

## Image Management

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### Status

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

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

Status Code	Status	API's HTTPS Method or HTTPS 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

## Mandatory Field Class table

### filter

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

### job

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

### imageInstallTask

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

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

### SMUInstallTask

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

**SMUInfo**

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

**GIRInfo**

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

**GIRInfoList**

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

**Status**

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

## Get valid switches for Image Management

**Resource Name** /inventory/switches/

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

**https Method** POST

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

**Parameter**

Parameter	Type	Description
filter	O	Filter Object

**Return Value**

Format: JSON

Type: List of Object

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

## Trigger compatibility check

**Resource Name** /imagemanagement/job

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

**https Method** POST

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

### Parameter

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

**Return Value** Format: JSON

Type: Long

Attribute Name	Type	Description
		Job ID of the new compatibility task



## Get compatibility check/image upgrade status

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

**Description** Gets the compatibility check status

**https Method** GET

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

**Parameter**

Parameter	Type	Description
—		

**Return Value**

Format: JSON

Type: ImageInstallTaskList

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

## Trigger Image upgrade check

**Resource Name** /imagemanagement/job

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

**https Method** POST

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

**Parameter**

Parameter	Type	Description
Job	O	Job Object

**Return Value** Format: JSON

Type: Long

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

## Get all upgrade and compatibility check jobs

**Resource Name** /imagemanagement/jobs

**Description** Gets the compatibility check status

**https Method** GET

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

**Parameter**

Parameter	Type	Description
—		

**Return Value**

Format: JSON

Type: List of Job

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

## Activate a SMU package

**Resource Name** /smu/activate

**Description** Installs patch

**https Method** POST

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

### Parameter

Parameter	Type	Description
SMUInstallJob	O	List of SMUInstallTask

**Return Value** Format: JSON

Type: smuTask

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

## Deactivate a SMU package

**Resource Name** /smu/deactivate

**Description** Installs patch

**https Method** POST

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

### Parameter

Parameter	Type	Description
SMUInstallJob	O	List of SMUInstallTask

### Return Value

Format: JSON

Type: smuTask

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

## Get all active SMU packages for a switches

**Resource Name** /smu/getactive

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

**https Method** POST

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

**Parameter**

Parameter	Type	Description
EthSwitchList	O	List of all Ethernet Switch IDs

**Return Value** Format: JSON

Type: List of SMUInfo

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

## Get GIR status for all the switches

**Resource Name** /imagemanagement/allsystemmode

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

**https Method** GET

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

**Parameter**

Parameter	Type	Description
—		

**Return Value**

Format: JSON

Type: List of GIRInfo

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

## Toggle GIR status for all the switches

**Resource Name** /imagemanagement/toggle

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

**https Method** POST

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

**Parameter**

Parameter	Type	Description
GIRInfoList	O	List of GIRInfo

**Return Value**

Format: JSON

Type: List of GIRInfo

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



## ISSU image upgrade

**Resource Name** /imagemanagement/job

**Description** Triggers image upgrade on the device and returns the Job ID.

**https Method** POST

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

**Parameter**

Parameter	Type	Description
Job	O	Job Object

**Return Value**

Format: JSON

Type: List of GIRInfo

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

## Get Bootflash content

**Resource Name** /repomanagement/fetchfirstlevelfiles

**Description** Gets the contents of the bootflash directory.

**https Method** POST

**URL** `https://dcnm-ip/fm/fmrest/repomanagement/fetchfirstlevelfiles?type=DEVICE&include=true&ip=<Device-IP>&id=<Folder-Name>&path=<Parent_Directory_Path>`

**Parameter**

Parameter	Type	Description

**Return Value** Format: JSON

Type: List of GIRInfo

Attribute Name	Type	Description
Response	O	Response Object with FolderContent embedded as entity.

## Get available and total space

**Resource Name** /repomanagement/fetchdirsize

**Description** Gets the available and total space for bootflash directory.

**https Method** GET

**URL** <https://dcnm-ip/fm/fmrest/repomanagement/fetchdirsize?type=DEVICE&include=true&ip=<Device-IP>&id=bootflash:&path=%2FFLASH%2F&start=0>

**Parameter**

Parameter	Type	Description

**Return Value**

Format: JSON

Type: List of GIRInfo

Attribute Name	Type	Description
Response	O	Response Object with list of RepositoryFile embedded as entity.

## Delete files from the Bootflash

**Resource Name** /repomanagement/file

**Description** Delete files from bootflash directory.

**https Method** DELETE

**URL** https://dcnm-ip/fm/fmrest/repomanagement/file?path=<File\_To\_Be\_Deleted>&ip=<DEVICE\_IP>&userId=<DCNM\_USER>&type=DEVICE

**Parameter**

Parameter	Type	Description

**Return Value** Format: JSON

Type: List of GIRInfo

Attribute Name	Type	Description
Response	O	Response Object with integer value embedded as entity.

## Get server contents in case of SFTP and SCP

**Resource Name** /repomanagement/fetchfirstlevelfiles

**Description** Gets the contents of the SFTP and SCP directory.

**https Method** GET

**URL** [https://dcnm-ip/fm/fmrest/repomanagement/fetchfirstlevelfiles?type=SERVER&include=true&serverName=<Repository\\_Name>&id=<Folder-Name>&path=<Parent\\_Directory\\_Path>](https://dcnm-ip/fm/fmrest/repomanagement/fetchfirstlevelfiles?type=SERVER&include=true&serverName=<Repository_Name>&id=<Folder-Name>&path=<Parent_Directory_Path>)

### Parameter

Parameter	Type	Description
GIRInfoList	O	List of GIRInfo

### Return Value

Format: JSON

Type: List of GIRInfo

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

