Cisco DCNM REST API Guide 7.1.x

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Preface

Organization

This guide includes the following sections:

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

Conventions

This document uses the following conventions:

Convention	Indication
bold font	Commands and keywords and user-entered text appear in **bold** font.
italic font	Document titles, new or emphasized terms, and arguments for which you supply values are in *italic* 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 `courier` 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**

Obtaining Documentation and Submitting 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* at: http://www.cisco.com/c/en/us/td/docs/general/whatsnew/whatsnew.html.

Subscribe to *What's New in Cisco Product Documentation*, which lists all new and revised Cisco technical documentation, as an RSS feed and deliver content directly to your desktop using a reader application. The RSS feeds are a free service.

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.

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 -35
- "DCI" section on page -49
- "DHCP" section on page -69
- "Multiple Orchestrator Support" section on page -85
- "Multiple Mobility Domain with VLAN Translation" section on page -75
- "Power On Auto Provisioning (POAP)" section on page -93

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.

By default, the dcnm will support http. For https support, you need to run the command **appmgr update dcnm -h true**.

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 HTTP methods.

Status Code	Status	API's HTTP Method or HTTP 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
404	Not Found	GET POST PUT DELETE

Status Code	Status	API's HTTP Method or HTTP 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	S	Token expiry duration.

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

The following are the auto-configuration REST APIs:

- List Organizations, page -13
- Create an Organization, page -14
- Get an Organization, page -15
- Update an Organization, page -16
- Delete an Organization, page -17
- List Partitions, page -18
- Create a Partition, page -19
- Get a Partition, page -20
- Update a Partition, page -21
- Delete a Partition, page -22
- List Networks, page -23
- Create a Network, page -24
- Get a Network, page -25
- Update a Network, page -26
- Delete a Network, page -27
- Create a Auto Configuration profile, page -31
- Delete a Auto Configuration profile, page -34
- Get Auto Config Settings, page -28
- Update Auto Config Settings, page -29
- List Auto Configuration Profiles, page -30
- Create a Auto Configuration profile, page -31
- Get a Auto Configuration profile, page -32
- Update a Auto Configuration profile, page -33
- Delete a Auto Configuration profile, page -34

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

Attributes	Type	Require
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

Attributes	Type	Require
forwardingMode	String	Mandatory
profileName	String	Mandatory
configCommands	String	Mandatory
description	String	Optional
profileType	String	Mandatory
profileSubType	String	Mandatory

Status

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

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401	Unauthorized	GET POST PUT DELETE

Status Code	Status	API's HTTP Method or HTTP Method
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 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
Oganization	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 http://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

Resource Name

`/auto-config/organizations/organization-name/partitions/partition-name/networks`

Description

List of networks.

https Method

GET

URL

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?detail=true

Parameter

Parameter	Type	Description

Return Value

Format: JSON

Type: Object

Attribute Name	Type	Description
Networks	A	By default, a list of segment IDs for l2 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	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 The following attributes are applicable for HA set-up: ldapPeerServer, ldapPeerUserName, ldapPeerPassWord.

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	The following auto config settings object are displayed: ldapServer, ldapUserName, ldapPassWord, segmentIdRange, partitionIdRange, useLocalDhcp, dhcpPrimarySubnet, enableAmqpNotification, amqpServer, amqpPort, amqpVirtualHost, amqpUserName, amqpPassWord, amqpExchangeName, xmppServer, xmppUserName, xmppPassWord, xmppGroup, xmppResponseTimeout, xmppSearch, vrfName The following attributes are applicable for HA set-up: ldapPeerServer, ldapPeerUserName, ldapPeerPassWord.

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

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 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.

https Method

PUT

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
profile	O	Profile object

Return Value

Format: JSON
Type: Object

Attribute Name	Type	Description

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:

Status

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

Status Code	Status	API's HTTP Method or HTTP 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

Status Code	Status	API's HTTP Method or HTTP Method
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 hhttps://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

DCI

The following are the DCI REST APIs:

Status

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

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

Status Code	Status	API's HTTP Method or HTTP Method
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}/partitions/{partition-name}`

Description

Get extended partition

https Method

GET

URL

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

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

Status

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

Status Code	Status	API's HTTP Method or HTTP 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
404	Not Found	GET POST PUT DELETE

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

List POAP Scopes

Resource Name `/poap/dhcp/scopes`

Description List of POAP DHCP scopes

https Method GET

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

Parameter

Parameter	Type	Description

Return Value

Format: JSON

Type: Object

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

Multiple Mobility Domain with VLAN Translation

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

Status

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

Status Code	Status	API's HTTP Method or HTTP 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
404	Not Found	GET POST PUT DELETE

Status Code	Status	API's HTTP Method or HTTP 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:

Status

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

Status Code	Status	API's HTTP Method or HTTP 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
404	Not Found	GET POST PUT DELETE

Status Code	Status	API's HTTP Method or HTTP 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-is}`

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

Resource Name `/settings/segmentid-ranges`

Description Create orchestrator segment ID ranges.

https Method POST

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

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

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

Power On Auto Provisioning (POAP)

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

Status

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

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

Status Code	Status	API's HTTP Method or HTTP Method
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 includingserver-name,URI,hostname/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 Get all the published templates.

<<sushs: the description is similar to Get a POAP template. how/why is this different? only difference is the https method.>>

https Method POST

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

Parameter

Parameter	Type	Description
templateParams	A	Template parameters with values. You will get the templateParams in get template data API response. It returns the template parameters with default values.

Return Value

Format: JSON

Type: Object

Attribute Name	Type	Description
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 *sushs: needs review*	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 POAP Definition

Resource Name `/poap/poap-switch-definition`

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

https Method POST

URL https://dcnm-ip/rest/poap/poap-switch-definition

Parameter

Parameter	Type	Description
POAP	A	Array of template parameters and POAP switch details.

Return Value Format: JSON

Type: Object

Attribute Name	Type	Description
poap	A	Array of POAPv switch details with template content.

VxLAN

The following are the VxLAN REST APIs:

Status

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

Status Code	Status	API's HTTP Method or HTTP 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
404	Not Found	GET POST PUT DELETE

Status Code	Status	API's HTTP Method or HTTP 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 https://dcnm-ip/rest/topology/switches/vxlan/vteps.

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 https://dcnm-ip/rest/topology/switches/vxlan/vteps
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.