>numeric</i>	Minimum number of numeric characters that must occur in the password
<i>special-char</i>	The number of punctuation characters that must occur in the password
<i>upper</i>	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 is an example of the GET operation 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">
  <min-length>9</min-length>
  <max-retry>3</max-retry>
  <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>
<admin-lockout>true</admin-lockout>
</password-attributes>
```

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

port-profile

Configures, modifies, or retrieves automatic port-profile.

Resource URIs

URI	Description
<base_URI>/config/running/port-profile	Automatic port-profile

Parameters

Name	Description
<i>name</i>	Port-profile name
<i>non-profiled-macs</i>	Allow or drop non-profiled MAC addresses
<i>switchport</i>	Set the switching characteristics of the Layer 2 interface
<i>vlan-mode</i>	Set mode of the Layer 2 interface
<i>native-vlan</i>	Set the native VLAN to classify untagged traffic
<i>fcoe-map-name</i>	FCoE Map name
<i>restrict-flooding</i>	Restrict flooding
<i>activate</i>	Specifies if this port-profile needs to be activated or not
<i>mac-address</i>	MAC address for a port-profile
<i>cee</i>	QoS CEE Map for the port
<i>cos</i>	The Range of Default CoS value
<i>trust-cos</i>	Specifies that trust L2 CoS field in incoming packets for deriving internal Traffic Class
<i>cos-mutation</i>	CoS-to-CoS mutation value
<i>cos-traffic-class</i>	Class of service to Traffic class
<i>pfc-cos</i>	Range for CoS Value
<i>pfc-tx</i>	Pause generation is enabled or disabled
<i>pfc-rx</i>	Pause reception is enabled or disabled
<i>tx</i>	Pause generation is enabled or disabled
<i>rx</i>	Pause reception is enabled or disabled
<i>access-group-name</i>	Access list name
<i>direction</i>	in
<i>vlan-type</i>	VLAN type

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

http://host:80/rest/config/running/port-profile

Request body

None

Response body

```
<port-profile xmlns="urn:brocade.com:mgmt:brocade-port-profile"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/port-profile/default">
  <name>default</name>
  <activate></activate>
  <allow y:self="/rest/config/running/port-profile/default/allow">
    <non-profiled-macs>true</non-profiled-macs>
  </allow>
  <vlan-profile y:self="/rest/config/running/port-profile/default/vlan-profile">
    <switchport>true</switchport>
    <switchport
y:self="/rest/config/running/port-profile/default/vlan-profile/switchport">
      <mode
y:self="/rest/config/running/port-profile/default/vlan-profile/switchport/mode">
        <vlan-mode>trunk</vlan-mode>
      </mode>
      <access
y:self="/rest/config/running/port-profile/default/vlan-profile/switchport/access
">
        <vlan
y:self="/rest/config/running/port-profile/default/vlan-profile/switchport/access
/vlan"/>
          </access>
          <trunk
y:self="/rest/config/running/port-profile/default/vlan-profile/switchport/trunk"
>
            <allowed
y:self="/rest/config/running/port-profile/default/vlan-profile/switchport/trunk/
allowed">
              <vlan
y:self="/rest/config/running/port-profile/default/vlan-profile/switchport/trunk/
allowed/vlan"/>
                </allowed>
                <native-vlan>1</native-vlan>
              </trunk>
            </switchport>
          </vlan-profile>
          <fcoe-profile y:self="/rest/config/running/port-profile/default/fcoe-profile">
            <fcoeport
y:self="/rest/config/running/port-profile/default/fcoe-profile/fcoeport">
              <fcoe-map-name>default</fcoe-map-name>
            </fcoeport>
          </fcoe-profile>
          <static y:self="/rest/config/running/port-profile/default/qos-profile/static">
            <mac-address>0050.56bf:0001</mac-address>
          </static>
          <qos-profile y:self="/rest/config/running/port-profile/default/qos-profile">
            <cee>map1</cee>
            <qos y:self="/rest/config/running/port-profile/default/qos-profile"/qos>
              <cos>1</cos>
            </qos-profile>
          </qos-profile>
        </access>
      </trunk>
    </switchport>
  </vlan-profile>
  <fcoe-profile y:self="/rest/config/running/port-profile/default/fcoe-profile">
    <fcoeport
y:self="/rest/config/running/port-profile/default/fcoe-profile/fcoeport">
      <fcoe-map-name>default</fcoe-map-name>
    </fcoeport>
  </fcoe-profile>
  <static y:self="/rest/config/running/port-profile/default/qos-profile/static">
    <mac-address>0050.56bf:0001</mac-address>
  </static>
  <qos-profile y:self="/rest/config/running/port-profile/default/qos-profile">
    <cee>map1</cee>
    <qos y:self="/rest/config/running/port-profile/default/qos-profile"/qos>
      <cos>1</cos>
    </qos-profile>
  </qos-profile>
</port-profile>
```

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```
<trust
y:self="/rest/config/running/port-profile/default/qos-profile/qos/trust">
  <trust-cos>true</trust-cos>
</trust>
<cos-mutation>map1</cos-mutation>
<cos-traffic-class>map2</cos-traffic-class>
<flowcontrol
y:self="/rest/config/running/port-profile/default/qos-profile/qos/flowcontrol">
  <pfc>
    <pfc-cos>1</pfc-cos>
    <pfc-tx>on</pfc-tx>
    <pfc-rx>on</pfc-rx>
  </pfc>
  <flowcontrolglobal>
    <tx>on</tx>
    <rx>on</rx>
  </flowcontrolglobal>
</flowcontrol>
<qos>
</qos-profile>
<security-profile
y:self="/rest/config/running/port-profile/default/security-profile">
  <mac y:self="/rest/config/running/port-profile/default/security-profile/mac">
    <access-group
y:self="/rest/config/running/port-profile/default/security-profile/mac/access-gr
oup">
      <access-group-name>acl1</access-group-name>
      <direction>in</direction>
    </access-group>
  </mac>
</security-profile>
  <restrict-flooding>true</restrict-flooding>
</port-profile>
```

The following is an example of the DELETE operation to remove a port-profile name.

URI

```
http://host:80/rest/config/running/port-profile/PortProfile1
```

Request body

None

Response body

None

port-profile-domain

Configures, modifies, or retrieves port-profile domain configurations.

Resource URIs

URI	Description
<base_URI>/config/running/port-profile-domain	Define a port-profile domain
<base_URI>/config/running/port-profile-domain/{port-profile-domain name}/port-profile	Port-profile name

Parameters

Name	Description
<i>port-profile-domain-name</i>	A fabric-wide unique name of a port-profile domain
<i>profile-name</i>	A fabric-wide unique name of a port-profile

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

```
http://host:80/rest/config/running/port-profile-domain
```

Request body

None

Response body

```
<port-profile-domain xmlns="urn:brocade.com:mgmt:brocade-port-profile"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/port-profile-domain/default">
  <port-profile-domain-name>default</port-profile-domain-name>
  <port-profile
y:self="/rest/config/running/port-profile-domain/default/port-profile/UpgradedVlanProfile">
    <profile-name>UpgradedVlanProfile</profile-name>
  </port-profile>
</port-profile-domain>
```

The following is an example of the DELETE operation to remove a port-profile name from the port-profile domain.

URI

```
http://host:80/rest/config/running/port-profile-domain/default/port-profile/UpgradedProfile
```

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Request body

None

Response body

None

protocol

Configures, modifies, or retrieves protocol configuration.

Resource URIs

URI	Description
<base_URI>/config/running/protocol	Protocol configuration
<base_URI>/config/running/protocol/cdp	Cisco Discovery Protocol (CDP)
<base_URI>/config/running/protocol/edge-loop-detection	ELD parameters
<base_URI>/config/running/protocol/lldp	Link Layer Discovery Protocol (LLDP)
<base_URI>/config/running/protocol/spanning-tree	Spanning tree commands
<base_URI>/config/running/protocol/udld	Unidirectional Link Detection protocol

Parameters

Name	Description
<i>udld</i>	Enables and/or enters unidirectional link detection (UDLD) protocol configuration mode
<i>hello</i>	The hello transmit interval
<i>multiplier</i>	The timeout multiplier
<i>shutdown</i>	Disable UDLD protocol
<i>spanning-tree</i>	Displays the protocol configuration information for MSTP
<i>stp</i>	Specifies Rapid Per-VLAN Spanning Tree Protocol Plus
<i>description</i>	Displays the spanning tree description
<i>bridge-priority</i>	Displays the Bridge priority commands
<i>error-disable-timeout</i>	Displays the Error-disable-timeout for the spanning tree
<i>interval</i>	The error disable timeout interval
<i>forward-delay</i>	Displays the forward delay for the spanning tree
<i>max-age</i>	Displays the maximum age for the spanning tree
<i>max-hops</i>	Displays the MST maximum hop count
<i>port-channel</i>	Displays the status of port-channel for spanning-tree
<i>path-cost</i>	Sets the path-cost behaviour
<i>shutdown</i>	Turn off the Spanning Tree Protocol
<i>hello-time</i>	Displays the hello time settings
<i>instance</i>	Displays the MST instance
<i>region</i>	Displays the MST region.
<i>revision</i>	Displays the revision number for configuration information.
<i>transmit-holdcount</i>	Displays the current transmit hold count of the bridge
<i>lldp</i>	Link Layer Discovery Protocol (LLDP)

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Name	Description
<i>mode</i>	LLDP configuration mode <ul style="list-style-type: none"> rx tx
<i>description</i>	The User description
<i>advertise</i>	The Advertise TLV configuration <ul style="list-style-type: none"> dcbx-fcoe-app-tlv dcbx-fcoe-logical-link-tlv dcbx-iscsi-app-tlv dcbx-tlv dot1-tlv dot3-tlv optional-tlv
<i>system-name</i>	The system name
<i>system-description</i>	The system description
<i>iscsi-priority</i>	Configure the Ethernet priority to advertise iscsi
<i>profile-name</i>	The name of the profile
<i>pdu-rx-limit</i>	Sets pdu-rx-limit
<i>mac-refresh-time</i>	Refresh time for MAC address
<i>mac-refresh-type</i>	The dynamic MAC cleaning type <ul style="list-style-type: none"> all - Clean dynamic MAC addresses for entire cluster port - Clean dynamic MAC addresses for partner port at the other end of the loop
<i>mac-refresh</i>	Refresh time for MAC address
<i>all</i>	Clean dynamic MAC addresses for entire cluster (applicable for mac-refresh)
<i>port</i>	Clean dynamic MAC addresses for partner port at the other end of the loop (applicable for mac-refresh)
<i>dot1-tlv</i>	IEEE 802.1 Organizationally Specific TLV (applicable for advertise)
<i>dot3-tlv</i>	IEEE 802.3 Organizationally Specific TLV (applicable for advertise)
<i>optional-tlv</i>	The Optional TLVs (applicable for advertise)
<i>description</i>	The user description
<i>rx</i>	LLDP Receive Only Mode (applicable for mode)
<i>tx</i>	LLDP Transmit Only Mode (applicable for mode)
<i>profile</i>	The LLDP profile name
<i>disable</i>	Disable Cisco Interoperability (applicable for cisco-interoperability)
<i>enable</i>	Enable Cisco Interoperability (applicable for cisco-interoperability)
<i>description</i>	Characters describing the xSTP
<i>enable</i>	Enable the timeout mechanism for the port to be enabled back (applicable for error-disable-timeout)
<i>interval</i>	Interval after which port will be enabled (applicable for error-disable-timeout)

Name	Description
<i>custom</i>	Custom behaviour: pathcost will change according to bandwidth (applicable for port-channel/path-cost)
<i>standard</i>	Standard behaviour: pathcost will not change according to bandwidth (applicable for port-channel/path-cost)

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

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

Request body

None

Response body

```
<protocol xmlns="urn:brocade.com:mgmt:brocade-interface"
xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/protocol">
  <udld xmlns="urn:brocade.com:mgmt:brocade-udld"
y:self="/rest/config/running/protocol/udld">
    <hello>25</hello>
    <multiplier>6</multiplier>
    <shutdown>true</shutdown>
  </udld>
  <spanning-tree xmlns="urn:brocade.com:mgmt:brocade-xstp"
y:self="/rest/config/running/protocol/spanning-tree">
    <stp y:self="/rest/config/running/protocol/spanning-tree/stp">
      <description>stp2</description>
      <bridge-priority>12288</bridge-priority>
      <error-disable-timeout
y:self="/rest/config/running/protocol/spanning-tree/stp/error-disable-timeout">
        <interval>150</interval>
      </error-disable-timeout>
      <forward-delay>20</forward-delay>
      <max-age>22</max-age>
      <port-channel
y:self="/rest/config/running/protocol/spanning-tree/stp/port-channel">
        <path-cost>custom</path-cost>
      </port-channel>
      <shutdown>true</shutdown>
      <hello-time>3</hello-time>
    </stp>
  </spanning-tree>
  <lldp xmlns="urn:brocade.com:mgmt:brocade-lldp"
y:self="/rest/config/running/protocol/lldp">
    <description>dcbxfcoe1</description>
    <hello>5</hello>
    <mode>rx</mode>
    <multiplier>2</multiplier>
```

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```
<advertise y:self="/rest/config/running/protocol/lldp/advertise">
  <dcbx-fcoe-app-tlv>true</dcbx-fcoe-app-tlv>
  <dcbx-fcoe-logical-link-tlv>true</dcbx-fcoe-logical-link-tlv>
  <dcbx-tlv>true</dcbx-tlv>
  <optional-tlv
y:self="/rest/config/running/protocol/lldp/advertise/optional-tlv">
  <system-name>true</system-name>
  </optional-tlv>
</advertise>
<system-name>client3</system-name>
<system-description>client2</system-description>
<iscsi-priority>2</iscsi-priority>
<disable>true</disable>
<profile y:self="/rest/config/running/protocol/lldp/profile/profile1">
  <profile-name>profile1</profile-name>
  <description>dotluser</description>
  <advertise
y:self="/rest/config/running/protocol/lldp/profile/profile1/advertise">
  <dot1-tlv>true</dot1-tlv>
  <optional-tlv
y:self="/rest/config/running/protocol/lldp/profile/profile1/advertise/optional-tlv"/>
  </advertise>
</profile>
<profile y:self="/rest/config/running/protocol/lldp/profile/profile2">
  <profile-name>profile2</profile-name>
  <advertise
y:self="/rest/config/running/protocol/lldp/profile/profile2/advertise">
  <optional-tlv
y:self="/rest/config/running/protocol/lldp/profile/profile2/advertise/optional-tlv"/>
  </advertise>
</profile>
</lldp>
<cdp xmlns="urn:brocade.com:mgmt:brocade-cdp"
y:self="/rest/config/running/protocol/cdp"/>
  <edge-loop-detection xmlns="urn:brocade.com:mgmt:brocade-eld"
y:self="/rest/config/running/protocol/edge-loop-detection">
  <pdu-rx-limit>2</pdu-rx-limit>
  <hello-interval>2200</hello-interval>
  <shutdown-time>20</shutdown-time>
  <mac-refresh
y:self="/rest/config/running/protocol/edge-loop-detection/mac-refresh">
  <mac-refresh-time>112</mac-refresh-time>
  <mac-refresh-type>all</mac-refresh-type>
  </mac-refresh>
  </edge-loop-detection>
</protocol>
```

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

URI

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

Request body

```
<udld>
</udld>
```

Response body

None

The following is an example of the DELETE operation to remove the shutdown time from the edge-loop-detection configuration.

URI

`http://host:80/rest/config/running/protocol/edge-loop-detection/shutdown-time/20`

Request body

None

Response body

None

qos

Configures, modifies, or retrieves Quality of Service (QoS).

Resource URIs

URI	Description
<base_URI>/config/running/qos	Quality of Service (QoS)

Parameters

Name	Description
<i>dscp-mutation-map-name</i>	DSCP-to-DSCP mutation map name
<i>dscp-in-values</i>	Incoming DSCP
<i>to</i>	DSCP Mutation Out or DSCP Traffic Class value or CoS Mutation out
<i>dscp-traffic-class-map-name</i>	DSCP traffic class map name
<i>dscp-in-values</i>	Incoming DSCP
<i>dscp-cos-map-name</i>	DSCP-to-CoS mutation map name
<i>dscp-in-values</i>	Incoming DSCP
<i>name</i>	Name of the map
<i>cos</i>	CoS mutated CoS value
<i>profile-id</i>	Profile ID
<i>min-threshold</i>	Minimum Threshold in Percentage
<i>max-threshold</i>	Maximum Threshold in Percentage
<i>drop-probability</i>	Drop Probability in Percentage
<i>dwrr-traffic-class</i>	Traffic Class DWRR Weight
<i>priority-number</i>	<ul style="list-style-type: none"> • 0 - No strict priority queue • 1 - Traffic Class 7 strict priority queue • 2 - Traffic Class 6 through 7 strict priority queues • 3 - Traffic Class 5 through 7 strict priority queues • 4 - Traffic Class 4 through 7 strict priority queues • 5 - Traffic Class 3 through 7 strict priority queues • 6 - Traffic Class 2 through 7 strict priority queues • 7 - Traffic Class 1 through 7 strict priority queues
<i>scheduler-type</i>	Deficit Weighted Round Robin queues
<i>traffic-class</i>	Traffic class tail drop threshold (packets)
<i>limit</i>	Rate limit (packets per second)
<i>burst</i>	Burst limit (packets)
<i>direction</i>	in - Input policy
<i>policy-map-name</i>	QoS Policy map name

Name	Description
<i>add</i>	Add RBridge-ID
<i>remove</i>	Remove RBridge-ID

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

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

Request body

None

Response body

```
<qos xmlns="urn:brocade.com:mgmt:brocade-qos"
xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/qos">
  <map y:self="/rest/config/running/qos/map">
    <dscp-mutation y:self="/rest/config/running/qos/map/dscp-mutation/map4">
      <dscp-mutation-map-name>map4</dscp-mutation-map-name>
      <mark y:self="/rest/config/running/qos/map/dscp-mutation/map4/mark/4">
        <dscp-in-values>4</dscp-in-values>
        <to>3</to>
      </mark>
    </dscp-mutation>
    <dscp-traffic-class
y:self="/rest/config/running/qos/map/dscp-traffic-class/map5">
      <dscp-traffic-class-map-name>map5</dscp-traffic-class-map-name>
      <mark y:self="/rest/config/running/qos/map/dscp-traffic-class/map5/mark/6">
        <dscp-in-values>6</dscp-in-values>
        <to>5</to>
      </mark>
    </dscp-traffic-class>
    <dscp-cos y:self="/rest/config/running/qos/map/dscp-cos/map3">
      <dscp-cos-map-name>map3</dscp-cos-map-name>
      <mark y:self="/rest/config/running/qos/map/dscp-cos/map3/mark/2">
        <dscp-in-values>2</dscp-in-values>
        <to>1</to>
      </mark>
    </dscp-cos>
    <cos-mutation y:self="/rest/config/running/qos/map/cos-mutation/map1">
      <name>map1</name>
      <cos0>2</cos0>
      <cos1>1</cos1>
      <cos2>2</cos2>
      <cos3>1</cos3>
      <cos4>1</cos4>
      <cos5>1</cos5>
      <cos6>1</cos6>
      <cos7>2</cos7>
    </cos-mutation>
```

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```
<cos-traffic-class
y:self="/rest/config/running/qos/map/cos-traffic-class/map6">
  <name>map6</name>
  <cos0>1</cos0>
  <cos1>3</cos1>
  <cos2>2</cos2>
  <cos3>2</cos3>
  <cos4>1</cos4>
  <cos5>2</cos5>
  <cos6>1</cos6>
  <cos7>2</cos7>
</cos-traffic-class>
</map>
<queue y:self="/rest/config/running/qos/queue">
  <multicast y:self="/rest/config/running/qos/queue/multicast">
    <scheduler y:self="/rest/config/running/qos/queue/multicast/scheduler">
      <dwrr y:self="/rest/config/running/qos/queue/multicast/scheduler/dwrr">
        <dwrr-traffic-class0>1000</dwrr-traffic-class0>
        <dwrr-traffic-class1>1000</dwrr-traffic-class1>
        <dwrr-traffic-class2>1000</dwrr-traffic-class2>
        <dwrr-traffic-class3>1000</dwrr-traffic-class3>
        <dwrr-traffic-class4>1000</dwrr-traffic-class4>
        <dwrr-traffic-class5>1000</dwrr-traffic-class5>
        <dwrr-traffic-class6>1000</dwrr-traffic-class6>
        <dwrr-traffic-class7>1000</dwrr-traffic-class7>
      </dwrr>
    </scheduler>
  </multicast>
  <scheduler y:self="/rest/config/running/qos/queue/scheduler">
    <strict-priority
y:self="/rest/config/running/qos/queue/scheduler/strict-priority">
      <priority-number>3</priority-number>
      <scheduler-type>dwrr</scheduler-type>
      <dwrr-traffic-class0>3</dwrr-traffic-class0>
      <dwrr-traffic-class1>7</dwrr-traffic-class1>
      <dwrr-traffic-class2>9</dwrr-traffic-class2>
      <dwrr-traffic-class3>2</dwrr-traffic-class3>
      <dwrr-traffic-class4>1</dwrr-traffic-class4>
      <dwrr-traffic-class5>4</dwrr-traffic-class5>
      <dwrr-traffic-class6>2</dwrr-traffic-class6>
      <dwrr-traffic-class-last>1</dwrr-traffic-class-last>
    </strict-priority>
  </scheduler>
</queue>
<rcv-queue y:self="/rest/config/running/qos/rcv-queue">
  <multicast y:self="/rest/config/running/qos/rcv-queue/multicast">
    <threshold y:self="/rest/config/running/qos/rcv-queue/multicast/threshold">
      <traffic-class0>1000</traffic-class0>
      <traffic-class1>1000</traffic-class1>
      <traffic-class2>1000</traffic-class2>
      <traffic-class3>1000</traffic-class3>
      <traffic-class4>1000</traffic-class4>
      <traffic-class5>1000</traffic-class5>
      <traffic-class6>1000</traffic-class6>
      <traffic-class7>1000</traffic-class7>
    </threshold>
    <rate-limit
y:self="/rest/config/running/qos/rcv-queue/multicast/rate-limit">
      <limit>10000</limit>
      <burst>10000</burst>
```



```

        </rate-limit>
    </multicast>
</rcv-queue>
<red-profile y:self="/rest/config/running/qos/red-profile/23">
    <profile-id>23</profile-id>
    <min-threshold>20</min-threshold>
    <max-threshold>50</max-threshold>
    <drop-probability>30</drop-probability>
</red-profile>
<service-policy y:self="/rest/config/running/qos/service-policy">
    <direction>in</direction>
    <policy-map-name>map1</policy-map-name>
    <attach y:self="/rest/config/running/qos/service-policy/attach">
        <rbridge-id
y:self="/rest/config/running/qos/service-policy/attach/rbridge-id">
            <add>121</add>
            <remove>200</remove>
        </rbridge-id>
    </attach>
</service-policy>
</qos>

```

The following is an example of the POST operation to configure a red-profile.

URI

`http://host:80/rest/config/running/qos/red-profile`

Request body

```

<profile-id>23</profile-id>
<min-threshold>20</min-threshold>
<max-threshold>50</max-threshold>
<drop-probability>30</drop-probability>

```

Response body

None

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

URI

`http://host:80/rest/config/running/qos/red-profile/23`

Request body

None

Response body

None

radius-server

Configures, modifies, or retrieves RADIUS server configurations.

Resource URIs

URI	Description
<base_URI>/config/running/radius-server	RADIUS server

Parameters

Name	Description
<i>hostname</i>	The IP address or host name of the RADIUS server
<i>auth-port</i>	The User Datagram Protocol (UDP) port used to connect the RADIUS server for authentication
<i>encryption-level</i>	The encryption level for the shared secret key operation
<i>key</i>	The text string that is used as the shared secret between the switch and the RADIUS server. The default is sharedsecret.
<i>protocol</i>	The authentication protocol. Parameters include CHAP, PAP, or PEAP-MSCHAP. The default is CHAP.
<i>retries</i>	The number of attempts allowed to connect to a RADIUS server. The default is 5 attempts.
<i>timeout</i>	The time to wait for the RADIUS server to respond, in seconds. The default is 5 seconds.

Usage guidelines

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

Examples

The following is an example of the GET operation 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/inetaddress">
    <hostname>inetaddress</hostname>
    <auth-port>1815</auth-port>
    <protocol>pap</protocol>
    <key>shardsecret</key>
    <encryption-level>0</encryption-level>
    <retries>10</retries>
```

```
    <timeout>10</timeout>
  </host>
</radius-server>
```

The following is an example of the POST operation to add the number of retries to the RADIUS server configuration.

URI

`http://host:80/rest/config/running/radius-server`

Request body

```
<host>
  <hostname>inetaddress</hostname>
  <retries>5</retries>
</host>
```

Response body

None

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

URI

`http://host:80/rest/config/running/radius-server/host/inetaddress/auth-port/1815`

Request body

None

Response body

None

rbridge-id

Configures, modifies, or retrieves RBridge ID for node-specific configuration.

Resource URIs

URI	Description
<base_URI>/config/running/rbridge-id	RBridge ID for node-specific configuration

Parameters

Name	Description
<i>rbridge-id</i>	The RBridge ID
<i>ag</i>	All AG-mode related commands. Refer to rbridge-id/{rbridge-number}/ag for information
<i>arp</i>	Address Resolution Protocol (ARP). Refer to rbridge-id/{rbridge-number}/arp for information
<i>chassis</i>	Configure Chassis Virtual address. Refer to rbridge-id/{rbridge-number}/chassis for information
<i>clock</i>	Configure system time zone. Refer to rbridge-id/{rbridge-number}/clock for information
<i>fabric</i>	Allows to configure fabric-related parameters. Refer to rbridge-id/{rbridge-number}/fabric for information
<i>fcoe</i>	FCoE configuration commands. Refer to rbridge-id/{rbridge-number}/fcoe for information
<i>fcsp</i>	FCSP configuration commands. Refer to rbridge-id/{rbridge-number}/fcsp for information
<i>filter-change-update-delay</i>	Change filter change update delay timer. Refer to rbridge-id/{rbridge-number}/filter-change-update-delay for information
<i>hardware-profile</i>	Configure Hardware Profile on a Switch. Refer to rbridge-id/{rbridge-number}/hardware-profile for information
<i>interface</i>	Interface configuration. Refer to rbridge-id/{rbridge-number}/interface for information
<i>ip</i>	Configure Internet Protocol (IP). Refer to rbridge-id/{rbridge-number}/ip for information
<i>ipv6</i>	Configure Internet Protocol version 6 (IPv6). Refer to rbridge-id/{rbridge-number}/ipv6 for information
<i>linecard</i>	Config linecard for the specified slot. Refer to rbridge-id/{rbridge-number}/linecard for information
<i>logical-chassis</i>	logical chassis commands. Refer to rbridge-id/{rbridge-number}/logical-chassis for information
<i>protocol</i>	Protocol configuration. Refer to rbridge-id/{rbridge-number}/protocol for information
<i>qos</i>	Configure rbridge-level qos config. Refer to rbridge-id/{rbridge-number}/qos for information
<i>route-map</i>	Configure a route-map instance. Refer to rbridge-id/{rbridge-number}/route-map for information
<i>router</i>	Configure router. Refer to rbridge-id/{rbridge-number}/router for information
<i>secpolicy</i>	Security policy-related configuration. Refer to rbridge-id/{rbridge-number}/secpolicy for information

Name	Description
<code>snmp-server</code>	SNMP server. Refer to rbridge-id/{rbridge-number}/snmp-server for information
<code>ssh</code>	Configure SSH Server. Refer to rbridge-id/{rbridge-number}/ssh for information
<code>switch-attributes</code>	Switch attributes configurations. Refer to rbridge-id/{rbridge-number}/switch-attributes for information
<code>system-monitor</code>	Configure FRU threshold and alert setting. Refer to rbridge-id/{rbridge-number}/system-monitor for information
<code>telnet</code>	Configure Telnet Server. Refer to rbridge-id/{rbridge-number}/telnet for information
<code>threshold-monitor</code>	Configure Class monitoring threshold and alert setting. Refer to rbridge-id/{rbridge-number}/threshold-monitor for information
<code>vrf</code>	VRF configurations. Refer to rbridge-id/{rbridge-number}/vrf for information

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

```
http://host:80/rest/config/running/rbridge-id
```

Request body

None

Response body

```
<rbridge-id xmlns="urn:brocade.com:mgmt:brocade-rbridge"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/rbridge-id/195">
  <rbridge-id>195</rbridge-id>
  <ip y:self="/rest/config/running/rbridge-id/195/ip"/>
  <switch-attributes
y:self="/rest/config/running/rbridge-id/195/switch-attributes"/>
  <vrf xmlns="urn:brocade.com:mgmt:brocade-vrf"
y:self="/rest/config/running/rbridge-id/195/vrf/mgmt-vrf"/>
  <threshold-monitor xmlns="urn:brocade.com:mgmt:brocade-threshold-monitor"
y:self="/rest/config/running/rbridge-id/195/threshold-monitor"/>
  <system-monitor xmlns="urn:brocade.com:mgmt:brocade-system-monitor"
y:self="/rest/config/running/rbridge-id/195/system-monitor"/>
  <snmp-server xmlns="urn:brocade.com:mgmt:brocade-snmp"
y:self="/rest/config/running/rbridge-id/195/snmp-server"/>
  <qos xmlns="urn:brocade.com:mgmt:brocade-qos"
y:self="/rest/config/running/rbridge-id/195/qos"/>
  <linecard xmlns="urn:brocade.com:mgmt:brocade-linecard-management"
y:self="/rest/config/running/rbridge-id/195/linecard"/>
  <protocol xmlns="urn:brocade.com:mgmt:brocade-interface"
y:self="/rest/config/running/rbridge-id/195/protocol"/>
  <hardware-profile xmlns="urn:brocade.com:mgmt:brocade-hardware"
y:self="/rest/config/running/rbridge-id/195/hardware-profile"/>
```

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```
<fcsp xmlns="urn:brocade.com:mgmt:brocade-fc-auth"
y:self="/rest/config/running/rbridge-id/195/fcsp"/>
  <secpolicy xmlns="urn:brocade.com:mgmt:brocade-fc-auth"
y:self="/rest/config/running/rbridge-id/195/secpolicy"/>
    <fabric xmlns="urn:brocade.com:mgmt:brocade-fabric-service"
y:self="/rest/config/running/rbridge-id/195/fabric"/>
      <clock xmlns="urn:brocade.com:mgmt:brocade-clock"
y:self="/rest/config/running/rbridge-id/195/clock"/>
        <chassis xmlns="urn:brocade.com:mgmt:brocade-chassis"
y:self="/rest/config/running/rbridge-id/195/chassis">
          <ag xmlns="urn:brocade.com:mgmt:brocade-ag"
y:self="/rest/config/running/rbridge-id/195/ag"/>
            <logical-chassis xmlns="http://brocade.com/ns/brocade-logical-chassis"
y:self="/rest/config/running/rbridge-id/195/logical-chassis"/>
              <telnet xmlns="urn:brocade.com:mgmt:brocade-sec-services"
y:self="/rest/config/running/rbridge-id/195/telnet"/>
                <ssh xmlns="urn:brocade.com:mgmt:brocade-sec-services"
y:self="/rest/config/running/rbridge-id/195/ssh"/>
                  <http xmlns="urn:brocade.com:mgmt:brocade-http"
y:self="/rest/config/running/rbridge-id/195/http"/>
                    <fcoe xmlns="urn:brocade.com:mgmt:brocade-fcoe"
y:self="/rest/config/running/rbridge-id/195/fcoe"/>
                      <router y:self="/rest/config/running/rbridge-id/195/router"/>
                        <ipv6 y:self="/rest/config/running/rbridge-id/195/ipv6"/>
                          <interface xmlns="urn:brocade.com:mgmt:brocade-interface"
y:self="/rest/config/running/rbridge-id/195/interface"/>
                        </rbridge-id>
```

rbridge-id/{rbridge-number}/ag

Configures, modifies, or retrieves all AG mode-related commands.

Resource URIs

URI	Description
<base_URI>/config/running/rbridge-id/{rbridge-number}/ag	All AG mode-related commands

Parameters

Name	Description
reliability	Reliability counter value
modes	PG mode
rename	Rename PG mode
fnm	Value for timeout
pgid	PGID
agNPortNb	N_port interface type

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

```
http://host:80/rest/config/running/rbridge-id/54/ag
```

Request body

None

Response body

```
<ag xmlns="urn:brocade.com:mgmt:brocade-ag"
y:self="/rest/config/running/rbridge-id/54/ag">
  <nport y:self="/rest/config/running/rbridge-id/54/ag/nport">
    <interface y:self="/rest/config/running/rbridge-id/54/ag/nport/interface">
      <FiberChannel
y:self="/rest/config/running/rbridge-id/54/ag/nport/interface/FiberChannel/%2254
/0/6%22">
        <agNPortNb>54/0/6</agNPortNb>
        <map
y:self="/rest/config/running/rbridge-id/54/ag/nport/interface/FiberChannel/%2254
/0/6%22/map">
          <fport
y:self="/rest/config/running/rbridge-id/54/ag/nport/interface/FiberChannel/%2254
/0/6%22/map/fport">
```

4 Configuration APIs

```
        <interface
y:self="/rest/config/running/rbridge-id/54/ag/nport/interface/FiberChannel/%2254
/0/6%22/map/fport/interface" />
        </fport>
        </map>
        </FiberChannel>
    </interface>
</nport>
<pg y:self="/rest/config/running/rbridge-id/54/ag/pg/0">
    <pgid>0</pgid>
    <nport y:self="/rest/config/running/rbridge-id/54/ag/pg/0/nport">
        <interface
y:self="/rest/config/running/rbridge-id/54/ag/pg/0/nport/interface">
            <FibreChannel>54/0/6</FibreChannel>
        </interface>
    </nport>
    <modes>lb</modes>
    <rename>pg1</rename>
</pg>
<timeout y:self="/rest/config/running/rbridge-id/54/ag/timeout">
    <fnm>120</fnm>
</timeout>
<counter y:self="/rest/config/running/rbridge-id/54/ag/counter">
    <reliability>25</reliability>
</counter>
</ag>
```


rbridge-id/{rbridge-number}/arp

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

Resource URIs

URI	Description
<base_URI>/config/running/rbridge-id/{rbridge-number}/arp	Address Resolution Protocol (ARP)

Parameters

Name	Description
<i>arp-ip-address</i>	IP address of the ARP entry
<i>mac-address-value</i>	MAC address
<i>interfacename</i>	Interface to use
<i>FortyGigabitEthernet</i>	Interface name

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

```
http://host:80/rest/config/running/rbridge-id/195/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/rbridge-id/195/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>
  <FortyGigabitEthernet>195/2/5</FortyGigabitEthernet>
</arp>
```

rbridge-id/{rbridge-number}/chassis

Configures, modifies, or retrieves Chassis Virtual address.

Resource URIs

URI	Description
<base_URI>/config/running/rbridge-id/{rbridge-number}/chassis	Chassis Virtual address

Parameters

Name	Description
virtual-ip	Chassis Virtual IPv4 address
virtual-ipv6	Chassis Virtual IPv6 address

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

```
http://host:80/rest/config/running/rbridge-id/195/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/rbridge-id/195/chassis">
  <virtual-ip>10.24.81.195/20</virtual-ip>
  <virtual-ipv6>2001:2017:111:1::/64</virtual-ipv6>
</chassis>
```

rbridge-id/{rbridge-number}/clock

Configures, modifies, or retrieves system time zone.

Resource URIs

URI	Description
<base_URI>/config/running/rbridge-id/{rbridge-number}/clock	Configure system time zone

Parameters

Name	Description
timezone	Time zone region or city

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

```
http://host:80/rest/config/running/rbridge-id/195/clock
```

Request body

None

Response body

```
<clock xmlns="urn:brocade.com:mgmt:brocade-clock"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/rbridge-id/195/clock">
  <timezone>Etc/GMT</timezone>
</clock>
```

rbridge-id/{rbridge-number}/fabric

Configures, modifies, or retrieves fabric-related parameters.

Resource URIs

URI	Description
<base_URI>/config/running/rbridge-id/{rbridge-number}/fabric	Allows to configure fabric-related parameters

Parameters

Name	Description
<i>load-balance</i>	Load balancing parameters <ul style="list-style-type: none"> • <i>dst-mac-vid</i> - Destination MAC address and VID-based load balancing • <i>src-dst-ip</i> - Source and Destination IP address-based load balancing • <i>src-dst-ip-mac-vid</i> - Source and Destination IP and MAC address and VID-based load balancing • <i>src-dst-ip-mac-vid-port</i> - Source and Destination IP, MAC address, VID and TCP/UDP port-based load balancing (default) • <i>src-dst-ip-port</i> - Source and Destination IP and TCP/UDP port-based load balancing • <i>src-dst-mac-vid</i> - Source and Destination MAC address and VID-based load balancing • <i>src-mac-vid</i> - Source MAC address and VID-based load balancing
<i>load-balance-hash-swap</i>	Hash-Swap value
<i>priority</i>	Priority (default 1)
<i>po-id</i>	Port-channel interface number

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

```
http://host:80/rest/config/running/rbridge-id/195/fabric
```

Request body

None

Response body

```
<fabric xmlns="urn:brocade.com:mgmt:brocade-fabric-service"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/rbridge-id/195/fabric">
  <ecmp y:self="/rest/config/running/rbridge-id/195/fabric/ecmp">
    <load-balance-hash-swap>500</load-balance-hash-swap>
    <load-balance>dst-mac-vid</load-balance>
  </ecmp>
</fabric>
```

```
</ecmp>
<route y:self="/rest/config/running/rbridge-id/195/fabric/route">
  <mcast y:self="/rest/config/running/rbridge-id/195/fabric/route/mcast">
    <priority>2</priority>
  </mcast>
</route>
<port-channel
y:self="/rest/config/running/rbridge-id/195/fabric/port-channel/600">
  <po-id>600</po-id>
  <load-balance>src-dst-ip</load-balance>
</port-channel>
</fabric>
```

rbridge-id/{rbridge-number}/fcoe

Configures, modifies, or retrieves FCoE configuration commands.

Resource URIs

URI	Description
<base_URI>/config/running/rbridge-id/{rbridge-number}/fcoe	FCoE configuration commands

Parameters

Name	Description
fcoe-enodes	The number of FCoE ENodes that are to be created on a switch

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

http://host:80/rest/config/running/rbridge-id/195/fcoe

Request body

None

Response body

```
<fcoe xmlns="urn:brocade.com:mgmt:brocade-fcoe"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/rbridge-id/195/fcoe">
  <fcoe-enodes>0</fcoe-enodes>
</fcoe>
```

rbridge-id/{rbridge-number}/fcsp

Configures, modifies, or retrieves FCSP configuration commands.

Resource URIs

URI	Description
<base_URI>/config/running/rbridge-id/{rbridge-number}/fcsp	FCSP configuration commands

Parameters

Name	Description
group	Specifies the DH group value. This parameter sets the strength of the secret
hash	Specifies the hash type used for authentication
switch	Configures the switch authentication policy attribute

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

```
http://host:80/rest/config/running/rbridge-id/54/fcsp
```

Request body

None

Response body

```
<fcsp xmlns="urn:brocade.com:mgmt:brocade-fc-auth"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/rbridge-id/54/fcsp">
  <auth y:self="/rest/config/running/rbridge-id/54/fcsp/auth">
    <group>1</group>
    <hash>sha1</hash>
    <policy y:self="/rest/config/running/rbridge-id/54/fcsp/auth/policy">
      <switch>on</switch>
    </policy>
  </auth>
</fcsp>
```

rbridge-id/{rbridge-number}/filter-change-update-delay

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

Resource URIs

URI	Description
<base_URI>/config/running/rbridge-id/{rbridge-number}/filter-change-update-delay	Change filter change update delay timer

Parameters

Name	Description
filter-delay-value	Delay time (default-10 secs, 0-disable)

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

http://host:80/rest/config/running/rbridge-id/195/filter-change-update-delay

Request body

None

Response body

```
<filter-change-update-delay xmlns="urn:brocade.com:mgmt:brocade-ip-policy"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/rbridge-id/195/filter-change-update-delay/15">
  <filter-delay-value>15</filter-delay-value>
</filter-change-update-delay>
```


rbridge-id/{rbridge-number}/hardware-profile

Configures, modifies, or retrieves hardware profile on a switch.

Resource URIs

URI	Description
<base_URI>/config/running/rbridge-id/{rbridge-number}/hardware-profile	Configure hardware profile on a switch

Parameters

Name	Description
<i>routing_profiletype</i>	Route table profile type <ul style="list-style-type: none"> • default - IPv4-IPv6 dual-stack applications • ipv4-max-arp - IPv4 routing with maximum ARP • ipv4-max-route - IPv4 maximum routes • ipv4-min-v6 - dual-stack optimized for IPv4 routes • ipv6-max-nd - IPv6 routing with maximum ND • ipv6-max-route - IPv6 maximum routes
<i>TCAM profile type</i>	TCAM profile type <ul style="list-style-type: none"> • default - basic support for all applications • ipv4-v6-mcast - optimized for multicast • ipv4-v6-pbr - optimized for IPv4 and IPv6 ACL, PBR • ipv4-v6-qos - optimized for IPv4 and IPv6 ACL, QoS • l2-acl-qos - optimized for L2 ACL, QoS • l2-ipv4-acl - optimized for L2 and IPv4 ACL

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

```
http://host:80/rest/config/running/rbridge-id/195/hardware-profile
```

Request body

None

Response body

```
<hardware-profile xmlns="urn:brocade.com:mgmt:brocade-hardware"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/rbridge-id/195/hardware-profile">
  <tcam y:self="/rest/config/running/rbridge-id/195/hardware-profile/tcam">
    <tcam_profiletype>ipv4-v6-mcast</tcam_profiletype>
  </tcam>
```

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```
<route-table  
y:self="/rest/config/running/rbridge-id/195/hardware-profile/route-table">  
  <routing_profiletype>ipv4-max-arp</routing_profiletype>  
</route-table>  
</hardware-profile>
```

rbridge-id/{rbridge-number}/interface

Configures, modifies, or retrieves interface configuration.

Resource URIs

URI	Description
<base_URI>/config/running/rbridge-id/{rbridge-number}/interface	Interface configuration

Parameters

Name	Description
<i>id</i>	Loopback port number
<i>shutdown</i>	Enable shutdown
<i>forwarding</i>	Creates and enters Virtual Routing and Forwarding (VRF) configuration mode
<i>name</i>	VE interface number
<i>address</i>	IP address of the DHCP server
<i>use-vrf</i>	VRF name
<i>mtu</i>	IP MTU in bytes
<i>directed-broadcast</i>	Enable directed IP broadcasts forwarding
<i>proxy-arp</i>	Enable Proxy-ARP on the interface
<i>arp-aging-timeout</i>	Set ARP age timeout value to interface
<i>last-member-query-interval</i>	Last Member Query Interval value
<i>query-interval</i>	Query Interval value
<i>immediate-leave</i>	Immediate Leave Processing
<i>managed-config-flag</i>	Set managed config flag in router advertisement
<i>other-config-flag</i>	Set other config flag in router advertisement
<i>ra-lifetime</i>	Set router lifetime in router advertisement
<i>reachable-time</i>	The duration node is considered reachable, Sent in RA messages
<i>retrans-timer</i>	RA retransmission timer, Sent in RA messages
<i>hoplimit</i>	Hop Limit to be advertised in RA
<i>ns-interval</i>	Interval between Neighbor solicitations
<i>proxy</i>	Enable proxy flag
<i>max-interval</i>	Maximum interval in seconds
<i>min</i>	Minimum interval between sending RA messages
<i>attempts</i>	Number of Neighbor solicitations to send as part of duplicate address detection
<i>time</i>	Retransmit time interval for Neighbor solicitations, sent as part of duplicate address detection

Name	Description
<i>expire</i>	Time interval after which the cache is deleted or refreshed
<i>shutdown</i>	Shut down the selected interface

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

`http://host:80/rest/config/running/rbridge-id/54/interface`

Request body

None

Response body

```
<interface xmlns="urn:brocade.com:mgmt:brocade-interface"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/rbridge-id/54/interface">
  <Loopback xmlns="urn:brocade.com:mgmt:brocade-intf-loopback"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/rbridge-id/54/interface/Loopback/10">
    <id>10</id>
    <shutdown>true</shutdown>
    <vrf xmlns="urn:brocade.com:mgmt:brocade-interface"
y:self="/rest/config/running/rbridge-id/54/interface/Loopback/10/vrf">
      <forwarding>vrf1</forwarding>
    </vrf>
    <ipv6 xmlns="urn:brocade.com:mgmt:brocade-ipv6-config"
y:self="/rest/config/running/rbridge-id/54/interface/Loopback/10/ipv6">
      <address
y:self="/rest/config/running/rbridge-id/54/interface/Loopback/10/ipv6/address"/>
      <ospf xmlns="urn:brocade.com:mgmt:brocade-ospfv3"
y:self="/rest/config/running/rbridge-id/54/interface/Loopback/10/ipv6/ospf">
        <authentication
y:self="/rest/config/running/rbridge-id/54/interface/Loopback/10/ipv6/ospf/authen
ntication">
          <ipsec
y:self="/rest/config/running/rbridge-id/54/interface/Loopback/10/ipv6/ospf/authen
tication/ipsec"/>
        </authentication>
      </ospf>
    </ipv6>
    <ip xmlns="urn:brocade.com:mgmt:brocade-ip-config"
y:self="/rest/config/running/rbridge-id/54/interface/Loopback/10/ip">
      <ospf xmlns="urn:brocade.com:mgmt:brocade-ospf"
y:self="/rest/config/running/rbridge-id/54/interface/Loopback/10/ip/ospf">
        <authentication-key
y:self="/rest/config/running/rbridge-id/54/interface/Loopback/10/ip/ospf/authent
ication-key"/>
      </ospf>
    </ip>
  </Loopback>
</interface>
```

```

        <md5-authentication
y:self="/rest/config/running/rbridge-id/54/interface/Loopback/10/ip/ospf/md5-aut
hentication">
        <key-id
y:self="/rest/config/running/rbridge-id/54/interface/Loopback/10/ip/ospf/md5-aut
hentication/key-id"/>
        </md5-authentication>
        <database-filter
y:self="/rest/config/running/rbridge-id/54/interface/Loopback/10/ip/ospf/databas
e-filter"/>
        </ospf>
    </ip>
</Loopback>
<Ve xmlns="urn:brocade.com:mgmt:brocade-interface"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/rbridge-id/54/interface/Ve/1">
    <name>1</name>
    <ip xmlns="urn:brocade.com:mgmt:brocade-ip-policy"
y:self="/rest/config/running/rbridge-id/54/interface/Ve/1/ip">
        <policy
y:self="/rest/config/running/rbridge-id/54/interface/Ve/1/ip/policy">
            <route-map
y:self="/rest/config/running/rbridge-id/54/interface/Ve/1/ip/policy/route-map"/>
            </policy>
            <ospf xmlns="urn:brocade.com:mgmt:brocade-ospf"
y:self="/rest/config/running/rbridge-id/54/interface/Ve/1/ip/ospf">
                <authentication-key
y:self="/rest/config/running/rbridge-id/54/interface/Ve/1/ip/ospf/authentication
-key"/>
                <md5-authentication
y:self="/rest/config/running/rbridge-id/54/interface/Ve/1/ip/ospf/md5-authentica
tion">
                    <key-id
y:self="/rest/config/running/rbridge-id/54/interface/Ve/1/ip/ospf/md5-authentica
tion/key-id"/>
                    </md5-authentication>
                <database-filter
y:self="/rest/config/running/rbridge-id/54/interface/Ve/1/ip/ospf/database-filte
r"/>
                </ospf>
                <icmp xmlns="urn:brocade.com:mgmt:brocade-icmp"
y:self="/rest/config/running/rbridge-id/54/interface/Ve/1/ip/icmp"/>
                <dhcp xmlns="urn:brocade.com:mgmt:brocade-dhcp"
y:self="/rest/config/running/rbridge-id/54/interface/Ve/1/ip/dhcp">
                    <relay
y:self="/rest/config/running/rbridge-id/54/interface/Ve/1/ip/dhcp/relay">
                        <servers
y:self="/rest/config/running/rbridge-id/54/interface/Ve/1/ip/dhcp/relay/servers/
1.1.1.1%2Cmgmt-vrf">
                            <address>1.1.1.1</address>
                            <use-vrf>mgmt-vrf</use-vrf>
                        </servers>
                    </relay>
                </dhcp>
                <mtu xmlns="urn:brocade.com:mgmt:brocade-ip-config">1600</mtu>
                <directed-broadcast
xmlns="urn:brocade.com:mgmt:brocade-ip-config">true</directed-broadcast>
                <proxy-arp xmlns="urn:brocade.com:mgmt:brocade-ip-config">true</proxy-arp>
                <arp-aging-timeout
xmlns="urn:brocade.com:mgmt:brocade-ip-config">10</arp-aging-timeout>

```

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```
    <pim xmlns="urn:brocade.com:mgmt:brocade-pim"
y:self="/rest/config/running/rbridge-id/54/interface/Ve/1/ip/pim"/>
    <igmp xmlns="urn:brocade.com:mgmt:brocade-igmp"
y:self="/rest/config/running/rbridge-id/54/interface/Ve/1/ip/igmp">
        <last-member-query-interval>1100</last-member-query-interval>
        <query-interval>130</query-interval>
        <immediate-leave>true</immediate-leave>
    </igmp>
</ip>
    <vrf y:self="/rest/config/running/rbridge-id/54/interface/Ve/1/vrf"/>
    <ipv6 xmlns="urn:brocade.com:mgmt:brocade-ipv6-access-list"
y:self="/rest/config/running/rbridge-id/54/interface/Ve/1/ipv6">
        <vrrp-suppress-interface-ra
xmlns="urn:brocade.com:mgmt:brocade-ipv6-nd-ra">true</vrrp-suppress-interface-ra
>
        <nd xmlns="urn:brocade.com:mgmt:brocade-ipv6-nd-ra"
y:self="/rest/config/running/rbridge-id/54/interface/Ve/1/ipv6/nd">
            <managed-config-flag>true</managed-config-flag>
            <other-config-flag>true</other-config-flag>
            <ra-lifetime>1850</ra-lifetime>
            <reachable-time>1</reachable-time>
            <mtu>1600</mtu>
            <retrans-timer>1</retrans-timer>
            <hoplimit>66</hoplimit>
            <ns-interval>2</ns-interval>
            <proxy>true</proxy>
            <suppress-ra
y:self="/rest/config/running/rbridge-id/54/interface/Ve/1/ipv6/nd/suppress-ra">
                <mtu>true</mtu>
                <all>true</all>
            </suppress-ra>
            <ra-interval
y:self="/rest/config/running/rbridge-id/54/interface/Ve/1/ipv6/nd/ra-interval">
                <max-interval>700</max-interval>
                <min>250</min>
            </ra-interval>
            <dad
y:self="/rest/config/running/rbridge-id/54/interface/Ve/1/ipv6/nd/dad">
                <attempts>3</attempts>
                <time>2</time>
            </dad>
            <cache
y:self="/rest/config/running/rbridge-id/54/interface/Ve/1/ipv6/nd/cache">
                <expire>145</expire>
            </cache>
        </nd>
        <policy xmlns="urn:brocade.com:mgmt:brocade-ip-policy"
y:self="/rest/config/running/rbridge-id/54/interface/Ve/1/ipv6/policy">
            <route-map
y:self="/rest/config/running/rbridge-id/54/interface/Ve/1/ipv6/policy/route-map"
/>
                </policy>
            <dhcp xmlns="urn:brocade.com:mgmt:brocade-dhcpv6"
y:self="/rest/config/running/rbridge-id/54/interface/Ve/1/ipv6/dhcp">
                <relay
y:self="/rest/config/running/rbridge-id/54/interface/Ve/1/ipv6/dhcp/relay"/>
                    </dhcp>
                    <address xmlns="urn:brocade.com:mgmt:brocade-ipv6-config"
y:self="/rest/config/running/rbridge-id/54/interface/Ve/1/ipv6/address"/>
                        <mtu xmlns="urn:brocade.com:mgmt:brocade-ipv6-config">1300</mtu>
```

```
    <ospf xmlns="urn:brocade.com:mgmt:brocade-ospfv3"
y:self="/rest/config/running/rbridge-id/54/interface/Ve/1/ipv6/ospf">
    <authentication
y:self="/rest/config/running/rbridge-id/54/interface/Ve/1/ipv6/ospf/authentication">
    </authentication>
    <ipsec
y:self="/rest/config/running/rbridge-id/54/interface/Ve/1/ipv6/ospf/authentication/ipsec"/>
    </ipsec>
    </ospf>
  </ipv6>
  <shutdown xmlns="urn:brocade.com:mgmt:brocade-ip-config">true</shutdown>
</Ve>
</interface>
```

rbridge-id/{rbridge-number}/ip

Configures, modifies, or retrieves Internet Protocol (IP).

Resource URIs

URI	Description
<base_URI>/config/running/rbridge-id/{rbridge-number}/ip	Configure Internet Protocol (IP)

Parameters

Name	Description
<i>name</i>	Community list name
<i>seq-keyword</i>	Sequence number of entry
<i>instance</i>	Instance number
<i>ip-action</i>	<ul style="list-style-type: none"> deny - Disallow matching pattern permit - Allow matching pattern
<i>ip-community-regex-pr</i>	A ordered community list regular expression
<i>src-vrf</i>	Name of VRF
<i>map</i>	Route-map name
<i>load-sharing</i>	Enable IP load sharing
<i>proto</i>	<ul style="list-style-type: none"> bgp - BGP routes to be used for next hop resolution of static route ospf - OSPF routes to be used for next hop resolution of static route
<i>static-route-dest</i>	Destination IP address
<i>static-route-next-hop</i>	Next hop ip address
<i>next-hop-recursion</i>	Use static route to resolve static route nexthop
<i>next-hop-enable-default</i>	Use default route to resolve static route nexthop
<i>extcommunity-list-number</i>	Extended Community list Instance number
<i>ext-community-action</i>	<ul style="list-style-type: none"> deny - Disallow matching pattern permit - Allow matching pattern
<i>ext-community-expr</i>	<ul style="list-style-type: none"> rt - ASN:nn or IpAddress:nn soo - ASN:nn or IpAddress:nn
<i>router-id</i>	Change the router ID already in use
<i>ip-regex-expr</i>	Regular expression
<i>action-ipp</i>	<ul style="list-style-type: none"> deny - Disallow matching pattern permit - Allow matching pattern
<i>ipprefix-ipp</i>	IPv4 prefix
<i>le</i>	Prefix list less than the specified value

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

`http://host:80/rest/config/running/rbridge-id/195/ip`

Request body

None

Response body

```
<ip xmlns="urn:brocade.com:mgmt:brocade-rbridge"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/rbridge-id/195/ip">
  <router-id xmlns="urn:brocade.com:mgmt:brocade-rtm">10.24.25.26</router-id>
  <load-sharing xmlns="urn:brocade.com:mgmt:brocade-rtm">2</load-sharing>
  <route xmlns="urn:brocade.com:mgmt:brocade-rtm"
y:self="/rest/config/running/rbridge-id/195/ip/route">
    <next-hop y:self="/rest/config/running/rbridge-id/195/ip/route/next-hop/bgp">
      <proto>bgp</proto>
    </next-hop>
    <static-route-nh
y:self="/rest/config/running/rbridge-id/195/ip/route/static-route-nh/%220.0.0.0/
0%22%2C10.20.232.1">
      <static-route-dest>0.0.0.0/0</static-route-dest>
      <static-route-next-hop>10.20.232.1</static-route-next-hop>
      <next-hop-recursion>4</next-hop-recursion>
      <next-hop-enable-default>true</next-hop-enable-default>
    </static-route-nh>
  </route>
  <extcommunity-list xmlns="urn:brocade.com:mgmt:brocade-ip-policy"
y:self="/rest/config/running/rbridge-id/195/ip/extcommunity-list/1">
    <extcommunity-list-num>1</extcommunity-list-num>
    <ext-community-action>permit</ext-community-action>
    <ext-community-expr>rt 12:12 soo 13:11</ext-community-expr>
  </extcommunity-list>
  <import xmlns="urn:brocade.com:mgmt:brocade-rtm"
y:self="/rest/config/running/rbridge-id/195/ip/import">
    <routes
y:self="/rest/config/running/rbridge-id/195/ip/import/routes/mgmt-vrf%2Cmap1">
      <src-vrf>mgmt-vrf</src-vrf>
      <map>map1</map>
    </routes>
  </import>
  <community-list xmlns="urn:brocade.com:mgmt:brocade-ip-policy"
y:self="/rest/config/running/rbridge-id/195/ip/community-list">
    <extended
y:self="/rest/config/running/rbridge-id/195/ip/community-list/extended/comlist1%
2Cseq%2C5">
      <name>comlist1</name>
      <seq-keyword>seq</seq-keyword>
      <instance>5</instance>
      <ip-action>deny</ip-action>
```

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```
        <ip-community-reg-expr>test</ip-community-reg-expr>
    </extended>
</community-list>
    <as-path xmlns="urn:brocade.com:mgmt:brocade-ip-policy"
y:self="/rest/config/running/rbridge-id/195/ip/as-path">
    <access-list
y:self="/rest/config/running/rbridge-id/195/ip/as-path/access-list/seq%2Cseq%2C5
">
        <name>seq</name>
        <seq-keyword>seq</seq-keyword>
        <instance>5</instance>
        <ip-action>permit</ip-action>
        <ip-reg-expr>myaspath</ip-reg-expr>
    </access-list>
</as-path>
    <prefix-list xmlns="urn:brocade.com:mgmt:brocade-ip-policy"
y:self="/rest/config/running/rbridge-id/195/ip/prefix-list/prefix554%2Cseq%2C10"
>
        <name>prefix554</name>
        <seq-keyword>seq</seq-keyword>
        <instance>10</instance>
        <action-ipp>permit</action-ipp>
        <iprefix-ipp>192.168.10.1/24</prefix-ipp>
        <le>64</le>
    </prefix-list>
</ip>
```

rbridge-id/{rbridge-number}/ipv6

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

Resource URIs

URI	Description
<base_URI>/config/running/rbridge-id/{rbridge-number}/ipv6	Configure Internet Protocol version 6 (IPv6)

Parameters

Name	Description
<i>src-vrf</i>	Name of VRF
<i>map</i>	Route-map name
<i>time</i>	Retransmit time interval for neighbor solicitations, sent as part of duplicate address detection
<i>vrrp</i>	Virtual Router Redundancy Protocol IPv6
<i>vrrp-extended</i>	Virtual Router Redundancy Protocol IPv6 Extended
<i>vrf</i>	Name of VRF
<i>area-id</i>	Area ID in IP address or decimal format
<i>spi</i>	Security parameter Index
<i>ah</i>	Use Authentication Header <ul style="list-style-type: none"> • hmac-md5 - Use hmac-md5 authentication algorithm • hmac-sha1 - Use hmac-sha1 authentication algorithm
<i>no-encrypt</i>	Enable do not encrypt the key
<i>key</i>	Key used for Authentication Header
<i>reference-bandwidth</i>	Set OSPFv3 Auto-cost Reference-bandwidth in Mbits per second
<i>database-overflow-interval</i>	Poll interval
<i>always</i>	Always advertise default route
<i>metric</i>	OSPF metric for default route
<i>metric-type</i>	OSPF metric type for default route
<i>default-metric</i>	Default metric
<i>default-passive-interface</i>	Set OSPF interface passive
<i>route-type</i>	<ul style="list-style-type: none"> • external - External type 5 and type 7 routes • inter-area - inter-area routes • intra-area - Intra-area routes
<i>distance-value</i>	Distance for the given type of routes
<i>distribute-list-prefix-list-name</i>	Prefix list name

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Name	Description
<i>in</i>	Inbound filtering
<i>external-lsdb-limit</i>	External link state database limit
<i>strict-lsa-checking</i>	Set strict LSA checking
<i>key-add-remove-interval</i>	Key add/remove interval
<i>key-rollover-interval</i>	New key rollover interval
<i>log-status-change</i>	Enable log status change
<i>maximum-paths</i>	Set the maximum number of paths to a destination
<i>metric-type</i>	<ul style="list-style-type: none"> type1 - Metric Type 1 (small) type2 - Metric Type 2 (large)
<i>nonstop-routing</i>	Enable nonstop-routing capability
<i>lsa-group-pacing</i>	OSPFv3 LSA group pacing timer
<i>static-route-dest</i>	Destination IP address
<i>static-route-next-hop</i>	Next hop ip address
<i>metric</i>	Specifies a value that the Layer 3 switch uses to compare this route to other static routes in the IPv6 static route table that have the same destination
<i>distance</i>	Specifies an administrative distance
<i>tag</i>	Specifies a tag value for the route.
<i>static-route-oif-type</i>	Static route interface type
<i>InterfaceNumber</i>	Interface number
<i>link-local-static-route-dest</i>	Destination link local static route IP address
<i>link-local-nexthop</i>	Link local next hop address
<i>link-local-route-oif-type</i>	Link local route interface type
<i>linklocalinterface</i>	Link local interface
<i>next-hop-vrf</i>	Next hop VRF
<i>area-id</i>	Area address in dotted decimal or decimal format
<i>no-summary</i>	When configured on the NSSA area border router (ABR) this parameter prevents any Type 3 and Type 4 summary link-state advertisement (LSA) from being injected into the area
<i>stub-area-metric</i>	Stub area metric
<i>name</i>	An ordered community-list regular expression
<i>seq-keyword</i>	Specifies the "seq" keyword
<i>instance</i>	Specifies the sequence number for the rule
<i>action-ipp</i>	Specifies the rules for transmission. The prefix list matches only on the specified ipv6-prefix/prefix-length unless you use the ge ge-value or le le-value parameters
<i>ipv6-prefix-ipp</i>	IPv6 prefix
<i>le</i>	If you specify only le le-value, then the range is from le-value to the prefix length parameter

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

```
http://host:80/rest/config/running/rbridge-id/195/ipv6
```

Request body

None

Response body

```
<ipv6 xmlns="urn:brocade.com:mgmt:brocade-rbridge"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/rbridge-id/195/ipv6">
  <protocol xmlns="urn:brocade.com:mgmt:brocade-vrrpv3"
y:self="/rest/config/running/rbridge-id/195/ipv6/protocol">
    <vrrp>true</vrrp>
    <vrrp-extended>true</vrrp-extended>
  </protocol>
  <prefix-list xmlns="urn:brocade.com:mgmt:brocade-ip-policy"
y:self="/rest/config/running/rbridge-id/195/ipv6/prefix-list/deny554%2Cseq%2C10"
>
    <name>deny554</name>
    <seq-keyword>seq</seq-keyword>
    <instance>10</instance>
    <action-ipp>permit</action-ipp>
    <ipv6-prefix-ipp>2001:5554:53::/48</ipv6-prefix-ipp>
    <le>64</le>
  </prefix-list>
  <route xmlns="urn:brocade.com:mgmt:brocade-ipv6-rtm"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/rbridge-id/195/ipv6/route">
    <static-route-nh
y:self="/rest/config/running/rbridge-id/195/ipv6/route/static-route-nh/%221700:5
4:1::/64%22%2C2001:2004::5401">
      <static-route-dest>1700:54:1::/64</static-route-dest>
      <static-route-next-hop>2001:2004::5401</static-route-next-hop>
    </static-route-nh>
    <static-route-nh
y:self="/rest/config/running/rbridge-id/195/ipv6/route/static-route-nh/%222001::
/16%22%2C2001:db:0:ee44::1">
      <static-route-dest>2001::/16</static-route-dest>
      <static-route-next-hop>2001:db:0:ee44::1</static-route-next-hop>
      <metric>3</metric>
      <distance>60</distance>
      <tag>67</tag>
    </static-route-nh>
    <static-route-oif
y:self="/rest/config/running/rbridge-id/195/ipv6/route/static-route-oif/%221700:
54::/64%22%2Ctengigabitethernet%2C%2254/0/9%22">
      <static-route-dest>1700:54::/64</static-route-dest>
      <static-route-oif-type>tengigabitethernet</static-route-oif-type>
      <InterfaceNumber>54/0/9</InterfaceNumber>
```

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```

    </static-route-oif>
    <link-local-static-route-nh
y:self="/rest/config/running/rbridge-id/195/ipv6/route/link-local-static-route-n
h/%221900:54::3/128%22%2Cfe80::210:94ff:fe54:954%2Ctengigabitethernet%2C%2254/0/
9%22">
    <link-local-static-route-dest>1900:54::3/128</link-local-static-route-dest>
    <link-local-nexthop>fe80::210:94ff:fe54:954</link-local-nexthop>
    <link-local-route-oif-type>tengigabitethernet</link-local-route-oif-type>
    <linklocalinterface>54/0/9</linklocalinterface>
    </link-local-static-route-nh>
    <static-route-nh-vrf
y:self="/rest/config/running/rbridge-id/195/ipv6/route/static-route-nh-vrf/%2220
01::/16%22%2Cvrf1%2C2001::">
    <static-route-next-vrf-dest>2001::/16</static-route-next-vrf-dest>
    <next-hop-vrf>vrf1</next-hop-vrf>
    <static-route-next-hop>2001::</static-route-next-hop>
    </static-route-nh-vrf>
</route>
    <import xmlns="urn:brocade.com:mgmt:brocade-ipv6-rtm"
y:self="/rest/config/running/rbridge-id/195/ipv6/import">
    <routes
y:self="/rest/config/running/rbridge-id/195/ipv6/import/routes/mgmt-vrf%2Cmap">
    <src-vrf>mgmt-vrf</src-vrf>
    <map>map</map>
    </routes>
    </import>
    <nd xmlns="urn:brocade.com:mgmt:brocade-ipv6-nd-ra"
y:self="/rest/config/running/rbridge-id/195/ipv6/nd">
    <dad y:self="/rest/config/running/rbridge-id/195/ipv6/nd/dad">
    <time>2</time>
    </dad>
    </nd>
    <router y:self="/rest/config/running/rbridge-id/195/ipv6/router">
    <ospf xmlns="urn:brocade.com:mgmt:brocade-ospfv3"
y:self="/rest/config/running/rbridge-id/195/ipv6/router/ospf/default-vrf">
    <vrf>default-vrf</vrf>
    <area
y:self="/rest/config/running/rbridge-id/195/ipv6/router/ospf/default-vrf/area/10
.25.26.24">
    <area-id>0.0.5.4</area-id>
    <stub
y:self="/rest/config/running/rbridge-id/195/ipv6/router/ospf/default-vrf/area/0.
0.5.4/stub">
    <no-summary>true</no-summary>
    <stub-area-metric>10</stub-area-metric>
    </stub>
    <authentication
y:self="/rest/config/running/rbridge-id/195/ipv6/router/ospf/default-vrf/area/10
.25.26.24/authentication">
    <spi>514</spi>
    <ah>hmac-md5</ah>
    <no-encrypt>true</no-encrypt>
    <key>key1</key>
    </authentication>
    </area>
    <auto-cost
y:self="/rest/config/running/rbridge-id/195/ipv6/router/ospf/default-vrf/auto-co
st">
    <reference-bandwidth>25</reference-bandwidth>
    </auto-cost>

```

```

        <database-overflow-interval>15</database-overflow-interval>
        <default-information-originate
y:self="/rest/config/running/rbridge-id/195/ipv6/router/ospf/default-vrf/default
-information-originate">
            <always>true</always>
            <metric>20</metric>
            <metric-type>type1</metric-type>
        </default-information-originate>
        <default-metric>25</default-metric>
        <default-passive-interface>true</default-passive-interface>
        <distance
y:self="/rest/config/running/rbridge-id/195/ipv6/router/ospf/default-vrf/distanc
e/external">
            <route-type>external</route-type>
            <distance-value>5</distance-value>
        </distance>
        <distribute-list
y:self="/rest/config/running/rbridge-id/195/ipv6/router/ospf/default-vrf/distrib
ute-list">
            <route-map
y:self="/rest/config/running/rbridge-id/195/ipv6/router/ospf/default-vrf/distrib
ute-list/route-map"/>
                <prefix-list
y:self="/rest/config/running/rbridge-id/195/ipv6/router/ospf/default-vrf/distrib
ute-list/prefix-list">
                    <distribute-list-prefix-list-name>prefix</distribute-list-prefix-list-name>
                    <in>true</in>
                </prefix-list>
            </distribute-list>
            <external-lsdb-limit>2500</external-lsdb-limit>
            <graceful-restart
y:self="/rest/config/running/rbridge-id/195/ipv6/router/ospf/default-vrf/gracefu
l-restart">
                <helper
y:self="/rest/config/running/rbridge-id/195/ipv6/router/ospf/default-vrf/gracefu
l-restart/helper">
                    <strict-lsa-checking>true</strict-lsa-checking>
                </helper>
            </graceful-restart>
            <key-add-remove-interval>1000</key-add-remove-interval>
            <key-rollover-interval>350</key-rollover-interval>
            <log-status-change>true</log-status-change>
            <redistribute
y:self="/rest/config/running/rbridge-id/195/ipv6/router/ospf/default-vrf/redistr
ibute">
                <connected
y:self="/rest/config/running/rbridge-id/195/ipv6/router/ospf/default-vrf/redistr
ibute/connected">
                    <metric-type>type1</metric-type>
                </connected>
                <static
y:self="/rest/config/running/rbridge-id/195/ipv6/router/ospf/default-vrf/redistr
ibute/static">
                    <route-map>route</route-map>
                    <metric>550</metric>
                </static>
            </bgp
y:self="/rest/config/running/rbridge-id/195/ipv6/router/ospf/default-vrf/redistr
ibute/bgp">
                <metric>500</metric>

```

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```
        </bgp>
    </redistribute>
    <timers
y:self="/rest/config/running/rbridge-id/195/ipv6/router/ospf/default-vrf/timers"
>
        <lsa-group-pacing>245</lsa-group-pacing>
        <spf
y:self="/rest/config/running/rbridge-id/195/ipv6/router/ospf/default-vrf/timers/
spf"/>
            </timers>
            <nonstop-routing>true</nonstop-routing>
            <maximum-paths>7</maximum-paths>
        </ospf>
    </router>
</ipv6>
```


rbridge-id/{rbridge-number}/linecard

Configures, modifies, or retrieves line card configurations for the specified slot.

Resource URIs

URI	Description
<base_URI>/config/running/rbridge-id/{rbridge-number}/linecard	Configure line card for the specified slot

Parameters

Name	Description
<i>linecardName</i>	Slot number
<i>linecardType</i>	<ul style="list-style-type: none"> LC6X100G - 6X100G line card LC12X40G - 12X40G line card LC27X40G - 27X40G line card LC36X10G - 36X10G line card LC48X1G - 48X1G line card LC48X10G - 48X10G line card LC48X10GT - 48X10GT line card LC72X1G - 72X1G line card

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

```
http://host:80/rest/config/running/rbridge-id/195/linecard
```

Request body

None

Response body

```
<linecard xmlns="urn:brocade.com:mgmt:brocade-linecard-management"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/rbridge-id/195/linecard">
  <linecards y:self="/rest/config/running/rbridge-id/195/linecard/linecards/1">
    <linecardName>1</linecardName>
    <linecardType>LC48X10G</linecardType>
  </linecards>
  <linecards y:self="/rest/config/running/rbridge-id/195/linecard/linecards/2">
    <linecardName>2</linecardName>
    <linecardType>LC12X40G</linecardType>
  </linecards>
</linecard>
```

rbridge-id/{rbridge-number}/logical-chassis

Configures, modifies, or retrieves logical chassis commands.

Resource URIs

URI	Description
<base_URI>/config/running/rbridge-id/{rbridge-number}/logical-chassis	Logical chassis commands

Parameters

Name	Description
principal-priority	Principal-priority

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

http://host:80/rest/config/running/rbridge-id/195/logical-chassis

Request body

None

Response body

```
<logical-chassis xmlns="http://brocade.com/ns/brocade-logical-chassis"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/rbridge-id/195/logical-chassis">
  <principal-priority>25</principal-priority>
</logical-chassis>
```

rbridge-id/{rbridge-number}/protocol

Configures, modifies, or retrieves protocol configuration.

Resource URIs

URI	Description
<base_URI>/config/running/rbridge-id/{rbridge-number}/protocol	Protocol configuration

Parameters

Name	Description
<i>vrrp</i>	Virtual Router Redundacy Protocol (VRRP)
<i>vrrp-extended</i>	Virtual Router Redundacy Protocol Extended (VRRP-E)

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

```
http://host:80/rest/config/running/rbridge-id/54/protocol
```

Request body

None

Response body

```
<protocol xmlns="urn:brocade.com:mgmt:brocade-interface"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/rbridge-id/54/protocol">
  <vrrp-extended xmlns="urn:brocade.com:mgmt:brocade-vrrp">true</vrrp-extended>
</protocol>
```

rbridge-id/{rbridge-number}/qos

Configures, modifies, or retrieves RBridge-level QoS configuration.

Resource URIs

URI	Description
<base_URI>/config/running/rbridge-id/{rbridge-number}/qos	Configure RBridge-level QoS configuration

Parameters

Name	Description
limit	Configure QoS ingress queue limit

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

http://host:80/rest/config/running/rbridge-id/54/qos

Request body

None

Response body

```
<qos xmlns="urn:brocade.com:mgmt:brocade-qos"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/rbridge-id/54/qos">
  <tx-queue y:self="/rest/config/running/rbridge-id/54/qos/tx-queue">
    <limit>300</limit>
  </tx-queue>
  <rcv-queue y:self="/rest/config/running/rbridge-id/54/qos/rcv-queue">
    <limit>230</limit>
  </rcv-queue>
</qos>
```

rbridge-id/{rbridge-number}/route-map

Configures, modifies, or retrieves route-map instance.

Resource URIs

URI	Description
<base_URI>/config/running/rbridge-id/{rbridge-number}/route-map	Configure a route-map instance

Parameters

Name	Description
<i>name</i>	Route-map name
<i>action-rm</i>	<ul style="list-style-type: none"> deny - Disallow matching pattern permit - Allow matching pattern
<i>instance</i>	Instance number
<i>prefix-list</i>	Specifies an IP prefix list
<i>acl</i>	Access list name
<i>extcommunity-num</i>	Extended Community list Instance number
<i>metric-rmm</i>	Compares the route MED (metric) to the value specified by number
<i>route-type-rmm</i>	Compares a route type to a specified value
<i>tag-rmm</i>	Compares the route tag with the specified tag value
<i>as-path-access-list-name</i>	Specifies an AS-path ACL
<i>community-access-list-name</i>	BGP community access list name
<i>bgp</i>	Border Gateway Protocol (BGP)
<i>bgp-route-type</i>	Route type in a route-map instance
<i>continue</i>	Use a "continue" clause to allow for more programmable policy configuration and route filtering, with capability to execute additional entries in a route map after an entry is executed with successful "match" and "set" clauses
<i>continue-val</i>	The sequence ID. The range is from 1 through 65535.

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

```
http://host:80/rest/config/running/rbridge-id/195/route-map
```

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/rbridge-id/195/route-map/route1%2Cdeny%2C550">
  <name>route1</name>
  <action-rm>deny</action-rm>
  <instance>550</instance>
  <match
y:self="/rest/config/running/rbridge-id/195/route-map/route1%2Cdeny%2C550/match"
  >
    <interface
y:self="/rest/config/running/rbridge-id/195/route-map/route1%2Cdeny%2C550/match/
interface"/>
      <ipv6
y:self="/rest/config/running/rbridge-id/195/route-map/route1%2Cdeny%2C550/match/
ipv6">
        <address
y:self="/rest/config/running/rbridge-id/195/route-map/route1%2Cdeny%2C550/match/
ipv6/address"/>
          <prefix-list>prefix1</prefix-list>
          <acl>acl1</acl>
        </address>
        <next-hop
y:self="/rest/config/running/rbridge-id/195/route-map/map1%2Cpermit%2C3/match/ip
v6/next-hop">
          <prefix-list>prefix2</prefix-list>
        </next-hop>
        <route-source
y:self="/rest/config/running/rbridge-id/195/route-map/route1%2Cdeny%2C550/match/
ipv6/route-source">
          <prefix-list>prefix2</prefix-list>
        </route-source>
      </ipv6>
      <ip
y:self="/rest/config/running/rbridge-id/195/route-map/route1%2Cdeny%2C550/match/
ip">
        <address
y:self="/rest/config/running/rbridge-id/195/route-map/map1%2Cpermit%2C3/match/ip
/address">
          <prefix-list>prefix1</prefix-list>
          <acl>acl1</acl>
        </address>
        <next-hop
y:self="/rest/config/running/rbridge-id/195/route-map/map1%2Cpermit%2C3/match/ip
/next-hop">
          <prefix-list>prefix2</prefix-list>
        </next-hop>
        <route-source
y:self="/rest/config/running/rbridge-id/195/route-map/map1%2Cpermit%2C3/match/ip
/route-source">
          <prefix-list>prefix 3</prefix-list>
        </route-source>
      </ip>
```

```

    <extcommunity
y:self="/rest/config/running/rbridge-id/195/route-map/route1%2Cdeny%2C550/match/
extcommunity">
    <extcommunity-num>2 </extcommunity-num>
    </extcommunity>
    <metric
y:self="/rest/config/running/rbridge-id/195/route-map/route1%2Cdeny%2C550/match/
metric">
    <metric-rmm>55500</metric-rmm>
    </metric>
    <route-type
y:self="/rest/config/running/rbridge-id/195/route-map/route1%2Cdeny%2C550/match/
route-type">
    <route-type-rmm>internal</route-type-rmm>
    </route-type>
    <tag
y:self="/rest/config/running/rbridge-id/195/route-map/route1%2Cdeny%2C550/match/
tag">
    <tag-rmm>5500</tag-rmm>
    </tag>
    <as-path
y:self="/rest/config/running/rbridge-id/195/route-map/route1%2Cdeny%2C550/match/
as-path">
    <as-path-access-list-name>acl6 </as-path-access-list-name>
    </as-path>
    <community
y:self="/rest/config/running/rbridge-id/195/route-map/route1%2Cdeny%2C550/match/
community">
    <community-access-list-name>acl10 exact-match</community-access-list-name>
    </community>
    <protocol
y:self="/rest/config/running/rbridge-id/195/route-map/route1%2Cdeny%2C550/match/
protocol">
    <bgp>true</bgp>
    <bgp-route-type>external</bgp-route-type>
    </protocol>
    </match>
    <continue>true</continue>
    <continue-val>600</continue-val>
</route-map>

```

rbridge-id/{rbridge-number}/router

Configures, modifies, or retrieves router configurations.

Resource URIs

URI	Description
<base_URI>/config/running/rbridge-id/{rbridge-number}/router	Configure router
<base_URI>/config/running/rbridge-id/{rbridge-number}/router/bgp	Configures, modifies, or retrieves Border Gateway Protocol (BGP). Refer to rbridge-id/{rbridge-number}/router/bgp for information
<base_URI>/config/running/rbridge-id/{rbridge-number}/router/ospf	Configures, modifies, or retrieves OSPF. Refer to rbridge-id/{rbridge-number}/router/ospf for information

Parameters

Name	Description
<i>max-mcache</i>	Maximum PIM mcache
<i>hello-interval</i>	Hello message interval
<i>nbr-timeout</i>	Neighbor timeout
<i>inactivity-timer</i>	Inactivity interval
<i>message-interval</i>	Periodic join/prune message interval
<i>spt-threshold</i>	Threshold for switching to shortest-path-tree
<i>rp-ip-addr</i>	RP address
<i>vrf</i>	Name of the VRF

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

```
http://host:80/rest/config/running/rbridge-id/122/router
```

Request body

None

Response body

```
<router xmlns="urn:brocade.com:mgmt:brocade-rbridge"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/rbridge-id/122/router">
  <pim xmlns="urn:brocade.com:mgmt:brocade-pim"
y:self="/rest/config/running/rbridge-id/122/router/pim">
    <max-mcache>2000</max-mcache>
    <hello-interval>35</hello-interval>
    <nbr-timeout>150</nbr-timeout>
    <inactivity-timer>185</inactivity-timer>
    <message-interval>65</message-interval>
    <spt-threshold>infinity</spt-threshold>
    <rp-address
y:self="/rest/config/running/rbridge-id/122/router/pim/rp-address/10.25.0.255">
      <rp-ip-addr>10.25.0.255</rp-ip-addr>
    </rp-address>
  </pim>
  <bgp xmlns="urn:brocade.com:mgmt:brocade-bgp"
y:self="/rest/config/running/rbridge-id/122/router/bgp/default">
    <vrf>default</vrf>
  </bgp>
  <ospf xmlns="urn:brocade.com:mgmt:brocade-ospf"
y:self="/rest/config/running/rbridge-id/122/router/ospf/default-vrf">
    <vrf>default-vrf</vrf>
  </ospf>
</router>
```

rbridge-id/{rbridge-number}/router/bgp

Configures, modifies, or retrieves Border Gateway Protocol (BGP) configurations.

Resource URIs

URI	Description
<base_URI>/config/running/rbridge-id/{rbridge-number}/router/bgp/vrf/{vrf-name}	Border Gateway Protocol (BGP)

Parameters

Name	Description
<i>vrf</i>	VRF name
<i>local-as</i>	Local AS number
<i>always-compare-med</i>	Allow comparing MED from different neighbors
<i>compare-med-empty- aspath</i>	Allow comparing MED from different neighbors even with empty AS-path attribute
<i>med-missing-as-worst</i>	Consider routes missing MED attribute as least desirable
<i>as-path-ignore</i>	Ignore AS_PATH length for best route selection
<i>compare-routerid</i>	Compare routerID for identical BGP paths
<i>install-igp-cost</i>	Install IGP cost to next hop instead of MED value as BGP route cost
<i>id</i>	Route-Reflector Cluster-ID
<i>default-local-preferen ce</i>	Configure default local preference value
<i>ext-route-distance</i>	Distance for routes external to the AS
<i>int-route-distance</i>	Distance for routes internal to the AS
<i>lcl-route-distance</i>	Distance for local routes
<i>as4-enable</i>	Enable AS4 capability
<i>num-as-in-path</i>	Number of autonomous systems in the AS-PATH attribute
<i>enforce-first-as</i>	Enforce the first AS for EBGp routes
<i>fast-external-fallover</i>	Reset session if link to EBGp peer goes down
<i>keep-alive</i>	Keepalive interval
<i>hold-time</i>	Hold-time value
<i>log-dampening-debug</i>	Log dampening debug messages
<i>identifier</i>	Confederation AS number
<i>peers</i>	Peer ASs in BGP confederation
<i>address</i>	Neighbor address
<i>bgp-redistribute-intern al</i>	Allow redistribution of IBGP routes into IGP

Name	Description
<i>redistribute-connected</i>	Enable connected
<i>metric</i>	Metric for redistributed routes
<i>redistribute-ospf</i>	Enable Open Shortest Path First (OSPF)
<i>redistribute-static</i>	Enable Static routes
<i>ebgp</i>	Number of EBGp paths for load sharing
<i>ibgp</i>	Number of IBGP paths for load sharing
<i>use-load-sharing</i>	Number of load-sharing paths: using load-sharing value
<i>always-propagate</i>	Allow readvertisement of best BGP routes not in IP Forwarding table
<i>default-information-originate</i>	Originate Default Information
<i>rib-route-limit</i>	Limit BGP rib count in routing table
<i>half-time</i>	Half-life time in minutes for the penalty
<i>reuse-value</i>	Value to start reusing a route, with each flap penalty as 1000
<i>start-suppress-time</i>	Value to start suppressing a route,with each flap penalty as 1000
<i>max-suppress-time</i>	Maximum duration in minutes to suppress a stable route
<i>default-metric</i>	Set metric of redistributed routes
<i>next-hop-enable-default</i>	Enable default route for BGP next-hop lookup
<i>update-time</i>	IGP route update interval
<i>restart-time</i>	Maximum restart wait time advertised to neighbors
<i>purge-time</i>	Maximum time before restarting router clean up stale
<i>stale-routes-time</i>	Maximum time before helper router clean up stale routes
<i>next-hop-recursion</i>	Perform next-hop recursive lookup for BGP route
<i>bgp-redistribute-internal</i>	Allow redistribution of iBGP routes into IGP
<i>route-map</i>	Route map
<i>aggregate-ip-prefix</i>	Aggregate IP prefix
<i>network-ipv6-address</i>	IP address
<i>advertise-map</i>	Causes the device to advertise the more-specific routes in the specified route map
<i>as-set</i>	Causes the device to aggregate AS-path information for all routes in the aggregate routes from a range of networks into a single network prefix
<i>attribute-map</i>	Causes the device to set attributes for the aggregate routes according to the specified route map
<i>summary-only</i>	Prevents the device from advertising more-specific routes contained within the aggregate route
<i>suppress-map</i>	Prevents the more-specific routes contained in the specified route map from being advertised
<i>ibgp</i>	IBGP distance

Name	Description
<i>multi-as</i>	Enables load sharing of paths from different neighboring autonomous systems
<i>network-ipv4-address</i>	IP address
<i>weight</i>	Weight to be added to routes to this network
<i>backdoor</i>	Changes administrative distance of the route to this network from the EBGp administrative distance
<i>route-map</i>	Route-map name
<i>static-network-addresses</i>	Static network address

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

`http://host:80/rest/config/running/rbridge-id/122/router/bgp/vrf/default`

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/rbridge-id/122/router/bgp/default">
  <vrf>default</vrf>
  <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/rbridge-id/122/router/bgp/default/cluster-id">
    <id>122</id>
  </cluster-id>
  <default-local-preference>100</default-local-preference>
  <distance
y:self="/rest/config/running/rbridge-id/122/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/rbridge-id/122/router/bgp/default/capability">
    <as4-enable>true</as4-enable>
  </capability>
  <maxas-limit
y:self="/rest/config/running/rbridge-id/122/router/bgp/default/maxas-limit">
```

```

    <in
y:self="/rest/config/running/rbridge-id/122/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/rbridge-id/122/router/bgp/default/timers">
    <keep-alive>65</keep-alive>
    <hold-time>170</hold-time>
  </timers>
  <log-dampening-debug>true</log-dampening-debug>
  <confederation
y:self="/rest/config/running/rbridge-id/122/router/bgp/default/confederation">
    <identifier>20000</identifier>
    <peers>100 120 130 140 1200 2300 5600 40000</peers>
  </confederation>
  <neighbor
y:self="/rest/config/running/rbridge-id/122/router/bgp/default/neighbor/INTERNAL
">
    <address>INTERNAL</address>
  </neighbor>
  <neighbor
y:self="/rest/config/running/rbridge-id/122/router/bgp/default/neighbor/PeerGroup1
">
    <address>PeerGroup1</address>
  </neighbor>
  <neighbor
y:self="/rest/config/running/rbridge-id/122/router/bgp/default/neighbor/VCS_8192
">
    <address>VCS_8192</address>
  </neighbor>
  <address-family
y:self="/rest/config/running/rbridge-id/122/router/bgp/default/address-family">
    <ipv4
y:self="/rest/config/running/rbridge-id/122/router/bgp/default/address-family/ipv4
">
    <unicast
y:self="/rest/config/running/rbridge-id/122/router/bgp/default/address-family/ipv4/unicast">
    <bgp- redistribute-internal>true</bgp- redistribute-internal>
    <redistribute
y:self="/rest/config/running/rbridge-id/122/router/bgp/default/address-family/ipv4/unicast/redistribute">
    <connected
y:self="/rest/config/running/rbridge-id/122/router/bgp/default/address-family/ipv4/unicast/redistribute/connected">
    <redistribute-connected>true</redistribute-connected>
    <metric>23</metric>
  </connected>
  <ospf
y:self="/rest/config/running/rbridge-id/122/router/bgp/default/address-family/ipv4/unicast/redistribute/ospf">
    <redistribute-ospf>true</redistribute-ospf>
    <match
y:self="/rest/config/running/rbridge-id/122/router/bgp/default/address-family/ipv4/unicast/redistribute/ospf/match"/>
    <metric>26</metric>
  </ospf>

```

4 Configuration APIs

```
        <static
y:self="/rest/config/running/rbridge-id/122/router/bgp/default/address-family/ip
v4/unicast/redistribute/static">
        <redistribute-static>true</redistribute-static>
        <metric>30</metric>
        </static>
    </redistribute>
    <aggregate-address
y:self="/rest/config/running/rbridge-id/54/router/bgp/default/address-family/ipv
4/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/rbridge-id/122/router/bgp/default/address-family/ip
v4/unicast/neighbor/INTERNAL">
        <address>INTERNAL</address>
    </neighbor>
    <neighbor
y:self="/rest/config/running/rbridge-id/122/router/bgp/default/address-family/ip
v4/unicast/neighbor/10.11.132.7">
        <address>10.11.132.7</address>
    </neighbor>
    <network
y:self="/rest/config/running/rbridge-id/54/router/bgp/default/address-family/ipv
4/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/rbridge-id/54/router/bgp/default/address-family/ipv
4/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/rbridge-id/122/router/bgp/default/address-family/ip
v4/unicast/maximum-paths">
        <ebgp>2</ebgp>
        <ibgp>3</ibgp>
        <use-load-sharing>true</use-load-sharing>
    </maximum-paths>
    <multipath
y:self="/rest/config/running/rbridge-id/122/router/bgp/default/address-family/ip
v4/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/rbridge-id/122/router/bgp/default/address-family/ip
v4/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>
    <next-hop-enable-default>true</next-hop-enable-default>
    <table-map
y:self="/rest/config/running/rbridge-id/122/router/bgp/default/address-family/ip
v4/unicast/table-map"/>
        <update-time>10</update-time>
        <graceful-restart
y:self="/rest/config/running/rbridge-id/122/router/bgp/default/address-family/ip
v4/unicast/graceful-restart">
            <restart-time>250</restart-time>
            <purge-time>200</purge-time>
            <stale-routes-time>300</stale-routes-time>
        </graceful-restart>
        <next-hop-recursion>true</next-hop-recursion>
    </unicast>
</ipv4>
<ipv6
y:self="/rest/config/running/rbridge-id/122/router/bgp/default/address-family/ip
v6">
    <unicast
y:self="/rest/config/running/rbridge-id/122/router/bgp/default/address-family/ip
v6/unicast">
        <bgp- redistribute-internal>true</bgp- redistribute-internal>
        <redistribute
y:self="/rest/config/running/rbridge-id/122/router/bgp/default/address-family/ip
v6/unicast/redistribute">
            <connected
y:self="/rest/config/running/rbridge-id/122/router/bgp/default/address-family/ip
v6/unicast/redistribute/connected">
                <redistribute-connected>true</redistribute-connected>
                <metric>23</metric>
            </connected>
            <ospf
y:self="/rest/config/running/rbridge-id/122/router/bgp/default/address-family/ip
v6/unicast/redistribute/ospf">
                <redistribute-ospf>true</redistribute-ospf>
                <match
y:self="/rest/config/running/rbridge-id/122/router/bgp/default/address-family/ip
v6/unicast/redistribute/ospf/match"/>
                    <metric>34</metric>
                </ospf>
            <static
y:self="/rest/config/running/rbridge-id/122/router/bgp/default/address-family/ip
v6/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/rbridge-id/122/router/bgp/default/address-family/ip
v6/unicast/aggregate-address/%22fd80:122:122:122::/64%22">
            <aggregate-ip-prefix>fd80:122:122:122::/64</aggregate-ip-prefix>
        </aggregate-address>

```

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```
        <network
y:self="/rest/config/running/rbridge-id/122/router/bgp/default/address-family/ip
v6/unicast/network/%22131::1/128%22">
    <network-ipv6-address>131::1/128</network-ipv6-address>
</network>
<network
y:self="/rest/config/running/rbridge-id/122/router/bgp/default/address-family/ip
v6/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/rbridge-id/122/router/bgp/default/address-family/ip
v6/unicast/neighbor/vcs_2122">
    <address>vcs_2122</address>
</neighbor>
<neighbor
y:self="/rest/config/running/rbridge-id/122/router/bgp/default/address-family/ip
v6/unicast/neighbor/VCS_8192_rr">
    <address>VCS_8192_rr</address>
</neighbor>
<neighbor
y:self="/rest/config/running/rbridge-id/122/router/bgp/default/address-family/ip
v6/unicast/neighbor/fd80:2001:2040::40">
    <address>fd80:2001:2040::40</address>
</neighbor>
<maximum-paths
y:self="/rest/config/running/rbridge-id/122/router/bgp/default/address-family/ip
v6/unicast/maximum-paths">
    <ebgp>2</ebgp>
    <ibgp>2</ibgp>
    <use-load-sharing>true</use-load-sharing>
</maximum-paths>
<multipath
y:self="/rest/config/running/rbridge-id/122/router/bgp/default/address-family/ip
v6/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/rbridge-id/122/router/bgp/default/address-family/ip
v6/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>
<next-hop-enable-default>true</next-hop-enable-default>
<table-map
y:self="/rest/config/running/rbridge-id/122/router/bgp/default/address-family/ip
v6/unicast/table-map"/>
    <update-time>10</update-time>
<graceful-restart
y:self="/rest/config/running/rbridge-id/122/router/bgp/default/address-family/ip
v6/unicast/graceful-restart">
    <restart-time>1400</restart-time>
    <purge-time>1200</purge-time>
    <stale-routes-time>1600</stale-routes-time>
</graceful-restart>
<next-hop-recursion>true</next-hop-recursion>
```



```
    </unicast>  
  </ipv6>  
</address-family>  
</bgp>
```

rbridge-id/{rbridge-number}/router/ospf

Configures, modifies, or retrieves Open Shortest Path First (OSPF) configurations.

Resource URIs

URI	Description
<base_URI>/config/running/rbridge-id/{rbridge-number}/router/ospf/vrf/{vrf-name}	Open Shortest Path First (OSPF)

Parameters

Name	Description
vrf	VRF name
database-overflow-interval	Set how often the router checks whether OSPF external LSDB overflow is eliminated
vrf-lite-capability	Disables the down-bit (DN bit) that is set when routes are redistributed from multiprotocol BGP (MP-BGP) to OSPF
always	Always advertise default route
metric	Metric for default route
metric-type	Set Type 1 or Type 2
route-map	Route-map reference
default-metric	Set OSPF default metric
external-lsdb-limit	Set maximum number of external LSAs
all	Logging everything
neighbor-addr	Neighbor address
area-id	Area ID
ref-bandwidth	Set OSPF auto-cost reference-bandwidth
use-active-ports	Dynamic change of BW will reflect cost change
route-type	<ul style="list-style-type: none"> external - External type 5 and type 7 routes inter-area - inter-area routes intra-area - Intra-area routes
IN	Apply filter for incoming Routes
external-lsa-val	Replace Metric in External LSA with maximum metric value
summary-lsa-val	Replace Metric in Summary LSA with maximum metric value
ptp	Advertise maximum metric in Router LSA for ptp links
stub	Advertise maximum metric in Router LSA for stub links
transit	Advertise maximum metric in Router LSA for transit links
sum-address	The IP summary address
sum-address-mask	The IP summary address mask
lsa-group-pacing	OSPF LSA group pacing timer

Name	Description
<i>init-delay</i>	Initial delay (msec) between receiving a change to SPF calculation
<i>hold-time</i>	Hold time (msec) between two SPF calculations
<i>max-hold-time</i>	Maximum hold time (msec) between two SPF calculations
<i>graceful-restart-enabled</i>	Enable graceful restart
<i>helper-disable</i>	Disable Helper Mode
<i>restart-time</i>	Set the maximum restart wait time advertised to neighbors
<i>maximum-paths</i>	The maximum number of paths to a destination
<i>time</i>	Sets the time (in seconds) for which the specified links in Router LSAs are advertised
<i>external-lsa-value-on-startup</i>	External LSA value on startup
<i>summary-lsa-value-on-startup</i>	Summary LSA value on startup
<i>nonstop-routing</i>	Enables nonstop-routing (NSR)

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

```
http://host:80/rest/config/running/rbridge-id/122/router/ospf/vrf/default-vrf
```

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/rbridge-id/122/router/ospf/default-vrf">
  <vrf>default-vrf</vrf>
  <database-overflow-interval>1</database-overflow-interval>
  <vrf-lite-capability>true</vrf-lite-capability>
  <nonstop-routing>true</nonstop-routing>
  <default-information-originate
y:self="/rest/config/running/rbridge-id/122/router/ospf/default-vrf/default-info
rmation-originate">
    <always>true</always>
    <metric>23</metric>
    <metric-type>type1</metric-type>
    <route-map>route1</route-map>
  </default-information-originate>
  <default-metric>11</default-metric>
  <external-lsdb-limit>14987</external-lsdb-limit>
  <log y:self="/rest/config/running/rbridge-id/122/router/ospf/default-vrf/log">
    <all>true</all>
```

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```
</log>
<metric-type>type1</metric-type>
<neighbor
y:self="/rest/config/running/rbridge-id/122/router/ospf/default-vrf/neighbor/10.
12.34.87">
  <neighbor-addr>10.12.34.87</neighbor-addr>
</neighbor>
  <redistribute
y:self="/rest/config/running/rbridge-id/122/router/ospf/default-vrf/redistribute
">
    <connected
y:self="/rest/config/running/rbridge-id/122/router/ospf/default-vrf/redistribute
/connected">
      <route-map>routel</route-map>
    </connected>
    <static
y:self="/rest/config/running/rbridge-id/122/router/ospf/default-vrf/redistribute
/static">
      <route-map>routel</route-map>
    </static>
    <bgp
y:self="/rest/config/running/rbridge-id/122/router/ospf/default-vrf/redistribute
/bgp">
      <route-map>routel</route-map>
    </bgp>
  </redistribute>
  <area
y:self="/rest/config/running/rbridge-id/122/router/ospf/default-vrf/area/0.0.0.0
">
    <area-id>0.0.0.0</area-id>
  </area>
  <area
y:self="/rest/config/running/rbridge-id/122/router/ospf/default-vrf/area/131">
    <area-id>131</area-id>
  </area>
  <auto-cost
y:self="/rest/config/running/rbridge-id/122/router/ospf/default-vrf/auto-cost">
    <reference-bandwidth
y:self="/rest/config/running/rbridge-id/122/router/ospf/default-vrf/auto-cost/re
ference-bandwidth">
      <ref-bandwidth>110</ref-bandwidth>
      <use-active-ports>true</use-active-ports>
    </reference-bandwidth>
  </auto-cost>
  <distance
y:self="/rest/config/running/rbridge-id/122/router/ospf/default-vrf/distance/ext
ernal">
    <route-type>external</route-type>
  </distance>
  <distance
y:self="/rest/config/running/rbridge-id/122/router/ospf/default-vrf/distance/int
er-area">
    <route-type>inter-area</route-type>
  </distance>
  <distance
y:self="/rest/config/running/rbridge-id/122/router/ospf/default-vrf/distance/int
ra-area">
    <route-type>intra-area</route-type>
  </distance>
```

```

    <distributed-list
y:self="/rest/config/running/rbridge-id/122/router/ospf/default-vrf/distribute-l
ist">
    <route-map
y:self="/rest/config/running/rbridge-id/122/router/ospf/default-vrf/distribute-l
ist/route-map">
        <route-map>route1</route-map>
        <in>>true</in>
    </route-map>
    </distributed-list>
    <max-metric
y:self="/rest/config/running/rbridge-id/122/router/ospf/default-vrf/max-metric">
        <router-lsa
y:self="/rest/config/running/rbridge-id/122/router/ospf/default-vrf/max-metric/r
outer-lsa">
            <external-lsa
y:self="/rest/config/running/rbridge-id/122/router/ospf/default-vrf/max-metric/r
outer-lsa/external-lsa">
                <external-lsa-val>1234343</external-lsa-val>
            </external-lsa>
            <summary-lsa
y:self="/rest/config/running/rbridge-id/122/router/ospf/default-vrf/max-metric/r
outer-lsa/summary-lsa">
                <summary-lsa-val>1223324</summary-lsa-val>
            </summary-lsa>
            <link
y:self="/rest/config/running/rbridge-id/122/router/ospf/default-vrf/max-metric/r
outer-lsa/link">
                <ptp>>true</ptp>
                <stub>>true</stub>
                <transit>>true</transit>
            </link>
            <on-startup
y:self="/rest/config/running/rbridge-id/54/router/ospf/default-vrf/max-metric/ro
uter-lsa/on-startup">
                <time>10</time>
                <external-lsa
y:self="/rest/config/running/rbridge-id/54/router/ospf/default-vrf/max-metric/ro
uter-lsa/on-startup/external-lsa">
                    <external-lsa-val-onstartup>100</external-lsa-val-onstartup>
                </external-lsa>
                <summary-lsa
y:self="/rest/config/running/rbridge-id/54/router/ospf/default-vrf/max-metric/ro
uter-lsa/on-startup/summary-lsa">
                    <summary-lsa-val-onstartup>199</summary-lsa-val-onstartup>
                </summary-lsa>
                <link
y:self="/rest/config/running/rbridge-id/54/router/ospf/default-vrf/max-metric/ro
uter-lsa/on-startup/link">
                    <ptp>>true</ptp>
                    <stub>>true</stub>
                    <transit>>true</transit>
                </link>
            </on-startup>
        </router-lsa>
    </max-metric>
    <summary-address
y:self="/rest/config/running/rbridge-id/122/router/ospf/default-vrf/summary-addr
ess/10.1.0.0%2C255.255.0.0">
        <sum-address>10.1.0.0</sum-address>

```

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```
    <sum-address-mask>255.255.0.0</sum-address-mask>
  </summary-address>
  <timers
y:self="/rest/config/running/rbridge-id/122/router/ospf/default-vrf/timers">
    <lsa-group-pacing>250</lsa-group-pacing>
    <throttle
y:self="/rest/config/running/rbridge-id/122/router/ospf/default-vrf/timers/throt
tle">
      <spf
y:self="/rest/config/running/rbridge-id/122/router/ospf/default-vrf/timers/throt
tle/spf">
        <init-delay>23</init-delay>
        <hold-time>5500</hold-time>
        <max-hold-time>11000</max-hold-time>
      </spf>
    </throttle>
  </timers>
  <graceful-restart
y:self="/rest/config/running/rbridge-id/122/router/ospf/default-vrf/graceful-res
tart">
    <graceful-restart-enable>true</graceful-restart-enable>
    <helper-disable>true</helper-disable>
    <restart-time>125</restart-time>
  </graceful-restart>
  <maximum-paths>7</maximum-paths>
</ospf>
```

rbridge-id/{rbridge-number}/secpolicy

Configures, modifies, or retrieves security policy-related configuration.

Resource URIs

URI	Description
<base_URI>/config/running/rbridge-id/{rbridge-number}/secpolicy	Security policy-related configuration

Parameters

Name	Description
<i>policy</i>	Select the security policy type
<i>member</i>	List of defined members

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

```
http://host:80/rest/config/running/rbridge-id/54/secpolicy
```

Request body

None

Response body

```
<secpolicy xmlns="urn:brocade.com:mgmt:brocade-fc-auth"
y:self="/rest/config/running/rbridge-id/54/secpolicy">
  <defined-policy
y:self="/rest/config/running/rbridge-id/54/secpolicy/defined-policy">
    <policies
y:self="/rest/config/running/rbridge-id/54/secpolicy/defined-policy/policies/SCC
_POLICY">
      <policy>SCC_POLICY</policy>
      <member-entry
y:self="/rest/config/running/rbridge-id/54/secpolicy/defined-policy/policies/SCC
_POLICY/member-entry/10:00:00:05:1e:00:69:01">
        <member>10:00:00:05:1e:00:69:01</member>
      </member-entry>
      <member-entry
y:self="/rest/config/running/rbridge-id/54/secpolicy/defined-policy/policies/SCC
_POLICY/member-entry/2f:00:00:05:1e:80:31:4f">
        <member>2f:00:00:05:1e:80:31:4f</member>
      </member-entry>
```

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```
        <member-entry
y:self="/rest/config/running/rbridge-id/54/secpolicy/defined-policy/policies/SCC
_POLICY/member-entry/10:00:00:05:1E:CD:52:6A">
        <member>10:00:00:05:1E:CD:52:6A</member>
        </member-entry>
        <member-entry
y:self="/rest/config/running/rbridge-id/54/secpolicy/defined-policy/policies/SCC
_POLICY/member-entry/10:00:00:05:33:65:2B:4C">
        <member>10:00:00:05:33:65:2B:4C</member>
        </member-entry>
        </policies>
    </defined-policy>
    <active-policy
y:self="/rest/config/running/rbridge-id/54/secpolicy/active-policy"/>
</secpolicy>
```


rbridge-id/{rbridge-number}/snmp-server

Configures, modifies, or retrieves SNMP server configuration.

Resource URIs

URI	Description
<base_URI>/config/running/rbridge-id/{rbridge-number}/snmp-server	SNMP server configuration

Parameters

Name	Description
local	Agent's (Local) engine ID

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

```
http://host:80/rest/config/running/rbridge-id/1/snmp-server
```

Request body

None

Response body

```
<snmp-server xmlns="urn:brocade.com:mgmt:brocade-snmp"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/rbridge-id/1/snmp-server">
  <engineID y:self="/rest/config/running/rbridge-id/1/snmp-server/engineID">
    <local>10:20:30:40:50:60:70:80:90:10:30:12</local>
  </engineID>
</snmp-server>
```

rbridge-id/{rbridge-number}/ssh

Configures, modifies, or retrieves SSH server configurations.

Resource URIs

URI	Description
<base_URI>/config/running/rbridge-id/{rbridge-number}/ssh	Configure SSH server

Parameters

Name	Description
key-exchange	Modified configure key exchange
rekey-interval	Time interval for session rekeying
shutdown	Shut down SSH server
protocol	Protocol type

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

http://host:80/rest/config/running/rbridge-id/195/ssh

Request body

None

Response body

```
<ssh xmlns="urn:brocade.com:mgmt:brocade-sec-services"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/rbridge-id/195/ssh">
  <server y:self="/rest/config/running/rbridge-id/195/ssh/server">
    <shutdown>true</shutdown>
    <key-exchange
y:self="/rest/config/running/rbridge-id/195/ssh/server/key-exchange/dh-group-14"
>
      <protocol>dh-group-14</protocol>
    </key-exchange>
    <rekey-interval>1000</rekey-interval>
  </server>
</ssh>
```

rbridge-id/{rbridge-number}/switch-attributes

Configures, modifies, or retrieves switch attributes configurations.

Resource URIs

URI	Description
<base_URI>/config/running/rbridge-id/{rbridge-number}/switch-attributes	Switch attributes configurations

Parameters

Name	Description
chassis-name	Chassis name
host-name	Host name

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

```
http://host:80/rest/config/running/rbridge-id/195/switch-attributes
```

Request body

None

Response body

```
<switch-attributes xmlns="urn:brocade.com:mgmt:brocade-rbridge"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/rbridge-id/195/switch-attributes">
  <chassis-name>VDX8770-4</chassis-name>
  <host-name>sw0</host-name>
</switch-attributes>
```

rbridge-id/{rbridge-number}/system-monitor

Configures, modifies, or retrieves FRU threshold and alert setting.

Resource URIs

URI	Description
<base_URI>/config/running/rbridge-id/{rbridge-number}/system-monitor	FRU threshold and alert setting

Parameters

Name	Description
action	Action that may be taken when component
state	Supported states for component
down-threshold	Minimum number contributing to DOWN state of component
marginal-threshold	Minimum number contributing to MARGINAL state of component

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

http://host:80/rest/config/running/rbridge-id/195/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/rbridge-id/195/system-monitor">
  <fan y:self="/rest/config/running/rbridge-id/195/system-monitor/fan">
    <threshold
y:self="/rest/config/running/rbridge-id/195/system-monitor/fan/threshold">
      <marginal-threshold>1</marginal-threshold>
      <down-threshold>2</down-threshold>
    </threshold>
    <alert y:self="/rest/config/running/rbridge-id/195/system-monitor/fan/alert">
      <state>removed</state>
      <action>raslog</action>
    </alert>
  </fan>
  <power y:self="/rest/config/running/rbridge-id/195/system-monitor/power">
    <threshold
y:self="/rest/config/running/rbridge-id/195/system-monitor/power/threshold">
```

```

        <marginal-threshold>3</marginal-threshold>
        <down-threshold>4</down-threshold>
    </threshold>
    <alert
y:self="/rest/config/running/rbridge-id/195/system-monitor/power/alert">
        <state>removed</state>
        <action>raslog</action>
    </alert>
</power>
<temp y:self="/rest/config/running/rbridge-id/195/system-monitor/temp">
    <threshold
y:self="/rest/config/running/rbridge-id/195/system-monitor/temp/threshold">
        <marginal-threshold>1</marginal-threshold>
        <down-threshold>2</down-threshold>
    </threshold>
</temp>
    <cid-card
y:self="/rest/config/running/rbridge-id/195/system-monitor/cid-card">
        <threshold
y:self="/rest/config/running/rbridge-id/195/system-monitor/cid-card/threshold">
            <marginal-threshold>1</marginal-threshold>
            <down-threshold>0</down-threshold>
        </threshold>
        <alert
y:self="/rest/config/running/rbridge-id/195/system-monitor/cid-card/alert">
            <state>removed</state>
            <action>raslog</action>
        </alert>
    </cid-card>
<sfp y:self="/rest/config/running/rbridge-id/195/system-monitor/sfp">
    <alert y:self="/rest/config/running/rbridge-id/195/system-monitor/sfp/alert">
        <state>none</state>
        <action>none</action>
    </alert>
</sfp>
<compact-flash
y:self="/rest/config/running/rbridge-id/195/system-monitor/compact-flash">
    <threshold
y:self="/rest/config/running/rbridge-id/195/system-monitor/compact-flash/thresho
ld">
        <marginal-threshold>1</marginal-threshold>
        <down-threshold>0</down-threshold>
    </threshold>
</compact-flash>
<MM y:self="/rest/config/running/rbridge-id/195/system-monitor/MM">
    <threshold
y:self="/rest/config/running/rbridge-id/195/system-monitor/MM/threshold">
        <marginal-threshold>1</marginal-threshold>
        <down-threshold>0</down-threshold>
    </threshold>
</MM>
<LineCard
y:self="/rest/config/running/rbridge-id/195/system-monitor/LineCard">
    <threshold
y:self="/rest/config/running/rbridge-id/195/system-monitor/LineCard/threshold">
        <marginal-threshold>1</marginal-threshold>
        <down-threshold>0</down-threshold>
    </threshold>
    <alert
y:self="/rest/config/running/rbridge-id/195/system-monitor/LineCard/alert">

```

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```
        <state>removed</state>
        <action>raslog</action>
    </alert>
</LineCard>
<SFM y:self="/rest/config/running/rbridge-id/195/system-monitor/SFM">
    <threshold
y:self="/rest/config/running/rbridge-id/195/system-monitor/SFM/threshold">
        <marginal-threshold>1</marginal-threshold>
        <down-threshold>0</down-threshold>
    </threshold>
</SFM>
</system-monitor>
```

rbridge-id/{rbridge-number}/telnet

Configures, modifies, or retrieves Telnet server.

Resource URIs

URI	Description
<base_URI>/config/running/rbridge-id/{rbridge-number}/telnet	Configure Telnet server

Parameters

Name	Description
shutdown	Shut down Telnet server

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

```
http://host:80/rest/config/running/rbridge-id/195/telnet
```

Request body

None

Response body

```
<telnet xmlns="urn:brocade.com:mgmt:brocade-sec-services"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/rbridge-id/195/telnet">
  <server y:self="/rest/config/running/rbridge-id/195/telnet/server">
    <shutdown>true</shutdown>
  </server>
</telnet>
```

rbridge-id/{rbridge-number}/threshold-monitor

Configures, modifies, or retrieves class-monitoring threshold and alert setting.

Resource URIs

URI	Description
<base_URI>/config/running/rbridge-id/{rbridge-number}/threshold-monitor	Configure class-monitoring threshold and alert setting

Parameters

Name	Description
<i>actions</i>	none - No action will be taken raslog - RASLOG will be sent
<i>limit</i>	Percent threshold usage for component:CPU
<i>poll</i>	Polling interval
<i>retry</i>	Number of retries
<i>high-limit</i>	Percent high threshold usage for component:MEMORY
<i>limit</i>	Percent threshold usage for component:MEMORY
<i>low-limit</i>	Percent low threshold usage for component:MEMORY
<i>apply</i>	Apply configuration
<i>pause</i>	Pause monitoring
<i>policy_name</i>	Only custom policy can be configured
<i>type</i>	Type all speed Ethernet interfaces
<i>area</i>	<ul style="list-style-type: none"> • CRCAlignErrors - Frames received with CRC and/or Align Errors • IFG - Number of times Inter Frame Gap was violated • MissingTerminationCharacter - Frames that terminated by anything other than the Terminate character. • SymbolErrors - Number of words received as unknown symbol
<i>buffer</i>	Buffer threshold value
<i>high-threshold</i>	High threshold value
<i>low-threshold</i>	Low threshold value
<i>timebase</i>	Configure timebase for monitoring
<i>highthresh-action</i>	Sets a high threshold action
<i>lowthresh-action</i>	Sets a low threshold action
<i>area</i>	Security <ul style="list-style-type: none"> • login-violation - Security Area login violation • telnet-violation - Security Area telnet violation

Name	Description
type	sfp <ul style="list-style-type: none"> • 1GLR - SFP type 1GLR • 1GSR - SFP type 1GSR • 10GLR - SFP type 10GLR • 10GSR - SFP type 10GSR • 10GUSR - SFP type 10GUSR • 100GSR - SFP type 100GSR • QSFP - SFP type QSFP
area	sfp <ul style="list-style-type: none"> • Current - SFP Area Current • RXP - SFP Area RXP • TXP - SFP Area TXP • Temperature - SFP Area Temperature • Voltage - SFP Area Voltage

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

```
http://host:80/rest/config/running/rbridge-id/195/threshold-monitor
```

Request body

None

Response body

```
<threshold-monitor xmlns="urn:brocade.com:mgmt:brocade-threshold-monitor"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/rbridge-id/195/threshold-monitor">
  <sfp y:self="/rest/config/running/rbridge-id/195/threshold-monitor/sfp">
    <apply>custom</apply>
    <pause>true</pause>
    <policy
y:self="/rest/config/running/rbridge-id/195/threshold-monitor/sfp/policy/custom"
>
      <policy_name>custom</policy_name>
      <area
y:self="/rest/config/running/rbridge-id/195/threshold-monitor/sfp/policy/custom/
area/">
        <area
y:self="/rest/config/running/rbridge-id/195/threshold-monitor/sfp/policy/custom/
area/1GLR%2CCurrent">
          <type>1GLR</type>
          <area>Current</area>
          <threshold
y:self="/rest/config/running/rbridge-id/195/threshold-monitor/sfp/policy/custom/
area/1GLR%2CCurrent/threshold">
            <high-threshold>45</high-threshold>
```

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```
        <low-threshold>1</low-threshold>
        <buffer>0</buffer>
    </threshold>
    <alert
y:self="/rest/config/running/rbridge-id/195/threshold-monitor/sfp/policy/custom/
area/1GLR%2CCurrent/alert">
        <above
y:self="/rest/config/running/rbridge-id/195/threshold-monitor/sfp/policy/custom/
area/1GLR%2CCurrent/alert/above">
            <highthresh-action>email</highthresh-action>
        </above>
        <below
y:self="/rest/config/running/rbridge-id/195/threshold-monitor/sfp/policy/custom/
area/1GLR%2CCurrent/alert/below">
            <highthresh-action>none</highthresh-action>
            <lowthresh-action>raslog</lowthresh-action>
        </below>
    </alert>
</area>
</policy>
</sfp>
<security
y:self="/rest/config/running/rbridge-id/195/threshold-monitor/security">
    <apply>custom</apply>
    <pause>true</pause>
    <policy
y:self="/rest/config/running/rbridge-id/195/threshold-monitor/security/policy/cu
stom">
        <sec_policy_name>custom</sec_policy_name>
    <area
y:self="/rest/config/running/rbridge-id/195/threshold-monitor/security/policy/cu
stom/area/"/>
        <area
y:self="/rest/config/running/rbridge-id/195/threshold-monitor/security/policy/cu
stom/area/login-violation">
            <area>login-violation</area>
            <timebase>minute</timebase>
            <threshold
y:self="/rest/config/running/rbridge-id/195/threshold-monitor/security/policy/cu
stom/area/login-violation/threshold">
                <high-threshold>2</high-threshold>
                <low-threshold>1</low-threshold>
                <buffer>0</buffer>
            </threshold>
            <alert
y:self="/rest/config/running/rbridge-id/195/threshold-monitor/security/policy/cu
stom/area/login-violation/alert">
                <above
y:self="/rest/config/running/rbridge-id/195/threshold-monitor/security/policy/cu
stom/area/login-violation/alert/above">
                    <highthresh-action>all</highthresh-action>
                </above>
                <below
y:self="/rest/config/running/rbridge-id/195/threshold-monitor/security/policy/cu
stom/area/login-violation/alert/below">
                    <highthresh-action>none</highthresh-action>
                    <lowthresh-action>none</lowthresh-action>
                </below>
            </alert>
        </area>
```

```

    </policy>
  </security>
  <Cpu y:self="/rest/config/running/rbridge-id/195/threshold-monitor/Cpu">
    <poll>125</poll>
    <retry>5</retry>
    <limit>50</limit>
  </Cpu>
  <Memory y:self="/rest/config/running/rbridge-id/195/threshold-monitor/Memory">
    <poll>125</poll>
    <retry>4</retry>
    <limit>40</limit>
    <high-limit>45</high-limit>
    <low-limit>35</low-limit>
  </Memory>
  <interface
y:self="/rest/config/running/rbridge-id/195/threshold-monitor/interface">
    <apply>custom</apply>
    <pause>true</pause>
    <policy
y:self="/rest/config/running/rbridge-id/195/threshold-monitor/interface/policy/c
ustom">
      <policy_name>custom</policy_name>
      <area
y:self="/rest/config/running/rbridge-id/195/threshold-monitor/interface/policy/c
ustom/area/" />
        <area
y:self="/rest/config/running/rbridge-id/195/threshold-monitor/interface/policy/c
ustom/area/Ethernet%2CSymbolErrors">
          <type>Ethernet</type>
          <area>SymbolErrors</area>
          <threshold
y:self="/rest/config/running/rbridge-id/195/threshold-monitor/interface/policy/c
ustom/area/Ethernet%2CSymbolErrors/threshold">
            <timebase>minute</timebase>
            <high-threshold>5</high-threshold>
            <low-threshold>0</low-threshold>
            <buffer>0</buffer>
          </threshold>
          <alert
y:self="/rest/config/running/rbridge-id/195/threshold-monitor/interface/policy/c
ustom/area/Ethernet%2CSymbolErrors/alert">
            <above
y:self="/rest/config/running/rbridge-id/195/threshold-monitor/interface/policy/c
ustom/area/Ethernet%2CSymbolErrors/alert/above">
              <highthresh-action>all</highthresh-action>
              <lowthresh-action>email</lowthresh-action>
            </above>
            <below
y:self="/rest/config/running/rbridge-id/195/threshold-monitor/interface/policy/c
ustom/area/Ethernet%2CSymbolErrors/alert/below">
              <highthresh-action>none</highthresh-action>
              <lowthresh-action>none</lowthresh-action>
            </below>
          </alert>
        </area>
      </policy>
    </interface>
  </threshold-monitor>

```

rbridge-id/{rbridge-number}/vrf

Configures, modifies, or retrieves VRF configurations.

Resource URIs

URI	Description
<base_URI>/config/running/rbridge-id/{rbridge-number}/vrf	VRF configurations

Parameters

Name	Description
<i>vrf-name</i>	Name of VRF
<i>rd</i>	VPN Route Distinguisher
<i>arp-ip-address</i>	IP address of the ARP entry
<i>mac-address-value</i>	MAC address
<i>interfacename</i>	Interface type
<i>FortyGigabitEthernet</i>	Interface name
<i>src-vrf</i>	Name of VRF
<i>map</i>	Route-map name
<i>max-route</i>	Maximum routes
<i>static-route-dest</i>	Destination IP address
<i>static-route-next-hop</i>	Next hop IP Address

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

```
http://host:80/rest/config/running/rbridge-id/195/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/rbridge-id/195/vrf/mgmt-vrf">
  <vrf-name>mgmt-vrf</vrf-name>
  <rd>1:2</rd>
```

```

    <address-family
y:self="/rest/config/running/rbridge-id/195/vrf/mgmt-vrf/address-family">
    <ipv4
y:self="/rest/config/running/rbridge-id/195/vrf/mgmt-vrf/address-family/ipv4">
    <unicast
y:self="/rest/config/running/rbridge-id/195/vrf/mgmt-vrf/address-family/ipv4/uni
cast">
        <max-route>129</max-route>
        <ip xmlns="urn:brocade.com:mgmt:brocade-rtm"
y:self="/rest/config/running/rbridge-id/195/vrf/mgmt-vrf/address-family/ipv4/uni
cast/ip">
            <route
y:self="/rest/config/running/rbridge-id/195/vrf/mgmt-vrf/address-family/ipv4/uni
cast/ip/route">
                <static-route-nh
y:self="/rest/config/running/rbridge-id/54/vrf/mgmt-vrf/address-family/ipv4/unic
ast/ip/route/static-route-nh/%220.0.0.0/0%22%2C10.20.232.1">
                    <static-route-dest>0.0.0.0/0</static-route-dest>
                    <static-route-next-hop>10.20.232.1</static-route-next-hop>
                    </static-route-nh>
                </route>
                <import
y:self="/rest/config/running/rbridge-id/195/vrf/mgmt-vrf/address-family/ipv4/uni
cast/ip/import">
                    <routes
y:self="/rest/config/running/rbridge-id/195/vrf/mgmt-vrf/address-family/ipv4/uni
cast/ip/import/routes/mgmt-vrf%2Cmap1">
                        <src-vrf>mgmt-vrf</src-vrf>
                        <map>map1</map>
                    </routes>
                </import>
            </ip>
            <arp xmlns="urn:brocade.com:mgmt:brocade-arp"
y:self="/rest/config/running/rbridge-id/195/vrf/mgmt-vrf/address-family/ipv4/uni
cast/arp/10.25.24.27">
                <arp-ip-address>10.25.24.27</arp-ip-address>
                <mac-address-value>0011.2222.2233</mac-address-value>
                <interfacename>interface</interfacename>
                <FortyGigabitEthernet>195/2/2</FortyGigabitEthernet>
            </arp>
        </unicast>
    </ipv4>
    <ipv6
y:self="/rest/config/running/rbridge-id/195/vrf/mgmt-vrf/address-family/ipv6">
    <unicast
y:self="/rest/config/running/rbridge-id/195/vrf/mgmt-vrf/address-family/ipv6/uni
cast">
        <ipv6 xmlns="urn:brocade.com:mgmt:brocade-ipv6-rtm"
y:self="/rest/config/running/rbridge-id/195/vrf/mgmt-vrf/address-family/ipv6/uni
cast/ipv6">
            <route
y:self="/rest/config/running/rbridge-id/195/vrf/mgmt-vrf/address-family/ipv6/uni
cast/ipv6/route"/>
                <import
y:self="/rest/config/running/rbridge-id/195/vrf/mgmt-vrf/address-family/ipv6/uni
cast/ipv6/import"/>
                    </ipv6>
                </unicast>
            </ipv6>
        </unicast>
    </ipv6>
</address-family>

```

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```
<ip y:self="/rest/config/running/rbridge-id/195/vrf/mgmt-vrf/ip">  
  <router-id>1.1.1.1</router-id>  
</ip>  
<ip y:self="/rest/config/running/rbridge-id/195/vrf/mgmt-vrf/ipv6">  
  <router-id>1.2.1.1</router-id>  
</ipv6>  
</vrf>
```

reserved-vlan

Configures, modifies, or retrieves the range of VLANs used for internal purposes.

Resource URIs

URI	Description
<base_URI>/config/running/reserved-vlan	Sets the range of VLANs used for internal purposes

Parameters

Name	Description
reserved-vlan-start	Start of range for reserved VLANs
reserved-vlan-end	End of range for reserved VLANs

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

```
http://host:80/rest/config/running/reserved-vlan
```

Request body

None

Response body

```
<reserved-vlan xmlns="urn:brocade.com:mgmt:brocade-interface"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/reserved-vlan">
  <reserved-vlan-start>20</reserved-vlan-start>
  <reserved-vlan-end>40</reserved-vlan-end>
</reserved-vlan>
```

The following is an example of the PUT operation to configure the range of the reserved VLAN.

URI

```
http://host:80/rest/config/running/reserved-vlan
```

Request body

```
<reserved-vlan>
  <reserved-vlan-start>30</reserved-vlan-start>
  <reserved-vlan-end>50</reserved-vlan-end>
</reserved-vlan>
```

4 Configuration APIs

Response body

None

rmon

Configures, modifies, or retrieves Remote Monitoring Protocol (RMON) configurations.

Resource URIs

URI	Description
<base_URI>/config/running/rmon	Remote Monitoring Protocol (RMON)
<base_URI>/config/running/rmon/alarm	Remote Monitoring Protocol (RMON) alarm
<base_URI>/config/running/rmon/event	Remote Monitoring Protocol (RMON) event

Parameters

Name	Description
<i>event-index</i>	Event Index
<i>description</i>	Event description
<i>log</i>	Log the event
<i>owner</i>	Owner identity
<i>alarm-index</i>	Alarm Index
<i>snmp-oid</i>	Sampling object SNMP OID
<i>alarm-interval</i>	Alarm sample interval
<i>alarm-sample</i>	<ul style="list-style-type: none"> absolute - Sample type absolute delta - Sample type delta
<i>alarm-rising-threshold</i>	Alarm rising threshold
<i>alarm-rising-event-index</i>	Event for rising alarm
<i>alarm-falling-threshold</i>	Alarm falling threshold
<i>alarm-falling-event-index</i>	Event for falling alarm
<i>alarm-owner</i>	Owner identity

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

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

Request body

None

Response body

```
<rmon xmlns="urn:brocade.com:mgmt:brocade-rmon"
xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/rmon">
  <event y:self="/rest/config/running/rmon/event/25">
    <event-index>25</event-index>
    <description>event1</description>
    <log>true</log>
    <owner>admin</owner>
  </event>
  <alarm-entry>
    <alarm-index>5</alarm-index>
    <snmp-oid>1.3.6.1.2.1.16.1.1.1.5.65535</snmp-oid>
    <alarm-interval>30</alarm-interval>
    <alarm-sample>absolute</alarm-sample>
    <alarm-rising-threshold>95</alarm-rising-threshold>
    <alarm-rising-event-index>27</alarm-rising-event-index>
    <alarm-falling-threshold>85</alarm-falling-threshold>
    <alarm-falling-event-index>30</alarm-falling-event-index>
    <alarm-owner>john_smith</alarm-owner>
  </alarm-entry>
</rmon>
```

The following is an example of the POST operation to add an event configuration.

URI

`http://host:80/rest/config/running/rmon/event`

Request body

```
<event-index>25</event-index>
<description>event1</description>
<log>true</log>
<owner>admin</owner>
```

Response body

None

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

URI

`http://host:80/rest/config/running/rmon/event`

Request body

None

Response body

None

role

Configures, modifies, or retrieves role configurations.

Resource URIs

URI	Description
<base_URI>/config/running/role	Role configuration

Parameters

Name	Description
<i>name</i>	Name of the role
<i>desc</i>	Description of the role

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

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

Request body

None

Response body

```
<role xmlns="urn:brocade.com:mgmt:brocade-aaa"
xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/role">
  <name y:self="/rest/config/running/role/name/admin">
    <name>admin</name>
    <desc>Administrator</desc>
  </name>
  <name y:self="/rest/config/running/role/name/admin2">
    <name>admin2</name>
  </name>
  <name y:self="/rest/config/running/role/name/trial">
    <name>trial</name>
  </name>
  <name y:self="/rest/config/running/role/name/user">
    <name>user</name>
    <desc>User</desc>
  </name>
</role>
```

The following is an example of the POST operation to add a role name and description.

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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

service

Configures, modifies, or retrieves password encryption services.

Resource URIs

URI	Description
<base_URI>/config/running/service	Password encryption services

Parameters

Name	Description
<i>password-encryption</i>	Encrypt all user account passwords

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

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

Request body

None

Response body

```
<service xmlns="urn:brocade.com:mgmt:brocade-aaa"
xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/service">
  <password-encryption>true</password-encryption>
</service>
```

The following is an example of the PUT operation to enable password encryption.

URI

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

Request body

```
<service>
  <password-encryption>true</password-encryption>
</service>
```

Response body

None

The following is an example of the DELETE operation to disable password encryption.

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URI

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

Request body

None

Response body

None

sflow

Configures, modifies, or retrieves sFlow configuration.

Resource URIs

URI	Description
<base_URI>/config/running/sflow	sFlow configuration
<base_URI>/config/running/sflow/collector	sFlow collector

Parameters

Name	Description
<i>enable</i>	Enable sFlow
<i>collector-ip-address</i>	The IPv4 or IPv6 address of the sFlow collector
<i>collector-port-number</i>	The port number used by the sFlow collector
<i>polling-interval</i>	Counter polling interval value
<i>sample-rate</i>	Sampling rate value in packets

Usage guidelines

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

Examples

The following is an example of the GET operation 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>
  <collector y:self="/rest/config/running/sflow/collector/10.20.38.100%2C6343">
    <collector-ip-address>10.20.38.100</collector-ip-address>
    <collector-port-number>6343</collector-port-number>
  </collector>
  <polling-interval>25</polling-interval>
  <sample-rate>32700</sample-rate>
</sflow>
```

The following is an example of the POST operation to add the sFlow collector IP address.

URI

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

4 Configuration APIs

Request body

```
<collector>
  <collector-ip-address>10.20.38.100</collector-ip-address>
  <collector-port-number>6343</collector-port-number>
</collector>
```

Response body

None

The following is an example of the DELETE operation to change the polling interval from the sFlow configuration to the default value.

URI

```
http://host:80/rest/config/running/sflow/polling-interval/25
```

Request body

None

Response body

None

snmp-server

Configures, modifies, or retrieves SNMP server configuration.

Resource URIs

URI	Description
<base_URI>/config/running/snmp-server	SNMP server
<base_URI>/config/running/snmp-server/community	Holds community strings and access
<base_URI>/config/running/snmp-server/context	Context to various instance mapping
<base_URI>/config/running/snmp-server/enable	Enable or disable the traps
<base_URI>/config/running/snmp-server/host	Holds IP address
<base_URI>/config/running/snmp-server/user	Holds user name, group name
<base_URI>/config/running/snmp-server/v3host	Holds IP address, user name, severity level and port number

Parameters

Name	Description
<i>context-name</i>	Context name
<i>vrf-name</i>	Enables the specification of a variable VRF name that can be retrieved when an SNMP request is sent with the configured context name
<i>contact</i>	Identification of contact for the system
<i>location</i>	Location of the system
<i>sys-descr</i>	The description of the system
<i>enable</i>	Enable the SNMP server trap
<i>community</i>	Community string associated with traps
<i>access</i>	Access rights to the server
<i>ip</i>	IP address
<i>community</i>	Holds community strings and access (ro rw)
<i>udp-port</i>	Port number associated with trap recipient
<i>severity-level</i>	Severity level associated with the traps
<i>username</i>	SNMP user name
<i>groupname</i>	Group name associated with user name.
<i>auth</i>	Authorization protocol for user name
<i>auth-password</i>	Authorization password associated with user name
<i>noauth</i>	Removes authentication
<i>priv</i>	Privacy protocol for user name
<i>priv-password</i>	Privacy password associated with user name
<i>nopriv</i>	Removes privacy

Name	Description
<i>encrypted</i>	This flag is used to enter the auth/priv passwords as encrypted.
<i>hostip</i>	Specifies the IP address of the host
<i>engineid</i>	Manager's remote engine ID
<i>severity-level</i>	Provides the ability to filter traps based on severity level on both the host and the SNMPv3 host
<i>access type</i>	Applicable for all the community configurations
<i>version</i>	Version used to send traps
<i>user</i>	User name associated with V3 notification type
<i>md5</i>	HMAC-MD5-96 is an authentication protocol uses MD5 message digest algorithm for digest computation.
<i>sha</i>	HMAC-SHA-96 is an authentication protocol uses Secure Hash Algorithm (sha) for digest computation
<i>AES128</i>	Advanced Encryption Standard is a privacy protocol uses 128 bit AES Algorithm to encrypt and decrypt snmp messages.
<i>DES</i>	Data Encryption Standard is a privacy protocol is used to encrypt and decrypt SNMP messages.
<i>notifytype</i>	Type of notification sent to host
<i>local</i>	snmp-engine-ID

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

```
http://host:80/rest/config/running/snmp-server
```

Request body

None

Response body

```
<snmp-server xmlns="urn:brocade.com:mgmt:brocade-snmp"
xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/snmp-server">
  <context y:self="/rest/config/running/snmp-server/context/mycontext">
    <context-name>mycontext</context-name>
    <vrf-name>myvrf</vrf-name>
  </context>
  <contact>server1</contact>
  <location>first-floor</location>
  <sys-descr>VDX-Switch</sys-descr>
  <enable y:self="/rest/config/running/snmp-server/enable">
    <trap y:self="/rest/config/running/snmp-server/enable/trap"/>
  </enable>
```

```

    <community
y:self="/rest/config/running/snmp-server/community/ConvergedNetwork">
    <community>ConvergedNetwork</community>
</community>
    <community y:self="/rest/config/running/snmp-server/community/OrigEquipMfr">
    <community>OrigEquipMfr</community>
    <access>rw</access>
</community>
    <community y:self="/rest/config/running/snmp-server/community/&quot;Secret
C0de&quot;">
    <community>"Secret C0de"</community>
    <access>rw</access>
</community>
    <community y:self="/rest/config/running/snmp-server/community/common">
    <community>common</community>
</community>
    <community y:self="/rest/config/running/snmp-server/community/private">
    <community>private</community>
    <access>rw</access>
</community>
    <community y:self="/rest/config/running/snmp-server/community/public">
    <community>public</community>
</community>
    <community y:self="/rest/config/running/snmp-server/community/secretcode">
    <community>secretcode</community>
    <access>rw</access>
</community>
<host y:self="/rest/config/running/snmp-server/host/10.20.234.255%2Cprivate">
    <ip>10.20.234.255</ip>
    <community>private</community>
    <version>2c</version>
    <udp-port>160</udp-port>
    <severity-level>Info</severity-level>
</host>
<host y:self="/rest/config/running/snmp-server/host/10.20.58.179%2Cprivate">
    <ip>10.20.58.179</ip>
    <community>private</community>
    <severity-level>Info</severity-level>
</host>
<user y:self="/rest/config/running/snmp-server/user/snmpadmin3">
    <username>snmpadmin3</username>
    <groupname>snmpadmin</groupname>
</user>
<user y:self="/rest/config/running/snmp-server/user/snmpuser1">
    <username>snmpuser1</username>
</user>
<user y:self="/rest/config/running/snmp-server/user/snmpuser2">
    <username>snmpuser2</username>
</user>
<user y:self="/rest/config/running/snmp-server/user/snmpuser3">
    <username>snmpuser3</username>
    <auth>md5</auth>
    <auth-password>user</auth-password>
    <priv>DES</priv>
    <priv-password>user</priv-password>
    <encrypted>>true</encrypted>
</user>
<v3host
y:self="/rest/config/running/snmp-server/v3host/10.20.23.100%2Csnmpuser1">
    <hostip>10.20.23.100</hostip>

```

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```
<username>snmpuser1</username>
<engineid>managerid11</engineid>
</v3host>
<v3host y:self="/rest/config/running/snmp-server/v3host/hostip%2Csnmpuser1">
  <hostip>hostip</hostip>
  <username>snmpuser1</username>
  <engineid>engineuser1</engineid>
  <severity-level>Info</severity-level>
</v3host>
<v3host
y:self="/rest/config/running/snmp-server/v3host/10.20.234.25%2Csnmpuser1">
  <hostip>10.20.234.25</hostip>
  <username>snmpuser1</username>
  <udp-port>161</udp-port>
  <engineid>engineuser1</engineid>
  <severity-level>Info</severity-level>
</v3host>
</snmp-server>
```

The following is an example of the POST operation to set the community and access rights of the SNMP server.

URI

`http://host:80/rest/config/running/snmp-server`

Request body

```
<community>
  <community>private</community>
  <access>rw</access>
</community>
```

Response body

None

The following is an example of the DELETE operation to remove a user name from the SNMP server configuration.

URI

`http://host:80/rest/config/running/snmp-server/user/snmpuser3`

Request body

None

Response body

None

support

Configures, modifies, or retrieves support configuration.

Resource URIs

URI	Description
<base_URI>/config/running/support	Support
<base_URI>/config/running/support/autoupload	Autoupload operation
<base_URI>/config/running/support/autoupload-param	Autoupload parameters
<base_URI>/config/running/support/ffdc	Enable or disable FFDC file generation
<base_URI>/config/running/support/support-param	Copy support parameters

Parameters

Name	Description
<i>hostip</i>	IP address of the remote host
<i>username</i>	The user name to access the remote host
<i>directory</i>	The path to the directory
<i>protocol</i>	The protocol used to access the remote server
<i>password</i>	The password to access the remote host
<i>enable</i>	Enable autoupload
<i>ffdc</i>	Enable or Disable FFDC file generation

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

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

Request body

None

Response body

```
<support xmlns="urn:brocade.com:mgmt:brocade-ras"
xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/support">
  <autoupload-param y:self="/rest/config/running/support/autoupload-param">
    <hostip>127.0.0.1</hostip>
    <username>user1</username>
    <directory>12</directory>
    <protocol>ftp</protocol>
```

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```
<password> "XDVMJTJ/uRBkyWmSat7/og==\n" </password>
</autoupload-param>
<support-param y:self="/rest/config/running/support/support-param">
  <hostip>10.20.38.100</hostip>
  <username>user1</username>
  <directory>12</directory>
  <protocol>scp</protocol>
  <password> "XDVMJTJ/uRBkyWmSat7/og==\n" </password>
</support-param>
<autoupload y:self="/rest/config/running/support/autoupload">
  <enable>true</enable>
</autoupload>
<ffdc>true</ffdc>
</support>
```

The following is an example of the PUT operation to add a user name and protocol to the support parameter.

URI

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

Request body

```
<autoupload-param>
  <hostip>127.0.0.1</hostip>
  <username>user1</username>
  <directory>test</directory>
  <protocol>ftp</protocol>
  <password> "XDVMJTJ/uRBkyWmSat7/og==\n" </password>
</autoupload-param>
```

Response body

None

switch-attributes

Configures, modifies, or retrieves switch attributes configurations.

Resource URIs

URI	Description
<base_URI>/config/running/switch-attributes	Switch attributes

Parameters

Name	Description
<i>rbridge-id</i>	The RBridge ID the attribute is to be set for
<i>chassis-name</i>	The switch chassis name
<i>host-name</i>	The switch host name

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

```
http://host:80/rest/config/running/switch-attributes
```

Request body

None

Response body

```
<switch-attributes xmlns="urn:brocade.com:mgmt:brocade-ras"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/switch-attributes">
  <rbridge-id y:self="/rest/config/running/switch-attributes/rbridge-id/122">
    <rbridge-id>122</rbridge-id>
    <chassis-name>VDX8770-8</chassis-name>
    <host-name>M8-122</host-name>
  </rbridge-id>
  <rbridge-id y:self="/rest/config/running/switch-attributes/rbridge-id/125">
    <rbridge-id>125</rbridge-id>
    <chassis-name>VDX8770-4</chassis-name>
    <host-name>M4-125</host-name>
  </rbridge-id>
  <rbridge-id y:self="/rest/config/running/switch-attributes/rbridge-id/54">
    <rbridge-id>54</rbridge-id>
    <chassis-name>VDX6740</chassis-name>
    <host-name>CAS-54</host-name>
  </rbridge-id>
</switch-attributes>
```

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The following is an example of the DELETE operation to change the switch attributes to default values.

URI

`http://host:80/rest/config/running/switch-attributes/rbridge-id/60`

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	FRU mail setting
<base_URI>/config/running/system-monitor-mail/fru	FRU mail settings
<base_URI>/config/running/system-monitor-mail/interface	Interface mail settings
<base_URI>/config/running/system-monitor-mail/relay	Relay IP mail settings
<base_URI>/config/running/system-monitor-mail/security	Security mail settings
<base_URI>/config/running/system-monitor-mail/sfp	SFP mail settings

Parameters

Name	Description
<i>email</i>	E-mail address for alerts
<i>enable</i>	Enable e-mail alerts
<i>host-ip</i>	The IPv4 address of the mail server.
<i>domain-name</i>	The domain that corresponds to the e-mail ID

Usage guidelines

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

Examples

The following is an example of the GET operation 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">
    <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>
```

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```
</fru>
<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>
<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>
<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@broca
de.com">
    <email>abc1@brocade.com</email>
  </email-list>
</interface>
<relay y:self="/rest/config/running/system-monitor-mail/relay/1.2.3.4">
  <host-ip>1.2.3.4</host-ip>
  <domain-name>domain1</domain-name>
</relay>
</system-monitor-mail>
```

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>1.2.3.4</host-ip>
  <domain-name>domain1</domain-name>
</relay>
```

Response body

None

The following is an example of the DELETE operation to remove the security e-mail settings.

URI

`http://host:80/rest/config/running/system-monitor-mail/security`

Request body

None

Response body

None

tacacs-server

Configures, modifies, or retrieves TACACS+ server configuration.

Resource URIs

URI	Description
<base_URI>/config/running/tacacs-server	TACACS+ server

Parameters

Name	Description
<i>hostname</i>	Specifies the IP address or domain name of the TACACS+ server
<i>encryption-level</i>	Level of encryption of the key
<i>key</i>	Secret shared with this server
<i>port</i>	TCP authentication port
<i>protocol</i>	Authentication protocol
<i>retries</i>	Number of retries for this server connection
<i>timeout</i>	Wait time for this server to respond
<i>source-ip</i>	Source IP address to be used for Tacacs+ server

Usage guidelines

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

Examples

The following is an example of the GET operation 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>
    <port>55</port>
    <protocol>pap</protocol>
    <key>"Yf0BKEhsc83gp+kIoGMQ/g==\n"</key>
    <encryption-level>7</encryption-level>
    <retries>6</retries>
    <timeout>10</timeout>
  </host>
```

4 Configuration APIs

```
<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

username

Configures, modifies, or retrieves configuration of local users.

Resource URIs

URI	Description
<base_URI>/config/running/username	Configuration of local users

Parameters

Name	Description
<i>name</i>	The account login name
<i>desc</i>	Description of the account
<i>enable</i>	Represents whether the user account is enabled
<i>encryption-level</i>	Level of encryption of the password
<i>expire</i>	Date until when the password will remain valid
<i>password</i>	Account password
<i>role</i>	The role assigned to the user account

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

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

Request body

None

Response body

```
<username xmlns="urn:brocade.com:mgmt:brocade-aaa"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/username/admin">
  <name>admin</name>
  <password>"BwrsDbB+tABWGWpINOVKoQ==\n"</password>
  <encryption-level>7</encryption-level>
  <role>admin</role>
  <desc>Administrator</desc>
</username>
<username xmlns="urn:brocade.com:mgmt:brocade-aaa"
xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/username/user1">
  <name>user1</name>
```

4 Configuration APIs

```
<password>"Zzq31Rtf/++XZ3uIC1keMw==\n"</password>
<encryption-level>7</encryption-level>
<role>user</role>
<desc>user1</desc>
<expire>2016-06-06</expire>
</username>
```

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

URI

`http://host:80/rest/config/running/username/user3`

Request body

None

Response body

None

VCS

Configures, modifies, or retrieves Virtual Cluster Switching configuration.

Resource URIs

URI	Description
<base_URI>/config/running/vcs	Virtual Cluster Switching
<base_URI>/config/running/vcs/virtual/ip/address	Virtual IP address
<base_URI>/config/running/vcs/virtual/ipv6/address	Virtual IPv6 address
<base_URI>/config/running/vcs/virtual-fabric	VCS virtual-fabric

Parameters

Name	Description
<i>address</i>	Virtual IP address
<i>ve</i>	VE interface number
<i>enable</i>	Enable virtual fabric

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

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

Request body

None

Response body

```
<vcs xmlns="urn:brocade.com:mgmt:brocade-vcs"
xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/vcs">
  <virtual y:self="/rest/config/running/vcs/virtual">
    <ip y:self="/rest/config/running/vcs/virtual/ip">
      <address
y:self="/rest/config/running/vcs/virtual/ip/address/%2210.20.1.1/24%22">
        <address>10.20.1.1/24</address>
        <inband
y:self="/rest/config/running/vcs/virtual/ip/address/%2210.20.1.1/24%22/inband">
          <interface
y:self="/rest/config/running/vcs/virtual/ip/address/%2210.20.1.1/24%22/inband/in
terface">
            <ve>10</ve>
          </interface>
        </inband>
```

4 Configuration APIs

```
        </address>
      </ip>
    </virtual>
    <virtual-fabric y:self="/rest/config/running/vcs/virtual-fabric">
      <enable>true</enable>
    </virtual-fabric>
  </vcs>
```

The following is an example of the POST operation to add a new virtual IP address.

URI

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

Request body

```
<virtual>
  <ip>
    <address>
      <address>10.20.1.2/24</address>
    </address>
  </ip>
</virtual>
```

Response body

None

The following is an example of the DELETE operation to remove a virtual IP address.

URI

`http://host:80/rest/config/running/vcs/virtual/ip/address/%2210.20.1.2/24%22`

Request body

None

Response body

None

vlan

Configures, modifies, or retrieves VLAN commands.

Resource URIs

URI	Description
<base_URI>/config/running/vlan	VLAN commands
<base_URI>/config/running/vlan/classifier	VLAN classification groups commands
<base_URI>/config/running/vlan/classifier/group	VLAN classifier group ID
<base_URI>/config/running/vlan/classifier/rule	VLAN classifier rule ID
<base_URI>/config/running/vlan/dot1q	Dot1q parameters

Parameters

Name	Description
<i>ruleid</i>	Specifies the VLAN identification rule
<i>address</i>	MAC address
<i>proto-val</i>	Specifies the protocol to use for the VLAN classifier rule
<i>encap</i>	Specifies to encapsulate the Ethernet frames sent for the VLAN classifier rule
<i>groupid</i>	The group ID of the classifier
<i>oper</i>	Operation
<i>rule-name</i>	Rule name
<i>native</i>	The native VLAN is enabled

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

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

Request body

None

Response body

```
<vlan xmlns="urn:brocade.com:mgmt:brocade-vlan"
xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/vlan">
  <classifier y:self="/rest/config/running/vlan/classifier">
    <rule y:self="/rest/config/running/vlan/classifier/rule/3">
      <ruleid>3</ruleid>
```

4 Configuration APIs

```
<mac y:self="/rest/config/running/vlan/classifier/rule/3/mac">
  <address>0011.2222.2233</address>
</mac>
</rule>
<rule y:self="/rest/config/running/vlan/classifier/rule/4">
  <ruleid>4</ruleid>
  <proto y:self="/rest/config/running/vlan/classifier/rule/4/proto">
    <proto-val>arp</proto-val>
    <encap>ethv2</encap>
  </proto>
</rule>
<group
y:self="/rest/config/running/vlan/classifier/group/2%2Cadd%2Crule%2C3">
  <groupid>2</groupid>
  <oper>add</oper>
  <rule-name>rule</rule-name>
  <ruleid>3</ruleid>
</group>
</classifier>
<dot1q y:self="/rest/config/running/vlan/dot1q">
  <tag y:self="/rest/config/running/vlan/dot1q/tag">
    <native>true</native>
  </tag>
</dot1q>
</vlan>
```

The following is an example of the POST operation to add a rule.

URI

`http://host:80/rest/config/running/vlan/classifier`

Request body

```
<rule>
  <ruleid>3</ruleid>
  <proto>
    <proto-val>ip</proto-val>
    <encap>snapllc</encap>
  </proto>
</rule>
```

Response body

None

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

URI

`http://host:80/rest/config/running/vlan/classifier/rule/2`

Request body

None

Response body

None

zoning

Configures, modifies, or retrieves zoning commands.

Resource URIs

URI	Description
<base_URI>/config/running/zoning	Zoning commands
<base_URI>/config/running/zoning/defined-configuration	Defined DB entries
<base_URI>/config/running/zoning/defined-configuration/alias	List of defined Zone Aliases
<base_URI>/config/running/zoning/defined-configuration/alias/{alias-name}/member-entry	Add members to a zone
<base_URI>/config/running/zoning/defined-configuration/cfg	List of defined CFGs
<base_URI>/config/running/zoning/defined-configuration/cfg-name/{cfg-name}/member-zone	Add members to cfg
<base_URI>/config/running/zoning/defined-configuration/zone	List of defined zones
<base_URI>/config/running/zoning/defined-configuration/zone/{zone-name}/member-entry	Add members to a zone
<base_URI>/config/running/zoning/enabled-configuration	Enabled DB entries

Parameters

Name	Description
<i>cfg-name</i>	Name of the zone configuration
<i>zone-name</i>	Specifies the name of a zone to be added to the configuration or removed from the configuration
<i>entry-name</i>	The name of the entry
<i>alias-name</i>	Specifies a zone alias
<i>alias-entry-name</i>	Specifies the WWN of the device to be added to the zone alias
<i>default-zone-access</i>	<ul style="list-style-type: none"> allaccess - Sets the default zone access mode to "All Access". Each device can access all other devices attached to the VCS Fabric. Noaccess - Sets the default zone access mode to "No Access". No device can access any other device in the VCS Fabric.
<i>cfg-action</i>	Defined configuration action - list the supported ones. <ul style="list-style-type: none"> cfg-clear - Clear cfg-disable - Disable cfg-none - None cfg-save - Save cfg.transaction-abort - Transaction abort
<i>member-entry</i>	WWN of the device to be added to the zone alias
<i>member-zone</i>	Name of a zone to be added to the configuration

Usage guidelines

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

Examples

The following is an example of the GET operation to retrieve the configuration details.

URI

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

Request body

None

Response body

```
<zoning xmlns="urn:brocade.com:mgmt:brocade-zone"
xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/zoning">
  <defined-configuration
y:self="/rest/config/running/zoning/defined-configuration">
    <cfg y:self="/rest/config/running/zoning/defined-configuration/cfg/cfg1">
      <cfg-name>cfg1</cfg-name>
      <member-zone
y:self="/rest/config/running/zoning/defined-configuration/cfg/cfg1/member-zone/z
one2">
        <zone-name>zone2</zone-name>
      </member-zone>
    </cfg>
    <zone y:self="/rest/config/running/zoning/defined-configuration/zone/zone5">
      <zone-name>zone5</zone-name>
      <member-entry
y:self="/rest/config/running/zoning/defined-configuration/zone/zone5/member-entr
y/alias1">
        <entry-name>alias1</entry-name>
      </member-entry>
    </zone>
    <alias
y:self="/rest/config/running/zoning/defined-configuration/alias/alias1">
      <alias-name>alias1</alias-name>
      <member-entry
y:self="/rest/config/running/zoning/defined-configuration/alias/alias1/member-en
try/10:00:00:00:00:00:00:01">
        <alias-entry-name>10:00:00:00:00:00:00:01</alias-entry-name>
      </member-entry>
    </alias>
  </defined-configuration>
  <enabled-configuration
y:self="/rest/config/running/zoning/enabled-configuration">
    <cfg-name>" "</cfg-name>
    <default-zone-access>allaccess</default-zone-access>
    <cfg-action>cfg-save</cfg-action>
  </enabled-configuration>
</zoning>
```

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

URI

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

Request body

```
<cfg>
  <cfg-name>cfg1</cfg-name>
</cfg>
```

Response body

None

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

URI

`http://host:80/rest/config/running/zoning/defined-configuration/alias/alias2`

Request body

None

Response body

None

Operational APIs

The URI `http://host:80/rest/operational-state` is used to perform the Custom RPC operations defined in the YANG.

activate-status

Retrieves the firmware activation status.

Resource URIs

URI	Description
<base_URI>/operational-state/activate-status	Retrieves the firmware activation status

Parameters

Name	Description
<i>overall-status</i>	Overall activation status on the switch
<i>rbridge-id</i>	The RBridge ID
<i>status</i>	Activation status for a particular RBridge ID

Usage guidelines

Only POST operation is supported.

Examples

URI

`http://host:80/rest/operational-state/activate-status`

Request body

```
<activate-status></activate-status>
```

Response body

```
<output xmlns='urn:brocade.com:mgmt:brocade-firmware'>
  <overall-status>0</overall-status>
  <activate-entries>
    <rbridge-id>54</rbridge-id>
    <status>0</status>
  </activate-entries>
</output>
```

bna-config-cmd

Copies configuration data to or from the system.

Resource URIs

URI	Description
<base_URI>/operational-state/bna-config-cmd	Copy configuration data to or from the system

Parameters

Name	Description
session-id	This id is used along with bna-config-cmd-status API to get the status of this operation (inprogress/complete)
status	Status of this operation (inprogress/complete)

Usage guidelines

Only POST operation is supported.

Examples

URI

http://host:80/rest/operational-state/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>/operational-state/bna-config-cmd-status	Retrieves the status of a previous configuration command

Parameters

Name	Description
status	Shows the status of API bna-config-cmd (completed/inprogress)
status-string	BNA config command status

Usage guidelines

Only POST operation is supported.

Examples

URI

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

dad-status

Displays the current status of firmware download.

Resource URIs

URI	Description
<base_URI>/operational-state/dad-status	Displays the current status of firmware download

Parameters

Name	Description
<i>index</i>	Index number
<i>date-and-time-info</i>	Date and time information
<i>message</i>	Status message
<i>dad-last-state</i>	<ul style="list-style-type: none"> • dad-in-progress • dad-failed • dad-completed

Usage guidelines

Only POST operation is supported.

Examples

URI

http://host:80/rest/operational-state/dad-status

Request body

```
<dad-status></dad-status>
```

Response body

```
<output xmlns='urn:brocade.com:mgmt:brocade-firmware'>
  <dad-status-entries>
    <index>1</index>
    <date-and-time-info>Fri Oct 25 21:01:12 GMT 2013</date-and-time-info>
    <message>DHCP Auto-deployment enabled.</message>
  </dad-status-entries>
  <dad-status-entries>
    <index>2</index>
    <date-and-time-info>Fri Oct 25 21:09:57 GMT 2013</date-and-time-info>
    <message>DHCP Auto-deployment failed during DHCP process.</message>
  </dad-status-entries>
  <dad-status-entries>
    <index>3</index>
    <date-and-time-info>Thu Mar 13 05:15:06 SCT 2014</date-and-time-info>
    <message>DHCP Auto-deployment failed to enable.</message>
  </dad-status-entries>
  <dad-status-entries>
    <index>14</index>
```

```

    <date-and-time-info>Thu Mar 13 19:45:10 SCT 2014</date-and-time-info>
    <message>DHCP Auto-deployment failed to enable.</message>
  </dad-status-entries>
</dad-status-entries>
  <index>15</index>
  <date-and-time-info>Thu Mar 13 20:24:50 SCT 2014</date-and-time-info>
  <message>DHCP Auto-deployment failed to enable.</message>
</dad-status-entries>
</dad-status-entries>
  <index>34</index>
  <date-and-time-info>Sun Mar 16 15:53:23 SCT 2014</date-and-time-info>
  <message>DHCP Auto-deployment failed to enable.</message>
</dad-status-entries>
</dad-status-entries>
  <index>35</index>
  <date-and-time-info>Sun Mar 16 16:32:33 SCT 2014</date-and-time-info>
  <message>DHCP Auto-deployment failed to enable.</message>
</dad-status-entries>
</dad-status-entries>
  <index>36</index>
  <date-and-time-info>Sun Mar 16 17:13:51 SCT 2014</date-and-time-info>
  <message>DHCP Auto-deployment failed to enable.</message>
</dad-status-entries>
</dad-status-entries>
  <index>37</index>
  <date-and-time-info>Sun Mar 16 18:01:41 SCT 2014</date-and-time-info>
  <message>DHCP Auto-deployment failed to enable.</message>
</dad-status-entries>
</dad-status-entries>
  <index>38</index>
  <date-and-time-info>Sun Mar 16 18:46:12 SCT 2014</date-and-time-info>
  <message>DHCP Auto-deployment failed to enable.</message>
</dad-status-entries>
</dad-status-entries>
  <index>39</index>
  <date-and-time-info>Sun Mar 16 19:31:00 SCT 2014</date-and-time-info>
  <message>DHCP Auto-deployment failed to enable.</message>
</dad-status-entries>
</dad-status-entries>
  <index>40</index>
  <date-and-time-info>Sun Mar 16 20:16:07 SCT 2014</date-and-time-info>
  <message>DHCP Auto-deployment failed to enable.</message>
</dad-status-entries>
</dad-status-entries>
  <index>41</index>
  <date-and-time-info>Sun Mar 16 20:59:21 SCT 2014</date-and-time-info>
  <message>DHCP Auto-deployment failed to enable.</message>
</dad-status-entries>
</dad-status-entries>
  <index>42</index>
  <date-and-time-info>Sun Mar 16 21:41:38 SCT 2014</date-and-time-info>
  <message>DHCP Auto-deployment failed to enable.</message>
</dad-status-entries>
</dad-status-entries>
  <dad-last-state>dad-failed</dad-last-state>
</output>

```

fcoe-get-interface

Retrieves the FCoE interface information.

Resource URIs

URI	Description
<base_URI>/operational-state/fcoe-get-interface	Retrieves the FCoE interface information

Parameters

Name	Description
<i>fcoe-intf-total-interfa</i> <i>ces</i>	The total number of interfaces whose details are being returned

Usage guidelines

Only POST operation is supported.

Examples

URI

http://host:80/rest/operational-state/fcoe-get-interface

Request body

```
<fcoe-intf-total-interfaces></fcoe-intf-total-interfaces>
```

Response body

```
<output xmlns='urn:brocade.com:mgmt:brocade-fcoe-ext'>  
  <fcoe-intf-total-interfaces>0</fcoe-intf-total-interfaces>  
</output>
```

fcoe-get-login

Retrieves the login information on FCoE End nodes that have logged in to the managed device.

Resource URIs

URI	Description
<base_URI>/operational-state/fcoe-get-login	Retrieves the login information on FCoE End nodes that have logged in to the managed device

Parameters

Name	Description
fcoe-login-total-logins	The total number of devices logged in

Usage guidelines

Only POST operation is supported.

Examples

URI

```
http://host:80/rest/operational-state/fcoe-get-login
```

Request body

```
<fcoe-get-login></fcoe-get-login>
```

Response body

```
<output xmlns='urn:brocade.com:mgmt:brocade-fcoe-ext'>
  <fcoe-login-total-logins>0</fcoe-login-total-logins>
</output>
```

fwdl-status

Retrieves the firmware download status.

Resource URIs

URI	Description
<base_URI>/operational-state/fwdl-status	Retrieves the firmware download status

Parameters

Name	Description
<i>fwdl-state</i>	The firmware download state
<i>number-of-entries</i>	Specifies the number of status entries
<i>index</i>	Sequence number for the message
<i>blade-name</i>	Name of the blade
<i>message-id</i>	Message identifier
<i>date-and-time-info</i>	Date and time of the message. The format is YYYY-MM-DD/HH:MM:SS.SSSS
<i>message</i>	Textual description of the status

Usage guidelines

Only POST operation is supported.

Examples

URI

http://host:80/rest/operational-state/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>/operational-state/get-arp	Retrieves the ARP cache details

Parameters

Name	Description
<i>ip-address</i>	IP address of the ARP entry
<i>mac-address</i>	MAC address of the ARP entry
<i>interface-type</i>	The interface type
<i>interface-name</i>	The interface name
<i>is-resolved</i>	Indicates whether the ARP entry is resolved or not
<i>age</i>	The age of the ARP entry
<i>entry-type</i>	The type of the ARP entry

Usage guidelines

Only POST operation is supported.

Examples

URI

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

Retrieves the list of flexports

Resource URIs

URI	Description
<base_URI>/operational-state/get-flexports	Retrieves the list of flexports

Parameters

Name	Description
port-id	Retrieves the list of flexports

Usage guidelines

Only POST operation is supported.

Examples

URI

```
http://host:80/rest/operational-state/get-flexports
```

Request body

```
<get-flexports></get-flexports>
```

Response body

```
<output xmlns='urn:brocade.com:mgmt:brocade-hardware'>
  <flexport-list>
    <port-id>7/0/1</port-id>
    <port-id>7/0/2</port-id>
    <port-id>7/0/3</port-id>
    <port-id>7/0/4</port-id>
    <port-id>7/0/5</port-id>
    <port-id>7/0/7</port-id>
    <port-id>7/0/6</port-id>
    <port-id>7/0/8</port-id>
    <port-id>7/0/17</port-id>
    <port-id>7/0/18</port-id>
    <port-id>7/0/19</port-id>
    <port-id>7/0/20</port-id>
    <port-id>7/0/21</port-id>
    <port-id>7/0/22</port-id>
    <port-id>7/0/40</port-id>
    <port-id>7/0/41</port-id>
    <port-id>7/0/45</port-id>
    <port-id>7/0/46</port-id>
    <port-id>7/0/47</port-id>
    <port-id>7/0/48</port-id>
  </flexport-list>
</output>
```

get-interface-detail

Retrieves operational data for all the VLANs, physical interfaces and port-channels.

Resource URIs

URI	Description
<base_URI>/operational-state/get-interface-detail	Retrieves operational data for a given VLAN and enumeration of all the interfaces belonging to this VLAN

Parameters

Name	Description
<i>interface-type</i>	The interface type
<i>interface-name</i>	The interface name
<i>port-role</i>	The current role that the particular interface is playing. This is applicable only for physical interfaces
<i>port-mode</i>	The operational mode of the particular interface. This is applicable only for physical interfaces or port-channel interfaces
<i>if-name</i>	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
<i>if-state</i>	The current operational state of this interface
<i>line-protocol-state</i>	The 'Line protocol' state of the interface
<i>line-protocol-state-info</i>	The reason for the current line protocol state of the interface
<i>hardware-type</i>	The type of the interface
<i>current-hardware-address</i>	The address of the interface at its protocol sub-layer
<i>logical-hardware-address</i>	The address of the interface at its protocol sub-layer
<i>ifindex</i>	A unique value, greater than zero, for each interface
<i>mtu</i>	The IP MTU value of the interface
<i>actual-line-speed</i>	The actual line speed of this interface
<i>configured-line-speed</i>	The administratively configured line speed of the interface
<i>line-duplex-state</i>	The 'Line duplex state' of the interface
<i>flow-control</i>	The 'Flow control' for the interface
<i>queuing-strategy</i>	The 'Queuing strategy' for the interface
<i>ifHCInOctets</i>	The total number of octets received on the interface, including framing characters
<i>ifHCInUcastPkts</i>	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

Name	Description
<i>ifHCInMulticastPkts</i>	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
<i>ifHCInBroadcastPkts</i>	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
<i>ifHCInErrors</i>	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
<i>ifHCOctets</i>	The total number of octets transmitted out of the interface, including framing characters
<i>ifHCOUcastPkts</i>	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
<i>ifHCOMulticastPkts</i>	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
<i>ifHCOBroadcastPkt</i>	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
<i>ifHCOErrors</i>	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
<i>ip-mtu</i>	IP MTU value of this interface
<i>line-protocol-exception-info</i>	'Exception information' of line protocol
<i>media-type</i>	The media type
<i>wavelength</i>	Wavelength of pluggable media
<i>if-description</i>	Textual string containing information about the interface
<i>queuing-strategy</i>	'Queuing strategy' for this interface

Usage guidelines

Only POST operation is supported.

Examples

URI

`http://host:80/rest/operational-state/get-interface-detail`

Request body

```
<get-interface-detail></get-interface-detail>
```

Response body

```
<output xmlns='urn:brocade.com:mgmt:brocade-interface-ext'>
  <interface>
    <interface-type>fortygigabitethernet</interface-type>
```

```

<interface-name>1/0/49</interface-name>
<port-role>edge</port-role>
<port-mode>unknown</port-mode>
<if-name>FortyGigabitEthernet 1/0/49</if-name>
<if-state>up</if-state>
<line-protocol-state>down</line-protocol-state>
<line-protocol-state-info>(link protocol down)</line-protocol-state-info>
<hardware-type>ethernet</hardware-type>
<current-hardware-address>00:27:f8:ce:5c:4e</current-hardware-address>
<logical-hardware-address>00:27:f8:ce:5c:4e</logical-hardware-address>
<ifindex>4496695488</ifindex>
<mtu>2500</mtu>
<actual-line-speed>nil</actual-line-speed>
<configured-line-speed>auto</configured-line-speed>
<line-duplex-state>full</line-duplex-state>
<flow-control></flow-control>
<queuing-strategy>fifo</queuing-strategy>
<ifHCInOctets>0</ifHCInOctets>
<ifHCInUcastPkts>0</ifHCInUcastPkts>
<ifHCInMulticastPkts>0</ifHCInMulticastPkts>
<ifHCInBroadcastPkts>0</ifHCInBroadcastPkts>
<ifHCInErrors>0</ifHCInErrors>
<ifHCOutOctets>0</ifHCOutOctets>
<ifHCOutUcastPkts>0</ifHCOutUcastPkts>
<ifHCOutMulticastPkts>0</ifHCOutMulticastPkts>
<ifHCOutBroadcastPkts>0</ifHCOutBroadcastPkts>
<ifHCOutErrors>0</ifHCOutErrors>
</interface>
</output>

```

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.

Request body

```

<get-interface-detail>
  <last-rcvd-interface>
    <interface-type>tengigabitethernet</interface-type>
    <interface-name>7/0/33</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.

Request body

```

<get-interface-detail>
  <interface-type>tengigabitethernet</interface-type>
  <interface-name>7/0/22</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>/operational-state/get-interface-switchport	Returns switch-port or Layer 2 characteristics of all the interfaces in the managed device

Parameters

Name	Description
<i>interface-name</i>	The Interface value
<i>interface-type</i>	The type of the interface
<i>mode</i>	The mode of the port-channel
<i>fcoe-port-enabled</i>	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>	The switch-port ingress Frame admission policy - whether only tagged Frames are allowed or all
<i>default-vlan</i>	The 'default vlan' identifier value for this switch-port
<i>vlanid</i>	The list of active VLAN identifiers

Usage guidelines

Only POST operation is supported.

Examples

URI

http://host:80/rest/operational-state/get-interface-switchport

Request body

```
<get-interface-switchport></get-interface-switchport>
```

Response body

```
<output xmlns='urn:brocade.com:mgmt:brocade-interface-ext'>
  <switchport>
    <interface-name>195/2/1</interface-name>
    <interface-type>fortygigabitethernet</interface-type>
    <mode>access</mode>
    <fcoe-port-enabled>>false</fcoe-port-enabled>
    <ingress-filter-enabled>>true</ingress-filter-enabled>
    <acceptable-frame-type>admit-all</acceptable-frame-type>
    <default-vlan>1</default-vlan>
    <active-vlans>
      <vlanid>1</vlanid>
```

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```
    </active-vlans>  
  </switchport>  
</output>
```

get-ip-interface

Retrieves the IP interface details.

Resource URIs

URI	Description
<base_URI>/operational-state/get-ip-interface	Retrieves the IP interface details

Parameters

Name	Description
<i>interface-type</i>	The network interface name in a VCS environment in the format: [rbridge-id]/slot/port
<i>interface-name</i>	The Interface value
<i>if-name</i>	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
<i>if-state</i>	The current operational state of the interface
<i>line-protocol-state</i>	The 'Line protocol' state of the interface
<i>ip-address</i>	The IP address for the management interface
<i>ipv4</i>	The IP address in dotted decimal/Mask (A.B.C.D/M)
<i>ipv4-type</i>	Indicates whether IP address is primary/secondary and corresponding Broadcast IP
<i>broadcast</i>	Broadcast IP Address
<i>ip-mtu</i>	MTU type
<i>vrf</i>	VRF name

Usage guidelines

Only POST operation is supported.

Examples

URI

```
http://host:80/rest/operational-state/get-ip-interface
```

Request body

```
<get-ip-interface></get-ip-interface>
```

Response body

```
<interface>
  <interface-type>fortygigabitethernet</interface-type>
  <interface-name>2/0/49</interface-name>
  <if-name>FortyGigabitEthernet 2/0/49</if-name>
  <if-state>up</if-state>
  <line-protocol-state>down</line-protocol-state>
  <ip-address>
    <ipv4>unassigned</ipv4>
```

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```
    </ip-address>
  </interface>
</interface>
  <interface-type>fortygigabitethernet</interface-type>
  <interface-name>2/0/50</interface-name>
  <if-name>FortyGigabitEthernet 2/0/50</if-name>
  <if-state>up</if-state>
  <line-protocol-state>down</line-protocol-state>
  <ip-address>
    <ipv4>unassigned</ipv4>
  </ip-address>
</interface>
</output>
```


get-last-config-update-time

Retrieves the time stamp of the last configuration change on the system.

Resource URIs

URI	Description
<base_URI>/operational-state/get-last-config-update-time	Retrieves the time stamp of the last configuration change

Parameters

Name	Description
<i>last-config-update-time</i>	The time stamp of the last configuration change

Usage guidelines

Only POST operation is supported.

Examples

URI

```
http://host:80/rest/operational-state/get-last-config-update-time
```

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>/operational-state/get-last-config-update-time-for-xpaths	Retrieves the time stamp of the last configuration change for xpaths

Parameters

Name	Description
<i>xpath-string</i>	The xpath string
<i>last-config-update-time</i>	Indicates the time stamp of the last configuration change for xpaths

Usage guidelines

Only POST operation is supported.

Examples

URI

http://host:80/rest/operational-state/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-mac-acl-for-intf

Retrieves the MAC ACL applied on the interfaces.

Resource URIs

URI	Description
<base_URI>/operational-state/get-mac-acl-for-intf	Retrieves the MAC ACL applied on the interfaces

Parameters

Name	Description
<i>interface-name</i>	The interface name
<i>interface-type</i>	The interface type
<i>policy-name</i>	The MAC ACL policy name

Usage guidelines

Only POST operation is supported.

Examples

URI

```
http://host:80/rest/operational-state/get-mac-acl-for-intf
```

Request body

```
<get-mac-acl-for-intf></get-mac-acl-for-intf>
```

Response body

```
<output xmlns='urn:brocade.com:mgmt:brocade-mac-access-list'>
  <interface>
    <interface-name>1/0/7</interface-name>
    <interface-type>tengigabitethernet</interface-type>
    <ingress-policy>
      <policy-name>stdmacacl</policy-name>
    </ingress-policy>
    <egress-policy>
      <policy-name>stdmacacl</policy-name>
    </egress-policy>
  </interface>
</output>
```

get-mac-address-table

Retrieves the operational data for a given MAC entry.

Resource URIs

URI	Description
<base_URI>/operational-state/get-mac-address-table	Returns operational data for a given MAC entry and the corresponding details of that MAC entry

Parameters

Name	Description
<i>vlanid</i>	The VLAN ID
<i>mac-address</i>	The MAC address
<i>mac-type</i>	The MAC type
<i>mac-state</i>	The MAC state
<i>interface-type</i>	The interface type
<i>interface-name</i>	The interface name

Usage guidelines

Only POST operation is supported.

Examples

URI

```
http://host:80/rest/operational-state/get-mac-address-table
```

Request body

```
<get-mac-address-table></get-mac-address-table>
```

Response body

```
<output xmlns='urn:brocade.com:mgmt:brocade-mac-address-table'>
  <mac-address-table>
    <vlanid>100</vlanid>
    <mac-address>00:11:22:22:33:33</mac-address>
    <mac-type>static</mac-type>
    <mac-state>inactive</mac-state>
    <forwarding-interface>
      <interface-type>port-channel</interface-type>
      <interface-name>25</interface-name>
    </forwarding-interface>
  </mac-address-table>
```

get-media-detail

Retrieves the media properties of all the interfaces.

Resource URIs

URI	Description
<base_URI>/operational-state/get-media-detail	Retrieves the media properties of all the interfaces

Parameters

Name	Description
<i>interface-type</i>	The interface type
<i>interface-name</i>	The interface name
<i>encoding</i>	The type of encoding used to transmit the data on this interface
<i>vendor-name</i>	The vendor of the interface
<i>vendor-oui</i>	The vendor IEEE company ID
<i>vendor-pn</i>	The vendor part number
<i>vendor-rev</i>	The vendor revision level
<i>distance</i>	SFP distance
<i>media-form-factor</i>	The media form factor
<i>wavelength</i>	The wavelength of pluggable media
<i>serial-no</i>	The serial number
<i>temperature</i>	The module temperature (degrees C)
<i>date-code</i>	The vendor's manufacturing date code
<i>voltage</i>	This indicates the supply voltage (Volts)
<i>current</i>	The laser diode drive current (milliAmps)
<i>tx-power</i>	The transmitted optical power (microWatts)
<i>rx-power</i>	The received optical power (microWatts)

Usage guidelines

Only POST operation is supported.

Examples

URI

```
http://host:80/rest/operational-state/get-media-detail
```

Request body

```
<get-media-detail></get-media-detail>
```

Response body

```
<output xmlns='urn:brocade.com:mgmt:brocade-interface-ext'>
  <interface>
    <interface-type>fortygigabitethernet</interface-type>
    <interface-name>54/0/50</interface-name>
    <qsfp>
      <speed>40Gbps</speed>
      <connector>mpo-parallel-optic</connector>
      <encoding>ieee-802-3ab</encoding>
      <vendor-name>BROCADE</vendor-name>
      <vendor-oui>00:05:1e</vendor-oui>
      <vendor-pn>57-1000128-01</vendor-pn>
      <vendor-rev>A</vendor-rev>
      <distance>short-dist</distance>
      <media-form-factor>unknown</media-form-factor>
      <wavelength>17000</wavelength>
      <serial-no>LTA112051000713</serial-no>
      <date-code>120202</date-code>
      <temperature>38</temperature>
      <voltage>3291.9</voltage>
      <current>7.138</current>
      <tx-power>0.0</tx-power>
      <rx-power>872.9</rx-power>
    </qsfp>
  </interface>
</output>
```

get-netconf-client-capabilities

Retrieves the session details, vendor details, IP details, time etc for all connected NETCONF clients.

Resource URIs

URI	Description
<base_URI>/operational-state/get-netconf-client-capabilities	Retrieves the vendor information of all the NETCONF clients

Parameters

Name	Description
session-id	The session ID of the NETCONF client session
user-name	Login name of the user for the NETCONF client session
vendor	Vendor name of the NETCONF client session
product	Product name of the NETCONF client session
version	Product version of the NETCONF client session
identity	Identity of the NETCONF client session
host-ip	IP address of NETCONF client session
time	Login time of NETCONF client session

Usage guidelines

Only POST operation is supported.

Examples

URI

http://host:80/rest/operational-state/get-netconf-client-capabilities

Request body

```
<get-netconf-client-capabilities></get-netconf-client-capabilities>
```

Response body

```
<output xmlns='urn:brocade.com:mgmt:brocade-netconf-ext'>
  <session>
    <session-id>112</session-id>
    <user-name>admin</user-name>
    <vendor>BROCADE</vendor>
    <product>Network Advisor</product>
    <version>12.2.0 build 138</version>
    <identity>Administrator</identity>
    <host-ip>10.20.58.179</host-ip>
    <time>2014-06-25T04:52:15+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>/operational-state/get-port-channel-detail	Retrieves the Link Aggregation Control Protocol (LACP) information for all port-channel

Parameters

Name	Description
<i>aggregator-id</i>	The aggregator ID
<i>aggregator-type</i>	The aggregator type
<i>isvlag</i>	Specifies if aggregator is VLAG
<i>aggregator-mode</i>	The aggregator mode
<i>system-priority</i>	The System Priority
<i>actor-system-id</i>	The Actor system ID
<i>partner-oper-priority</i>	The partner operational priority
<i>partner-system-id</i>	The Partner system ID
<i>admin-key</i>	The Admin key
<i>oper-key</i>	The Operational key
<i>partner-oper-key</i>	The Partner Operational key
<i>rx-link-count</i>	The RX link counter
<i>tx-link-count</i>	The TX link counter
<i>individual-agg</i>	Individual aggregator
<i>ready-agg</i>	Ready aggregator
<i>rbridge-id</i>	The RBridge ID
<i>interface-type</i>	The interface type
<i>interface-name</i>	The interface name
<i>actor-port</i>	The actor port number
<i>sync</i>	Sync-info

Usage guidelines

Only POST operation is supported.

Examples

URI

http://host:80/rest/operational-state/get-port-channel-detail

Request body

```
<get-port-channel-detail></get-port-channel-detail>
```

Response body

```
<output xmlns='urn:brocade.com:mgmt:brocade-lag'>
  <lacp>
    <aggregator-id>6</aggregator-id>
    <aggregator-type>standard</aggregator-type>
    <isvlag>true</isvlag>
    <aggregator-mode>dynamic</aggregator-mode>
    <system-priority>32768</system-priority>
    <actor-system-id>01:e0:52:00:20:00</actor-system-id>
    <partner-oper-priority>32768</partner-oper-priority>
    <partner-system-id>00:05:1e:cd:19:6a</partner-system-id>
    <admin-key>6</admin-key>
    <oper-key>6</oper-key>
    <partner-oper-key>6</partner-oper-key>
    <rx-link-count>4</rx-link-count>
    <tx-link-count>4</tx-link-count>
    <individual-agg>0</individual-agg>
    <ready-agg>1</ready-agg>
    <aggr-member>
      <rbridge-id>122</rbridge-id>
      <interface-type>tengigabitethernet</interface-type>
      <interface-name>122/5/13</interface-name>
      <actor-port>524410060933</actor-port>
      <sync>1</sync>
    </aggr-member>
  </lacp>
</output>
```

get-port-profile-for-intf

Retrieves the port-profiles applied on ports and port-channels.

Resource URIs

URI	Description
<base_URI>/operational-state/get-port-profile-for-intf	Port-profiles applied on ports and port-channels

Parameters

Name	Description
<i>interface-type</i>	The interface type
<i>interface-name</i>	The interface name
<i>name</i>	Port-profile name

Usage guidelines

Only POST operation is supported.

Examples

URI

http://host:80/rest/operational-state/get-port-profile-for-intf

Request body

```
<get-port-profile-for-intf></get-port-profile-for-intf>
```

Response body

```
<output xmlns='urn:brocade.com:mgmt:brocade-port-profile-ext'>
  <interface>
    <interface-type>tengigabitethernet</interface-type>
    <interface-name>2/0/12</interface-name>
    <port-profile>
      <name>default</name>
    </port-profile>
  </interface>
  <interface>
    <interface-type>tengigabitethernet</interface-type>
    <interface-name>2/0/13</interface-name>
    <port-profile>
      <name>default</name>
    </port-profile>
  </interface>
  <has-more>false</has-more>
</output>
```

If the entire information cannot be retrieved in a single execution as the output is huge or crossed designed length of chunk. In such cases the remaining information can be retrieved as shown in the request body below.

Request body

```
<get-port-profile-for-intf>  
  <last-received-interface-info>  
    <interface-type>tengigabitethernet</interface-type>  
    <interface-name>18/0/50</interface-name>  
  </last-received-interface-info>  
</get-port-profile-for-intf>
```

get-port-profile-status

Retrieves the port-profiles applied on ports and port-channels.

Resource URIs

URI	Description
<base_URI>/operational-state/get-port-profile-status	Retrieves the port-profiles applied on ports and port-channels

Parameters

Name	Description
<i>name</i>	Profile name
<i>ppid</i>	Indicates the ID of the port-profile
<i>is-active</i>	Indicates if this port-profile is activated or not
<i>mac</i>	Indicates the MAC addresses associated with this port-profile
<i>interface-type</i>	Interface type
<i>interface-name</i>	Interface name

Usage guidelines

Only POST operation is supported.

Examples

URI

http://host:80/rest/operational-state/get-port-profile-status

Request body

```
<get-port-profile-status></get-port-profile-status>
```

Response body

```
<output xmlns='urn:brocade.com:mgmt:brocade-port-profile-ext'>
  <port-profile>
    <name>PP1</name>
    <ppid>2</ppid>
    <is-active>true</is-active>
    <has-more>true</has-more>
    <mac-association>
      <mac>00:00:11:11:22:22</mac>
    </mac-association>
    <mac-association>
      <mac>00:00:11:11:22:23</mac>
    </mac-association>
  </port-profile>
</output>
```

get-portchannel-info-by-intf

Displays Link Aggregation Control Protocol (LACP) configuration parameters for an Aggregation Port.

Resource URIs

URI	Description
<base_URI>/operational-state/get-portchannel-info-by-intf	Displays Link Aggregation Control Protocol (LACP) configuration parameters for an Aggregation Port

Parameters

Name	Description
<i>interface-type</i>	The interface type
<i>interface-name</i>	The interface name
<i>actor-port</i>	The actor port number
<i>system-priority</i>	The System Priority
<i>actor-system-id</i>	The Actor system ID
<i>partner-oper-priority</i>	The partner operational priority
<i>partner-system-id</i>	The Partner system ID
<i>actor-priority</i>	The Actor Priority
<i>admin-key</i>	The Admin key
<i>oper-key</i>	The Operational key
<i>receive-machine-state</i>	The state of the 'Receive Machine'
<i>periodic-transmission-machine-state</i>	The state of the 'Periodic Transmission machine'
<i>mux-machine-state</i>	The state of the 'Mux machine'
<i>admin-state</i>	The Admin state
<i>oper-state</i>	The Operational state
<i>partner-oper-state</i>	The Partner Operational state
<i>partner-oper-port</i>	The Partner Operational port
<i>actor-chip-number</i>	The actor chip number
<i>actor-max-deskew</i>	The actor maximum deskew
<i>partner-chip-number</i>	The actor chip number
<i>partner-max-deskew</i>	The partner maximum deskew
<i>actor-brcd-state</i>	Actor BRCD trunk state
<i>partner-brcd-state</i>	Partner BRCD trunk state

Usage guidelines

Only POST operation is supported.

Examples

URI

http://host:80/rest/operational-state/get-portchannel-info-by-intf

Request body

```
<get-portchannel-info-by-intf></get-portchannel-info-by-intf>
```

Response body

```
<output xmlns='urn:brocade.com:mgmt:brocade-lag'>
  <lacp>
    <interface-type>fortygigabitethernet</interface-type>
    <interface-name>122/8/1</interface-name>
    <actor-port>524204122304</actor-port>
    <system-priority>32255</system-priority>
    <actor-system-id>01:e0:52:00:20:00</actor-system-id>
    <partner-oper-priority>1</partner-oper-priority>
    <partner-system-id>00:00:00:00:00:01</partner-system-id>
    <actor-priority>32768</actor-priority>
    <admin-key>40</admin-key>
    <oper-key>40</oper-key>
    <receive-machine-state>current</receive-machine-state>
    <periodic-transmission-machine-state>slow-periodic</periodic-transmission-machine-state>
    <mux-machine-state>collecting-distributing</mux-machine-state>
    <admin-state>activity aggregation defaulted</admin-state>
    <oper-state>activity aggregation synchronization collecting
distributing</oper-state>
    <partner-oper-state>activity aggregation synchronization collecting
distributing</partner-oper-state>
    <partner-oper-port>1</partner-oper-port>
  </lacp>
</output>
```

get-stp-brief-info

Displays spanning tree information.

Resource URIs

URI	Description
<base_URI>/operational-state/get-stp-brief-info	Displays spanning tree information

Parameters

Name	Description
<i>stp-mode</i>	Type of the Spanning Tree Protocol configured on the switch
<i>priority</i>	The Bridge priority
<i>bridge-id</i>	The Bridge ID
<i>hello-time</i>	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)
<i>max-age</i>	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)
<i>forward-delay</i>	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)
<i>interface-type</i>	Interface type
<i>interface-name</i>	Interface name
<i>spanningtree-enabled</i>	Enable spanning tree
<i>if-index</i>	Interface index
<i>interface-id</i>	Interface ID
<i>if-role</i>	Interface role
<i>if-state</i>	Interface state
<i>external-path-cost</i>	Designated external path cost
<i>internal-path-cost</i>	Designated internal path cost
<i>configured-path-cost</i>	Configured path cost
<i>designated-port-id</i>	Designated port ID
<i>port-priority</i>	Port priority
<i>designated-bridge-id</i>	Designated bridge ID
<i>port-hello-time</i>	Port hello time
<i>forward-transitions-count</i>	Number of forward transitions
<i>received-stp-type</i>	Received (rx) stp type
<i>transmitted-stp-type</i>	Transmitted (tx) stp type
<i>edge-port</i>	Edge port mode

Name	Description
<i>auto-edge</i>	Auto edge
<i>admin-edge</i>	Admin edge
<i>edge-delay</i>	Edge delay
<i>configured-root-guard</i>	Configured root guard
<i>oper-root-guard</i>	Operational root guard
<i>boundary-port</i>	Is boundary
<i>oper-bpdu-guard</i>	Operational BPDU guard
<i>oper-bpdu-filter</i>	Operational BPDU filter
<i>link-type</i>	Spanning tree link type
<i>rx-bpdu-count</i>	Received BPDU count
<i>tx-bpdu-count</i>	Transmitted BPDU count

Usage guidelines

Only POST operation is supported.

Examples

URI

`http://host:80/rest/operational-state/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>/operational-state/get-stp-mst-detail	Retrieves RPC to return MSTP details

Parameters

Name	Description
<i>cist-root-id</i>	CIST Root ID
<i>cist-bridge-id</i>	CIST bridge ID
<i>cist-reg-root-id</i>	CIST regional root ID
<i>root-forward-delay</i>	CIST root forward delay
<i>hello-time</i>	CIST root hello time
<i>max-age</i>	CIST root maximum age
<i>max-hops</i>	Hops the BPDU will be valid
<i>migrate-time</i>	Migration time
<i>interface-type</i>	The interface type
<i>interface-name</i>	The interface name
<i>spanningtree-enabled</i>	Is spanning tree enabled
<i>if-index</i>	Interface index
<i>interface-id</i>	Interface ID
<i>if-role</i>	Interface role
<i>if-state</i>	Interface state
<i>internal-path-cost</i>	Designated internal path cost
<i>external-path-cost</i>	Designated external path cost
<i>configured-path-cost</i>	Configured path cost
<i>designated-port-id</i>	Designated port ID
<i>port-priority</i>	Port priority
<i>designated-bridge-id</i>	Designated bridge ID
<i>forward-transitions-count</i>	Number of forward transitions
<i>port-hello-time</i>	Port hello time
<i>received-stp-type</i>	Received (rx) stp type
<i>transmitted-stp-type</i>	Transmitted (tx) stp type
<i>edge-port</i>	Edge Port mode

Name	Description
<i>auto-edge</i>	Auto Edge
<i>edge-delay</i>	Edge delay
<i>admin-edge</i>	Admin Edge
<i>boundary-port</i>	Is boundary
<i>configured-root-guard</i>	Configured root guard
<i>oper-root-guard</i>	Operational root guard
<i>oper-bpdu-guard</i>	Operational BPDU guard
<i>oper-bpdu-filter</i>	Operational BPDU filter
<i>link-type</i>	Point-to-point - enable rapid transition
<i>rx-bpdu-count</i>	Received BPDU count
<i>tx-bpdu-count</i>	Transmitted BPDU count
<i>instance-id</i>	Instance ID of the last received spanning-tree instance
<i>msti-root-id</i>	MSTI Root ID
<i>msti-bridge-id</i>	MSTI bridge ID
<i>msti-bridge-priority</i>	MSTI bridge priority
<i>vlan-id</i>	VLAN ID

Usage guidelines

Only POST operation is supported.

Examples

URI

`http://host:80/rest/operational-state/get-stp-mst-detail`

Request body

```
<get-stp-mst-detail></get-stp-mst-detail>
```

Response body

```
<output xmlns='urn:brocade.com:mgmt:brocade-xstp-ext'>
  <cist>
    <cist-root-id>8000.01e0.5200.05bf</cist-root-id>
    <cist-bridge-id>8000.01e0.5200.05bf</cist-bridge-id>
    <cist-reg-root-id>8000.01e0.5200.05bf</cist-reg-root-id>
    <root-forward-delay>15</root-forward-delay>
    <hello-time>2</hello-time>
    <max-age>20</max-age>
    <max-hops>20</max-hops>
    <migrate-time>3</migrate-time>
    <port>
      <interface-type>tengigabitethernet</interface-type>
      <interface-name>2/0/12</interface-name>
      <spanningtree-enabled>>false</spanningtree-enabled>
      <if-index>403046411</if-index>
    </port>
  </cist>
</output>
```

```

<interface-id>32768</interface-id>
<if-role>disabled</if-role>
<if-state>forwarding</if-state>
<internal-path-cost>0</internal-path-cost>
<external-path-cost>0</external-path-cost>
<configured-path-cost>20000000</configured-path-cost>
<designated-port-id>0</designated-port-id>
<port-priority>128</port-priority>
<designated-bridge-id>0000.0000.0000.0000</designated-bridge-id>
<forward-transitions-count>0</forward-transitions-count>
<port-hello-time>2</port-hello-time>
<received-stp-type>none</received-stp-type>
<transmitted-stp-type>mstp</transmitted-stp-type>
<edge-port>off</edge-port>
<auto-edge>no</auto-edge>
<edge-delay>3</edge-delay>
<admin-edge>no</admin-edge>
<boundary-port>yes</boundary-port>
<configured-root-guard>off</configured-root-guard>
<oper-root-guard>off</oper-root-guard>
<oper-bpdu-guard>off</oper-bpdu-guard>
<oper-bpdu-filter>off</oper-bpdu-filter>
<link-type>point-to-point</link-type>
<rx-bpdu-count>0</rx-bpdu-count>
<tx-bpdu-count>0</tx-bpdu-count>
</port>
</cist>
<msti>
  <instance-id>1</instance-id>
  <msti-root-id>8001.01e0.5200.05bf</msti-root-id>
  <msti-bridge-id>8001.01e0.5200.05bf</msti-bridge-id>
  <msti-bridge-priority>32769</msti-bridge-priority>
  <port>
    <interface-type>tengigabitethernet</interface-type>
    <interface-name>2/0/12</interface-name>
    <spanningtree-enabled>>false</spanningtree-enabled>
    <if-index>403046411</if-index>
    <interface-id>32768</interface-id>
    <if-role>disabled</if-role>
    <if-state>forwarding</if-state>
    <internal-path-cost>0</internal-path-cost>
    <configured-path-cost>20000000</configured-path-cost>
    <designated-port-id>0</designated-port-id>
    <port-priority>128</port-priority>
    <designated-bridge-id>0000.0000.0000.0000</designated-bridge-id>
    <forward-transitions-count>0</forward-transitions-count>
    <received-stp-type>none</received-stp-type>
    <transmitted-stp-type>mstp</transmitted-stp-type>
    <edge-port>off</edge-port>
    <auto-edge>no</auto-edge>
    <edge-delay>3</edge-delay>
    <admin-edge>no</admin-edge>
    <boundary-port>yes</boundary-port>
    <rx-bpdu-count>0</rx-bpdu-count>
    <tx-bpdu-count>0</tx-bpdu-count>
  </port>
</msti>
<has-more>>false</has-more>
</output>

```

get-system-uptime

Retrieves the time since this managed entity was last re-initialized.

Resource URIs

URI	Description
<base_URI>/operational-state/get-system-uptime	Retrieves the time since this managed entity was last re-initialized

Parameters

Name	Description
<i>rbridge-id</i>	The RBridge ID
<i>days</i>	The number of days the managed node is up since its last re-initialization
<i>hours</i>	The number of hours the managed node is up since its last re-initialization
<i>minutes</i>	The number of minutes the managed node is up since its last re-initialization
<i>seconds</i>	The number of seconds the managed node is up since its last re-initialization

Usage guidelines

Only POST operation is supported.

Examples

URI

http://host:80/rest/operational-state/get-system-uptime

Request body

```
<get-system-uptime></get-system-uptime>
```

Response body

```
<output xmlns='urn:brocade.com:mgmt:brocade-system'>
  <show-system-uptime>
    <rbridge-id>1</rbridge-id>
    <days>0</days>
    <hours>5</hours>
    <minutes>53</minutes>
    <seconds>4</seconds>
  </show-system-uptime>
</output>
```

get-vcs-details

Retrieves the VCS Fabric configuration information.

Resource URIs

URI	Description
<base_URI>/operational-state/get-vcs-details	Retrieves the VCS Fabric configuration information

Parameters

Name	Description
<i>node-vcs-mode</i>	Node's VCS mode
<i>local-switch-wwn</i>	WWN of local switch
<i>node-vcs-type</i>	VCS types
<i>node-vcs-id</i>	VCS ID
<i>principal-switch-wwn</i>	WWN of the principal switch
<i>co-ordinator-wwn</i>	WWN of the coordinator switch

Usage guidelines

Only POST operation is supported.

Examples

URI

`http://host:80/rest/operational-state/get-vcs-details`

Request body

`<get-vcs-details></get-vcs-details>`

Response body

```
<output xmlns='urn:brocade.com:mgmt:brocade-vcs'>
  <vcs-details>
    <node-vcs-mode>true</node-vcs-mode>
    <local-switch-wwn>10:00:00:27:F8:54:4F:98</local-switch-wwn>
    <node-vcs-type>vcs-management-cluster</node-vcs-type>
    <node-vcs-id>1</node-vcs-id>
    <principal-switch-wwn>10:00:00:27:F8:54:4F:98</principal-switch-wwn>
    <co-ordinator-wwn>10:00:00:27:F8:54:4F:98</co-ordinator-wwn>
  </vcs-details>
</output>
```

get-vlan-brief

Retrieves the operational data for a given VLAN and enumeration of all the interfaces belonging to the VLAN.

Resource URIs

URI	Description
<base_URI>/operational-state/get-vlan-brief	Retrieves the operational data for a given VLAN and enumeration of all the interfaces belonging to the VLAN

Parameters

Name	Description
<i>vlan-id</i>	The VLAN ID
<i>vlan-type</i>	The VLAN type
<i>vlan-name</i>	The administrative name of the VLAN
<i>vlan-state</i>	The operational state of the VLAN
<i>interface-type</i>	The interface type
<i>interface-name</i>	The interface name
<i>tag</i>	The state of the interface - untagged, tagged, or converged
<i>classification-type</i>	Type of classification
<i>classification-value</i>	Value of the VLAN classification
<i>last-vlan-id</i>	The last VLAN record that has been fetched

Usage guidelines

Only POST operation is supported.

Examples

URI

```
http://host:80/rest/operational-state/get-vlan-brief
```

Request body

```
<get-vlan-brief></get-vlan-brief>
```

Response body

```
<output xmlns='urn:brocade.com:mgmt:brocade-interface-ext'>
  <vlan>
    <vlan-id>1</vlan-id>
    <vlan-type>static</vlan-type>
    <vlan-name>default</vlan-name>
    <vlan-state>active</vlan-state>
    <interface>
      <interface-type>port-channel</interface-type>
```

```
    <interface-name>6</interface-name>  
    <tag>tagged</tag>  
  </interface>  
</output>
```

get-vmpolicy-macaddr

Shows vnics/vmknics to port group to port-profile association.

Resource URIs

URI	Description
<base_URI>/operational-state/get-vmpolicy-macaddr	Shows vnics/vmknics to port group to port-profile association

Parameters

Name	Description
mac	MAC address in HH:HH:HH:HH:HH:HH format
datacenter	Name of the datacenter
dvpgrp-nn	Distributed virtual port group
port-prof	Port-profile

Usage guidelines

Only POST operation is supported.

Examples

URI

http://host:80/rest/operational-state/get-vmpolicy-macaddr

Request body

```
<get-vmpolicy-macaddr>
  <vcenter>VC6</vcenter>
</get-vmpolicy-macaddr>
```

Response body

```
<output xmlns="urn:brocade.com:mgmt:brocade-vswitch">
  <vmpolicy-macaddr>
    <mac>00:21:5e:c6:0e:c8</mac>
    <datacenter>datacenter-4381</datacenter>
    <dvpgrp-nn>Management Network</dvpgrp-nn>
    <port-prof>auto_VC6_datacenter-4381_Management+Network</port-prof>
  </vmpolicy-macaddr>
  <vmpolicy-macaddr>
    <mac>00:50:56:aa:02:ee</mac>
    <datacenter>datacenter-4381</datacenter>
    <name>VM40</name>
    <dvpgrp-nn>pg3</dvpgrp-nn>
    <port-prof>auto_VC6_datacenter-4381_pg3</port-prof>
  </vmpolicy-macaddr>
  <vmpolicy-macaddr>
    <mac>00:50:56:aa:2d:36</mac>
    <datacenter>datacenter-2</datacenter>
```



```
<name>VM10</name>
<dvpg-nn>VM Network</dvpg-nn>
<port-prof>auto_VC6_datacenter-2_VM+Network</port-prof>
</vmpolicy-macaddr>
<vmpolicy-macaddr>
  <mac>00:50:56:aa:3b:d7</mac>
  <datacenter>datacenter-4381</datacenter>
  <name>VM_Temp</name>
  <dvpg-nn>vlan-castor-19</dvpg-nn>
</vmpolicy-macaddr>
<vmpolicy-macaddr>
  <mac>00:50:56:b3:2d:ee</mac>
  <datacenter>datacenter-2</datacenter>
  <name>KVM_Hyperv_103_castor_castor-t</name>
</vmpolicy-macaddr>
<vmpolicy-macaddr>
  <mac>00:50:56:b3:43:74</mac>
  <datacenter>datacenter-2</datacenter>
  <name>KVM_Hyperv_105_castort_castor</name>
</vmpolicy-macaddr>
<vmpolicy-macaddr>
  <mac>e4:1f:13:31:cb:88</mac>
  <datacenter>datacenter-2</datacenter>
  <dvpg-nn>Management Network</dvpg-nn>
  <port-prof>auto_VC6_datacenter-2_Management+Network</port-prof>
</vmpolicy-macaddr>
<vmpolicy-macaddr>
  <mac>e4:1f:13:31:d3:f4</mac>
  <datacenter>datacenter-2</datacenter>
  <dvpg-nn>Management Network</dvpg-nn>
  <port-prof>auto_VC6_datacenter-2_Management+Network</port-prof>
</vmpolicy-macaddr>
</output>
```

get-vnetwork-dvpgs

Shows discovered distributed virtual port groups.

Resource URIs

URI	Description
<base_URI>/operational-state/get-vnetwork-dvpgs	Shows discovered distributed virtual port groups

Parameters

Name	Description
<i>name</i>	Port group name
<i>datacenter</i>	Datacenter name
<i>dvs-nn</i>	Distributed virtual switch
<i>vlan</i>	Allowed VLANs

Usage guidelines

Only POST operation is supported.

Examples

URI

```
http://host:80/rest/operational-state/get-vnetwork-dvpgs
```

Request body

```
<get-vnetwork-dvpgs>
  <vcenter>VC6</vcenter>
</get-vnetwork-dvpgs>
```

Response body

```
<output xmlns='urn:brocade.com:mgmt:brocade-vswitch'>
  <vnetwork-dvpgs>
    <name>dvPortGroup</name>
    <datacenter>datacenter-2</datacenter>
    <dvs-nn>dvSwitch</dvs-nn>
    <vlan>0,</vlan>
  </vnetwork-dvpgs>
  <vnetwork-dvpgs>
    <name>dvSwitch-DVUplinks-4504</name>
    <datacenter>datacenter-2</datacenter>
    <dvs-nn>dvSwitch</dvs-nn>
    <vlan>0-4094,</vlan>
  </vnetwork-dvpgs>
</output>
```

get-vnetwork-dvs

Shows discovered Distributed Virtual Switches.

Resource URIs

URI	Description
<base_URI>/operational-state/get-vnetwork-dvs	Shows discovered Distributed Virtual Switches

Parameters

Name	Description
<i>name</i>	Distributed virtual switch name
<i>datacenter</i>	Host datacenter
<i>host</i>	Host name
<i>pnic</i>	Host NIC
<i>interface-type</i>	The interface type
<i>interface-name</i>	The interface name

Usage guidelines

Only POST operation is supported.

Examples

URI

`http://host:80/rest/operational-state/get-vnetwork-dvs`

Request body

```
<get-vnetwork-dvs>
  <vcenter>VC6</vcenter>
</get-vnetwork-dvs>
```

Response body

```
<output xmlns='urn:brocade.com:mgmt:brocade-vswitch'>
  <vnetwork-dvs>
    <name>dvSwitch</name>
    <datacenter>datacenter-2</datacenter>
    <host>ESX5-1-74.englab.brocade.com</host>
    <pnic>vmnic4</pnic>
    <interface-type>unknown</interface-type>
    <interface-name></interface-name>
  </vnetwork-dvs>
  <vnetwork-dvs>
    <name>dvSwitch</name>
    <datacenter>datacenter-2</datacenter>
    <host>ESX5-1-74.englab.brocade.com</host>
    <pnic>vmnic5</pnic>
    <interface-type>unknown</interface-type>
```

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```
    <interface-name></interface-name>
  </vnetwork-dvs>
<vnetwork-dvs>
  <name>dvSwitch</name>
  <datacenter>datacenter-2</datacenter>
  <host>ESX5-1-74.englab.brocade.com</host>
  <pnict>vmnic8</pnict>
  <interface-type>unknown</interface-type>
  <interface-name></interface-name>
</vnetwork-dvs>
<vnetwork-dvs>
  <name>dvSwitch</name>
  <datacenter>datacenter-2</datacenter>
  <host>ESX5-1-74.englab.brocade.com</host>
  <pnict>vmnic9</pnict>
  <interface-type>unknown</interface-type>
  <interface-name></interface-name>
</vnetwork-dvs>
<instance-id>0</instance-id>
<has-more>>false</has-more>
</output>
```

get-vnetwork-hosts

Shows discovered hosts.

Resource URIs

URI	Description
<base_URI>/operational-state/get-vnetwork-hosts	Shows discovered hosts

Parameters

Name	Description
<i>name</i>	Host name
<i>datacenter</i>	Host datacenter
<i>vmnic</i>	Host NIC
<i>mac</i>	Vmnic MAC address in HH:HH:HH:HH:HH:HH format
<i>vswitch</i>	Regular or distributed virtual switch
<i>interface-type</i>	The interface type
<i>interface-name</i>	The interface name

Usage guidelines

Only POST operation is supported.

Examples

URI

```
http://host:80/rest/operational-state/get-vnetwork-hosts
```

Request body

```
<get-vnetwork-hosts>
  <vcenter>VC6</vcenter>
</get-vnetwork-hosts>
```

Response body

```
<output xmlns='urn:brocade.com:mgmt:brocade-vswitch'>
  <vnetwork-hosts>
    <name>ESX5-0-72.englab.brocade.com</name>
    <datacenter>datacenter-2</datacenter>
    <vmnic>vmnic0</vmnic>
    <mac>e4:1f:13:31:d3:f4</mac>
    <vswitch>vSwitch0</vswitch>
    <interface-type>unknown</interface-type>
    <interface-name></interface-name>
  </vnetwork-hosts>
  <vnetwork-hosts>
    <name>ESX5-0-72.englab.brocade.com</name>
    <datacenter>datacenter-2</datacenter>
```

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```
<vmnic>vmnic1</vmnic>
<mac>e4:1f:13:31:d3:f6</mac>
<interface-type>unknown</interface-type>
<interface-name></interface-name>
</vnetwork-hosts>
<vnetwork-hosts>
  <name>ESX5-0-72.englab.brocade.com</name>
  <datacenter>datacenter-2</datacenter>
  <vmnic>vmnic2</vmnic>
  <mac>00:1b:21:90:67:b4</mac>
  <vswitch>vSwitch1</vswitch>
  <interface-type>unknown</interface-type>
  <interface-name></interface-name>
</vnetwork-hosts>
<vnetwork-hosts>
  <name>ESX5-0-72.englab.brocade.com</name>
  <datacenter>datacenter-2</datacenter>
  <vmnic>vmnic4</vmnic>
  <mac>00:1b:21:90:67:b6</mac>
  <interface-type>unknown</interface-type>
  <interface-name></interface-name>
</vnetwork-hosts>
<vnetwork-hosts>
  <name>ESX5-0-72.englab.brocade.com</name>
  <datacenter>datacenter-2</datacenter>
  <vmnic>vusb0</vmnic>
  <mac>e6:1f:13:2b:23:f7</mac>
  <interface-type>unknown</interface-type>
  <interface-name></interface-name>
</vnetwork-hosts>
<vnetwork-hosts>
  <name>ESX5-1-74.englab.brocade.com</name>
  <datacenter>datacenter-2</datacenter>
  <vmnic>vmnic0</vmnic>
  <mac>00:21:5e:c6:b6:ec</mac>
  <vswitch>vSwitch0</vswitch>
  <interface-type>unknown</interface-type>
  <interface-name></interface-name>
</vnetwork-hosts>
<vnetwork-hosts>
  <name>ESX5-1-74.englab.brocade.com</name>
  <datacenter>datacenter-2</datacenter>
  <vmnic>vmnic13</vmnic>
  <mac>00:1b:21:90:70:2d</mac>
  <vswitch>vSwitch1</vswitch>
  <interface-type>unknown</interface-type>
  <interface-name></interface-name>
</vnetwork-hosts>
<vnetwork-hosts>
  <name>esx5-0-70.englab.brocade.com</name>
  <datacenter>datacenter-2</datacenter>
  <vmnic>vusb0</vmnic>
  <mac>e6:1f:13:2b:1b:8b</mac>
  <interface-type>unknown</interface-type>
  <interface-name></interface-name>
</vnetwork-hosts>
<instance-id>0</instance-id>
<has-more>false</has-more>
</output>
```

get-vnetwork-portgroups

Shows discovered Port groups.

Resource URIs

URI	Description
<base_URI>/operational-state/get-vnetwork-portgroups	Shows discovered Port groups

Parameters

Name	Description
<i>name</i>	Host name
<i>datacenter</i>	Host datacenter
<i>vlan</i>	Allowed VLANs
<i>host-nn</i>	Host name

Usage guidelines

Only POST operation is supported.

Examples

URI

`http://host:80/rest/operational-state/get-vnetwork-portgroups`

Request body

```
<get-vnetwork-portgroups>
  <vcenter>VC6</vcenter>
</get-vnetwork-portgroup>
```

Response body

```
<output xmlns='urn:brocade.com:mgmt:brocade-vswitch'>
  <vnetwork-pgs>
    <name>Management Network</name>
    <datacenter>datacenter-2</datacenter>
    <vlan>0</vlan>
    <host-nn>ESX5-0-72.englab.brocade.com</host-nn>
  </vnetwork-pgs>
  <vnetwork-pgs>
    <name>PG-1001</name>
    <datacenter>datacenter-2</datacenter>
    <vlan>100</vlan>
    <host-nn>esx5-0-70.englab.brocade.com</host-nn>
  </vnetwork-pgs>
  <vnetwork-pgs>
    <name>VM Network</name>
    <datacenter>datacenter-2</datacenter>
    <vlan>0</vlan>
    <host-nn>ESX5-0-72.englab.brocade.com</host-nn>
```

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```
</vnetwork-pgs>
<vnetwork-pgs>
  <name>VM Network</name>
  <datacenter>datacenter-2</datacenter>
  <vlan>0</vlan>
  <host-nn>ESX5-1-74.englab.brocade.com</host-nn>
</vnetwork-pgs>
<vnetwork-pgs>
  <name>VM Network</name>
  <datacenter>datacenter-2</datacenter>
  <vlan>0</vlan>
  <host-nn>esx5-0-70.englab.brocade.com</host-nn>
</vnetwork-pgs>
<vnetwork-pgs>
  <name>VM Network</name>
  <datacenter>datacenter-4381</datacenter>
  <vlan>0</vlan>
  <host-nn>ESX5-1-75.englab.brocade.com</host-nn>
</vnetwork-pgs>
<vnetwork-pgs>
  <name>VM Network</name>
  <datacenter>datacenter-4381</datacenter>
  <vlan>0</vlan>
  <host-nn>ESXi5-0-71.englab.brocade.com</host-nn>
</vnetwork-pgs>
<vnetwork-pgs>
  <name>VM Network 2</name>
  <datacenter>datacenter-2</datacenter>
  <vlan>0</vlan>
  <host-nn>ESX5-0-72.englab.brocade.com</host-nn>
</vnetwork-pgs>
<vnetwork-pgs>
  <name>VM Network 2</name>
  <datacenter>datacenter-2</datacenter>
  <vlan>0</vlan>
  <host-nn>ESX5-1-74.englab.brocade.com</host-nn>
</vnetwork-pgs>
<vnetwork-pgs>
  <name>VM Network 2</name>
  <datacenter>datacenter-2</datacenter>
  <vlan>4095</vlan>
  <host-nn>esx5-0-70.englab.brocade.com</host-nn>
</vnetwork-pgs>
<vnetwork-pgs>
  <name>pg4</name>
  <datacenter>datacenter-4381</datacenter>
  <vlan>100</vlan>
  <host-nn>ESX5-1-75.englab.brocade.com</host-nn>
</vnetwork-pgs>
<instance-id>0</instance-id>
<has-more>>false</has-more>
</output>
```


get-vnetwork-vms

Shows discovered VMs.

Resource URIs

URI	Description
<base_URI>/operational-state/get-vnetwork-vms	Shows discovered VMs

Parameters

Name	Description
<i>name</i>	Host name
<i>datacenter</i>	Host datacenter
<i>mac</i>	MAC address
<i>host-nn</i>	Host name

Usage guidelines

Only POST operation is supported.

Examples

URI

```
http://host:80/rest/operational-state/get-vnetwork-vms
```

Request body

```
<get-vnetwork-vms>
  <vcenter>VC6</vcenter>
</get-vnetwork-vms>
```

Response body

```
<output xmlns='urn:brocade.com:mgmt:brocade-vswitch'>
  <vnetwork-vms>
    <name>KVM_Hyperv_101_castor_castor</name>
    <datacenter>datacenter-2</datacenter>
    <mac>00:50:56:b3:5e:25</mac>
    <host-nn>ESX5-1-74.englab.brocade.com</host-nn>
  </vnetwork-vms>
  <vnetwork-vms>
    <name>KVM_Hyperv_101_castor_castor</name>
    <datacenter>datacenter-2</datacenter>
    <mac>00:50:56:b3:6b:19</mac>
    <host-nn>ESX5-1-74.englab.brocade.com</host-nn>
  </vnetwork-vms>
  <vnetwork-vms>
    <name>KVM_Hyperv_102_castor_nexus</name>
    <datacenter>datacenter-2</datacenter>
    <mac>00:50:56:b3:37:c6</mac>
    <host-nn>ESX5-1-74.englab.brocade.com</host-nn>
  </vnetwork-vms>
```

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```
</vnetwork-vms>
<vnetwork-vms>
  <name>KVM_Hyperv_102_castor_nexus</name>
  <datacenter>datacenter-2</datacenter>
  <mac>00:50:56:b3:78:fb</mac>
  <host-nn>ESX5-1-74.englab.brocade.com</host-nn>
</vnetwork-vms>
<vnetwork-vms>
  <name>KVM_Hyperv_103_castor_castor-t</name>
  <datacenter>datacenter-2</datacenter>
  <mac>00:50:56:b3:69:ca</mac>
  <host-nn>ESX5-1-74.englab.brocade.com</host-nn>
</vnetwork-vms>
<vnetwork-vms>
  <name>KVM_Hyperv_106_castort_nexus</name>
  <datacenter>datacenter-2</datacenter>
  <mac>00:50:56:b3:76:ce</mac>
  <host-nn>ESX5-1-74.englab.brocade.com</host-nn>
</vnetwork-vms>
<vnetwork-vms>
  <name>KVM_Hyperv_107_castort_castor-t</name>
  <datacenter>datacenter-2</datacenter>
  <mac>00:50:56:b3:39:f4</mac>
  <host-nn>ESX5-1-74.englab.brocade.com</host-nn>
</vnetwork-vms>
<vnetwork-vms>
  <name>KVM_Hyperv_107_castort_castor-t</name>
  <datacenter>datacenter-2</datacenter>
  <mac>00:50:56:b3:68:a3</mac>
  <host-nn>ESX5-1-74.englab.brocade.com</host-nn>
</vnetwork-vms>
<vnetwork-vms>
  <name>KVM_Hyperv_108_castort_callisto</name>
  <datacenter>datacenter-2</datacenter>
  <mac>00:50:56:b3:6e:22</mac>
  <host-nn>ESX5-1-74.englab.brocade.com</host-nn>
</vnetwork-vms>
<vnetwork-vms>
  <name>Vm_test_clone1</name>
  <datacenter>datacenter-4381</datacenter>
  <mac>00:50:56:aa:43:33</mac>
  <host-nn>ESX5-1-75.englab.brocade.com</host-nn>
</vnetwork-vms>
<vnetwork-vms>
  <name>centos-don-script</name>
  <datacenter>datacenter-2</datacenter>
  <mac>00:50:56:8d:3c:a6</mac>
  <ip>255.255.255.255</ip>
  <host-nn>ESX5-1-74.englab.brocade.com</host-nn>
</vnetwork-vms>
<vnetwork-vms>
  <name>centos-don-script</name>
  <datacenter>datacenter-2</datacenter>
  <mac>00:50:56:8d:44:0d</mac>
  <ip>255.255.255.255</ip>
  <host-nn>ESX5-1-74.englab.brocade.com</host-nn>
</vnetwork-vms>
<instance-id>0</instance-id>
<has-more>>false</has-more>
</output>
```

get-vnetwork-vswitches

Shows discovered Virtual Switches.

Resource URIs

URI	Description
<base_URI>/operational-state/get-vnetwork-vswitches	Shows discovered Virtual Switches

Parameters

Name	Description
<i>name</i>	Virtual switch name
<i>datacenter</i>	Host datacenter
<i>host</i>	Host name
<i>pnic</i>	Host NIC
<i>interface-type</i>	The interface type
<i>interface-name</i>	The interface name

Usage guidelines

Only POST operation is supported.

Examples

URI

`http://host:80/rest/operational-state/get-vnetwork-vswitches`

Request body

```
<get-vnetwork-vswitches>
  <vcenter>VC6</vcenter>
</get-vnetwork-vswitches>
```

Response body

```
<output xmlns='urn:brocade.com:mgmt:brocade-vswitch'>
  <vnetwork-vswitches>
    <name>vSwitch0</name>
    <datacenter>datacenter-2</datacenter>
    <host>ESX5-0-72.englab.brocade.com</host>
    <pnic>vmnic0</pnic>
    <interface-type>unknown</interface-type>
    <interface-name></interface-name>
  </vnetwork-vswitches>
  <vnetwork-vswitches>
    <name>vSwitch0</name>
    <datacenter>datacenter-2</datacenter>
    <host>ESX5-1-74.englab.brocade.com</host>
    <pnic>vmnic0</pnic>
    <interface-type>unknown</interface-type>
```

```

    <interface-name></interface-name>
  </vnetwork-vswitches>
</vnetwork-vswitches>
  <name>vSwitch2</name>
  <datacenter>datacenter-2</datacenter>
  <host>esx5-0-70.englab.brocade.com</host>
  <pnictype>vmnic1</pnictype>
  <interface-type>unknown</interface-type>
  <interface-name></interface-name>
</vnetwork-vswitches>
</vnetwork-vswitches>
  <name>vSwitch3</name>
  <datacenter>datacenter-4381</datacenter>
  <host>ESX5-1-75.englab.brocade.com</host>
  <pnictype>vmnic4</pnictype>
  <interface-type>unknown</interface-type>
  <interface-name></interface-name>
</vnetwork-vswitches>
</vnetwork-vswitches>
  <name>vSwitch4</name>
  <datacenter>datacenter-4381</datacenter>
  <host>ESX5-1-75.englab.brocade.com</host>
  <pnictype>vmnic5</pnictype>
  <interface-type>unknown</interface-type>
  <interface-name></interface-name>
</vnetwork-vswitches>
</vnetwork-vswitches>
  <name>vSwitch4</name>
  <datacenter>datacenter-4381</datacenter>
  <host>ESX5-1-75.englab.brocade.com</host>
  <pnictype>vmnic6</pnictype>
  <interface-type>unknown</interface-type>
  <interface-name></interface-name>
</vnetwork-vswitches>
</vnetwork-vswitches>
  <name>vSwitch4</name>
  <datacenter>datacenter-4381</datacenter>
  <host>ESX5-1-75.englab.brocade.com</host>
  <pnictype>vmnic7</pnictype>
  <interface-type>unknown</interface-type>
  <interface-name></interface-name>
</vnetwork-vswitches>
</vnetwork-vswitches>
  <name>vSwitch4</name>
  <datacenter>datacenter-4381</datacenter>
  <host>ESX5-1-75.englab.brocade.com</host>
  <pnictype>vmnic8</pnictype>
  <interface-type>unknown</interface-type>
  <interface-name></interface-name>
</vnetwork-vswitches>
<instance-id>0</instance-id>
<has-more>false</has-more>
</output>

```

I2traceroute

Traces a TRILL route from a host source MAC address to a destination MAC address.

Resource URIs

URI	Description
<base_URI>/operational-state/l2traceroute	Trace a TRILL route from the provided host-source-mac to host-dest-mac

Parameters

Name	Description
session-id	Session ID given to client. Use in API l2traceroute-result to check the result of this operation
reason	Reason for this return

Usage guidelines

Only POST operation is supported.

Examples

URI

```
http://host:80/rest/operational-state/l2traceroute
```

Request body

```
<l2traceroute>
<src-mac>0000.0000.0200</src-mac>
  <dest-mac>0000.0000.0201</dest-mac>
  <vlan-id>1</vlan-id>
  <rbridge-id>7</rbridge-id>
</l2traceroute>
```

Response body

```
<output xmlns='urn:brocade.com:mgmt:brocade-trilloam'>
  <session-id>458756</session-id>
  <reason>SUCCESS</reason>
</output>
```

l2traceroute-result

Returns the result of a TRILL traceroute.

Resource URIs

URI	Description
<base_URI>/operational-state/l2traceroute-result	l2traceroute command result

Parameters

Name	Description
session-id	Session ID previously given by client to identify this session

Usage guidelines

Only POST operation is supported.

Examples

URI

http://host:80/rest/operational-state/l2traceroute-result

Request body

```
<l2traceroute-result>  
  <session-id>458756</session-id>  
</l2traceroute-result>
```

Response body

None

logical-chassis-fwdl-sanity

Retrieves firmware download sanity check status.

Resource URIs

URI	Description
<base_URI>/operational-state/logical-chassis-fwdl-sanity	Retrieves firmware download sanity check status.

Parameters

Name	Description
<i>rbridge-id</i>	The RBridge ID
<i>fwdl-status</i>	Firmware download status
<i>fwdl-msg</i>	Firmware download message
<i>fwdl-cmd-status</i>	Firmware download command status
<i>fwdl-cmd-msg</i>	Firmware download command message

Usage guidelines

Only POST operation is supported.

Examples

URI

`http://host:80/rest/operational-state/logical-chassis-fwdl-sanity`

Request body

```
<logical-chassis-fwdl-sanity>
  <user>user1</user>
  <password>user1</password>
  <host>192.168.10.2</host>
  <directory>/import/builds/sanity_bld_02</directory>
  <file>release.plist</file>
  <rbridge-id>2</rbridge-id>
  <auto-activate/>
  <protocol>scp</protocol>
</logical-chassis-fwdl-sanity>
```

Response body

```
<output xmlns='urn:brocade.com:mgmt:brocade-firmware'>
  <cluster-output>
    <rbridge-id>2</rbridge-id>
    <fwdl-status>1</fwdl-status>
    <fwdl-msg>ISSU protocol, non-disruptive.</fwdl-msg>
  </cluster-output>
  <fwdl-cmd-status>0</fwdl-cmd-status>
  <fwdl-cmd-msg>Firmware download sanity check completed
  successfully</fwdl-cmd-msg>
</output>
```

logical-chassis-fwdl-status

Retrieves firmware activation status.

Resource URIs

URI	Description
<base_URI>/operational-state/logical-chassis-fwdl-status	Retrieves firmware activation status

Parameters

Name	Description
<i>rbridge-id</i>	RBridge ID in the cluster
<i>fwdl-state</i>	Firmware download state
<i>index</i>	Index
<i>message-id</i>	Firmware download message ID
<i>date-and-time-info</i>	Firmware download date and time
<i>message</i>	Firmware download message

Usage guidelines

Only POST operation is supported.

Examples

URI

`http://host:80/rest/operational-state/logical-chassis-fwdl-status`

Request body

```
<logical-chassis-fwdl-status></logical-chassis-fwdl-status>
```

Response body

```
<output xmlns='urn:brocade.com:mgmt:brocade-firmware'>
  <overall-status>0</overall-status>
  <cluster-fwdl-entries>
    <rbridge-id>54</rbridge-id>
    <fwdl-state>completed</fwdl-state>
    <fwdl-entries>
      <index>1</index>
      <message-id>0</message-id>
      <date-and-time-info>2014-07-04/23:52:39</date-and-time-info>
      <message>Firmware install begins.</message>
      <blade-name>SW/0</blade-name>
    </fwdl-entries>
    <fwdl-entries>
      <index>2</index>
      <message-id>0</message-id>
      <date-and-time-info>2014-07-04/23:55:33</date-and-time-info>
      <message>Firmware install ends.</message>
```



```
    <blade-name>SW/0</blade-name>
  </fwdl-entries>
</cluster-fwdl-entries>
<cluster-fwdl-entries>
  <rbridge-id>125</rbridge-id>
  <fwdl-state>completed</fwdl-state>
  <fwdl-entries>
    <index>1</index>
    <message-id>0</message-id>
    <date-and-time-info>2014-07-04/23:56:32</date-and-time-info>
    <message>Firmware install begins.</message>
    <blade-name>M2</blade-name>
  </fwdl-entries>
  <fwdl-entries>
    <index>2</index>
    <message-id>0</message-id>
    <date-and-time-info>2014-07-05/00:00:36</date-and-time-info>
    <message>Firmware install ends.</message>
    <blade-name>M2</blade-name>
  </fwdl-entries>
</cluster-fwdl-entries>
<cluster-fwdl-entries>
  <rbridge-id>55</rbridge-id>
  <fwdl-state>completed</fwdl-state>
  <fwdl-entries>
    <index>1</index>
    <message-id>0</message-id>
    <date-and-time-info>2014-07-04/23:52:08</date-and-time-info>
    <message>Firmware install begins.</message>
    <blade-name>SW/0</blade-name>
  </fwdl-entries>
  <fwdl-entries>
    <index>2</index>
    <message-id>0</message-id>
    <date-and-time-info>2014-07-04/23:55:10</date-and-time-info>
    <message>Firmware install ends.</message>
    <blade-name>SW/0</blade-name>
  </fwdl-entries>
</cluster-fwdl-entries>
</output>
```

no-vcs-rbridge-context

Disables VCS Fabric mode.

Resource URIs

URI	Description
<base_URI>/operational-state/no-vcs-rbridge-context	Disables VCS Fabric mode

Parameters

None

Usage guidelines

Only POST operation is supported.

Examples

URI

`http://host:80/rest/operational-state/no-vcs-rbridge-context`

Request body

`<no-vcs-rbridge-context></no-vcs-rbridge-context>`

Response body

None

set-http-application-url

Updates the HTTP application URL.

Resource URIs

URI	Description
<base_URI>/operational-state/set-http-application-url	Update HTTP application URL

Parameters

Name	Description
status-code	<ul style="list-style-type: none"> • URL updated successfully - 0 • Error not able to update configuration - 1 • Error not able to remove configuration - 2
status-string	Error in string format

Usage guidelines

Only POST operation is supported.

Examples

URI

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

Retrieves the current time for the cluster or specified switch.

Resource URIs

URI	Description
<base_URI>/operational-state/show-clock	Retrieves current time for the cluster or specified switch

Parameters

Name	Description
<i>rbridge-id-out</i>	The RBridge ID
<i>current-time</i>	Switch date and time
<i>timezone</i>	Region/city or region/state/city

Usage guidelines

Only POST operation is supported.

Examples

URI

```
http://host:80/rest/operational-state/show-clock
```

Request body

```
<show-clock></show-clock>
```

Response body

```
<output xmlns='urn:brocade.com:mgmt:brocade-clock'>
  <clock-time>
    <rbridge-id-out>1</rbridge-id-out>
    <current-time>2014-05-19T16:25:06+00:00</current-time>
    <timezone>Etc/GMT+0</timezone>
  </clock-time>
</output>
```

show-fibrechannel-interface-info

Retrieves the detailed information of FibreChannel ports.

Resource URIs

URI	Description
<base_URI>/operational-state/show-fibrechannel-interface-info	Retrieves the detailed information of FibreChannel ports

Parameters

Name	Description
portsgroup-rbridgeid	The RBridge ID of the switch

Usage guidelines

Only POST operation is supported.

Examples

URI

```
http://host:80/rest/operational-state/show-fibrechannel-interface-info
```

Request body

```
<show-fibrechannel-interface-info></show-fibrechannel-interface-info>
```

Response body

```
<output xmlns='urn:brocade.com:mgmt:brocade-fabric-service'>
  <show-fibrechannel-interface>
    <portsgroup-rbridgeid>1</portsgroup-rbridgeid>
  </show-fibrechannel-interface>
</output>
```

show-firmware-versions

Retrieves the firmware version information.

Resource URIs

URI	Description
<base_URI>/operational-state/show-firmware-version	Retrieves the firmware version information

Parameters

Name	Description
<i>switchid</i>	Switch ID specifies the particular switch to fetch firmware version information
<i>os-name</i>	Name of the Firmware version. Example: NOS, FOS, etc.
<i>os-version</i>	Version of the Firmware
<i>copy-right-info</i>	Copyright information of the Firmware
<i>build-time</i>	Time information on the build of Firmware
<i>firmware-full-version</i>	Full version string of Firmware
<i>control-processor-version</i>	Information on the control processor
<i>control-processor-chipset</i>	Information on the control processor
<i>control-processor-memory</i>	Memory of the control processor
<i>slot-no</i>	The slot number
<i>node-instance-no</i>	The instance number
<i>Node-type</i>	The node type
<i>Is-active-cp</i>	Indicates whether the control processor is active or not
<i>application-name</i>	Name of the application
<i>primary-version</i>	Indicates the primary version
<i>secondary-version</i>	Indicates the secondary version

Usage guidelines

Only POST operation is supported.

Examples

URI

`http://host:80/rest/operational-state/show-firmware-version`

Request body

`<show-firmware-version></show-firmware-version>`

Response body

```
<output xmlns='urn:brocade.com:mgmt:brocade-firmware-ext'>
  <show-firmware-version>
    <switchid>1</switchid>
    <os-name>Network Operating System Software</os-name>
    <os-version>5.0.0</os-version>
    <copy-right-info>Copyright (c) 1995-2014 Brocade Communications Systems,
Inc.</copy-right-info>
    <build-time>Mon May 19 08:05:08 2014
  </build-time>

  <firmware-full-version>5.0.0pkadu_nos5.0.0_pit_a_03_0518_041429</firmware-full-v
ersion>
    <control-processor-vendor>Freescale Semiconductor</control-processor-vendor>
    <control-processor-chipset>P4080E</control-processor-chipset>
    <control-processor-memory>7168 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>5.0.0pkadu_nos5.0.0_pit_a_03_0518_041429</primary-version>
      <secondary-version>5.0.0pkadu_nos5.0.0_pit_a_03_0518_041429</secondary-version>
    </firmware-version-info>
  </node-info>
</output>
```

show-linkinfo

Retrieves details of all the links connected in the fabric.

Resource URIs

URI	Description
<base_URI>/operational-state/show-linkinfo	Retrieves details of all the links connected in the fabric

Parameters

Name	Description
<i>linkinfo-rbridgeid</i>	The RBridge ID of the node in the fabric
<i>linkinfo-domain-reachable</i>	Indicates whether the RBridge is reachable or not
<i>linkinfo-version</i>	The FSPF version
<i>linkinfo-wwn</i>	The WWN of the switch

Usage guidelines

Only POST operation is supported.

Examples

URI

```
http://host:80/rest/operational-state/show-linkinfo
```

Request body

```
<show-linkinfo></show-linkinfo>
```

Response body

```
<output xmlns='urn:brocade.com:mgmt:brocade-fabric-service'>
  <show-link-info>
    <linkinfo-rbridgeid>1</linkinfo-rbridgeid>
    <linkinfo-domain-reachable>Yes</linkinfo-domain-reachable>
    <linkinfo-version>1</linkinfo-version>
    <linkinfo-wwn>10:00:00:27:F8:54:4F:98</linkinfo-wwn>
  </show-link-info>
</output>
```


show-ntp

Retrieves NTP server information.

Resource URIs

URI	Description
<base_URI>/operational-state/show-ntp	Retrieves NTP server information

Parameters

Name	Description
<i>rbridge-id-out</i>	The RBridge ID
<i>LOCL</i>	Indicates whether the LOCL is true or false

Usage guidelines

Only POST operation is supported.

Examples

URI

```
http://host:80/rest/operational-state/show-ntp
```

Request body

```
<show-ntp></show-ntp>
```

Response body

```
<output xmlns='urn:brocade.com:mgmt:brocade-ntp'>
  <node-active-server>
    <rbridge-id-out>3</rbridge-id-out>
    <LOCL>true</LOCL>
  </node-active-server>
</output>
```

show-portindex-interface-info

Retrieves the details of physical interfaces and FibreChannel over Ethernet (FCoE) ports.

Resource URIs

URI	Description
<base_URI>/operational-state/show-portindex-interface-info	Retrieves the details of physical interfaces and Fibre Channel over Ethernet (FCoE) ports

Parameters

Name	Description
<i>portsgroup-rbridgeid</i>	The RBridge ID of the switch in the cluster
<i>port-index</i>	The port index of the RBridge
<i>port-interface</i>	The port index interface of the RBridge
<i>port-type</i>	The port type of the RBridge

Usage guidelines

Only POST operation is supported.

Examples

URI

`http://host:80/rest/operational-state/show-portindex-interface-info`

Request body

```
<show-portindex-interface-info></show-portindex-interface-info>
```

Response body

```
<output xmlns='urn:brocade.com:mgmt:brocade-fabric-service'>
  <show-portindex-interface>
    <portsgroup-rbridgeid>1</portsgroup-rbridgeid>
    <show-portindex>
      <port-index>0</port-index>
      <port-interface>1/1/1</port-interface>
      <port-type>Te</port-type>
    </show-portindex>
  </output>
```

show-raslog

Retrieves the entries of RASLOG.

Resource URIs

URI	Description
<base_URI>/operational-state/show-raslog	Retrieves the entries of RASLOG

Parameters

Name	Description
<i>rbridge-id</i>	The RBridge ID
<i>number-of-entries</i>	The number of recent events to be fetched from the RASLOG entries
<i>index</i>	The sequence number for the message
<i>message-id</i>	The message identifier
<i>date-and-time-info</i>	The date and time of the message. The format is: YYYY-MM-DD/HH:MM:SS.SSSS (micro seconds)
<i>severity</i>	The severity of the message. Valid values include: INFO, WARNING, ERROR, and CRITICAL
<i>log-type</i>	Specifies if the message is a SYSTEM or DCE log
<i>repeat-count</i>	The number of times the particular event has occurred
<i>message</i>	The textual description of the event
<i>message-flag</i>	The type of the message
<i>switch-or-chassis-name</i>	The switch name for the generator of the message, or chassis

Usage guidelines

Only POST operation is supported.

Examples

URI

`http://host:80/rest/operational-state/show-raslog`

Request body

```
<show-raslog></show-raslog>
```

Response body

```
<output xmlns='urn:brocade.com:mgmt:brocade-ras-ext'>
  <show-all-raslog>
    <rbridge-id>1</rbridge-id>
    <number-of-entries>1151</number-of-entries>
    <raslog-entries>
      <index>1</index>
      <message-id>HASM-1004</message-id>
```

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```
<date-and-time-info>2014/05/08-16:08:21:48</date-and-time-info>  
<severity>informational</severity>  
<log-type>system</log-type>  
<repeat-count>1</repeat-count>  
<message>Processor reloaded - Reset.</message>  
<message-flag>unknown</message-flag>  
<switch-or-chassis-name>VDX8770-4</switch-or-chassis-name>  
</raslog-entries>  
</output>
```

show-support-save-status

Retrieves the information on the status of a recent support save request.

Resource URIs

URI	Description
<base_URI>/operational-state/show-support-save-status	Retrieves the information on the status of a recent support save request

Parameters

Name	Description
<i>rbridge-id</i>	The RBridge ID
<i>status</i>	The status of recent support save
<i>message</i>	The textual description of status of recent support save
<i>percentage-of-completion</i>	The value of percentage of completion

Usage guidelines

Only POST operation is supported.

Examples

URI

http://host:80/rest/operational-state/show-support-save-status

Request body

```
<show-support-save-status></show-support-save-status>
```

Response body

```
<output xmlns='urn:brocade.com:mgmt:brocade-ras-ext'>
  <show-support-save-status>
    <rbridge-id>54</rbridge-id>
    <status>unknown</status>
    <message>supportsave is not running.</message>
    <percentage-of-completion>0</percentage-of-completion>
  </show-support-save-status>
</output>
```

show-system-info

Retrieves the system information.

Resource URIs

URI	Description
<base_URI>/operational-state/show-system-info	Retrieves the system information

Parameters

Name	Description
rbridge-id-out	The RBridge ID
stack-mac	The MAC address of the switch

Usage guidelines

Only POST operation is supported.

Examples

URI

http://host:80/rest/operational-state/show-system-info

Request body

```
<show-system-info></show-system-info>
```

Response body

```
<output xmlns='urn:brocade.com:mgmt:brocade-ras-ext'>  
  <show-system-info>  
    <rbridge-id>54</rbridge-id>  
    <stack-mac>00:05:33:65:2b:4d</stack-mac>  
  </show-system-info>  
</output>
```

show-system-monitor

Retrieves the overall status for a selected switch.

Resource URIs

URI	Description
<base_URI>/operational-state/show-system-monitor	Retrieves the overall status for a selected switch

Parameters

Name	Description
<i>rbridge-id-out</i>	The RBridge ID
<i>switch-name</i>	The name of the switch
<i>switch-ip</i>	The IP address of the switch
<i>switch-state</i>	Switch status based on components
<i>switch-state-reason</i>	The component reason for switch status
<i>report-time</i>	The switch report time stamp
<i>component-name</i>	The component name
<i>component-state</i>	The component status based on thresholds
<i>port-area</i>	Port identifier
<i>port-name</i>	Port name
<i>port-state</i>	Port state

Usage guidelines

Only POST operation is supported.

Examples

URI

```
http://host:80/rest/operational-state/show-system-monitor
```

Request body

```
<show-system-monitor></show-system-monitor>
```

Response body

```
<output xmlns='urn:brocade.com:mgmt:brocade-system-monitor-ext'>
  <switch-status>
    <rbridge-id-out>195</rbridge-id-out>
    <switch-name>sw0</switch-name>
    <switch-ip>10.24.81.195</switch-ip>
    <switch-state>state-marginal</switch-state>
    <switch-state-reason>Switch Status is MARGINAL. Contributors:* MM
non-redundant: (M2). (MARGINAL).</switch-state-reason>
    <report-time>2014-06-11T09:40:21+00:00</report-time>
```

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```
<component-status>  
  <component-name>Power supplies monitor</component-name>  
  <component-state>state-healthy</component-state>  
</component-status>  
</output>
```


show-vcs

Retrieves the VCS information.

Resource URIs

URI	Description
<base_URI>/operational-state/show-vcs	Retrieves the VCS information

Parameters

Name	Description
<i>vcs-cluster-type-info</i>	VCS type
<i>vcs-guid</i>	The VCS cluster GUID
<i>virtual-ip-address</i>	The cluster virtual IP address
<i>principal-switch-wwn</i>	VCS Cluster principal switch WWN
<i>co-ordinator-wwn</i>	The VCS cluster coordinator node WWN
<i>total-nodes-in-cluster</i>	The total number of nodes in cluster
<i>nodes-disconnected-from-cluster</i>	The number of nodes disconnected from cluster
<i>cluster-generic-status</i>	The cluster generic status
<i>cluster-specific-status</i>	The cluster specific status
<i>node-num</i>	The node number
<i>node-serial-num</i>	The serial number
<i>node-condition</i>	The node condition
<i>node-status</i>	The node status
<i>node-vcs-mode</i>	The node's VCS mode
<i>node-vcs-id</i>	The node VCS ID
<i>node-rbridge-id</i>	The node RBridge ID
<i>node-is-principal</i>	Indicates if the node is management cluster principal
<i>node-co-ordinator</i>	Indicates if the node is management cluster coordinator
<i>node-switch-mac</i>	The node switch MAC address
<i>node-switch-wwn</i>	The node switch WWN
<i>switch-fcf-mac</i>	The node FCF MAC address
<i>node-internal-ip-address</i>	The node internal IP address
<i>node-public-ip-address</i>	The node public IP address
<i>node-public-ipv6-address</i>	The node public IPv6 address
<i>node-swbd-number</i>	The node SWBD number
<i>firmware-version</i>	The node firmware version

Name	Description
<i>node-switchname</i>	The node switch name
<i>node-fabric-state</i>	The Fabric node state

Usage guidelines

Only POST operation is supported.

Examples

URI

http://host:80/rest/operational-state/show-vcs

Request body

```
<show-vcs></show-vcs>
```

Response body

```
<output xmlns='urn:brocade.com:mgmt:brocade-vcs'>
  <vcs-cluster-type-info>vcs-management-cluster</vcs-cluster-type-info>
  <vcs-guid>00000000000000000000000000000000</vcs-guid>
  <virtual-ip-address>NULL</virtual-ip-address>
  <principal-switch-wwn>10:00:00:27:F8:54:4F:98</principal-switch-wwn>
  <co-ordinator-wwn>10:00:00:27:F8:54:4F:98</co-ordinator-wwn>
  <total-nodes-in-cluster>1</total-nodes-in-cluster>
  <nodes-disconnected-from-cluster>0</nodes-disconnected-from-cluster>
  <cluster-generic-status>Good</cluster-generic-status>
  <cluster-specific-status>All Nodes Present in the
Cluster</cluster-specific-status>
  <vcs-nodes>
    <vcs-node-info>
      <node-num>1</node-num>
      <node-serial-num>CDU2507J00D</node-serial-num>
      <node-condition>Good</node-condition>
      <node-status>Co-ordinator</node-status>
      <node-vcs-mode>Enabled</node-vcs-mode>
      <node-vcs-id>1</node-vcs-id>
      <node-rbridge-id>1</node-rbridge-id>
      <node-is-principal>true</node-is-principal>
      <co-ordinator>true</co-ordinator>
      <node-switch-mac>00:27:f8:54:50:19</node-switch-mac>
      <node-switch-wwn>10:00:00:27:F8:54:4F:98</node-switch-wwn>
      <switch-fcf-mac>00:27:f8:54:4f:98</switch-fcf-mac>
      <node-internal-ip-address>127.1.0.1</node-internal-ip-address>
      <node-public-ip-addresses>
        <node-public-ip-address>10.24.81.195</node-public-ip-address>
      </node-public-ip-addresses>
      <node-public-ipv6-addresses>
      </node-public-ipv6-addresses>
      <node-swbd-number>1000</node-swbd-number>
      <firmware-version>v5.0.0nos5.0.0_pit_a_140518_1800</firmware-version>
      <node-switchname>sw0</node-switchname>
      <node-state>Online</node-state>
      <node-fabric-state>Online</node-fabric-state>
    </vcs-node-info>
  </vcs-nodes>
```

```
</output>
```

show-zoning-enabled-configuration

Retrieves zoning-enabled configuration information.

Resource URIs

URI	Description
<base_URI>/operational-state/show-zoning-enabled-configuration	Retrieves zoning-enabled configuration information

Parameters

Name	Description
<i>cfg-name</i>	The name of the zone configuration
<i>zone-name</i>	The name of a zone to be added to the configuration
<i>entry-name</i>	The WWN of the device

Usage guidelines

Only POST operation is supported.

Examples

URI

```
http://host:80/rest/operational-state/show-zoning-enabled-configuration
```

Request body

```
<show-zoning-enabled-configuration></show-zoning-enabled-configuration>
```

Response body

```
<output xmlns='urn:brocade.com:mgmt:brocade-zone'>
  <enabled-configuration>
    <cfg-name></cfg-name>
    <has-more>>false</has-more>
  </enabled-configuration>
</output>
```

vcs-rbridge-context

Sets VCS Fabric mode for a given routing bridge.

Resource URIs

URI	Description
<base_URI>/operational-state/vcs-rbridge-context	Sets VCS Fabric mode for a given routing bridge.

Parameters

Name	Description
<i>rbridge-id</i>	The RBridge ID

Usage guidelines

Only POST operation is supported.

Examples

URI

```
http://host:80/rest/operational-state/vcs-rbridge-context
```

Request body

```
<vcs-rbridge-context><rbridge-id>2</rbridge-id></vcs-rbridge-context>
```

Response body

None

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