



## **Cisco Prime DCNM REST API Guide, Release 10.0.x**

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# Preface

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## Organization

This guide includes the following sections:

Section	Title	Description
1	Cisco DCNM REST API	Describes the REST API's for Cisco DCNM

## Conventions

This document uses the following conventions:

Convention	Indication
<b>bold</b> font	Commands and keywords and user-entered text appear in <b>bold</b> font.
<i>italic</i> font	Document titles, new or emphasized terms, and arguments for which you supply values are in <i>italic</i> font.
[ ]	Elements in square brackets are optional.
{x   y   z }	Required alternative keywords are grouped in braces and separated by vertical bars.
[ x   y   z ]	Optional alternative keywords are grouped in brackets and separated by vertical bars.
string	A nonquoted set of characters. Do not use quotation marks around the string or the string will include the quotation marks.
courier font	Terminal sessions and information the system displays appear in <i>courier</i> font.
< >	Nonprinting characters such as passwords are in angle brackets.
[ ]	Default responses to system prompts are in square brackets.
!, #	An exclamation point (!) or a pound sign (#) at the beginning of a line of code indicates a comment line.



### Note

Means *reader take note*. Notes contain helpful suggestions or references to material not covered in the manual.

**Tip**

Means *the following information will help you solve a problem*. The tips information might not be troubleshooting or even an action, but could be useful information, similar to a Timesaver.

**Caution**

Means *reader be careful*. In this situation, you might perform an action that could result in equipment damage or loss of data.

**Timesaver**

Means *the described action saves time*. You can save time by performing the action described in the paragraph.

**Warning****IMPORTANT SAFETY INSTRUCTIONS**

This warning symbol means danger. You are in a situation that could cause bodily injury. Before you work on any equipment, be aware of the hazards involved with electrical circuitry and be familiar with standard practices for preventing accidents. Use the statement number provided at the end of each warning to locate its translation in the translated safety warnings that accompanied this device.

**SAVE THESE INSTRUCTIONS****Warning**

Statements using this symbol are provided for additional information and to comply with regulatory and customer requirements

## Obtain Documentation and Submit a Service Request

For information on obtaining documentation, using the Cisco Bug Search Tool (BST), submitting a service request, and gathering additional information, see [What's New in Cisco Product Documentation](#).

To receive new and revised Cisco technical content directly to your desktop, you can subscribe to the [What's New in Cisco Product Documentation RSS feed](#). The RSS feeds are a free service.



## New and Changed Information

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The following new publications support both Cisco DCNM for LAN and Cisco DCNM for SAN and address the new licensing model, the new installation process, and the new features of Cisco DCNM:

- Cisco DCNM Installation Guide, Release 10.0.x
- Cisco DCNM Release Notes, Release 10.0.x

The following describes the release-specific information for each new and changed feature in the *Cisco Prime DCNM REST API Guide, Release 10.0.x*. The latest version of this document is available at the following Cisco website:

[https://www.cisco.com/en/US/products/ps9369/tsd\\_products\\_support\\_series\\_home.html](https://www.cisco.com/en/US/products/ps9369/tsd_products_support_series_home.html)

Table 1 summarizes the new and changed features for the *Cisco Prime DCNM REST API Guide, Release 10.0.x*, and tells you where they are documented.

**Table 1** *New and Changed Features for Cisco Prime DCNM REST API Guide, Release 10.0.x*

Feature	Description	Changed in Release	Where Documented
Config Archive	Config Archive REST API support is added.	10.0(1)	<a href="#">Config Archive, page 51</a>
Discovery	Discovery REST API support is added.	10.0(1)	<a href="#">Discovery, page 83</a>
Image Management	Image Management REST API support is added.	10.0(1)	<a href="#">Image Management, page 101</a>
Inventory	Inventory REST API support is added.	10.0(1)	<a href="#">Inventory, page 117</a>
Reports	Reports REST API support is added.	10.0(1)	<a href="#">Reports, page 189</a>
Templates	Templates REST API support is added.	10.0(1)	<a href="#">Templates, page 193</a>
Topology	Topology REST API support is added.	10.0(1)	<a href="#">Topology, page 207</a>
Support for HTTPS	Cisco DCNM Supports only the HTTPS protocol.	10.0(1)	—





# Cisco Fabric Automation REST API

## Introduction

The Cisco Fabric Automation REST APIs for third party applications enables you to programmatically control Cisco Fabric Automation. The REST API supports POAP (Power On Auto Provisioning), Auto Config and Cable plan features.

POAP allows devices to boot up with temporary IP address (assigned by DHCP server), to download the POAP boot-up script (also assigned by DHCP server) which will further download the required kick-start and system image, and the device configuration file from the specific TFTP server indicated in the boot-up script.

In the Cisco Fabric Automation architecture, the virtual machine (VM) facing interface on leaf switches is automatically configured and de-configured by the auto config. It detects the server/VM boot-up, retrieves pre-defined network parameters from the asset database, and applies the generated configuration. When the VM is moved or shutdown, the auto config also updates/removes the dynamic configuration.

Cable plan provides a Netmap of port-to-port cable connectivity data that can be imported into the switches of the Fabric Automation. The XML cable plan acts as a lookup table, and if a port is not connected to its corresponding destination port as per the plan, the switch should flag an error and notify the customers.

All the REST API operations can also be performed using the DCNM GUI as DCNM uses these REST APIs to render the GUI.

For more information about Cisco Dynamic Fabric Automation, see the *Cisco DFA Application Programmer's Guide*.

## Software Architecture

In a Fabric Automation datacenter, Cisco DCNM will be the central point of management for the fabric and for the network auto-configuration. PoAP templates are used to auto-configure the spine and leaf network devices and configuration profiles are used to auto-configure the organizations, networks and services.

DCNM works as the network controller in conjunction with any instances of compute/storage orchestrators and service controllers to provide an open and extensible integrated virtual and physical network. Organizations and networks can be created directly using the Cisco DCNM GUIs or through the compute/storage orchestrators. In both cases the external APIs discussed in this document are used to retrieve information and create/retrieve/update/delete configuration profile instances into the network

Asset Database (LDAP). The leaf devices in turn fetch configuration from the Asset Database and self-configure themselves. Service controllers like PNSC can also get organization/network information from DCNM through the APIs, as well as update the configuration profiles for services integration.

The general workflow is as follows:

- Create Organizations and Partitions
- As part of this, edge services may be automatically deployed
- Create Segments
- As part of this, segment services may be automatically deployed
- Deploy application workload

Throughout this process the network and network services can be automated using Fabric Automation. For an animated description of the Fabric Automation architecture and work flow refer the following link [https://www.youtube.com/watch?v=MNnv2Y\\_k6EY](https://www.youtube.com/watch?v=MNnv2Y_k6EY).



**Note** You can also use your own REST based clients to integrate with third party orchestrators.

## REST APIs

DCNM will provide REST API, and the REST approach emphasizes on using the resource name as part of the URL. In this release, the response of the REST API will be encoded in JSON format (see <https://www.json.org> for validation).

The query parameters for the https GET will be appended to the URL after the symbol “?”; the input for the https POST/PUT/DELETE will be specified in the payload with the URL-encoded. REST APIs support both https and https.

This section contains the high level description for the REST API, during implementation the REST APIs are subject to change.

DCNM REST API supports “application/json” for the Content-Type.

The following parameter types are mentioned in this document:

A - Array

S - String

O – Object

- “Authentication” section on page -3
- “Auto Configuration” section on page -9
- “Cable Plan” section on page -37
- “DCI” section on page -63
- “DHCP” section on page -83
- “Multiple Orchestrator Support” section on page -149
- “Multiple Mobility Domain with VLAN Translation” section on page -139
- “Power On Auto Provisioning (POAP)” section on page -167

# Authentication

The Authentication REST APIs can be used by an external application to authenticate itself to the DCNM in order to control the Fabric Automation cluster. After calling logon to get the token, all the subsequent REST API requests need to set the DCNM-Token field with the token in the HTTPS header.

From Release 10.0(1), by default, the Cisco DCNM will support https only.

The following are the Authentication REST APIs:

- [Logon, page -5](#)
- [Logout, page -6](#)
- [Get DCNM Version, page -7](#)

## Status

The following table details the API Response code, status and, the HTTPS methods.

<b>Status Code</b>	<b>Status</b>	<b>API's HTTPS Method or HTTPS Method</b>
200	OK	GET
202	Accepted	POST PUT DELETE
400	Bad Request	GET POST PUT DELETE
401	Unauthorized	GET POST PUT DELETE
403	Forbidden	GET POST PUT DELETE
404	Not Found	GET POST PUT DELETE

Status Code	Status	API's HTTPS Method or HTTPS Method
405	Method Not Allowed	GET POST PUT DELETE
500	Internal Server Error	GET POST PUT DELETE

## Logon

**Resource Name** /logon

**Description** Logon to DCNM server to authenticate the user. Once the authentication is complete, a token will be returned as the response. All API calls to the DCNM server should use this token until it is expired or invalid. The logon API uses “username:password” with base64 encoded in https Authorization header. For example, “Authorization: Basic QWxhZGRpbjpvcGVuIHNlc2FtZQ==” will return the token in the payload.

**https Method** POST

**URL** https://dcnm-ip/rest/logon

### Parameter

Parameter	Type	Description
expirationTime	O	Token expiry time in milliseconds.

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
Dcnm-Token	S	Details of the token.

## Logout

**Resource Name** /logout

**Description** Logout from the DCNM server. Once you have logged out, the token will be invalid. You must set the token in the Authorization header while using this API.

**https Method** POST

**URL** https://dcnm-ip/rest/logout

### Parameter

Parameter	Type	Description

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description

## Get DCNM Version

**Resource Name** /rest/dcnm-version

**Description** Get the installed DCNM version.

**https Method** GET

**URL** https://dcnm-ip/rest/dcnm-version

**Parameter**

Parameter	Type	Description

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
Dcnm-Version	S	Get DCNM version.



## Auto Configuration

The auto configuration contains the following tables:

- [Organization, page -10](#)
- [Partition, page -10](#)
- [Network, page -10](#)
- [Profile, page -11](#)
- [Mandatory Field Class table, page -12](#)

The following are the auto-configuration REST APIs:

- [List Organizations, page -15](#)
- [Create an Organization, page -16](#)
- [Get an Organization, page -17](#)
- [Update an Organization, page -18](#)
- [Delete an Organization, page -19](#)
- [List Partitions, page -20](#)
- [Create a Partition, page -21](#)
- [Get a Partition, page -22](#)
- [Update a Partition, page -23](#)
- [Delete a Partition, page -24](#)
- [List Networks, page -25](#)
- [Create a Network, page -26](#)
- [Get a Network, page -27](#)
- [Update a Network, page -28](#)
- [Delete a Network, page -29](#)
- [Create a Auto Configuration profile, page -33](#)
- [Delete a Auto Configuration profile, page -36](#)
- [Get Auto Config Settings, page -30](#)
- [Update Auto Config Settings, page -31](#)
- [List Auto Configuration Profiles, page -32](#)
- [Create a Auto Configuration profile, page -33](#)
- [Get a Auto Configuration profile, page -34](#)
- [Update a Auto Configuration profile, page -35](#)
- [Delete a Auto Configuration profile, page -36](#)

## Organization

Attributes	Type	Require
organizationName	String	Mandatory
description	String	Optional
orchestrationSource	String	Optional

## Partition

Attributes	Type	Require
partitionName	String	Mandatory
partitionSegmentId	String	Mandatory
organizationName	String	Mandatory
vrfProfileName	String	Mandatory
description	String	Optional
serviceNodeIpAddress	String	Optional
dnsServer	String	Optional
secondaryDNSServer	String	Optional
vrfName	String	Optional
dciId	String	Optional
configArg	String	Optional

## Network

Attributes	Type	Require
organizationName	String	Mandatory
networkRole	String	Mandatory
networkName	String	Mandatory
segmentId	String	Mandatory
vlanId	String	Mandatory
mobilityDomainId	String	Mandatory
profileName	String	Mandatory
partitionName	String	Mandatory
dvsId	String	Optional
staticIpStart	String	Optional
gateway	String	Optional
netmaskLength	String	Optional
gatewayIpv6Address	String	Optional
prefixLength	String	Optional
secondaryGateway	String	Optional

<b>Attributes</b>	<b>Type</b>	<b>Require</b>
staticIpEnd	String	Optional
vSwitchControllerNetworkId	String	Optional
description	String	Optional
vSwitchControllerId	String	Optional
configArg	String	Optional
dhcpScope	subnet	Optional
	gateway	Optional
	ipRange	Optional
vrfName	String	Optional

## Profile

<b>Attributes</b>	<b>Type</b>	<b>Require</b>
forwardingMode	String	Mandatory
profileName	String	Mandatory
configCommands	String	Mandatory
description	String	Optional
profileType	String	Mandatory
profileSubType	String	Mandatory

## Mandatory Field Class table

### ConfigDeliveryTask

Attributes	Type	Required	Constants, Formats
description	String	Mandatory	
timeout	Number	Mandatory	
scheduledTimeStr	String	Mandatory	Format: dd/MM/yyyy HH:mm:ss
configDeliveryTaskRollbackSetting	String	Mandatory	Possible values: <ul style="list-style-type: none"> <li>• Rollback on Device and Stop Delivery on Other Devices</li> <li>• Rollback on Device and Continue Delivery on Other Devices</li> <li>• Rollback on All Devices</li> <li>• Stop Delivery on Error</li> <li>• Stop Delivery on All Devices on Error</li> <li>• Continue on Error</li> </ul>
configDeliveryTaskDeliveryOrderSetting	String	Optional	Possible values: <ul style="list-style-type: none"> <li>• sequential</li> <li>• parallel</li> </ul>
configTemplateRef	ConfigTemplate	Mandatory	
configDeliveryTaskDeviceDetailsCol	ConfigDeliveryTaskDeviceDetails[]	Mandatory	
isCopyRunToStartTask	Boolean	Optional	
username	String	Mandatory	
password	String	Mandatory	

### ConfigTemplate

Attributes	Type	Required
name	String	Mandatory
instanceClassId	Number	Optional

**ConfigDeliveryTaskDeviceDetails**

<b>Attributes</b>	<b>Type</b>	<b>Required</b>
ipAddress	String	Mandatory
paramValues	Array	Mandatory

**Status**

The following table details the API Response code, status and, the HTTPS methods.

<b>Status Code</b>	<b>Status</b>	<b>API's HTTPS Method or HTTPS Method</b>
200	OK	GET OK POST PUT DELETE
202 <sup>1</sup>	Accepted	POST PUT DELETE
400	Bad Request	GET POST PUT DELETE
401	Unauthorized	GET POST PUT DELETE
403	Forbidden	GET POST PUT DELETE
404	Not Found	GET POST PUT DELETE

Status Code	Status	API's HTTPS Method or HTTPS Method
405	Method Not Allowed	GET POST PUT DELETE
500	Internal Server Error	GET POST PUT DELETE

1. Status Code 202 is returned only if the operation is **Un-committed**. Status code 200 is returned otherwise.

## List Organizations

**Resource Name** /auto-config/organizations

**Description** Displays a list of Organizations.

**https Method** GET

**URL**  
<https://dcnm-ip/rest/auto-config/organizations>  
<https://dcnm-ip/rest/auto-config/organizations?detail=true>

### Parameter

Parameter	Type	Description

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
Organizations	A	By default, a list of organization names is displayed. If “detail=true”, then a list of Organization objects is displayed.

## Create an Organization

**Resource Name** /auto-config/organizations

**Description** Enables you to create a new organization.

**https Method** POST

**URL** https://dcnm-ip/rest/auto-config/organizations

### Parameter

Parameter	Type	Description
Organization	O	Organization object

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
Organization-name	S	New organization name

## Get an Organization

**Resource Name** /auto-config/organizations/organization-name

**Description** Enables you to get an organization.

**https Method** GET

**URL** https://dcnm-ip/rest/auto-config/organizations/organization-name

**Parameter**

Parameter	Type	Description

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
Organization	O	Organization object

## Update an Organization

**Resource Name** /auto-config/organizations/organization-name

**Description** Enables you to update an organization.

**https Method** PUT

**URL** https://dcnm-ip/rest/auto-config/organizations/organization-name

### Parameter

Parameter	Type	Description
Organization	O	Organization object

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description

## Delete an Organization

**Resource Name** /auto-config/organizations/organization-name

**Description** Enables you to delete a organization.

**https Method** DELETE

**URL** https://dcnm-ip/rest/auto-config/organizations/organization-name

**Parameter**

Parameter	Type	Description

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description

## List Partitions

**Resource Name** /auto-config/organizations/organization-name/partitions

**Description** Displays a list of partitions.

**https Method** GET

**URL**  
<https://dcnm-ip/rest/auto-config/organizations/organization1/partitions>  
<https://dcnm-ip/rest/auto-config/organizations/organization1/partitions?detail=true>

**Parameter**

Parameter	Type	Description

**Return Value**  
Format: JSON  
Type: Object

Attribute Name	Type	Description
Partitions	A	By default, a list of partition names is displayed. If “detail=true”, then a list of partition objects is displayed.

## Create a Partition

**Resource Name** /auto-config/organizations/organization-name/partitions

**Description** Enables you to create a new partition.

**https Method** POST

**URL** https://dcnm-ip/rest/auto-config/organizations/organization-name/partitions

**Parameter**

Parameter	Type	Description
Partition-object	O	Partition object

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
partition-name	S	Partition name

## Get a Partition

**Resource Name** /auto-config/organizations/organization-name/partitions/partition-name

**Description** Enables you to get a partition.

**https Method** GET

**URL** https://dcnm-ip/rest/auto-config/organizations/organization-name/partitions/partition-name

### Parameter

Parameter	Type	Description

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
Partition	O	Partition object

## Update a Partition

**Resource Name** /auto-config/organizations/organization-name/partitions/partition-name

**Description** Update a partition.

**https Method** PUT

**URL** https://dcnm-ip/rest/auto-config/organizations/organization-name/partitions/partition-name

### Parameter

Parameter	Type	Description
Partition	O	Partition object

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description

## Delete a Partition

**Resource Name** /auto-config/organizations/organization-name/partitions/partition-name

**Description** Delete a partition.

**https Method** DELETE

**URL** https://dcnm-ip/rest/auto-config/organizations/organization-name/partitions/partition-name

### Parameter

Parameter	Type	Description

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description

## List Networks

<b>Resource Name</b>	/auto-config/organizations/organization-name/partitions/partition-name/networks							
<b>Description</b>	List of networks.							
<b>https Method</b>	GET							
<b>URL</b>	<a href="https://dcnm-ip/rest/auto-config/organizations/organization-name/partitions/partition-name/networks">https://dcnm-ip/rest/auto-config/organizations/organization-name/partitions/partition-name/networks</a> <a href="https://dcnm-ip/rest/auto-config/organizations/organization-name/partitions/partition-name/networks?detail=true">https://dcnm-ip/rest/auto-config/organizations/organization-name/partitions/partition-name/networks?detail=true</a>							
<b>Parameter</b>								
<table border="1"> <thead> <tr> <th>Parameter</th><th>Type</th><th>Description</th></tr> </thead> <tbody> <tr> <td></td><td></td><td></td></tr> </tbody> </table>		Parameter	Type	Description				
Parameter	Type	Description						
<b>Return Value</b>	<p>Format: JSON</p> <p>Type: Object</p> <table border="1"> <thead> <tr> <th>Attribute Name</th><th>Type</th><th>Description</th></tr> </thead> <tbody> <tr> <td>Networks</td><td>A</td><td>By default, a list of segment IDs for 12 segments, a list of VLAN IDs, and Mobility Domain IDs for the VLAN Mobility Domain is displayed. If “detail=true”, then list of network objects is displayed</td></tr> </tbody> </table>	Attribute Name	Type	Description	Networks	A	By default, a list of segment IDs for 12 segments, a list of VLAN IDs, and Mobility Domain IDs for the VLAN Mobility Domain is displayed. If “detail=true”, then list of network objects is displayed	
Attribute Name	Type	Description						
Networks	A	By default, a list of segment IDs for 12 segments, a list of VLAN IDs, and Mobility Domain IDs for the VLAN Mobility Domain is displayed. If “detail=true”, then list of network objects is displayed						

## Create a Network

**Resource Name** /auto-config/organizations/organization-name/partitions/partition-name/networks

**Description** Create a new network.

**https Method** POST

**URL** https://dcnm-ip/rest/auto-config/organizations/organization-name/partitions/partition-name/networks

### Parameter

Parameter	Type	Description
Network	O	Network object

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
SegmentID or VLANID + MobilityDomainID	S	Segment ID for L2 segments or VLAN ID and Mobility Domain ID for VLAN Mobility Domain is displayed.

## Get a Network

**Resource Name** /auto-config/organizations/organization-name/partitions/partition-name/networks/{network-id}

**Description** Get a network.

**https Method** GET

**URL** <https://dcnm-ip/rest/auto-config/organizations/organization-name/partitions/partition-name/networks/segment/20010>

<https://dcnm-ip/rest/auto-config/organizations/organization-name/partitions/partition-name/networks/vlan/10/mobility-domain/mydomain>

### Parameter

Parameter	Type	Description

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
Network	O	Network object

## Update a Network

**Resource Name** /auto-config/organizations/organization-name/partitions/partition-name/networks/{network-id}

**Description** Update a network.

**https Method** PUT

**URL** https://dcnm-ip/rest/auto-config/organizations/organization-name/partitions/partition-name/networks/segment/20010

https://dcnm-ip/rest/auto-config/organizations/organization-name/partitions/partition-name/networks/vlan/10/mobility-domain/mydomain

### Parameter

Parameter	Type	Description
Network	O	Network object

### Return Value

Format: JSON

Type: Object

Attribute Name	Type	Description

## Delete a Network

**Resource Name** /auto-config/organizations/organization-name/partitions/partition-name/networks/{network-id}

**Description** Delete a network.

**https Method** DELETE

**URL** <https://dcnm-ip/rest/auto-config/organizations/organization-name/partitions/partition-name/networks/segment/20010>

<https://dcnm-ip/rest/auto-config/organizations/organization-name/partitions/partition-name/networks/vlan/10/mobility-domain/mydomain>

### Parameter

Parameter	Type	Description

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description

## Get Auto Config Settings

**Resource Name** /auto-config/settings

**Description** Get auto config settings.

**https Method** GET

**URL** https://dcnm-ip/rest/auto-config/settings

### Parameter

Parameter	Type	Description

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
Auto-config-settings	O	<p>The following auto config settings objects are displayed: ldapServer, ldapUserName, ldapPassWord, segmentIdRange, partitionIdRange, useLocalDhcp, dhcpPrimarySubnet, enableAmqpNotification, amqpServer, amqpPort, amqpVirtualHost, amqpUserName, amqpPassWord, amqpExchangeName, xmppServer, xmppUserName, xmppPassWord, xmppGroup, xmppResponseTimeout, xmppSearch, vrfName</p> <p>The following attributes are applicable for HA set-up: ldapPeerServer, ldapPeerUserName, ldapPeerPassWord.</p>

## Update Auto Config Settings

**Resource Name** /auto-config/settings

**Description** Update auto config settings.

**https Method** PUT

**URL** https://dcnm-ip/rest/auto-config/settings

### Parameter

Parameter	Type	Description
Auto-config-settings	O	<p>The following auto config settings object are displayed:</p> <ul style="list-style-type: none"> <li>ldapServer, ldapUserName,</li> <li>ldapPassWord, segmentIdRange,</li> <li>partitionIdRange,</li> <li>useLocalDhcp,</li> <li>dhcpPrimarySubnet,</li> <li>enableAmqpNotification,</li> <li>amqpServer, amqpPort,</li> <li>amqpVirtualHost,</li> <li>amqpUserName,</li> <li>amqpPassWord,</li> <li>amqpExchangeName,</li> <li>xmppServer, xmppUserName,</li> <li>xmppPassWord, xmppGroup,</li> <li>xmppResponseTimeout,</li> <li>xmppSearch, vrfName</li> </ul> <p>The following attributes are applicable for HA set-up:</p> <ul style="list-style-type: none"> <li>ldapPeerServer,</li> <li>ldapPeerUserName,</li> <li>ldapPeerPassWord.</li> </ul>

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description

## List Auto Configuration Profiles

**Resource Name** /rest/auto-config/profiles

**Description** List of profiles

**https Method** GET

**URL** https://dcnm-ip/rest/auto-config/profiles

**Parameter**

Parameter	Type	Description

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
profiles	A	By default, a list of profile Names, profile Types and profile SubTypes are displayed. If "detail=true", a list of profile objects is displayed.

## Create a Auto Configuration profile

**Resource Name** /rest/auto-config/profiles/

**Description** Create a new profile.

**https Method** POST

**URL** https://dcnm-ip/rest/auto-config/profiles/

**Parameter**

Parameter	Type	Description
profile	O	Profile object

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
ProfileName	S	Profile name

## Get a Auto Configuration profile

**Resource Name**

```
/rest/auto-config/profiles/{profile-name}
/rest/auto-config/profiles/{profile-name}/type/IPVLAN
/rest/auto-config/profiles/{profile-name}/type/FPBD
```

**Description**

If profile Type has not been provided then response will return default FPVLAN profile.  
If profile Type is IPVLAN then response will return IPVLAN profile.  
If profile Type is FPBD then response will return FPBD profile.

**https Method**

GET

**URL**

```
https://dcnm-ip/rest/auto-config/profiles/{profile-name}
https://dcnm-ip/rest/auto-config/profiles/{profile-name}/type/IPVLAN
https://dcnm-ip/rest/auto-config/profiles/{profile-name}/type/FPBD
```

**Parameter**

Parameter	Type	Description

**Return Value**

Format: JSON

Type: Object

Attribute Name	Type	Description
profile	O	Profile object

## Update a Auto Configuration profile

<b>Resource Name</b>	/rest/auto-config/profiles/{profile-name} /rest/auto-config/profiles/{profile-name}/type/IPVLAN /rest/auto-config/profiles/{profile-name}/type/FPBD
----------------------	---

<b>Description</b>	If profile Type has not been provided then update a default FPVLAN profile. If profile Type is IPVLAN then update an IPVLAN profile. If profile Type is FPBD then update a FPBD profile.
--------------------	--

<b>https Method</b>	PUT
---------------------	-----

<b>URL</b>	https://dcnm-ip/rest/auto-config/profiles/{profile-name} https://dcnm-ip/rest/auto-config/profiles/{profile-name}/type/IPVLAN https://dcnm-ip/rest/auto-config/profiles/{profile-name}/type/FPBD
------------	--

<b>Parameter</b>	<b>Parameter</b>	<b>Type</b>	<b>Description</b>
	profile	O	Profile object

<b>Return Value</b>	Format: JSON Type: Object		
	<b>Attribute Name</b>	<b>Type</b>	<b>Description</b>

## Delete a Auto Configuration profile

**Resource Name**

```
/rest/auto-config/profiles/{profile-name}
/rest/auto-config/profiles/{profile-name}/type/IPVLAN
/rest/auto-config/profiles/{profile-name}/type/FPBD
```

**Description**

If profile Type has not been provided then delete a default FPVLAN profile.  
If profile Type is IPVLAN then delete an IPVLAN profile.  
If profile Type is FPBD then delete a FPBD profile.

**https Method**

DELETE

**URL**

```
https://dcnm-ip/rest/auto-config/profiles/{profile-name}
https://dcnm-ip/rest/auto-config/profiles/{profile-name}/type/IPVLAN
https://dcnm-ip/rest/auto-config/profiles/{profile-name}/type/FPBD
```

**Parameter**

Parameter	Type	Description

**Return Value**

Format: JSON

Type: Object

Attribute Name	Type	Description

## Cable Plan

The following are the Cable Plan REST APIs:

- [Capture a Cable Plan, page -39](#)
- [Generate a Cable Plan, page -40](#)
- [Get a Cable Plan, page -41](#)
- [Save a Cable Plan, page -42](#)
- [Delete a Cable Plan, page -43](#)
- [Get a Cable Plan From Device, page -44](#)
- [View Cable Plan From Device, page -45](#)
- [Import a Cable Plan, page -46](#)
- [Export a Cable Plan, page -47](#)
- [Deploy a Cable Plan, page -48](#)
- [Revoke a Cable Plan, page -49](#)

### Status

The following table details the API Response code, status and, the HTTPS methods.

<b>Status Code</b>	<b>Status</b>	<b>API's HTTPS Method or HTTPS Method</b>
200	OK	GET
202	Accepted	POST PUT DELETE
400	Bad Request	GET POST PUT DELETE
401	Unauthorized	GET POST PUT DELETE
403	Forbidden	GET POST PUT DELETE

<b>Status Code</b>	<b>Status</b>	<b>API's HTTPS Method or HTTPS Method</b>
404	Not Found	GET POST PUT DELETE
405	Method Not Allowed	GET POST PUT DELETE
500	Internal Server Error	GET POST PUT DELETE

## Capture a Cable Plan

**Resource Name** /cable-plans/discovery

**Description** Extract a cable plan base on the switches discovered by DCNM.

**https Method** GET

**URL** https://dcnm-ip/rest/cable-plans/discovery

**Parameter**

Parameter	Type	Description

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
cable-plan-name	S	Name of the cable plan

## Generate a Cable Plan

**Resource Name** /cable-plans/poap

**Description** Generate a cable plan base on the POAP switch definitions from DCNM

**https Method** GET

**URL** https://dcnm-ip/rest/cable-plans/poap

### Parameter

Parameter	Type	Description

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
cable-plan-name	S	Name of the cable plan

## Get a Cable Plan

**Resource Name** /cable-plans

**Description** Get a cable plan

**https Method** GET

**URL** https://dcnm-ip/rest/cable-plans

https://dcnm-ip/rest/cable-plans?detail=true

### Parameter

Parameter	Type	Description

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
cable-plan	O	By default returns cable-plan information, if “detail=true”, then will return CablePlan object.

## Save a Cable Plan

**Resource Name** /cable-plans

**Description** Save a cable plan into the DCNM database.

**https Method** POST

**URL** https://dcnm-ip/rest/cable-plans

### Parameter

Parameter	Type	Description
cable-plan-object	O	Cable-plan-object including cable-plan-name, source-device, source-device-type, source-port, dest-device, dest-device-type, dest-port.

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description

## Delete a Cable Plan

**Resource Name** /cable-plans

**Description** Delete cable plan base on the POAP switch definitions from DCNM.

**https Method** DELETE

**URL** https://dcnm-ip/rest/cable-plans

**Parameter**

Parameter	Type	Description

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description

## Get a Cable Plan From Device

**Resource Name** /cable-plans/device-xml

**Description** Get a cable plan from devices in XML

**https Method** POST

**URL** https://dcnm-ip/rest/cable-plans/device-xml

### Parameter

Parameter	Type	Description
Ip-addresses	S	The Switch IP Address list which derives the cable plan.

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
cable-plan-info	S	Cable plans in XML

## View Cable Plan From Device

**Resource Name** /cable-plans/device-raw

**Description** Get cable plan from devices and return in raw format

**https Method** POST

**URL** https://dcnm-ip/rest/cable-plans/device-raw

**Parameter**

Parameter	Type	Description
Ip-addresses	S	The Switch IP Address list which derives the cable plan

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
Cable-plan-info	S	Cable plans in raw format

## Import a Cable Plan

**Resource Name** /cable-plans/import

**Description** Returns Cable Plan object of imported cable plan file.

**https Method** POST

**URL** https://dcnm-ip/rest/cable-plans/import

### Parameter

Parameter	Type	Description
cable-plan	S	You must provide a Name for the cable plan and the cable plan content in the payload.

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
Cable-plan-object	O	Cable plan object

## Export a Cable Plan

**Resource Name** /cable-plans/xml

**Description** Export a cable plan from DCNM in XML format

**https Method** GET

**URL** https://dcnm-ip/rest/cable-plans/xml

**Parameter**

Parameter	Type	Description

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
Cable-plan-object	S	Name of the cable plan and content in XML format in the payload.

## Deploy a Cable Plan

**Resource Name** /cable-plans/fabric

**Description** Deploy a cable plan to all the spine and leaf devices

**https Method** POST

**URL** <https://dcnm-ip/rest/cable-plans/fabric>

### Parameter

Parameter	Type	Description
Ip-addresses	S	Switch IP address list that needs to be deployed.

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description

## Revoke a Cable Plan

**Resource Name** /cable-plans/revoke

**Description** Revoke a cable plan from all the spine and leaf devices

**https Method** POST

**URL** https://dcnm-ip/rest/cable-plans/revoke

**Parameter**

Parameter	Type	Description
Ip-addresses	S	Switch IP address list that needs to be deployed.

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description



## Config Archive

The following are the Config Archive REST APIs:

- [Get Archived Devices, page -53](#)
- [Get Archived Configurations for device, page -54](#)
- [Compare Configurations, page -55](#)
- [Copy Configuration, page -56](#)
- [Delete Configurations, page -57](#)
- [Get List of Archive Jobs, page -58](#)
- [Get Devices for a Archive Job, page -59](#)
- [Delete Archive Job, page -60](#)
- [Get Device in Particular Group, page -61](#)
- [Get Job Execution History, page -62](#)

### Status

The following table details the API Response code, status and, the HTTPS methods.

<b>Status Code</b>	<b>Status</b>	<b>API's HTTPS Method or HTTPS Method</b>
200	OK	GET
202	Accepted	POST PUT DELETE
400	Bad Request	GET POST PUT DELETE
401	Unauthorized	GET POST PUT DELETE
403	Forbidden	GET POST PUT DELETE

Status Code	Status	API's HTTPS Method or HTTPS Method
404	Not Found	GET POST PUT DELETE
405	Method Not Allowed	GET POST PUT DELETE
500	Internal Server Error	GET POST PUT DELETE

## Get Archived Devices

**Resource Name** /config/archive/devices

**Description** Get Config Archive devices

**https Method** GET

**URL** https://dcnm-ip/fm/fmrest/config/archive/devices

**Parameter**

Parameter	Type	Description
filterStr	archivedOnly:true	Filter string

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
List<BackupDeviceDO>	O	List of BackupDeviceDO

## Get Archived Configurations for device

**Resource Name** /config/archive/devices

**Description** Get Archived configuration Archive devices

**https Method** GET

**URL** https://dcnm-ip/fm/fmrest/config/archive/devices

### Parameter

Parameter	Type	Description
filterStr	archivedOnly:true	Filter string
parentID	int	Database ID of the device

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
List<BackupDeviceDO>	O	List of BackupDeviceDO

## Compare Configurations

**Resource Name** /config/archive/compare

**Description** Compares two Archived Configurations and returns the differences.

**https Method** GET

**URL** https://dcnm-ip/fm/fmrest/config/archive/compare

**Parameter**

Parameter	Type	Description
sourceDevice	S	Source Device IP Address
sourceConf	S	Source Configuration to Compare
targetDevice	S	Target Device IP Address
targetConf	S	Target Configuration to Compare
showAll	B	Show diff only or all (true/false)

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
Map<String, Report>	O	Map of group configuration Items

## Copy Configuration

**Resource Name** /config/archive/copy

**Description** Get list of archived configurations for a device

**https Method** POST

**URL** https://dcnm-ip/fm/fmrest/config/archive/restore

### Parameter

Parameter	Type	Description
sourceDevice	S	Source Device IP Address
sourceConf	S	Source Configuration to Compare
targetDevices	S	Target Device IP Address
Modified	B	Copy a modified configuration

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
List<String>	O	Copy Command device response

## Delete Configurations

**Resource Name** /config/archive/

**Description** Delete the configuration.

**https Method** DELETE

**URL** https://dcnm-ip/fm/fmrest/config/archive

**Parameter**

Parameter	Type	Description
parentID(path parameter)	S	Source Device database ID
configuration(path parameter)	S	Source Configuration to delete

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description

## Get List of Archive Jobs

**Resource Name** /config/archive/jobs

**Description** Get all jobs

**https Method** GET

**URL** https://dcnm-ip/fm/fmrest/config/archive/jobs

### Parameter

Parameter	Type	Description

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
Map<String, Map<String, ArchiveJobDO >>	O	Map of ArchiveJobDO

## Get Devices for a Archive Job

**Resource Name** /config/archive/job/{jobID}

**Description** Get devices part of the archive job.

**https Method** GET

**URL** https://https://dcnm-ip/fm/fmrest/config/archive/job/switch/groupID

**Parameter**

Parameter	Type	Description

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
Map<String, Map<String, SwitchNameDO>>	O	Map of switch group and SwitchNameDo.

## Delete Archive Job

**Resource Name** /config/archive/jobs

**Description** Delete the job

**https Method** DELETE

**URL** https://https://dcnm-ip/fm/fmrest/config/archive/jobs/{jobName}

**Parameter**

Parameter	Type	Description
jobName	path	Path parameter

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
ConfigDeliveryTaskDeviceDO []	A	Array of device objects

## Get Device in Particular Group

**Resource Name** /config/archive/job/group

**Description** Get eligible devices for a group.

**https Method** GET

**URL** https://https://dcnm-ip/fm/fmrest/config/archive/job/group/{groupID}

**Parameter**

Parameter	Type	Description

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
Map<String, Map<String, SwitchNameDO>>	O	Map of switch group and SwitchNameDo.

## Get Job Execution History

**Resource Name** /config/archive/

**Description** Get job execution history.

**https Method** GET

**URL** https://dcnm-ip/fm/fmrest/config/archive/jobs/execution

**Parameter**

Parameter	Type	Description

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
Map<String, Map<String, BackupStatusDO>>	O	Map of BackupStatusDO.

# DCI

The following are the DCI REST APIs:

- [Get Fabric Automation DCI Settings, page -65](#)
- [Update Fabric Automation DCI Settings, page -66](#)
- [List DCI pairs, page -67](#)
- [Create DCI Pairs, page -68](#)
- [Get DCI Pairs with Node Id, page -69](#)
- [Update DCI Pairs with Node ID, page -70](#)
- [Delete DCI Pairs with Node ID, page -71](#)
- [Get DCI Pairs with Node ID and Peer ID, page -72](#)
- [Update DCI Pairs with Node ID and Peer ID, page -73](#)
- [Delete DCI Pairs with Node ID and Peer ID, page -74](#)
- [Create Partition with DCI Option, page -75](#)
- [Update Partition with DCI ID, page -76](#)
- [Update Partition to Disable DCI Extension, page -77](#)
- [Update Partition to Enable DCI Extension, page -78](#)
- [List All Extended Partitions, page -79](#)
- [List All Extended Partitions with a VRF, page -80](#)
- [List all Extended Partitions in an Organization, page -81](#)
- [Get Extended Partition, page -82](#)

## Status

The following table details the API Response code, status and, the HTTPS methods.

Status Code	Status	API's HTTPS Method or HTTPS Method
200	OK	GET
202	Accepted	POST PUT DELETE
400	Bad Request	GET POST PUT DELETE

<b>Status Code</b>	<b>Status</b>	<b>API's HTTPS Method or HTTPS Method</b>
401	Unauthorized	GET POST PUT DELETE
403	Forbidden	GET POST PUT DELETE
404	Not Found	GET POST PUT DELETE
405	Method Not Allowed	GET POST PUT DELETE
500	Internal Server Error	GET POST PUT DELETE

## Get Fabric Automation DCI Settings

**Resource Name** /settings/dci

**Description** Get Fabric Automation DCI settings

**https Method** GET

**URL** https://dcnm-ip/rest/settings/dci

**Parameter**

Parameter	Type	Description

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
settings	O	Return DCI settings

## Update Fabric Automation DCI Settings

**Resource Name** /settings/dci

**Description** Update Fabric Automation DCI settings

**https Method** PUT

**URL** https://dcnm-ip/rest/settings/dci

### Parameter

Parameter	Type	Description
settings	S	Update the DCI settings.

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description

## List DCI pairs

**Resource Name** /auto-config/dci/paired-devices

**Description** List all the DCI pairs.

**https Method** GET

**URL** https://dcnm-ip/rest/auto-config/dci/paired-devices

### Parameter

Parameter	Type	Description

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
dci-pairings	S	DCI pairs

## Create DCI Pairs

**Resource Name** /auto-config/dci/paired-devices

**Description** Create DCI pairing.

**https Method** POST

**URL** https://dcnm-ip/rest/auto-config/dci/paired-devices

### Parameter

Parameter	Type	Description
dci-pairing	O	DCI pairing

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description

## Get DCI Pairs with Node Id

**Resource Name** /auto-config/dci/paired-devices/device/{node-id}

**Description** Get the Edge Router with the paired border leaf for a given node ID, or of type “BL-DCI”, or type “Hub PE” without peering.

**https Method** GET

**URL** https://dcnm-ip/rest/auto-config/dci/paired-devices/device/{node-id}

### Parameter

Parameter	Type	Description

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
dci-pairing	O	DCI pairing

## Update DCI Pairs with Node ID

**Resource Name** /auto-config/dci/paired-devices/device/{node-id}

**Description** Update the DCI pairing for the type "BL-DCI" or "BL" without peering

**https Method** PUT

**URL** https://dcnm-ip/rest/auto-config/dci/paired-devices/device/{node-id}

### Parameter

Parameter	Type	Description

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
dci-pairing	O	DCI pairing

## Delete DCI Pairs with Node ID

**Resource Name** /auto-config/dci/paired-devices/device/{node-id}

**Description** Delete the DCI pairing for the type "BL-DCI" or "BL" without peering

**https Method** DELETE

**URL** https://dcnm-ip/rest/auto-config/dci/paired-devices/device/{node-id}

**Parameter**

Parameter	Type	Description

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description

## Get DCI Pairs with Node ID and Peer ID

**Resource Name** /auto-config/dci/paired-devices/device/{node-id}/peer/{peer-node-id}

**Description** Get the DCI pairing for a given node-id and peer-id

**https Method** GET

**URL** https://dcnm-ip/rest/auto-config/dci/paired-devices/device/{node-id}/peer/{peer-node-id}

### Parameter

Parameter	Type	Description

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
dci-pairing	O	DCI pairing

## Update DCI Pairs with Node ID and Peer ID

**Resource Name** /auto-config/dci/paired-devices/device/{node-id}/peer/{peer-node-id}

**Description** Update the DCI pairing for a given node-id and peer-id.

**https Method** PUT

**URL** https://dcnm-ip/rest/auto-config/dci/paired-devices/device/{node-id}/peer/{peer-node-id}

### Parameter

Parameter	Type	Description
dci-pairing	O	DCI Pairing

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
settings	O	Return DCI settings

## Delete DCI Pairs with Node ID and Peer ID

**Resource Name** /auto-config/dci/paired-devices/device/{node-id}/peer/{peer-node-id}

**Description** Delete the DCI pairing for a given node ID and peer ID

**https Method** DELETE

**URL** https://dcnm-ip/rest/auto-config/dci/paired-devices/device/{node-id}/peer/{peer-node-id}

### Parameter

Parameter	Type	Description

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description

## Create Partition with DCI Option

**Resource Name** /auto-config/organizations/{organization-name}/partitions

**Description** Create the partition with DCI ID and enable DCI extension.

**https Method** POST

**URL** https://dcnm-ip/rest/auto-config/organizations/{organization-name}/partitions

**Parameter**

Parameter	Type	Description
partition	O	Partition object

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description

## Update Partition with DCI ID

**Resource Name** /auto-config/organizations/{organization-name}/partitions/{partition-name}

**Description** Update the partition with DCI ID.

**https Method** PUT

**URL** https://dcnm-ip/rest/auto-config/organizations/{organization-name}/partitions/{partition-name}

### Parameter

Parameter	Type	Description
partition	O	Partition object

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description

## Update Partition to Disable DCI Extension

**Resource Name** /auto-config/organizations/{organization-name}/partitions/{partition-name}

**Description** Update the partition to disable DCI extension.

**https Method** PUT

**URL** https://dcnm-ip/rest/auto-config/organizations/{organization-name}/partitions/{partition-name}

### Parameter

Parameter	Type	Description
partition	O	Partition object

### Return Value

Format: JSON

Type: Object

Attribute Name	Type	Description

## Update Partition to Enable DCI Extension

**Resource Name** /auto-config/organizations/{organization-name}/partitions/{partition-name}

**Description** Update the partition to enable DCI extension.

**https Method** PUT

**URL** https://dcnm-ip/rest/auto-config/organizations/{organization-name}/partitions/{partition-name}

### Parameter

Parameter	Type	Description
partition	O	Partition object

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description

## List All Extended Partitions

**Resource Name** /auto-config/dci/extended-partitions

**Description** List all the extended partitions.

**https Method** GET

**URL**  
<https://dcnm-ip/rest/auto-config/dci/extended-partitions>  
<https://dcnm-ip/rest/auto-config/dci/extended-partitions?detail=true>

### Parameter

Parameter	Type	Description

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
extended-partition	O	Extended partition

## List All Extended Partitions with a VRF

**Resource Name** /auto-config/dci/extended-partitions/vrfs/{vrf-name}

**Description** List all the extended partitions with a VRF.

**https Method** GET

**URL**  
<https://dcnm-ip/rest/auto-config/dci/extended-partitions/vrfs/{vrf-name}>  
<https://dcnm-ip/rest/auto-config/dci/extended-partitions/vrfs/{vrf-name}?detail=true>

### Parameter

Parameter	Type	Description

**Return Value**  
Format: JSON  
Type: Object

Attribute Name	Type	Description
extended-partition	O	Extended partition

## List all Extended Partitions in an Organization

**Resource Name** /auto-config/dci/extended-partitions/organizations/{organization-name}

**Description** List all the extended partitions in a organization.

**https Method** GET

**URL**

https://dcnm-ip/rest/auto-config/dci/extended-partitions/organizations/{organization-name}  
 https://dcnm-ip/rest/auto-config/dci/extended-partitions/organizations/{organization-name}?detail=true

### Parameter

Parameter	Type	Description

### Return Value

Format: JSON

Type: Object

Attribute Name	Type	Description
extended-partition	O	Extended partition

## Get Extended Partition

**Resource Name** /auto-config/dci/extended-partitions/organizations/{organization-name}/{partition-name}

**Description** Get extended partition

**https Method** GET

**URL**

https://dcnm-ip/rest/auto-config/dci/extended-partitions/organizations/{organization-name}/{partition-name}

https://dcnm-ip/rest/auto-config/dci/extended-partitions/organizations/{organization-name}/{partition-name}?detail=true

### Parameter

Parameter	Type	Description

### Return Value

Format: JSON

Type: Object

Attribute Name	Type	Description
extended-partition	O	Extended partition

# DHCP

The following are the DHCP REST APIs:

- [List POAP Scopes, page -85](#)
- [Create a POAP Scope, page -86](#)
- [Update a POAP Scope, page -87](#)
- [Delete a POAP Scope, page -88](#)

## Status

The following table details the API Response code, status and, the HTTPS methods.

<b>Status Code</b>	<b>Status</b>	<b>API's HTTPS Method or HTTPS Method</b>
200	OK	GET
202	Accepted	POST PUT DELETE
400	Bad Request	GET POST PUT DELETE
401	Unauthorized	GET POST PUT DELETE
403	Forbidden	GET POST PUT DELETE
404	Not Found	GET POST PUT DELETE

Status Code	Status	API's HTTPS Method or HTTPS Method
405	Method Not Allowed	GET POST PUT DELETE
500	Internal Server Error	GET POST PUT DELETE

## List POAP Scopes

<b>Resource Name</b>	/poap/dhcp/scopes						
<b>Description</b>	List of POAP DHCP scopes						
<b>https Method</b>	GET						
<b>URL</b>	https://dcnm-ip/rest/poap/dhcp/scopes						
<b>Parameter</b>							
<table border="1"> <thead> <tr> <th>Parameter</th><th>Type</th><th>Description</th></tr> </thead> <tbody> <tr> <td></td><td></td><td></td></tr> </tbody> </table>		Parameter	Type	Description			
Parameter	Type	Description					
<b>Return Value</b>							
<p>Format: JSON</p> <p>Type: Object</p> <table border="1"> <thead> <tr> <th>Attribute Name</th><th>Type</th><th>Description</th></tr> </thead> <tbody> <tr> <td>Poap-scopes</td><td>A</td><td>A list of scope objects including scope name, ip-range, default-lease-time, max-lease-time, tftp-server-ip-address, tftp-server-username, tftp-server-password, boot-script-path is displayed.</td></tr> </tbody> </table>		Attribute Name	Type	Description	Poap-scopes	A	A list of scope objects including scope name, ip-range, default-lease-time, max-lease-time, tftp-server-ip-address, tftp-server-username, tftp-server-password, boot-script-path is displayed.
Attribute Name	Type	Description					
Poap-scopes	A	A list of scope objects including scope name, ip-range, default-lease-time, max-lease-time, tftp-server-ip-address, tftp-server-username, tftp-server-password, boot-script-path is displayed.					

## Create a POAP Scope

**Resource Name** /poap/dhcp/scopes

**Description** Create a new DHCP scope for POAP.

**https Method** POST

**URL** https://dcnm-ip/rest/poap/dhcp/scopes

### Parameter

Parameter	Type	Description
Poap-scope		Displays a list of POAP scope objects including scope name and ip-range, default-lease-time, max-lease-time, tftp-server-ip-address, tftp-server-username, tftp-server-password, boot-script-path.

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
scope-name	S	DHCP scope name.

## Update a POAP Scope

**Resource Name** /poap/dhcp/scopes/{scope-name}

**Description** Update a DHCP scope for POAP.

**https Method** PUT

**URL** https://dcnm-ip/rest/poap/dhcp/scopes/{scope-name}

### Parameter

Parameter	Type	Description
Poap-scope	O	Displays a list of POAP scope objects including scope name and switch-settings, switch-settings includes ip-range, default-lease-time, max-lease-time, tftp-server-ip-address, tftp-server-username, tftp-server-password, boot-script-path

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description

## Delete a POAP Scope

**Resource Name** /poap/dhcp/scopes/{scope-name}

**Description** Delete a DHCP scope for POAP.

**https Method** DELETE

**URL** https://dcnm-ip/rest/poap/dhcp/scopes/{scope-name}

**Parameter**

Parameter	Type	Description

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description

# Discovery

The following are the Discovery REST APIs:

- [Discover Fabric, page -85](#)
- [Shallow Discover LAN Device\(s\), page -87](#)
- [Discover LAN Device\(s\), page -89](#)
- [Discover Storage Device, page -91](#)
- [Discover Virtual Machine, page -93](#)

## Status

The following table details the API Response code, status and, the HTTPS methods.

<b>Status Code</b>	<b>Status</b>	<b>API's HTTPS Method or HTTPS Method</b>
200	OK	GET
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401	Unauthorized	GET POST PUT DELETE
403	Forbidden	GET POST PUT DELETE
404	Not Found	GET POST PUT DELETE

Status Code	Status	API's HTTPS Method or HTTPS Method
405	Method Not Allowed	GET POST PUT DELETE
500	Internal Server Error	GET POST PUT DELETE

## Discover Fabric

**Resource Name** /san/discoverFabricWithServerFuji4

**Description** Enables you to discover fabrics

**https Method** SET

**URL** https://dcnm-ip/fm/fmrest/san/discoverFabricWithServerFuji4

### Parameter

Parameter	Type	Description
send	string	Seed switch for discovery
isV3	string	Is snmp V3: "true" or "false"
username	string	Snmp user name if v3, ignored if v2
password	string	Snmp v3 password or ignored if v2
v3protocol	string	Snmp v3 protocol V3 MD5 only = "0" V3 SHA only = "1" V3 MD5_DES = "2" V3 MD5_AES = "3" V3 SHA_DES = "4" V3 SHA_AES = "5"
community	string	Snmp v2 community string, ignored if snmp v3
inVsans	string	Included Vsan range for discovery.  Example: "1" for VSAN 1, "1,3" for VSAN 1 and 3 "1-3" for VSAN 1, 2, 3
exVsans	string	Excluded Vsan range for discovery.  Example: "1" for VSAN 1, "1,3" for VSAN 1 and 3 "1-3" for VSAN 1, 2, 3
globalEnableNpvDiscovery	string	Enable discovery to include NPV sw globally "true" or "false"

Parameter	Type	Description
ucsUsername	string	Ssh Username for UCS software, ignored if null or 0 length String
ucsPasswd	string	Ssh password for UCS sw, ignored if null or 0 length String
fmserver	string	Target DCNM server IP String where this fabric will be discovered by, this cannot be blank or null; even in the non-federation setup, the connected DCNM server IP string has to be provided.

**Return Value**

Format: JSON

Type: Object

Attribute Name	Type	Description
CallResultDO	A	<p>Result</p> <p>CallResutlDO.getResultStatus() : 0 means success</p> <p>Non-0 means failure and getResultMessage() will be the failure result</p>

## Shallow Discover LAN Device(s)

**Resource Name** /san/shallowLanDiscover

**Description** Shallow discover LAN Device(s) by CDP discovery

**https Method** GET

**URL** https://dcnm-ip/fm/fmrest/san/shallowLanDiscover

**Parameter**

Parameter	Type	Description
SeedIp	string	Seed switch for LAN CDP discovery by hops or switch ip list for LAN CDP discovery "10.1.1.1" or "10.1.1.1-3"
isFWSM	string	Always "false"
isV3	string	Is snmp V3: "true" or "false"
username	string	Snmp user name if v3, ignored if v2
password	string	Snmp v3 password or ignored if v2
v3protocol	string	Snmp v3 protocol V3 MD5 only = "0" V3 SHA only = "1" V3 MD5_DES = "2" V3 MD5_AES = "3" V3 SHA_DES = "4" V3 SHA_AES = "5"
community	string	Snmp v2 community string, ignored if snmp v3

Parameter	Type	Description
maxHop	string	Number of hops for LAN CDP Discovery if a single switch ip is provided in "seedIp" parameter, ignored if a switch list is provided in "seedIp" parameter
cdpTimeout	string	LAN CDP Discovery timeout, "3" for 3 sec and 3, 6, 9, 10, 20, 30 sec are provided on the GUI

**Return Value**

Format: JSON

Type: Object

Attribute Name	Type	Description
rstDO	AdminShallowDiscoverNodeDO[]	<p>Array of AdminShallowDiscoverNode Objects</p> <p>Note for AdminShallowDiscoverNode-</p> <p>reachable:boolean;</p> <p>auth:boolean;</p> <p>known:boolean;</p> <p>valid:boolean;</p> <p>selectable:boolean;</p> <p>sysName:String;</p> <p>ipaddr:String;</p> <p>platform:String;</p> <p>version:String;</p> <p>lastChange:String;</p> <p>hopCount:int;</p> <p>deviceIndex:String;</p> <p>statusReason:String;</p>

## Discover LAN Device(s)

**Resource Name** /san/discoverLan

**Description** Discover LAN device(s)

**https Method** SET

**URL** https://dcnm-ip/fm/fmrest/san/discoverLan

### Parameter

Parameter	Type	Description
SeedIp	string	switch ip list for LAN CDP discovery "10.1.1.1" or "10.1.1.1-3" Note: recommend picking the switch(s) from the output of /san/shallowLanDiscover where the node is reachable true and valid true
isFWSM	string	Always "false"
isV3	string	Is snmp V3: "true" or "false"
username	string	Snmp user name if v3, ignored if v2
password	string	Snmp v3 password or ignored if v2
v3protocol	string	Snmp v3 protocol V3 MD5 only = "0" V3 SHA only = "1" V3 MD5_DES = "2" V3 MD5_AES = "3" V3 SHA_DES = "4" V3 SHA_AES = "5"
community	string	Snmp v2 community string, ignored if snmp v3
maxHop	string	null
enablePwd	string	null

Parameter	Type	Description
groupDbId	string	LAN Group DB Id, eg. "10" for 10
isDeepDiscovery	string	null
serverIpAddress	string	Target DCNM server IP String where this LAN device will be discovered by, this cannot be blank or null; even in the non-federation setup, the connected DCNM server IP string has to be provided.
isSingleDeviceTask	string	Always "true".

**Return Value**

Format: JSON

Type: Object

Attribute Name	Type	Description
CallResultDO	A	<p>Result</p> <p>CallResutlDO.getResultStatus() : 0 means success</p> <p>Non-0 means failure and getResultMessage() will be the failure result</p>

## Discover Storage Device

**Resource Name** /storage/demandDiscoverSmisProvider

**Description** Discover SMIS

**https Method** SET

**URL** https://dcnm-ip/fm/fmrest/storage/demandDiscoverSmisProvider

### Parameter

Parameter	Type	Description
smisWorker	SMISProviderWorkerDO	SMIS provider information providerList:SMISProviderDO[], password:String, fmserver:String note : SMISProviderDO is dbId:long; provId:int; fmServer:String; ns:String; interops:String; url:String; username:String; port:int; secure:boolean; vendor:String; select:String; status:String; managedstatus:String; lastUpdated:String; version:String;

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
CallResultDO	A	<p>Result</p> <p>CallResutlDO.getResultStatus() :</p> <p>0 means success</p> <p>Non-0 means failure and getResultMessage() will be the failure result</p>

## Discover Virtual Machine

**Resource Name** /san/addVirtualCenter

**Description** Discover Virtual Machine

**https Method** SET

**URL** https://dcnm-ip/fm/fmrest/san/addVirtualCenter

### Parameter

Parameter	Type	Description
vcIP	string	Virtual Center Ip address
username	string	Virtual Center user name
password	string	Virtual Center password
serverIpaddress	string	Target DCNM server IP String where this Virtual Machine will be discovered by, this cannot be blank or null; even in the non-federation setup, the connected DCNM server IP string has to be provided.

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
CallResultDO	A	<p>Result</p> <p>CallResultDO.getResultStatus() : 0 means success</p> <p>Non-0 means failure and getResultMessage() will be the failure result</p>



## Events

The following are the Events REST APIs:

- [Get Events, page -97](#)
- [Get Accounting, page -98](#)
- [Get Forwarders, page -99](#)

## Status

The following table details the API Response code, status and, the HTTPS methods.

<b>Status Code</b>	<b>Status</b>	<b>API's HTTPS Method or HTTPS Method</b>
200	OK	GET
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401	Unauthorized	GET POST PUT DELETE
403	Forbidden	GET POST PUT DELETE
404	Not Found	GET POST PUT DELETE

Status Code	Status	API's HTTPS Method or HTTPS Method
405	Method Not Allowed	GET POST PUT DELETE
500	Internal Server Error	GET POST PUT DELETE

## Get Events

**Resource Name** /health/events

**Description** Enables you to get events data

**https Method** GET

**URL** https://dcnm-ip/fm/fmrest/health/events

### Parameter

Parameter	Type	Description

**Return Value** Format: JSON

Type: String

Attribute Name	Type	Description
	ServerResponse	Array of DBEntryDO Objects

## Get Accounting

**Resource Name** /health/accounting

**Description** Enables you to get accounting data.

**https Method** GET

**URL** https://dcnm-ip/fm/fmrest/health/accounting

**Parameter**

Parameter	Type	Description
NA	NA	NA

**Return Value** Format: JSON

Type: String

Attribute Name	Type	Description
	ServerResponse	Array of DBEntryDO Objects

## Get Forwarders

**Resource Name** /dbadmin/getEventForwarders

**Description** Enables you to get event forwarder list.

**https Method** GET

**URL** https://dcnm-ip/fm/fmrest/dbadmin/getEventForwarders

**Parameter**

Parameter	Type	Description
NA	NA	NA

**Return Value** Format: JSON

Type: String

Attribute Name	Type	Description
Parsed JSON string	String	Array of DBEntryDO Objects



## Image Management

The following are the Image Management REST APIs:

- [Get valid switches for Image Management, page -106](#)
- [Trigger compatibility check, page -107](#)
- [Get compatibility check/image upgrade status, page -108](#)
- [Trigger Image upgrade check, page -109](#)
- [Get all upgrade and compatibility check jobs, page -110](#)
- [Activate a SMU package, page -111](#)
- [Deactivate a SMU package, page -112](#)
- [Get all active SMU packages for a switches, page -113](#)
- [Get GIR status for all the switches, page -114](#)
- [Toggle GIR status for all the switches, page -115](#)

## Mandatory Field Class table

### filter

Attributes	Type	Require	Description
entity	String	Mandatory	The value must be <b>ethswitch</b> , to get switch details
filterAttributes	HashMap<String, String>	Mandatory	Name value pair for filtering services. For Image image management key value pair will be "capability" and "ISSU" respectively.

### job

Attributes	Type	Require	Description
saverunningConfig	boolean	Optional	Saves the running configuration to switch, if value is <b>true</b> .
concurrentExec	boolean	Mandatory	Upgrade occurs concurrently, if the value is <b>true</b> .
executeImmediately	boolean	Mandatory	Upgrade begins immediately if the value is <b>true</b> . The upgrade process will be scheduled for a later time.
comments	String	Optional	Any comments for the upgrade task
jobType	integer	Mandatory	0 for image upgrade, 2 for compatibility check
id	integer	Mandatory	-1 for new job creation. Job Id of the compatibility job for upgrading image.
taskList	List<ImageInstallTask>	Mandatory	Information on images for different devices.

### imageInstallTask

Attributes	Type	Require	Description
kickStartImage	String	Mandatory	Kickstart image for compatibility check or upgrade.
systemImageFile	String	Mandatory	System image for compatibility check or upgrade.
installLog	String	Optional	Contains install log from the device
compatiblty_log	String	Optional	Contains compatibility check log from the device
statusDescr	String	Optional	Description on the status.
compatiblty_desc	String	Optional	-1 for new job creation. Job Id of the compatibility job for upgrading image.
strStatus	String	Optional	Status of the image upgrade task.

<b>Attributes</b>	<b>Type</b>	<b>Require</b>	<b>Description</b>
strCompStatus	String	Optional	Status of the compatibility check task.
jobId	Integer	Mandatory	Job Id of the parent Job. -1 initially when the job is not yet created.
scheduledTime	Timestamp	Optional	Timestamp at which image upgrade needs to be triggered.
completedTime	Timestamp	Optional	Time at which the compatibility check or image upgrade is completed.
parallelLineCardUpgrade	boolean	Optional	True when the line cards needs to be upgraded parallel.
id	long	Mandatory	-1 initially. Task id once the job is created.
ethswitch_id	long	Mandatory	Ethswitch id for the switch.
hostName	String	Mandatory	Host name of the device
ipAddress	String	Mandatory	IP address of the device
platform	String	Mandatory	Nexus Platform of the device
version	String	Mandatory	NXOS version of the device
serverName	String	Optional	Server from where images needs to be installed.
type	Enum	Optional	Type of the image source. It can be either SERVER or DEVICE.
status	Enum	Optional	Status of image upgrade
compatibility_status	Enum	Optional	Status of compatibility check.

### **SMUInstallTask**

<b>Attributes</b>	<b>Type</b>	<b>Require</b>	<b>Description</b>
packageName	String	Mandatory	Name of the SMU package. Comma seperated in case of multiple packages.
ipAddress	String	Mandatory	IP Address of the device.
statusDescr	String	Optional	Description for the status
type	Enum	Optional	"DEVICE" when the SMU package is on the device. "SERVER" if its on remote server.
serverName	String	Optional	Name of the server from where the image needs to be installed.
platform	String	Mandatory	Platform of the device.
hostName	String	Mandatory	Hostname of the device.
completedTime	TimeStamp	Optional	Time at which SMU installation completes.
id	long	Mandatory	-1 while trigerring SMU.
ethSwitch_id	long	Mandatory	Switch id from db.
status	Enum	Optional	Status of SMU task
jobtype	integer	Mandatory	0 for SMU install and 1 for uninstallation.

**SMUInfo**

<b>Attributes</b>	<b>Type</b>	<b>Require</b>	<b>Description</b>
switch_id	long	Mandatory	Ethswitch ID of the switch.
packages	Set<String>	Mandatory	SMU packages installed on the switch

**GIRInfo**

<b>Attributes</b>	<b>Type</b>	<b>Require</b>	<b>Description</b>
switch_id	long	Mandatory	Ethswitch ID of the switch.
bMaintenanceMode	boolean	Mandatory	True if switch is in maintenance mode.
maintenanceMode	String	Mandatory	Indicates of the switch is in isolate or shut down mode. Other wise NA
bSuccess	boolean	Optional	True if the system mode change is successful.
statusDesc	String	Mandatory	Description of the status
hostName	String	Mandatory	Hostname of the device
platform	String	Mandatory	Platform of the device
ipAddress	String	Mandatory	IP address of the device

**GIRInfoList**

<b>Attributes</b>	<b>Type</b>	<b>Require</b>	<b>Description</b>
girList	List<GIRInfo>	Mandatory	List of GIRInfo

**Status**

The following table details the API Response code, status and, the HTTPS methods.

<b>Status Code</b>	<b>Status</b>	<b>API's HTTPS Method or HTTPS Method</b>
200	OK	GET
202	Accepted	POST PUT DELETE
400	Bad Request	GET POST PUT DELETE

<b>Status Code</b>	<b>Status</b>	<b>API's HTTPS Method or HTTPS Method</b>
401	Unauthorized	GET POST PUT DELETE
403	Forbidden	GET POST PUT DELETE
404	Not Found	GET POST PUT DELETE
405	Method Not Allowed	GET POST PUT DELETE
500	Internal Server Error	GET POST PUT DELETE

## Get valid switches for Image Management

**Resource Name** /inventory/switches/

**Description** Returns all valid switches that are qualified for image upgrade.

**https Method** POST

**URL** https://dcnm-ip/fm/fmrest/inventory/switches/

**Parameter**

Parameter	Type	Description
filter	O	Filter Object

**Return Value** Format: JSON

Type: List of Object

Attribute Name	Type	Description
Response	O	Response Object with switch information in string.

## Trigger compatibility check

**Resource Name** /imagemanagement/job

**Description** Triggers compatibility check on the device and returns the job ID

**https Method** POST

**URL** https://dcnm-ip/fm/fmrest/imagemanagement/job

### Parameter

Parameter	Type	Description
saverunningConfig	boolean	Saves the running configuration to switch if value is true.
concurrentExec	boolean	Upgrade will happen concurrently if the value is true.
executeImmediately	boolean	Upgrade will happen immediately if true. Otherwise will be scheduled.
comments	string	Any comments for the upgrade task.
jobType	integer	0 for image upgrade, 2 for compatibility check
id	integer	-1 for new job creation. Job Id of the compatibility job for upgrading image.
taskList	List<ImageInstallTask>	Information on images for different devices.

**Return Value** Format: JSON

Type: Long

Attribute Name	Type	Description
		Job ID of the new compatibility task

## Get compatibility check/image upgrade status

**Resource Name** /imagemanagement/job/{Job-id}

**Description** Gets the compatibility check status

**https Method** GET

**URL** https://dcnm-ip/fm/fmrest/imagemanagement/job/{job-id}

### Parameter

Parameter	Type	Description
—		

**Return Value** Format: JSON

Type: ImageInstallTaskList

Attribute Name	Type	Description
Response	O	Response Object with Job status as List of ImageInstallTask.

## Trigger Image upgrade check

**Resource Name** /imagemanagement/job

**Description** Triggers compatibility check on the device and returns the job ID

**https Method** POST

**URL** https://dcnm-ip/fm/fmrest/imagemanagement/job

**Parameter**

Parameter	Type	Description
Job	O	Job Object

**Return Value** Format: JSON

Type: Long

Attribute Name	Type	Description
Response	O	Response Object with Job Id information as long.

## Get all upgrade and compatibility check jobs

**Resource Name** /imagemanagement/jobs

**Description** Gets the compatibility check status

**https Method** GET

**URL** https://dcnm-ip/fm/fmrest/imagemanagement/jobs

**Parameter**

Parameter	Type	Description
—		

**Return Value** Format: JSON

Type: List of Job

Attribute Name	Type	Description
Response	O	Response Object with list of Job object.

## Activate a SMU package

**Resource Name** /smu/activate

**Description** Installs patch

**https Method** POST

**URL** https://dcnm-ip/fm/fmrest/smu/activate

### Parameter

Parameter	Type	Description
SMUInstallJob	O	List of SMUInstallTask

**Return Value** Format: JSON

Type: smuTask

Attribute Name	Type	Description
Response	O	Response Object with list of SMUInstallTask

## Deactivate a SMU package

**Resource Name** /smu/deactivate

**Description** Installs patch

**https Method** POST

**URL** https://dcnm-ip/fm/fmrest/smu/deactivate

### Parameter

Parameter	Type	Description
SMUInstallJob	O	List of SMUInstallTask

**Return Value** Format: JSON

Type: smuTask

Attribute Name	Type	Description
Response	O	Response Object with list of SMUInstallTask

## Get all active SMU packages for a switches

**Resource Name** /smu/getactive

**Description** Gets the active SMU packages for a switch

**https Method** POST

**URL** https://dcnm-ip/fm/fmrest/imagemanagement/jobs

**Parameter**

Parameter	Type	Description
EthSwitchList	O	List of all Ethernet Switch IDs

**Return Value** Format: JSON

Type: List of SMUInfo

Attribute Name	Type	Description
Response	O	Response Object with list of SMUInfo

## Get GIR status for all the switches

**Resource Name** /imagemanagement/allsystemmode

**Description** Gets the maintenance status for all the switches

**https Method** GET

**URL** https://dcnm-ip/fm/fmrest/imagemanagement/allsystemmode

### Parameter

Parameter	Type	Description
—		

**Return Value** Format: JSON

Type: List of GIRInfo

Attribute Name	Type	Description
Response	O	Response Object with list of GIRInfo

## Toggle GIR status for all the switches

**Resource Name** /imagemanagement/toggle

**Description** Gets the maintenance status for all the switches

**https Method** POST

**URL** https://dcnm-ip/fm/fmrest/imagemanagement/allsystemmode

**Parameter**

Parameter	Type	Description
GIRInfoList	O	List of GIRInfo

**Return Value** Format: JSON

Type: List of GIRInfo

Attribute Name	Type	Description
Response	O	Response Object with list of GIRInfo



# Inventory

The following are the Inventory REST APIs:

- [Get Fabrics, page -119](#)
- [Get Switches, page -120](#)
- [Get all End Ports, page -121](#)
- [Get all End Ports Performance, page -122](#)
- [Get all San Ethernet Ports, page -123](#)
- [Get San Isls, page -124](#)
- [Get Modules, page -125](#)
- [Get VSANs, page -126](#)
- [Get Licenses, page -127](#)
- [Get Host/Storage Enclosed List, page -128](#)
- [Get Port Groups, page -129](#)
- [Get Regular Zones, page -130](#)
- [Get all Lan ISL, page -131](#)
- [Get all LAN Ethernet Ports, page -132](#)
- [Get LAN Devices, page -133](#)
- [Get Storage Providers, page -134](#)
- [Get Storage Providers worker status, page -136](#)
- [Get Virtual Centers, page -138](#)

## Status

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403	Forbidden	GET POST PUT DELETE
404	Not Found	GET POST PUT DELETE
405	Method Not Allowed	GET POST PUT DELETE
500	Internal Server Error	GET POST PUT DELETE

## Get Fabrics

**Resource Name** /san/ getFabricWithSnmpCredentail\_fromDB

**Description** Enables to discover fabrics.

**https Method** GET

**URL** https://dcnm-ip/fm/fmrest/san/getFabricWithSnmpCredentail\_fromDB

**Parameter**

Parameter	Type	Description
NA	NA	NA

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
Rst.toJSONString()	A	Array of DBEntryDO Objects

## Get Switches

**Resource Name** /inventory/switches

**Description** Get all discovered SAN switches

**https Method** GET

**URL** https://dcnm-ip/fm/fmrest/inventory/switches

### Parameter

Parameter	Type	Description
NA	NA	NA

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
	ServerResponse	Array of SwitchDO objects

## Get all End Ports

**Resource Name** /inventory/endports

**Description** Get all end ports

**https Method** GET

**URL** https://dcnm-ip/fm/fmrest/statistics/endports

**Parameter**

Parameter	Type	Description
NA	NA	NA

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
	ServerResponse	List of all EndPortDO objects

## Get all End Ports Performance

**Resource Name** /statistics/endportStat

**Description** Get all end ports counters

**https Method** GET

**URL** https://dcnm-ip/fm/fmrest/statistics/endportStat

**Parameter**

Parameter	Type	Description

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
	ServerResponse	List of all StatisticsDataDO objects

## Get all San Ethernet Ports

**Resource Name** /statistics/SanGigEStat

**Description** Get all Ethernet ports under SAN

**https Method** GET

**URL** https://dcnm-ip/fm/fmrest/statistics/SanGigEStat

**Parameter**

Parameter	Type	Description

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
	ServerResponse	List of all StatisticsDataDO objects

## Get San Isls

**Resource Name** /statistics/sanIslStat

**Description** Get all Isls

**https Method** GET

**URL** https://dcnm-ip/fm/fmrest/statistics/sanIslStat

### Parameter

Parameter	Type	Description
NA	NA	NA

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
	ServerResponse	List of all StatisticsDataDO objects

## Get Modules

**Resource Name** /inventory/modules

**Description** Get all modules

**https Method** GET

**URL** https://dcnm-ip/fm/fmrest/inventory/modules

### Parameter

Parameter	Type	Description

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
	ServerResponse	List of all DBEntryDO objects

## Get VSANs

**Resource Name** /inventory/vsans

**Description** Get all VSANs.

**https Method** GET

**URL** https://dcnm-ip/fm/fmrest/inventory/vsans

### Parameter

Parameter	Type	Description
NA	NA	NA

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
	ServerResponse	List of all VsanDO Objects

## Get Licenses

**Resource Name** /inventory/licenses

**Description** Enables you to get all licenses

**https Method** GET

**URL** https://dcnm-ip/fm/fmrest/inventory/licenses

### Parameter

Parameter	Type	Description

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
License	A	List of all License Objects

## Get Host/Storage Enclosed List

**Resource Name** /statistics/portGroupStat

**Description** Get the Host's enclosure List or Storage Enclosure list

**https Method** GET

**URL** https://dcnm-ip/fm/fmrest/statistics/portGroupStat

### Parameter

Parameter	Type	Description
type	string	Type of the object Host: type=Host%20Enclosures Storage: type=Storage%20Enclosures

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
	ServerResponse	List of StatisticsDataDO objects

## Get Port Groups

**Resource Name** /statistics/portGroupStat

**Description** Get the group groups

**https Method** GET

**URL** https://dcnm-ip/fm/fmrest/statistics/portGroupStat

### Parameter

Parameter	Type	Description
type	string	Type of the object type=Port%20Groups

### Return Value

Format: JSON

Type: Object

Attribute Name	Type	Description
	ServerResponse	List of StatisticsDataDO objects

## Get Regular Zones

**Resource Name** /inventory/zones

**Description** Get the regular zones

**https Method** GET

**URL** https://dcnm-ip/fm/fmrest/inventory/zones

**Parameter**

Parameter	Type	Description

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
	ServerResponse	List of ZoneDO objects

## Get all Lan ISL

**Resource Name** /statistics/lanIslstat

**Description** Get all ISLs under LAN

**https Method** GET

**URL** https://dcnm-ip/fm/fmrest/statistics/lanIslstat

### Parameter

Parameter	Type	Description

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
	ServerResponse	List of all StatisticsDataDO objects

## Get all LAN Ethernet Ports

**Resource Name** /statistics/LanEthernetStat

**Description** Get all Ethernet ports under LAN

**https Method** GET

**URL** https://dcnm-ip/fm/fmrest/statistics/LanEthernetStat

### Parameter

Parameter	Type	Description

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
	ServerResponse	List of StatisticsDataDO objects

## Get LAN Devices

**Resource Name** /san/getEthSwitchAll

**Description** Enables you to discover LAN devices

**https Method** GET

**URL** https://dcnm-ip/fm/fmrest/san/getEthSwitchAll

### Parameter

Parameter	Type	Description

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
	string	DBEntryDO.toJSONString()

## Get Storage Providers

**Resource Name** /storage/getSmisProviders

**Description** Get all discovered SMIS Storage providers

**https Method** GET

**URL** https://dcnm-ip/fm/fmrest/storage/getSmisProviders

### Parameter

Parameter	Type	Description

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
Rst	string	SMISProviderListDO.toJSONString(), SMISProvderListDO object which is an array of SMISProviderDO.  SMISProviderDO is dbId:long; provId:int; fmServer:String; ns:String; interopns:String; url:String; username:String; port:int; secure:boolean; vendor:String; select:String; status:String; managedstatus:String; lastUpdated:String; version:String;

## Get Storage Providers worker status

**Resource Name** /storage/getWorkerStatus

**Description** Get all discovered SMIS Storage worker status

**https Method** GET

**URL** https://dcnm-ip/fm/fmrest/storage/getWorkerStatus

### Parameter

Parameter	Type	Description
smisWorker	SMISProviderWorkerDO	A array of SMIS provider. SMISProviderWorkerDO - providerList:SMISProviderDO[], password:String, fmserver:String. Note SMISProviderDO is dbId:long; provId:int; fmServer:String; ns:String; interopns:String; url:String; username:String; port:int; secure:boolean; vendor:String; select:String; status:String; managedstatus:String; lastUpdated:String; version:String;

**Return Value** Format: JSON

Type: Object

<b>Attribute Name</b>	<b>Type</b>	<b>Description</b>
Rst.toJSONString()	string	<p>SMISProviderListDO.toJSONString(),</p> <p>SMISProvderListDO object which is an array of SMISProviderDO.</p> <p>SMISProviderDO is</p> <p>dbId:long;</p> <p>provId:int;</p> <p>fmServer:String;</p> <p>ns:String;</p> <p>interopns:String;</p> <p>url:String;</p> <p>username:String;</p> <p>port:int;</p> <p>secure:boolean;</p> <p>vendor:String;</p> <p>select:String;</p> <p>status:String;</p> <p>managedstatus:String;</p> <p>lastUpdated:String;</p> <p>version:String;</p>

## Get Virtual Centers

**Resource Name** /san/getVirtualCenters

**Description** Get all discovered Virtual Centers

**https Method** GET

**URL** https://dcnm-ip/fm/fmrest/san/getVirtualCenters

### Parameter

Parameter	Type	Description

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
	string	DBEntryDO.toJSONString()

## Multiple Mobility Domain with VLAN Translation

The following are the Multiple Mobility Domain with VLAN Translation REST APIs:

- [List Mobility Domains with VLANs, page -141](#)
- [Get Mobility Domain with VLANs, page -142](#)
- [Create Mobility Domain with VLANs, page -143](#)
- [Update Mobility Domain with VLANs, page -144](#)
- [Delete Mobility Domain with VLANs, page -145](#)
- [Get Translate VLAN Settings, page -146](#)
- [Update Translate VLAN Settings, page -147](#)
- [Delete Translate VLAN Settings, page -148](#)

### Status

The following table details the API Response code, status and, the HTTPS methods.

<b>Status Code</b>	<b>Status</b>	<b>API's HTTPS Method or HTTPS Method</b>
200	OK	GET
202	Accepted	POST PUT DELETE
400	Bad Request	GET POST PUT DELETE
401	Unauthorized	GET POST PUT DELETE
403	Forbidden	GET POST PUT DELETE
404	Not Found	GET POST PUT DELETE

Status Code	Status	API's HTTPS Method or HTTPS Method
405	Method Not Allowed	GET POST PUT DELETE
500	Internal Server Error	GET POST PUT DELETE

## List Mobility Domains with VLANs

**Resource Name** /rest/settings/mobility-domains

**Description** List mobility domains with VLANs.

**https Method** GET

**URL** https://dcnm-ip/rest/settings/mobility-domains

**Parameter**

Parameter	Type	Description

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
mobilityDomains	O	Return all the mobility domain names with their translated VLAN ranges.

## Get Mobility Domain with VLANs

**Resource Name** /rest/settings/mobility-domains/{mobility-domain}

**Description** Get mobility domain with VLANs.

**https Method** GET

**URL** https://dcnm-ip/rest/settings/mobility-domains/{mobility-domain}

### Parameter

Parameter	Type	Description

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
mobilityDomains	O	Return all the mobility domain names with their translated VLAN ranges.

## Create Mobility Domain with VLANs

**Resource Name** /rest/settings/mobility-domains

**Description** Create mobility domain with VLANs.

**https Method** POST

**URL** https://dcnm-ip/rest/settings/mobility-domains

**Parameter**

Parameter	Type	Description
mobilityDomains		Mobility domain name with translated VLAN ranges.

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description

## Update Mobility Domain with VLANs

**Resource Name** /rest/settings/mobility-domains/{mobility-domain}

**Description** Update mobility domain with VLANs.

**https Method** PUT

**URL** https://dcnm-ip/rest/settings/mobility-domains/{mobility-domain}

### Parameter

Parameter	Type	Description
mobilityDomains	O	Mobility domain name with translated VLAN ranges.

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description

## Delete Mobility Domain with VLANs

**Resource Name** /rest/settings/mobility-domains/{mobility-domain}

**Description** Delete mobility domain with VLANs.

**https Method** DELETE

**URL** https://dcnm-ip/rest/settings/mobility-domains/{mobility-domain}

**Parameter**

Parameter	Type	Description

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description

## Get Translate VLAN Settings

**Resource Name** /rest/settings/general

**Description** Get Fabric Automation translate VLAN settings.

**https Method** GET

**URL** https://dcnm-ip/rest/settings/general

### Parameter

Parameter	Type	Description
settings	O	Return all the Fabric Automation settings, including translate VLAN related information.

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description

## Update Translate VLAN Settings

**Resource Name** /rest/settings/general

**Description** Update Fabric Automation translate VLAN settings.

**https Method** PUT

**URL** https://dcnm-ip/rest/settings/general

### Parameter

Parameter	Type	Description
settings	O	Fabric Automation settings, including translate VLAN related information.

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description

## Delete Translate VLAN Settings

**Resource Name** /rest/settings/general

**Description** Delete Fabric Automation translate VLAN settings.

**https Method** PUT

**URL** https://dcnm-ip/rest/settings/general

### Parameter

Parameter	Type	Description
settings	O	Fabric Automation settings, including translate VLAN related information.

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description

## Multiple Orchestrator Support

The following are the Multiple Orchestrator Support REST APIs:

- [List All the Orchestrators with Segment Id Ranges, page -151](#)
- [Get Orchestrator Segment Id Ranges, page -152](#)
- [Create Orchestrator Segment Id Ranges, page -153](#)
- [Update Orchestrator Segment Id Ranges, page -154](#)
- [Delete Orchestrator Segment Id Ranges, page -155](#)

### Status

The following table details the API Response code, status and, the HTTPS methods.

<b>Status Code</b>	<b>Status</b>	<b>API's HTTPS Method or HTTPS Method</b>
200	OK	GET
202	Accepted	POST PUT DELETE
400	Bad Request	GET POST PUT DELETE
401	Unauthorized	GET POST PUT DELETE
403	Forbidden	GET POST PUT DELETE
404	Not Found	GET POST PUT DELETE

Status Code	Status	API's HTTPS Method or HTTPS Method
405	Method Not Allowed	GET POST PUT DELETE
500	Internal Server Error	GET POST PUT DELETE

## List All the Orchestrators with Segment Id Ranges

**Resource Name** /settings/segmentid-ranges

**Description** List all the orchestrators with Segment ID Ranges.

**https Method** GET

**URL** https://dcnm-ip/rest/settings/segmentid-ranges

**Parameter**

Parameter	Type	Description

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
orchestratorSegmentIds	O	Return all the orchestrators with their segment Id ranges.

## Get Orchestrator Segment Id Ranges

**Resource Name** /settings/segmentid-ranges/{orchestrator-id}

**Description** Get orchestrator segment ID ranges.

**https Method** GET

**URL** https://dcnm-ip/rest/settings/segmentid-ranges/{orchestrator-id}

### Parameter

Parameter	Type	Description

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
orchestratorSegmentIds	O	Return orchestrator with segment Id ranges.

## Create Orchestrator Segment Id Ranges

<b>Resource Name</b>	/settings/segmentid-ranges						
<b>Description</b>	Create orchestrator segment ID ranges.						
<b>https Method</b>	POST						
<b>URL</b>	https://dcnm-ip/rest/settings/segmentid-ranges						
<b>Parameter</b>							
<table border="1"> <thead> <tr> <th>Parameter</th><th>Type</th><th>Description</th></tr> </thead> <tbody> <tr> <td>orchestratorSegmentIds</td><td>O</td><td>Orchestrator with segment ID ranges</td></tr> </tbody> </table>		Parameter	Type	Description	orchestratorSegmentIds	O	Orchestrator with segment ID ranges
Parameter	Type	Description					
orchestratorSegmentIds	O	Orchestrator with segment ID ranges					
<b>Return Value</b>							
<p>Format: JSON</p> <p>Type: Object</p> <table border="1"> <thead> <tr> <th>Attribute Name</th><th>Type</th><th>Description</th></tr> </thead> <tbody> <tr> <td>orchestratorSegmentIds</td><td>O</td><td>Orchestrator with segment ID ranges</td></tr> </tbody> </table>		Attribute Name	Type	Description	orchestratorSegmentIds	O	Orchestrator with segment ID ranges
Attribute Name	Type	Description					
orchestratorSegmentIds	O	Orchestrator with segment ID ranges					

## Update Orchestrator Segment Id Ranges

**Resource Name** /settings/segmentid-ranges/{orchestrator-id}

**Description** Update orchestrator segment ID ranges.

**https Method** PUT

**URL** https://dcnm-ip/rest/settings/segmentid-ranges/{orchestrator-id}

### Parameter

Parameter	Type	Description
orchestratorSegmentIds	O	Orchestrator with segment ID ranges

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
orchestratorSegmentIds	O	Orchestrator with segment ID ranges

## Delete Orchestrator Segment Id Ranges

**Resource Name** /settings/segmentid-ranges/{orchestrator-id}

**Description** Delete orchestrator segment ID ranges.

**https Method** DELETE

**URL** https://dcnm-ip/rest/settings/segmentid-ranges/{orchestrator-id}

**Parameter**

Parameter	Type	Description

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description



# Performance

The following are the Performance REST APIs:

- [Get Access Port Utilization for LAN Switch, page -159](#)
- [Get CPU, page -160](#)
- [Get End Port Utilization for SAN Fabric, page -161](#)
- [Get Link Utilization for LAN Switch, page -162](#)
- [Get Link Utilization for SAN Switch, page -163](#)
- [Get Memory, page -164](#)
- [Get NPV Link Utilization for SAN Switch, page -165](#)
- [Get Traffic, page -166](#)

## Status

The following table details the API Response code, status and, the HTTPS methods.

<b>Status Code</b>	<b>Status</b>	<b>API's HTTPS Method or HTTPS Method</b>
200	OK	GET
202	Accepted	POST PUT DELETE
400	Bad Request	GET POST PUT DELETE
401	Unauthorized	GET POST PUT DELETE
403	Forbidden	GET POST PUT DELETE
404	Not Found	GET POST PUT DELETE

Status Code	Status	API's HTTPS Method or HTTPS Method
405	Method Not Allowed	GET POST PUT DELETE
500	Internal Server Error	GET POST PUT DELETE

## Get Access Port Utilization for LAN Switch

**Resource Name** /statistics/ethernetStat

**Description** Enables you to get interface access port utilization details.

**https Method** GET

**URL** https://dcnm-ip/fm/fmrest/statistics/ethernetStat

**Parameter**

Parameter	Type	Description
NA	NA	NA

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
	ServerResponse	Array of StatisticsDataDO Objects

## Get CPU

**Resource Name** /statistics/cpuStat

**Description** Enables you to get switch CPU usage.

**https Method** GET

**URL** https://dcnm-ip/fm/fmrest/statistics/cpuStat

### Parameter

Parameter	Type	Description
NA	NA	NA

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
	ServerResponse	Array of StatisticsDataDO Objects

## Get End Port Utilization for SAN Fabric

**Resource Name** /statistics/endportStat

**Description** Enables you to get San End Port utilization details.

**https Method** GET

**URL** https://dcnm-ip/fm/fmrest/statistics/endportStat

**Parameter**

Parameter	Type	Description
NA	NA	NA

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
	ServerResponse	Array of StatisticsDataDO Objects

## Get Link Utilization for LAN Switch

**Resource Name** /statistics/lanIslStat

**Description** Enables you to get link utilization details for LAN switch

**https Method** GET

**URL** https://dcnm-ip/fm/fmrest/statistics/lanIslStat

### Parameter

Parameter	Type	Description
NA	NA	NA

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
	ServerResponse	Array of StatisticsDataDO Objects

## Get Link Utilization for SAN Switch

**Resource Name** /statistics/sanIslStat

**Description** Enables you to get FC link utilization details.

**https Method** GET

**URL** https://dcnm-ip/fm/fmrest/statistics/sanIslStat

**Parameter**

Parameter	Type	Description
NA	NA	NA

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
	ServerResponse	Array of StatisticsDataDO Objects

## Get Memory

**Resource Name** /statistics/memoryStat

**Description** Enables you to get switch memory usage data.

**https Method** GET

**URL** https://dcnm-ip/fm/fmrest/statistics/memoryStat

### Parameter

Parameter	Type	Description
NA	NA	NA

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
	ServerResponse	Array of StatisticsDataDO Objects

## Get NPV Link Utilization for SAN Switch

**Resource Name** /statistics/npvlinksStat

**Description** Enables you to get FC link utilization details.

**https Method** GET

**URL** https://dcnm-ip/fm/fmrest/statistics/npvlinksStat

**Parameter**

Parameter	Type	Description
NA	NA	NA

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
	ServerResponse	Array of StatisticsDataDO Objects

## Get Traffic

**Resource Name** /statistics/bandwidthStat

**Description** Enables you to get switch traffic data.

**https Method** GET

**URL** https://dcnm-ip/fm/fmrest/statistics/bandwidthStat

### Parameter

Parameter	Type	Description
NA	NA	NA

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
	ServerResponse	Array of StatisticsDataDO Objects

## Power On Auto Provisioning (POAP)

The following are the Power On Auto Provisioning (POAP) REST APIs:

- [List Servers, page -169](#)
- [Create a Server, page -170](#)
- [Get Servers, page -171](#)
- [Update Servers, page -172](#)
- [Delete Servers, page -173](#)
- [List Switch Definitions, page -174](#)
- [Create Switch Definitions, page -175](#)
- [Publish Switch Definitions, page -176](#)
- [Get a Switch Definition, page -177](#)
- [Update a Switch Definition, page -178](#)
- [Delete a Switch Definition, page -179](#)
- [Get a POAP Template, page -180](#)
- [Create a POAP Template, page -181](#)
- [Update a POAP Template, page -182](#)
- [Delete a POAP Template, page -183](#)
- [Get All Published Templates, page -184](#)
- [Generate Template Startup Config, page -185](#)
- [Get Group Navigation, page -187](#)
- [Perform Shallow Discovery, page -188](#)
- [Create Multiple POAP Definitions, page -189](#)

### Status

The following table details the API Response code, status and, the HTTPS methods.

<b>Status Code</b>	<b>Status</b>	<b>API's HTTPS Method or HTTPS Method</b>
200	OK	GET
202	Accepted	POST PUT DELETE
400	Bad Request	GET POST PUT DELETE

<b>Status Code</b>	<b>Status</b>	<b>API's HTTPS Method or HTTPS Method</b>
401	Unauthorized	GET POST PUT DELETE
403	Forbidden	GET POST PUT DELETE
404	Not Found	GET POST PUT DELETE
405	Method Not Allowed	GET POST PUT DELETE
500	Internal Server Error	GET POST PUT DELETE

## List Servers

**Resource Name** /poap/servers

**Description** List POAP image/config servers

**https Method** GET

**URL** https://dcnm-ip/rest/poap/servers

https://dcnm-ip/rest/poap/servers?detail=true

### Parameter

Parameter	Type	Description

### Return Value

Format: JSON

Type: Object

Attribute Name	Type	Description
poap-servers		By default, a list of POAP image/config server names is displayed. If "detail=true" a list of POAP image/config server-objects including server-name and URI is displayed.

## Create a Server

**Resource Name** /poap/servers

**Description** Create a new POAP image/config server

**https Method** POST

**URL** https://dcnm-ip/rest/poap/servers

### Parameter

Parameter	Type	Description
poap-servers		POAP image/config server-object including server-name, URI, host name/ipaddress, path, username and password.

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
poap-server-name		POAP image/config server name.

## Get Servers

**Resource Name** /poap/servers/server-name

**Description** Get the POAP image/config servers

**https Method** GET

**URL** https://dcnm-ip/rest/poap/servers/server-name

**Parameter**

Parameter	Type	Description

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
poap-server		POAP image/config server-object including server-name and URI.

## Update Servers

**Resource Name** /poap/servers/server-name

**Description** Update the POAP image/config servers

**https Method** PUT

**URL** https://dcnm-ip/rest/poap/servers/server-name

### Parameter

Parameter	Type	Description
poap-server		POAP image/config-server-object including server-name,hostname/ipaddress, path,username and password.

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description

## Delete Servers

**Resource Name** /poap/servers/server-name

**Description** Delete the POAP image/config servers

**https Method** DELETE

**URL** https://dcnm-ip/rest/poap/servers/server-name

**Parameter**

Parameter	Type	Description

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description

## List Switch Definitions

**Resource Name** /poap/switch-definitions

**Description** List the POAP switch definitions

**https Method** GET

**URL** https://dcnm-ip/rest/poap/switch-definitions

https://dcnm-ip/rest/poap/switch-definitions?detail=true

https://dcnm-ip/rest/poap/switch-definitions?search-string=<search-string>&start-index=<start-index>&size=<size>

**Parameter**

Parameter	Type	Description

**Return Value**

Format: JSON

Type: Object

Attribute Name	Type	Description
Switch-definitions		By default, a list of serial- numbers is displayed. If "detail=true", then a list of switch-definition objects including serial-numbers, status(saved and publish later/published/saved and publishing/error), system-image, kick-start-image, image-server-uri, config-server-uri, template-name, parameter-values with a list of name, type, value corresponding to the template is displayed.

## Create Switch Definitions

**Resource Name** /poap/switch-definitions

**Description** Create POAP switch definitions

**https Method** POST

**URL** https://dcnm-ip/rest/poap/switch-definitions

**Parameter**

Parameter	Type	Description
Switch-definitions		Displays a list of serial-numbers, system-image, kick-start-image, image-server-uri, config-server-uri, template-name, poap-settings-name, parameter-values with a list of name, type, value corresponding to the template , and publish=true/false.

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
switch-numbers		List of serial numbers.

## Publish Switch Definitions

**Resource Name** /poap/published-switch-definitions/{serial-number}

**Description** Publish list of switch-definitions to the Repository server.

**https Method** POST

**URL** https://dcnm-ip/rest/poap/published-switch-definitions/{serial-number}

### Parameter

Parameter	Type	Description

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description

## Get a Switch Definition

**Resource Name** /poap/switch-definitions/{serial-number}

**Description** Get a switch definition.

**https Method** GET

**URL** https://dcnm-ip/rest/poap/switch-definitions/{ serial-number }

**Parameter**

Parameter	Type	Description

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
switch-definition		Displays a list of serial-numbers, system-image, kick-start-image, image-server-uri, config-server-uri, template-name and parameter-values with a list of name, type, value corresponding to the template .

## Update a Switch Definition

**Resource Name** /poap/switch-definitions/serial-number

**Description** Update a switch-definition.

**https Method** PUT

**URL** https://dcnm-ip/rest/poap/switch-definitions/{ serial-number }

**Parameter**

Parameter	Type	Description
switch-definition		Displays a list of serial-numbers, system-image, kick-start-image, image-server-uri, config-server-uri, template-name and parameter-values with a list of name, type, value corresponding to the template , and publish=true/false.

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description

## Delete a Switch Definition

**Resource Name** /poap/switch-definitions/serial-number

**Description** Delete a switch-definition.

**https Method** DELETE

**URL** https://dcnm-ip/rest/poap/switch-definitions/{ serial-number }

**Parameter**

Parameter	Type	Description

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description

## Get a POAP Template

**Resource Name** /poap/templates/{template-name}

**Description** Get a POAP template.

**https Method** GET

**URL** https://dcnm-ip/rest/poap/templates/{template-name}

**Parameter**

Parameter	Type	Description
Serial-number	S	Device serial-number

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
Poap-template	O	Poap template object

## Create a POAP Template

**Resource Name** /poap/templates

**Description** Create a POAP template.

**https Method** POST

**URL** https://dcnm-ip/rest/poap/templates

### Parameter

Parameter	Type	Description
Poap-template	O	Poap template object

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
Poap-template-name	O	Poap template name

## Update a POAP Template

**Resource Name** /poap/templates/{template-name}

**Description** Update a POAP template.

**https Method** PUT

**URL** https://dcnm-ip/rest/poap/templates/{template-name}

### Parameter

Parameter	Type	Description
Poap-template	O	Poap template object

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description

## Delete a POAP Template

**Resource Name** /poap/templates/{template-name}

**Description** Delete a POAP template.

**https Method** POST

**URL** https://dcnm-ip/rest/poap/templates/{template-name}

**Parameter**

Parameter	Type	Description
Poap-template-name	S	Poap template name

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description

## Get All Published Templates

**Resource Name** /poap/templates?published=true

**Description** Get all the published templates.

**https Method** GET

**URL** https://dcnm-ip/rest/templates?published=true

**Parameter**

Parameter	Type	Description

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
templates	O	Returns all the published template names, if published=true. Returns all the templates if published=false.

## Generate Template Startup Config

**Resource Name** /templates/populate-template/{template-name}

**Description** Generates template for startup config.

**https Method** POST

**URL** https://dcnm-ip/rest/templates/populate-template/{template-name}

**Example**

**Request Body:**

```
{
  "templateParams": {
    "SWITCH_NAME": "r-123",
    "ADMIN_USERNAME": "admin",
    "ADMIN_PASSWORD": "test123",
    "MGMT_IP": "10.0.0.0",
    "MGMT_PREFIX": "24",
    "DEFAULT_GATEWAY": "10.0.0.1",
    "CONSOLE_TIMEOUT": "0",
    "CONSOLE_SPEED": "9600"
  }
}
```

**Response Body:**

```
{
  "startupConfig": "hostname r-123\nno password strength-check\nusername admin password test123 role network-admin\nnsnmp-server user admin network-admin auth md5 test123 priv test123\nnvrf context management\n ip route 0.0.0.0/0 10.0.0.1\ninterface mgmt0\nvrf member management\n no cdp enable\n no lldp transmit\n no lldp receive\n ip address 10.0.0.0/24\n no shutdown\nonline console\n exec-timeout 0\n"
}
```

**Parameter**

<b>Parameter</b>	<b>Type</b>	<b>Description</b>
templateParams	O	<p>Template parameters with values. You will get the templateParams in get template data API response. It returns the template parameters with default values.</p> <p>The object should contain key-value pairs whose keys align with the Parameters field in the Get Configuration Template method.</p>

**Return Value**

Format: JSON

Type: Object

<b>Attribute Name</b>	<b>Type</b>	<b>Description</b>
startupConfig	S	Return startup config

## Get Group Navigation

**Resource Name** /templates/groups

**Description** Get all the groups.

**https Method** GET

**URL** https://dcnm-ip/rest/templates/groups

**Parameter**

Parameter	Type	Description

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
memDbId, name, navType	S	Return group/scope details

## Perform Shallow Discovery

**Resource Name** /templates/perform-shallow-discovery

**Description** All the devices provided in payload will be discovered into DCNM.

**https Method** POST

**URL** https://dcnm-ip/rest/templates/perform-shallow-discovery

### Parameter

Parameter	Type	Description
POAP	A <i>sushs: needs review</i>	Serial Number, Management IP, Lan Group, User Name and Password need to provide in payload.

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description

## Create Multiple POAP Definitions

**Resource Name** /poap/definitions

**Description** Simple and Single API to create multiple POAP definitions w/ discovery.

if you use this single API, the following separate APIs are not required.

- Create the switch definition without template— /rest/poap/switch-definitions (POST)
- Generate the startup configuration— /rest/templates/populate-template/<template-name> (POST)
- Associate the template and startup configuration with the switch definition— /rest/poap/templates (POST)
- Publish the switch definition— /rest/poap/published-switch-definitions/<serial-number> (POST)
- Discover the switch in Cisco DCNM— /rest/templates/perform-shallow-discovery (POST)

**https Method** POST

**URL** https://dcnm-ip/rest/poap/definitions

**Parameter**

Parameter	Type	Description
Request Payload	A	Array of switchDetails and templateDetails.

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
Response Object	O	POAP Device Serial Number and the Status

**Example** The following example shows how to create two POAP definitions using this API:

Request: {

```

    "switchDetails": [
        {
            "serialNumber": "SerialNo1",
            "switchName": "Switch-1",
            "systemImageName": "sys.bin",
            "kickstartImageName": "kick.bin",
            "imageServerId": 1,

```

```

        "configServerId":1,
        "deviceType":"N9K",
        "mgmtIp":"80.0.0.10",
        "username":"admin",
        "password":"cisco123",
        "lanGroup":2,
        "publish":"true"
    },
    {
        "serialNumber":"SerialNo2",
        "switchName":"Switch-2",
        "systemImageName":"sys.bin",
        "kickstartImageName":"kick.bin",
        "imageServerId":1,
        "configServerId":1,
        "deviceType":"N9K",
        "mgmtIp":"80.0.0.11",
        "username":"admin",
        "password":"cisco123",
        "lanGroup":2,
        "publish":"true"
    }
],
"templateDetails":[
{
    "templateParams":{
        "SWITCH_NAME":"Switch-1",
        "ADMIN_USERNAME":"admin",
        "ADMIN_PASSWORD":"cisco123",
        "MGMT_IP":"80.0.0.10",
        "MGMT_PREFIX":"24",
        "DEFAULT_GATEWAY":"80.0.0.1",
        "CONSOLE_TIMEOUT":"0",
        "CONSOLE_SPEED":"9600"
    },
    "templateName":"Example_Simple_v6"
},
{
    "templateParams":{
        "SWITCH_NAME":"Switch-2",
        "ADMIN_USERNAME":"admin",
        "ADMIN_PASSWORD":"cisco123",
        "MGMT_IP":"80.0.0.11",
        "MGMT_PREFIX":"24",
        "DEFAULT_GATEWAY":"80.0.0.1",
        "CONSOLE_TIMEOUT":"0",
        "CONSOLE_SPEED":"9600"
    },
    "templateName":"Example_Simple_v6"
}
]
}

```

#### Response:

```
{
    "SerialNo2": "Success",
    "SerialNo1": "Success"
}
```

# Reports

The following are the Reports REST APIs:

- [Get Report View by Selection, page -191](#)
- [Get Report Jobs, page -192](#)

## Status

The following table details the API Response code, status and, the HTTPS methods.

<b>Status Code</b>	<b>Status</b>	<b>API's HTTPS Method or HTTPS Method</b>
200	OK	GET
202	Accepted	POST PUT DELETE
400	Bad Request	GET POST PUT DELETE
401	Unauthorized	GET POST PUT DELETE
403	Forbidden	GET POST PUT DELETE
404	Not Found	GET POST PUT DELETE

Status Code	Status	API's HTTPS Method or HTTPS Method
405	Method Not Allowed	GET POST PUT DELETE
500	Internal Server Error	GET POST PUT DELETE

## Get Report View by Selection

**Resource Name** /report/reportview

**Description** Enables you to get a report view by individual selection

**https Method** GET

**URL** https://dcnm-ip/fm/fmrest/report/reportview

**Parameter**

Parameter	Type	Description
group	S	URI Parameter
selection	S	URI Parameter
reportFilter	S	URI Parameter
sortDownStr	S	URI Parameter
userName	S	URI Parameter
isAdmin	S	URI Parameter

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
ReportDO	O	Report Object

## Get Report Jobs

**Resource Name** /report/reportjobs

**Description** Enables you to get a report of Jobs

**https Method** GET

**URL** https://dcnm-ip/fm/fmrest/report/reportjobs

### Parameter

Parameter	Type	Description
sortDownStr	S	URI Parameter
userName	S	URI Parameter
isAdmin	S	URI Parameter

**Return Value** Format: JSON

Type: Long

Attribute Name	Type	Description
SortedReportJobDO	O	Sorted Report for Jobs Object

# Templates

The following are the Template REST APIs:

- [Get a Template, page -195](#)
- [Get All Template, page -196](#)
- [Create a Config Template, page -197](#)
- [Modify a Config Template, page -198](#)
- [Delete a Config Template, page -200](#)
- [Get Populated template CLI content, page -201](#)
- [Validate a Config Template, page -202](#)
- [Get Config Template Valid Switches, page -203](#)
- [Create a Config Template Job, page -204](#)
- [Get Config Template Jobs, page -205](#)
- [Get Config Template Job detail, page -206](#)
- [Delete Config Template Job, page -207](#)

## Status

The following table details the API Response code, status and, the HTTPS methods.

Status Code	Status	API's HTTPS Method or HTTPS Method
200	OK	GET
202	Accepted	POST PUT DELETE
400	Bad Request	GET POST PUT DELETE
401	Unauthorized	GET POST PUT DELETE
403	Forbidden	GET POST PUT DELETE

<b>Status Code</b>	<b>Status</b>	<b>API's HTTPS Method or HTTPS Method</b>
404	Not Found	GET POST PUT DELETE
405	Method Not Allowed	GET POST PUT DELETE
500	Internal Server Error	GET POST PUT DELETE

## Get a Template

**Resource Name** /config/templates/{template-name}

**Description** Get Configuration template

**https Method** GET

**URL** https://dcnm-ip/fm/fmrest/config/templates/{template-name}

**Parameter**

Parameter	Type	Description
templateName	S	ConfigTemplate name

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
ConfigTemplateDO	O	ConfigTemplate object

## Get All Template

**Resource Name** /config/templates

**Description** Get All Configuration template

**https Method** GET

**URL** https://dcnm-ip/fm/fmrest/config/templates

### Parameter

Parameter	Type	Description
filterStr	S	Used for filtering the template format is <templateField1>:<filter value1>
sortBy	S	Filed to be sorted +<filed name> for ASC and -<filed name> for DESC
items (request header)	S	Range of records to fetch (i.e. 10-20)

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
ConfigTemplateDO[]	A	Array of ConfigTemplate object
items (response header)	S	Total number of records available

## Create a Config Template

**Resource Name** /config/templates

**Description** Create a Config template

**https Method** POST

**URL** https://dcnm-ip/fm/fmrest/config/templates

**Parameter**

Parameter	Type	Description
templateFileContent	S	ConfigTemplate file content in plain text

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
InstanceNameIdDO	O	InstanceNameId of created template

## Modify a Config Template

**Resource Name** /config/templates/{template-name}

**Description** Modify a config template

**https Method** PUT

**URL** https://dcnm-ip/fm/fmrest/config/templates/{template-name}

**Example**

**Request Body:**

```
{
    "id": "Example_Simple_v7",
    "content": "#Template properties\nname =Example_Simple_v7;\ndescription = Simple POAP
Template example to assign a Management IP address;\nuserDefined=
true;\nsupportedPlatforms = N3K,N5K,N5500,N5600,N6K,N9K;\ntemplateType =
POAP;\ntemplateSubType=NA;\npublished = false;\ntimestamp = 2017-05-26 23:27:05
;\n##Template variables\n\n# Copyright (c) 2017 by Cisco Systems, Inc.\n# All rights
reserved.\n\n@{IsSwitchName=true, UseDNSReverseLookup=true, IsMandatory=true,
Description=\"The host name of the switch [example: switch{1-3}]\", DisplayName=\"Switch
Name\")\nstring SWITCH_NAME;\n\n@{IsMandatory=true, Description=\"Administrative User
which will be used to manage this device\", DisplayName=\"Administrative
Username\")\nstring ADMIN_USERNAME{\n    defaultValue=admin;\n};\n\n@{IsMandatory=true,
Description=\"Plain text password of at least 8 characters\", DisplayName=\"Administrative
Password\")\nstring ADMIN_PASSWORD;\n\n@{IsManagementIP=true, IsMandatory=true,
IsMultiplicity=true, Description=\"Mgmt0 address for this device [example:
10.10.10.10-20]\", DisplayName=\"Management IP\")\nipV4Address
MGMT_IP;\n\n@{IsMandatory=true, Description=\"Management Network Prefix\",
DisplayName=\"Management Prefix\")\ninteger MGMT_PREFIX{\n    defaultValue=%POAP.MGMT_PREFIX;\n};\n\n@{IsMandatory=true, Description=\"Default Gateway
IP address\", DisplayName=\"Default Gateway\")\nipV4Address DEFAULT_GATEWAY{\n    defaultValue=%POAP.DEFAULT_GATEWAY;\n};\n\n@{IsMandatory=true, DisplayName=\"Console
timeout\", Description=\"Enter timeout in minutes, 0 to disable\")\ninteger
CONSOLE_TIMEOUT{\n    defaultValue=0;\n};\n\n@{IsMandatory=true, DisplayName=\"Console
Speed\")\ninteger CONSOLE_SPEED{\n    defaultValue=9600;\n};\n##\n##Template
content\n\nhostname $$SWITCH_NAME$$\nno password strength-check\nusername
$$ADMIN_USERNAME$$ password $$ADMIN_PASSWORD$$ role network-admin\n\nsnmp-server user
$$ADMIN_USERNAME$$ network-admin auth md5 $$ADMIN_PASSWORD$$ priv $$ADMIN_PASSWORD$$
\n\nvrf context management\n ip route 0.0.0.0/0 $$DEFAULT_GATEWAY$$\n\ninterface mgmt0\n
vrf member management\n no cdp enable\n no lldp transmit\n no lldp receive\n ip address
$$MGMT_IP$$/$$MGMT_PREFIX$$\n no shutdown\n\nline console\nif( $$CONSOLE_TIMEOUT$$ !=
\"30\" ){\n    exec-timeout $$CONSOLE_TIMEOUT$$\n}\nif( $$CONSOLE_SPEED$$ != \"9600\" ){
    speed $$CONSOLE_SPEED$$\n}\n##\n}
```



**Note**

The **id** attribute must match with the template-name in the URL.

**Response Body:**

```
{
  "status": "Template modification successful"
}
```

**Parameter**

<b>Parameter</b>	<b>Type</b>	<b>Description</b>
templateFileContent	O	ConfigTemplate file content in plain text  The parameter is a JSON object data type with mandatory properties of <b>id</b> and <b>content</b> , where <b>id</b> is the template name and <b>content</b> is the modified template content.

**Return Value**

Format: JSON

Type: Object

<b>Attribute Name</b>	<b>Type</b>	<b>Description</b>

## Delete a Config Template

**Resource Name** /config/templates/{template-name}

**Description** Delete a Config template

**https Method** DELETE

**URL** https://dcnm-ip/fm/fmrest/config/templates/{template-name}

### Parameter

Parameter	Type	Description
templateName	S	ConfigTemplate name

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description

## Get Populated template CLI content

**Resource Name** /config/templates/{templateName}/populate/{deviceIP}

**Description** To get the CLI delivery content for the given parameter value for a template

**https Method** POST

**URL** https://dcnm-ip/fm/fmrest/config/{templateName}/populate/{deviceIP}

### Parameter

Parameter	Type	Description
parametervalue	A	JSON Array of parameter values i.e [1, 'a']

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
String	S	Populated CLI commands

## Validate a Config Template

**Resource Name** /config/templates/validate

**Description** To Validate a Config template before creation

**https Method** POST

**URL** https://dcnm-ip/fm/fmrest/config/templates/validate

### Parameter

Parameter	Type	Description
templateFileContent	S	ConfigTemplate file content in plain text

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
ReportItem[]	S	Validation result

## Get Config Template Valid Switches

**Resource Name** /config/templates/{template-name}/switches

**Description** Returns all valid switches available for the template based on "supported platform" attribute there in Template.

**https Method** GET

**URL** https://dcnm-ip/fm/fmrest/config/templates/{template-name}/switches

### Parameter

Parameter	Type	Description
templateName	S	Template name

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
ConfigDeliveryTaskDeviceDO []	A	Array of device objects

## Create a Config Template Job

**Resource Name** /config/templates/jobs

**Description** Creates a Config template delivery job

**https Method** POST

**URL** https://dcnm-ip/fm/fmrest/config/templates/jobs

**Parameter**

Parameter	Type	Description
TemplateConfigDeliveryTaskDO	O	ConfigDeliveryTask Object

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
InstanceIdDO	O	Task ID value

## Get Config Template Jobs

**Resource Name** /config/templates/jobs

**Description** Fetches the Config template delivery jobs

**https Method** GET

**URL** https://dcnm-ip/fm/fmrest/config/templates/jobs

**Parameter**

Parameter	Type	Description
status	S	Could be any of "not started/in progress/completed"

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
ConfigDeliveryTaskDO []	A	Array of ConfigDeliveryTask

## Get Config Template Job detail

**Resource Name** /config/templates/jobs/{jobID}

**Description** Fetches the Config template delivery job with execution details

**https Method** GET

**URL** https://dcnm-ip/fm/fmrest/config/templates/jobs/{jobID}

**Parameter**

Parameter	Type	Description

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
ConfigDeliveryTaskDO []	A	Array of ConfigDeliveryTask

## Delete Config Template Job

**Resource Name** /config/templates/jobs/{job-id}

**Description** Deletes the Config template delivery jobs

**https Method** DELETE

**URL** https://dcnm-ip/fm/fmrest/config/templates/jobs/{job-id}

**Parameter**

Parameter	Type	Description
jobID	S	ID of the ConfigDeliveryTask

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description



# Topology

The following are the Topology REST APIs:

- [Get a Topology, page -209](#)
- [Get a Vpc Topology, page -210](#)
- [Override Switch Role, page -211](#)
- [Revert Switch Role, page -212](#)
- [Get Topology Tags, page -213](#)
- [Fetch Tag, page -214](#)
- [Create Tag, page -215](#)
- [Delete Tags, page -216](#)
- [VLAN Search, page -217](#)
- [OTV Topology, page -218](#)
- [OTV Vlans, page -219](#)
- [VxLan VTEPs, page -220](#)
- [VxLan VNIs, page -221](#)
- [VxLan Multicast, page -222](#)
- [Switch VxLan Details, page -223](#)

## Status

The following table details the API Response code, status and, the HTTPS methods.

<b>Status Code</b>	<b>Status</b>	<b>API's HTTPS Method or HTTPS Method</b>
200	OK	GET
202	Accepted	POST PUT DELETE
400	Bad Request	GET POST PUT DELETE
401	Unauthorized	GET POST PUT DELETE

<b>Status Code</b>	<b>Status</b>	<b>API's HTTPS Method or HTTPS Method</b>
403	Forbidden	GET POST PUT DELETE
404	Not Found	GET POST PUT DELETE
405	Method Not Allowed	GET POST PUT DELETE
500	Internal Server Error	GET POST PUT DELETE

## Get a Topology

**Resource Name** /topology

**Description** Enables to get a topology

**https Method** GET

**URL** https://dcnm-ip/fm/fmrest/topology

### Parameter

Parameter	Type	Description
NA	NA	NA

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
Topology	O	Topology Object

## Get a Vpc Topology

**Resource Name** /topology/vpc

**Description** Enables to get a VPC topology

**https Method** GET

**URL** https://dcnm-ip/fm/fmrest/topology/vpc

### Parameter

Parameter	Type	Description
vpcDbId	long @QueryParam	VPC database identifier

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
Topology	O	Topology Object

## Override Switch Role

**Resource Name** topology/role/{ethSwitchId}

**Description** Switch override is used by the topology so that you can specify which position to render a node at. This API is used to change the role or override the role of the Switch. It has a default value of -1.

**https Method** PUT

**URL** https://dcnm-ip/fm/fmrest/topology/role/

### Parameter

Parameter	Type	Description
ethSwitchId	long	Switch ID

### Return Value

Format: JSON

Type: Object

Attribute Name	Type	Description
NA	NA	NA

## Revert Switch Role

**Resource Name** /topology/role/{ethSwitchId}

**Description** Reverts the role of the switch to its default role.

**https Method** DELETE

**URL** https://dcnm-ip/fm/fmrest/topology/role/

### Parameter

Parameter	Type	Description
ethSwitchId	long @PathParam	Switch ID

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
NA	NA	NA

## Get Topology Tags

**Resource Name** /topology/tags/{definedType}

**Description** Enables you to get all topology tags

**https Method** GET

**URL** https://dcnm-ip/fm/fmrest/topology/{definedType}

### Parameter

Parameter	Type	Description
definedType	S @PathParam	Enums (USER or SYSTEM)
idsToFetch	O	IntegerList of ids to fetch

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
tags	A	A set of all requested tags

## Fetch Tag

**Resource Name** /topology/tags/{id}

**Description** Enables you to fetch a tag

**https Method** GET

**URL** https://dcnm-ip/fm/fmrest/topology/tags/{id}

### Parameter

Parameter	Type	Description
definedType	S @PathParam	Enums (USER or SYSTEM)
type	S @QueryParam	Enums (SWITCH or LINK)
id	int @PathParam	ID to fetch

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
tags	O	Requested tag

## Create Tag

**Resource Name** /topology/tags

**Description** Enables to create a tag

**https Method** POST

**URL** https://dcnm-ip/fm/fmrest/topology/tags

### Parameter

Parameter	Type	Description
id	S	ID to fetch
type	S	Enums (SWITCH or LINK)
definedType	S	Enums (USER or SYSTEM)
value	S	Tag name
tag	O	Tag object

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description

## Delete Tags

**Resource Name** /topology/tags

**Description** Enables to delete tags

**https Method** DELETE

**URL** https://dcnm-ip/fm/fmrest/topology/tags

### Parameter

Parameter	Type	Description
definedType	S @QueryParam	Enums (USER or SYSTEM)
type	S @QueryParam	Enums (SWITCH or LINK)
id	int @QueryParam	ID to fetch
tagName	S @QueryParam	Tag to delete

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description

## VLAN Search

**Resource Name** /topology/l2vlanstp/islsondemand

**Description** Enables you to search for VLAN information in a group

**https Method** GET

**URL** https://dcnm-ip/fm/fmrest/topology/l2vlanstp/islsondemand

### Parameter

Parameter	Type	Description
group-id	String @QueryParam	DCNM Group ID
range	String @QueryParam	Vlan range to be searched. Example: 1-10,120-150

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
L2TopologyOnDemand	O	Contains ISL and Switches for the searched VLAN range

## OTV Topology

**Resource Name** /rest/topology/switches/otv

**Description** Enables to fetch OTV overlay networks

**https Method** GET

**URL** https://dcnm-ip/rest/topology/switches/otv

**Parameter**

Parameter	Type	Description
session-id	String @QueryParam	Token

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
Overlays	O	Contains list of OTV overlays

## OTV Vlans

**Resource Name** /rest/topology/switches/otv/vlans

**Description** Enables you to fetch OTV active and inactive extended vlans for OTV edges

**https Method** GET

**URL** https://dcnm-ip/rest/topology/switches/otv/vlans-<<Edit the URL>>

### Parameter

Parameter	Type	Description
session-id	String @QueryParam	Token

### Return Value

Format: JSON

Type: Object

Attribute Name	Type	Description
OtvVlans	A	Contains list of active and inactive extended VLANs.

## VxLan VTEPs

**Resource Name** /rest/topology/switches/vxlan/vteps

**Description** Enables you to fetch all VxLan VTEPs

**https Method** GET

**URL** https://dcnm-ip/rest/topology/switches/vxlan/vteps

### Parameter

Parameter	Type	Description
session-id	String @QueryParam	Token

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
vteps	A	Contains list of VxLan VTEPs

## VxLan VNIs

**Resource Name** /rest/topology/switches/vxlan

**Description** Enables you to search vteps on VNIs

**https Method** GET

**URL** https://dcnm-ip/rest/topology/switches/vxlan

### Parameter

Parameter	Type	Description
vni	String @QueryParam	vni
session-id	String @QueryParam	Token

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
vteps	A	Contains list of VxLAN VTEPs

## VxLan Multicast

**Resource Name** /rest/topology/switches/vxlan

**Description** Enables you to search vteps on multicast address

**https Method** GET

**URL** https://dcnm-ip/rest/topology/switches/vxlan

### Parameter

Parameter	Type	Description
multicast-address	String @QueryParam	Multicast address
session-id	String @QueryParam	Token

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
vteps	A	Contains list of VxLAN VTEPs

## Switch VxLan Details

**Resource Name** /rest/topology/switches/vxlan

**Description** Enables you to search vteps on multicast address

**https Method** GET

**URL** https://dcnm-ip/rest/topology/switches/vxlan

### Parameter

Parameter	Type	Description
switch-id	String @QueryParam	Switch Database ID
session-id	String @QueryParam	Token

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
VxLanData	A	Contains list of VNIs and associated parameters for switch



# VxLAN

The following are the VxLAN REST APIs:

- [List all VTEPs, page -227](#)
- [Get VTEPs with VNI, page -228](#)
- [Get VTEPs with Multicast address, page -229](#)
- [Get VNI details for a VTEP, page -230](#)
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## Status

The following table details the API Response code, status and, the HTTPS methods.

<b>Status Code</b>	<b>Status</b>	<b>API's HTTPS Method or HTTPS Method</b>
200	OK	GET
202	Accepted	POST PUT DELETE
400	Bad Request	GET POST PUT DELETE
401	Unauthorized	GET POST PUT DELETE
403	Forbidden	GET POST PUT DELETE
404	Not Found	GET POST PUT DELETE

Status Code	Status	API's HTTPS Method or HTTPS Method
405	Method Not Allowed	GET POST PUT DELETE
500	Internal Server Error	GET POST PUT DELETE

## List all VTEPs

**Resource Name** /topology/switches/vxlan/vteps

**Description** List of all the VTEPs.

**https Method** GET

**URL** https://dcnm-ip/rest/topology/switches/vxlan/vteps

### Parameter

Parameter	Type	Description

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
VTEPs	A	List of VTEPs including attributes VTEP IP, NVE Interface and Switch ID.

## Get VTEPs with VNI

**Resource Name** /topology/switches/vxlan?vni=<vni>

**Description** Get the VTEPs which have this VNI configured on them.

**https Method** GET

**URL** https://dcnm-ip/rest/topology/switches/vxlan?vni=<vni>

### Parameter

Parameter	Type	Description
vni	S	VxLAN Network Identifier.

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
VTEPs	A	List of VTEPs configured with VNI, including attributes, multicast address, VNI status, VLAN, NVE interface, switch name and switch ID.

## Get VTEPs with Multicast address

**Resource Name** /topology/switches/vxlan?multicast-address=<multicast-address>

**Description** Get VTEPs which have this multicast address configured on them.

**https Method** GET

**URL** https://dcnm-ip/rest/topology/switches/vxlan?multicast-address=<multicast-address>

### Parameter

Parameter	Type	Description
multicast-address	S	Multicast address configured in VxLAN.

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
VTEPs	A	List of VTEPs configured with multicast address, including attributes, VNI, multicast address, VNI status, VLAN, NVE interface, switch name and switch ID.

## Get VNI details for a VTEP

**Resource Name** /topology/switches/vxlan?switch-id=<switch-id>

**Description** Get all the VNIs configured on a VTEP with all the associated attributes.

**https Method** GET

**URL** https://dcnm-ip/rest/topology/switches/vxlan?switch-id=<switch-id>

### Parameter

Parameter	Type	Description
switch-id	S	VTEP switch ID, obtained by the API <a href="https://dcnm-ip/rest/topology/switches/vxlan/vtaps">https://dcnm-ip/rest/topology/switches/vxlan/vtaps</a> .

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
VNI Details	A	List of all VNIs on a VTEP, with the associated Multicast Address, VNI Status, VLAN, NVE Interface, Switch Name and Switch ID.

## Get active peers for a VTEP for a given VNI

**Resource Name** /topology/switches/vxlan/peers?switch-id=<switch-id>&vni=<vni>

**Description** Get the active peers for a VTEP for a given VNI.

**https Method** GET

**URL** https://dcnm-ip/rest/topology/switches/vxlan/peers?switch-id=<switch-id>&vni=<vni>

### Parameter

Parameter	Type	Description
switch-id	S	VTEP switch ID, obtained by the API <a href="https://dcnm-ip/rest/topology/switches/vxlan/vtaps">https://dcnm-ip/rest/topology/switches/vxlan/vtaps</a>
vni	S	VxLAN Network Identifier

**Return Value** Format: JSON

Type: Object

Attribute Name	Type	Description
VTEP peers	A	List of VTEP active peers for given VNI.

