



New Features and Enhancements

Cisco Data Center Network Manager (DCNM), includes the new features, enhancements, and hardware support that are described in the following section:

- [New Features and Enhancements in Cisco DCNM, Release 10.1\(2\)ST\(1\), page 1](#)
- [New Features and Enhancements in Cisco DCNM, Release 10.1\(2\), page 3](#)
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New Features and Enhancements in Cisco DCNM, Release 10.1(2)ST(1)

Cisco DCNM, Release 10.1(2)ST(1) is a template (.zip) file release. You can download the Cisco-defined templates from <https://software.cisco.com/download/release.html>.

Cisco DCNM, Release 10.1(2)ST(1), includes the new features, enhancements, that are described in the following section:

VNI-based VDP Auto-Configuration

In Programmable Fabric, end-host reachability management, is an essential function to automate the end-host provisioning in data center networks. There are several ways by which a leaf switch can detect adjacent end-hosts. VSI Discovery and configuration protocol (VDP) is a mechanism to do so. VDP can be used to reliably signal the presence of end-hosts and exchange capability with leaf switches as well as automating the association of the external network state to a VM thereby automating VM mobility seamlessly. This feature running on Cisco Nexus 9300 series is able to communicate with VDP capable Openstack managed end-hosts and perform auto configuration provisioning.

Inband POAP and Management for IP Fabric

A Nexus device with Power On Auto Provisioning (POAP) feature enabled is able to find its IP address and download image/configuration and successfully complete POAP process via the DHCP Server or Cisco DCNM located in or across a VXLAN/EVPN Fabric.

DCNM, Release 10.1(2)ST(1) supports POAP over VXLAN/EVPN fabric via the inband fabric interfaces (IP unnumbered and numbered P2P interfaces) and inband management via 'default' vrf in the fabric.

Consolidation of Border Leaf templates

The Nexus 7000 series border leaf templates have been consolidated into fewer templates.

The following two check boxes have been added to the general tab of the POAP wizard page.

- IS_VDC—The check box indicates if it is a Nexus 7000 or VDC configuration.
- IS_PE—The check box indicates if it is a combined border Leaf/Dc Edge function (MPLS handoff) or a BorderLeaf role (IP handoff) role.

The selection of these check boxes (see the table below) shows how to get roles from the new templates.

The following table shows the older template names and the new consolidated versions.

Table 1: Consolidation of Border Leaf templates

Old Template Names	Consolidated Template Name	IS_VDC Check box	IS_PE Check box
IPFabric_N7K_BorderLeaf.template IPFabric_N7K_BorderPELeaf.template IPFabric_VDC_BorderLeaf.template IPFabric_VDC_BorderPELeaf.template	IPFabric_N7K_VDC_BorderLeaf.template	FALSE FALSE TRUE TRUE	FALSE TRUE FALSE TRUE
IPFabric_N7K_BorderSpine.template IPFabric_N7K_BorderPESpine.template IPFabric_VDC_BorderSpine.template IPFabric_VDC_BorderPESpine.template	IPFabric_N7K_VDC_BorderSpine.template	FALSE FALSE TRUE TRUE	FALSE TRUE FALSE TRUE
Fabric_N7K_BorderLeaf.template Fabric_N7K_BorderPE.template Fabric_VDC_BorderLeaf.template Fabric_VDC_BorderPE.template	Fabric_N7K_VDC_BorderLeaf.template	FALSE FALSE TRUE TRUE	FALSE TRUE FALSE TRUE
Base_N7K_Edge_Router.template Base_VDC_Edge_Router.template	Base_N7K_VDC_Edge_Router.template	FALSE TRUE	— —

New Features and Enhancements in Cisco DCNM, Release 10.1(2)

Cisco DCNM, Release 10.1(2), includes the new features, enhancements, and hardware support that are described in the following section:

DCNM Media Controller

Through open APIs, the Cisco DCNM Media Controller seamlessly integrates with the broadcast controller and provides a similar operator workflow with all the benefits of an IP-based infrastructure. The DCNM Media Controller features an intuitive GUI that enables you to configure your IP fabric using pre-defined templates designed for media networks.

To access the Media Controller feature using the DCNM Web Client, choose **Web Client > Media Controller**.

The DCNM Media Controller enables you to do the following:

- Configure secure generic or multicast-specific policies for individual hosts and allow or deny hosts based on their role.
- Configure secure multicast-specific policies for multiple hosts and flows.
- View the end-to-end traffic flow and bandwidth utilization to quickly identify problem areas (such as link failures or oversubscriptions) in your fabric.
- Use flow analytics to measure and store bit rates and to display the details for individual traffic flows.
- View an audit log of actions performed on the fabric.

Deprecated POAP Templates

The *dcnm_deprecated_templates.10.1.1* zip file contains the POAP templates that are deprecated in DCNM Release 10.1.2.

New Features and Enhancements in Cisco DCNM, Release 10.1(1)ST(1)

Cisco DCNM, Release 10.1(1)ST(1) is a template (.zip) file release. You can download the Cisco-defined templates from <https://software.cisco.com/download/release.html>.

The following lists the POAP templates available for download:

- *dcnm_ip_vxlan_fabric_templates.10.1.1.ST.1.zip*
- *dcnm_fabricpath_fabric_templates.10.1.1.ST.1.zip*
- *dcnm_deprecated_templates.10.1.1.ST.1.zip*

**Note**

The templates in the dcnm_deprecated_templates.10.1.1.ST.1.zip file are being deprecated, and will be dropped from future template zip releases.

New Features and Enhancements in Cisco DCNM, Release 10.1(1)

Cisco DCNM, Release 10.1(1), includes the new features, enhancements, and hardware support that are described in the following section:

San Management Enhancement

Beginning from Release 10.1(1), Cisco DCNM supports the following SAN Management enhancements.

- Smart Zoning through Cisco DCNM Web Client
- Zoning activation dialog shows color coded identifiers in the Cisco DCNM Web Client
- Supports FCoE on Cisco Nexus 9000 Series Switches
- View and monitor FCIP compression ratio through Web Client
- Access to FICON Request Node Identification Data (RNID) information through the Web Client
- Proactive insight of Slow Drain with job scheduling functionality

End of life and End of support reporting enhancements

Cisco DCNM provides End of Life information about Cisco MDS 900 Series Switches and Cisco Nexus products. This aids the users to plan for replacement or upgrading the components that are nearing End of Life.

vPC Functionality enhancement

The virtual port channel (vPC) feature enables you to view the links that are physically connected to different devices as a single port channel. The Cisco DCNM Web Client helps you to configure and identify the inconsistent vPCs, and resolve the inconsistencies in each vPC.

From the Cisco DCNM **Web Client** > **Configure** > **Deploy** > **VPC Peer** to configure vPC peer links.

From the Cisco DCNM **Web Client** > **Configure** > **Deploy** > **VPC** to configure the vPC.

From the Cisco DCNM **Web Client** > **Monitor** > **LAN** > **VPC** > **vPC Consistency** to view the vPC consistency status.

DCNM Connect (Storage creation and assignment)

Beginning with Release 10.1(1), Cisco DCNM allows you to create and automate storage, which allows you to allocate and assign storage through the Web Client. This provides deployment automation for Cisco MDS and Cisco Nexus Switches. After the storage is allocated and assigned, Cisco DCNM assists in establishing connectivity between host and storage through the Web Client.

Interface Provisioning

Cisco DCNM Release 10.1(x) supports Add, Edit through Policy Templates, Delete, Shut, No Shut and Visibility with micro-templates. Interface modifications deployed over time can also be tracked from the Cisco DCNM Web Client interface.

Per User LAN Credentials

Cisco DCNM Release 10.1(x) now requires that users set personal LAN credentials prior to performing actions which modify a device or device configuration. Per user LAN credentials is accessible on Cisco DCNM **Web Client > Configure > Credentials Management > LAN Credentials**.

VLAN Management

Cisco DCNM Release 10.1(x) supports Add, Delete, Shut, No Shut and Visibility with micro-templates. VLANs can be created directly from the switch view from the Cisco DCNM Web Client.

Cisco Nexus 9000 support FCoE NPV

Beginning from Release 10.1(0), Cisco DCNM facilitates FCoE NPV support along with vPC and FEX on Cisco Nexus 9000 Series Switches.

New Hardware Support

The following hardware are supported in Cisco DCNM Release 10.1(1).

Hardware	Part Number
Cisco MDS 9000 FCIP Line Card, Release 7.3(0)DY(1)	DS-X93340-K9
Cisco MDS 9700 Series 24/10 San Extension Module	

