Cisco DCNM REST API Guide 7.1.x

Cisco Dynamic Fabric Automation
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CONTENTS

Preface

Organization

This guide includes the following sections:

Section	Title	Description
1	DFA REST API	Describes the REST API's for Cisco Dynamic Fabric Automation.

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.

REVIEW DRAFT—CISCO CONFIDENTIAL

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**

Cisco Unified Fabric REST API

Introduction

The Cisco Unified Fabric REST APIs for third party applications enables you to programmatically control Cisco Unified Fabric. 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 Unified Fabric 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 Unified Fabric. 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 Unified Fabric 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 Unified Fabric. For an animated description of the Unified Fabric 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

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- "Auto Configuration" section on page -7
- "Cable Plan" section on page -33
- "DCI" section on page -45
- "DHCP" section on page -65
- "Multiple Orchestrator Support" section on page -81
- "Multiple Mobility Domain with VLAN Translation" section on page -71
- "Power On Auto Provisioning (POAP)" section on page -87

Authentication

The Authentication REST APIs can be used by an external application to authenticate itself to the DCNM in order to programmatically control the Unified Fabric 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

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.

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
500	Internal Server Error

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

Status Code

202	Accepted
400	Bad Request
401	Unauthorized
403	Forbidden
500	Internal Server Error

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.

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
500	Internal Server Error

Auto Configuration

The auto configuration contains the following tables:

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The following are the Authentication REST APIs:

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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
description	String	Optional
serviceNodeIpAddress	String	Optional
dnsServer	String	Optional
secondaryDNSServer	String	Optional
vrfName	String	Optional
dciId	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
gatewayIpv6Adddress	String	Optional
prefixLength	String	Optional
secondaryGateway	String	Optional
staticIpEnd	String	Optional
vSwitchControllerNetworkId	String	Optional

Attributes	Type	Require
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

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.

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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

Status Code

202	Accepted
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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

Status Code

202	Accepted
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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

Status Code

202	Accepted
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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.

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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

Status Code

202	Accepted
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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

Status Code

202	Accepted
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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

Status Code

202	Accepted
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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.

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

Update a Network

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

Description Update a network.

https Method PUT

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

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

Parameter

Parameter	Type	Description
Network	O	Network object

Return Value Format: JSON

Type: Object

Attribute Name	Type	Description

Status Code

202	Accepted
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

Delete a Network

Resource Name

```
/auto-config/organizations/organization-name/partitions/partition-nam
e/networks/{network-id}
```

Description Delete a network.

https Method DELETE

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

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

Parameter

Parameter	Type	Description

Return Value Format: JSON

Type: Object

Attribute Name	Type	Description

Status Code

202	Accepted
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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.

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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

Status Code

202	Accepted
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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.

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

Cable Plan

The following are the Cable Plan REST APIs:

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

Status Code

200	Accepted
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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

Status Code

200	Accepted
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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.

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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

Status Code

202	Accepted
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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

Status Code

202	Accepted
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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

Status Code

200	OK
202	Accepted
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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.

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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

Status Code

202	Accepted
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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

Status Code

202	Accepted
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

DCI

The following are the DCI REST APIs:

Get Unified Fabric DCI Settings

Resource Name   `/settings/dci`

Description   Get Unified Fabric 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

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

Update Unified Fabric DCI Settings

Resource Name   `/settings/dci`

Description   Update Unified Fabric 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

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

Get DCI Pairs with Node Id

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

Description   Get the DCI pairings for a given node ID, or the type is "BL-DCI", or type is "BL" without peering.

<<sushs: do we need to expand BL?>>

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

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

Update DCI Pairs for Special Type BL-DCI and BL

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

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

<<sushs: same comment as above>>

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

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

Delete DCI Pairs for Special Type BL-DCI and BL

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

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

<<sushs: same comment as above>>

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

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

<<sushs: Do we need to add the Sample Flow as mentioned in the SFS? I havent seen any instances earlier.>>

DHCP

The following are the DHCP REST APIs:

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.

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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.

Status Code

202	Accepted
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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

Status Code

202	Accepted
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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

Status Code

202	Accepted
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

Multiple Orchestrator Support

The following are the Multiple Orchestrator Support REST APIs:

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.

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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.

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

Multiple Mobility Domain with VLAN Translation

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

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.

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

■

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.

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

Get Translate VLAN Settings

Resource Name	`/rest/settings/general`

Description	Get Unified Fabric translate VLAN settings.

https Method	GET

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

Parameter

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

Return Value

Format: JSON

Type: Object

Attribute Name	Type	Description

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

Update Translate VLAN Settings

Resource Name   `/rest/settings/general`

Description   Update Unified Fabric translate VLAN settings.

https Method   PUT

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

Parameter

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

Return Value   Format: JSON

Type: Object

Attribute Name	Type	Description

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

Delete Translate VLAN Settings

Resource Name `/rest/settings/general`

Description Delete Unified Fabric translate VLAN settings.

https Method PUT

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

Parameter

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

Return Value Format: JSON

Type: Object

Attribute Name	Type	Description

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

Power On Auto Provisioning (POAP)

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

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.

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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.

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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.

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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.

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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.

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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 .

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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

Status Code

202	Accepted
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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.

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

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

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error

Create POAP Definition

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

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

<<sushs: how is this different from Create Switch Definition?>>

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.

Status Code

200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
500	Internal Server Error