



Cisco DCNM Release Notes, Release 11.0(1)

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Overview

• Overview of Cisco DCNM, on page 1

Overview of Cisco DCNM

Cisco Data Center Network Manager (DCNM) 11 automates Cisco Nexus and Cisco MDS Family infrastructure for data center management across Cisco Nexus 1000, 2000, 3000, 5000, 6000, 7000, and 9000 Series Switches in NX-OS mode using Cisco NX-OS Software. Data Center Network Manager 11 lets you manage large numbers of devices while providing ready-to-use control, management, and automation capabilities plus Virtual Extensible LAN (VXLAN) control and automation for Cisco Nexus LAN fabrics.

For more information, see https://www.cisco.com/c/en/us/products/cloud-systems-management/prime-data-center-network-manager/index.html.

Cisco DCNM Release 11.0(1) manages SAN, LAN, and LAN Fabrics with VXLAN in the Cisco NX-OS driven data center environment. To download the Cisco DCNM software, go to https://www.cisco.com/c/en/us/support/cloud-systems-management/prime-data-center-network-manager/tsd-products-support-series-home.html and click **Download Software**.



Note

Release Notes are sometimes updated with new information about restrictions and caveats. To view the most recent version of the Cisco DCNM Release Notes document, see: https://www.cisco.com/c/en/us/support/cloud-systems-management/prime-data-center-network-manager/products-release-notes-list.html.

The following table shows the change history for this document.

Table 1: Change History

Date	Description
10 July 2018	Published Release Notes for Cisco DCNM Release 11.0(1)

Overview of Cisco DCNM



System Requirements

This chapter lists the tested and supported hardware and software specifications for Cisco Data Center Network Management (DCNM) server and client architecture. The application is in English locales only. This chapter contains the following section:

- System Requirements for Cisco DCNM, Release 11.0(1), on page 3
- Cisco DCNM Supported Scale Parameters , on page 7

System Requirements for Cisco DCNM, Release 11.0(1)



Note

We recommend that you do not upgrade any underlying third-party software separately. All the necessary software components will be updated during the inline upgrade procedure. Upgrading the components outside of DCNM upgrade will cause performance issues.

Java Requirements

The Cisco DCNM Server is distributed with JRE 1.8.0_152 into the following directory:

DCNM_root_directory/java/jre1.8

Server Requirements

Cisco DCNM, Release 11.0(1), supports the Cisco DCNM Server on these 64-bit operating systems:

- SAN Deployments:
 - Microsoft Windows 2012 R2
 - Red Hat Enterprise Linux Release 7.3 and 7.4
- LAN Fabric, Classic LAN, and IP For Media (IPFM) Deployments:
 - Open Virtual Appliance (OVA) with an integrated CentOS Linux release
 - ISO Virtual Appliance (ISO) with an integrated CentOS Linux release

Cisco DCNM Release 11.0(1) supports the following databases:

- Oracle11g Express (XE), Standard, and Enterprise Editions, and Oracle 11g Real Application Clusters (RAC)
- Oracle 12c Enterprise Edition (Conventional)—(Nonpluggable installation)



Note

Cisco DCNM Release 11.0(1) does not support the Oracle 12c pluggable database version installation.

- Oracle 12c RAC (nonpluggable installation)
- PostgreSQL 9.4.5



Note

Cisco DCNM 11.0(1) for LAN is not supported with an external database.



Note

The ISO/OVA installation only supports the embedded PostgreSQL database.



Note

The Cisco DCNM database size is not limited, and increases according to the number of nodes and ports that the DCNM manages with Performance Manager Collections enabled. You cannot restrict the database size. If you choose Oracle database, we recommend that you use Oracle SE or Enterprise edition, instead of Oracle XE due to table space limitations.



Note

You are responsible for all the support that is associated with the Oracle databases, including maintenance, troubleshooting, and recovery. We recommend that you take regular database backups, either daily or weekly, to ensure that all the data is preserved.

Cisco DCNM Release 11.0(1) supports the ISO installation on a bare-metal server (no hypervisor) on the following server platforms:

Server	Product ID (PID)	Recommended minimum memory, drive capacity, and CPU count
Cisco UCS C240M4	UCSC-C240-M4S	24G / 500G 8-vCPU Cores with Cisco hardware RAID Controller [UCSC-MRAID12G-1GB/2 GB] for the RAID operation (small)

Install the Cisco DCNM Compute node with 16vCPUs, 64G RAM, and 500GB hard disk. Ensure that you do not install the Compute node on 32G RAM server.

Server	Product ID (PID)	Recommended minimum memory, drive capacity, and CPU count
Cisco UCS C240M4	UCSC-C240-M4L	32G / 500G 16-vCPU Cores with Cisco hardware RAID Controller [UCSC-MRAID12G- GB/2 GB] for the RAID operation (large)
Cisco UCS C240 M5S	UCSC-C240-M5SX	24G / 500G 8-vCPU Cores with Cisco hardware RAID Controller [UCSC-SAS-M5] for the RAID operation (small)
Cisco UCS C220 M5L	UCSC-C220-M5L	32G / 500G 16-vCPU Cores with Cisco hardware RAID Controller [UCSC-SAS-M5] for the RAID operation (small)



Note

Cisco DCNM can work on an alternative computing hardware as well, despite Cisco is only testing on Cisco UCS.

Server Resource Requirements

Table 2: Server Resource Requirements

Deployment	Deployment Type	Small (Lab or POC)	Large (Production)	Compute
SAN	Windows, Linux (standalone or VM)	Small (Lab or POC) CPU: 8 vCPUs RAM: 24 GB DISK: 500 GB	CPU: 16 vCPUs Note Standalone functioning of SAN Insights require 28 vCPUs. RAM: 128 GB RAM(with SAN Insights) or 32 GB (without SAN Insights) DISK: 10 TB Disk	Not Applicable
			Insights)	

Deployment	Deployment Type	Small (Lab or POC)	Large (Production)	Compute
IP for Media (IPFM)	• OVA	CPU: 8 vCPUs	CPU: 16 vCPUs	Not Applicable
	• ISO	RAM: 24 GB	RAM: 32 GB	
		DISK: 500 GB	DISK: 500 GB	
LAN Fabric	• OVA	CPU: 8 vCPUs	CPU: 16 vCPUs	CPU: 16 vCPUs
Classic LAN	• ISO	RAM: 24 GB	RAM: 32 GB	RAM: 64 GB
		DISK: 500 GB	DISK: 500 GB	DISK: 500 GB



- The SAN Insights feature is not supported on small deployment.
- You can use the SAN Insights feature on a medium-sized deployment with 2 TB disk space as well.
- Every Federation node must consists of 3 Large configuration nodes.

Client Requirements

Cisco DCNM SAN desktop client and Cisco Device Manager support Microsoft Windows 10, Microsoft Windows 2012, and Red Hat Linux. The following table lists the minimum hardware requirements for these client systems.

Table 3: Client Hardware Requirements

Hardware	Minimum Requirements	
RAM (free)	6 GB or more	
CPU speed	3 GHz or faster	
Disk space (free)	20 GB	

If you install Cisco DCNM on a virtual machine, you must reserve resources equal to the server resource requirements to ensure a baseline with the physical machines.

Some Cisco DCNM features require a license. Before using the licensed features, you must install a Cisco DCNM license for each Nexus-managed or MDS-managed platform. For information about Licensing in DCNM, see https://www.cisco.com/c/en/us/td/docs/switches/datacenter/sw/11_x/licensing/cisco_dcnm_licensing_guide_11_x.html.

Supported Web Browsers

Cisco DCNM supports the following web browsers:

- Google Chrome version 67.0.3396.99 (Official Build)
- Mozilla Firefox Version 61.0 (64/32 bit)
- Microsoft Internet Explorer 11.0.9600.19035CO update Version: 11.0.65(KB4230450)

Other Supported Software

The following table lists the other software that is supported by Cisco DCNM, Release 11.0(1).

Table 4: Other Supported Software

Component	Features
Security	• ACS versions 4.0, 5.1, and 5.5
	• Telnet Disabled: SSH Version 1, SSH Version 2, Global Enforce SNMP Privacy Encryption.
	• Web Client and Cisco DCNM-SAN Server Encryption: HTTPS with TLS 1, 1.1 and 1.2
OVA/ISO Installers	CentOS 7.6/Linux Kernel 3.10.x

Also, Cisco DCNM supports call-home events, fabric change events, and events that are forwarded by traps and email.

Cisco DCNM Supported Scale Parameters

For more information about the Cisco DCNM Supported Scale Parameters, the see the Cisco DCNM Scalability Guide, Release 11.0(1).

Cisco DCNM Supported Scale Parameters



Guidelines and Limitations

• Guidelines and Limitations, on page 9

Guidelines and Limitations

This section lists guidelines and limitations that are related to the Cisco DCNM Release 11.0(1).

• The icons or fonts on Cisco DCNM GUI may not appear correctly on Microsoft Windows 10 browsers. This problem can occur if your Windows 10 is set to block untrusted fonts or some security or mitigation options. Microsoft's Internet Explorer Browser Support team has provided with the following steps to address this issue.

Configure the *Allow Font Downloads* Internet Explorer Setting on the Internet Zone and Restricted Sites Zone (enabled by default). Perform the following steps:

- 1. Search for **Group Policy Editor** in Control Panel.
- 2. Choose Computer Configuration > Administrative Templates > Windows Components > Internet Explorer > Internet Control Panel > Security Page > Internet Zone > Allow Font Downloads.
- 3. Double click and choose the **Enabled** radio button.
- 4. Click OK.
- Choose Computer Configuration > Administrative Templates > Windows Components >
 Internet Explorer > Internet Control Panel > Security Page > Restricted Sites Zone > Allow
 Font Downloads.
- **6.** Double click and choose the **Enabled** radio button.
- 7. Click OK.
- **8.** Restart the computer so that the new setting takes effect.
- You must apply patch for any changes that happen on switch side (Nexus 3000 and/or Nexus 9000), to enable Cisco DCNM to support those features. To apply that patch to your Cisco DCNM Native HA setup, follow the steps below:
- 1. Stop the services on the Active node using the /etc/init.d/FMServer stop command.
- **2.** Run **patch.sh** on the Active node.

3. Run **patch.sh** on Standby node.



Note

Services are not stopped on Standby node.

- **4.** Start services on the Active node using the /etc/init.d/FMServer start command.
- 5. Stop the services on Active node using the /etc/init.d/FMServer stop command, and roll back the patch.
- **6.** Roll back the patch on the Standby node.
- 7. Start services on the Active node using /etc/init.d/FMServer start command.
- Restarting Elasticsearch—When Elasticsearch is not running, Cisco DCNM may not be able to find alarms properly. This is because the cache in Alarms is out of sync with Elasticsearch. You can restart Elasticsearch and ensure that Elasticsearch and alarms cache are in sync. To restart Elasticsearch, perform the following steps:
 - 1. Disable the alarm.
 - Restart Elasticsearch.
 - 3. Wait for Elasticsearch to be up and running.
 - **4.** Enable the alarm.
- To check the status of the running Postgres database in Native HA setup, use **pg_ctl** command. Do not use the **systemctl** command.
- Do not begin the password with Hash (#) symbol. Cisco DCNM considers the password as an encrypted text if it begins with # symbol.
- POAP Dynamic Breakout—From Cisco NX-OS Release 7.0(3)I4(1), POAP dynamically breaks out ports to detect a DHCP server behind one of the broken-out ports. Previously, the DHCP server that is used for POAP was directly connected to a normal cable as the breakout cables were not supported. POAP determines which breakout map (for example, 10gx4, 50gx2, 25gx4, or 10gx2) brings up the link that is connected to the DHCP server. If breakout is not supported on any of the ports, POAP skips the dynamic breakout process. After the breakout loop completes, POAP proceeds with the DHCP discovery phase as normal.

Cisco DCNM leverages the dynamic breakout to simplify the fabric setup by retaining successful breakout configuration. Since dynamic breakout requires the other side of the link to be active, there are circumstances where you must manually breakout interfaces, or may notice breakout in places which are not desired. In those situations, you must adjust the ports on the Interfaces page before performing Save and Deploy in the Fabric Builder.

- Before using the licensed features, install a Cisco DCNM license for each Nexus-managed platform. For information about licensing, see the Cisco DCNM Licensing Guide, Release 11.x.
- Depending on how a switch handles the cdp enable CLI command (enabled or disabled by default),
 Cisco DCNM shows this as config difference, although the Save and Deploy operation is performed to
 correct it. This depends on the default behavior of the switch image (that is, whether the show
 running-config shows the CLI or not). To address this issue, the respective policy template that is applied
 on the interfaces must be updated, so that the CLI is ignored during the configuration compliance check.

• Create a free-form configuration on all the white box switches that are managed by Cisco DCNM as shown below, and deploy them on all the switches before the final Save and Deploy operation.

```
line console
speed 115200
stopbits 2
```

This is only applicable to the Cisco DCNM LAN Fabric mode.

- On Microsoft Windows 2016 Standard server, run the Cisco DCNM installation EXE file as an administrator. Cisco DCNM installation will not start on Microsoft Windows 2016 Standard server unless you set the EXE file as an administrator. To start the installation EXE file, you can right-click on the EXE file, and choose **Run as administrator**.
- When the Cisco Nexus 9000v Virtual Switches are cloned, they may use the same serial number. Since Cisco DCNM discovers them using the same serial number, the device discovery operation fails.
- You cannot access the Cisco DCNM Web UI, when the user system is configured with the same IP address range as that of internal subnet used by the Application Framework in DCNM. For more information, see *Cisco DCNM Troubleshooting Guide*.
- The VXLAN OAM feature in Cisco DCNM is only supported on a single fabric or site.
- You cannot configure ICAM on the Cisco Nexus 9000 Series Switches Release 7.0(3)17(6), and therefore, the telemetry will fail until the switch issue is resolved.
- Though you can delete PMN hosts, we recommended that you use this option with extreme caution, understanding that manual effort is needed to bring the solution back in sync.
- Cisco DCNM in Media Controller Deployment Release 11.x does not support non-default VRFs for Cisco Nexus 9000 Release 9.3(x).
- From Cisco DCNM Release 11.2(1), the Device Connector allows you to change the access mode via the Web UI at **Administration > DCNM Server > Device Connector > Settings > General**. The Cisco Intersight will not configure its device connector, and therefore, the Read-Only and Allow Control access mode in the Device Connector are not operational.
- Cisco DCNM does not support hot snapshots. While taking snapshots, we recommend that you power off the VM. Otherwise, ensure that you uncheck the **Snapshot the virtual machine's memory** option.
- Cisco DCNM does not support suspending or unsuspending of the VMs.
- Do not install NIR on standalone DCNM
- If NIR was installed and stopped, it does not stop service containers running on DCNM compute nodes. If the NIR application is deleted from DCNM, a few service containers continues to run DCNM compute nodes and must be stopped manually using **afw service** commands.
- When DCNM Tracker is enabled, the NIR LAN Telemetry feature in Managed mode and the EPL feature
 with the Configure my Fabric option selected, will not work. As a workaround, disable the DCNM
 tracker on the switches that are configured during the EPL or NIR LAN Telemetry configuration. For
 EPL, disable the DCNM tracker on the Spines/Route Reflectors (both RR1 and RR2). For NIR LAN
 Telemetry, disable the DCNM tracker on all the switches selected for telemetry configuration.
- The DCNM installer creates a _deviceImage-0.iso in the DCNM VM folder and mounts the ISO permanently to the VM. If this ISO is removed or the CD/DVD is disconnected, the VM will not boot. The VM will enter Emergency Mode and prompt you with the message:Give root password for

maintenance. If the VM is down, CD/DVD drive can be disconnected. However, after you power it up again, the VM will enter Emergency Mode and provide a prompt.

- For leaf-leaf ports in non-VPC cases, DCNM will always push the **shutdown** command. If you want to bring up the port, add the **no cdp enable** command to the interface freeform policy on one of the ports.
- Two-factor authentication is not supported in DCNM.
- In case VOAP fails on Cisco Nexus 7000 Series switches running on Cisco NX-OS Release 6.2(x) and the error log given below in the VOAP failure console log is displayed, add the property: VINCI_VOAP_SLEEP_TIME in the /usr/local/cisco/dcm/fm/conf/server.properties file, set the property value to 30, and restart DCNM. The VOAP process will then complete successfully.

VOAP failure console log:

2018 Jul 20 13:00:10 N77K %\$ VDC-1 %\$ %USER-1-SYSTEM_MSG: S/N[FXS2030Q19M:L1] - EXCEPTION: Traceback (most recent call last): File "/bootflash/scripts/voap.py", line 1566, in parse_json fh = open(g_unix_destination_path+filename); IOError: [Errno 2] No such file or directory: '/bootflash/L1-device-recipe.cfg' - voap.py

2018 Jul 20 13:00:10 N77K %\$ VDC-1 %\$ %USER-1-SYSTEM_MSG: S/N[FXS2030Q19M:L1] - ERROR: parsing json file L1-device-recipe.cfg - voap.py

Property that has to be added in server properties to resolve the issue:

VINCI_VOAP_SLEEP_TIME=30

- In Cisco DCNM SAN deployment, if the DCNM server streaming the SAN analytics is over-utilized, the Elasticsearch database service goes down. This results in performance issues. The Pipeline service may be consuming all the CPU and system resources on the Cisco DCNM server. To troubleshoot this, do the following task:
 - 1. Stop the Pipeline service.
 - 2. Reduce the streaming load from the MDS fabric.
 - 3. Start Elasticsearch service.
 - 4. Start the Pipeline service.
- In Cisco DCNM SAN deployment, when you enable or disable alarms on a Primary node, it will not be applied to all the nodes in the Federation. You must manually enable or disable alarms on all nodes on all servers in the Federation setup. You must restart the DCNM Server to apply the changes.
- In Cisco DCNM SAN deployment, when you add or delete alarm policies on a Primary node, it will not be applied to all the nodes in the Federation. You must restart all the DCNM servers to apply this change on all servers in the Federation setup.
- In Cisco DCNM SAN deployment, when you modify the server properties on Cisco DCNM Web UI >
 Administration > DCNM Server > Server Properties on a Primary node, it will not be applied to all
 the nodes in the Federation. You must manually make the changes to the server properties on all nodes
 on all servers in the Federation setup. You must restart the DCNM Server to apply the changes.
- SAN Insights is not recommended on Windows Deployments, and is no longer supported from Release 11.3(1).
- SAN Insights is best supported on Linux from Release 11.0(1), and on Cisco DCNM OVA/ISO deployments from Release 11.3(1).

- While retrieving a slow drain report from DCNM Release 11.0.1 on the Web UI, the session expires, and you will logout from DCNM Web UI. The slow drain reports are generated. However, it cannot be retrieved or downloaded from the DCNM server. All other reports are working correctly and can be retrieved.
- From Cisco DCNM Release 11.3(1), you cannot download the SAN Client package from the Software Downloads page. You must install Cisco DCNM, launch Web UI to download the SAN Client and Device Manager. For more information, Cisco DCNM Installation and Upgrade Guide for SAN Deployment.
- We recommend that you do not upgrade any underlying third-party software separately. All the necessary software components will be DCNM upgrade will cause performance issues.

Certain commands must not be executed on Cisco DCNM, as they may harm the functionality of various components on the network. The following table shows the commands and specifies the reason why they must not be executed.

Table 5: List of Commands that must not be executed on Cisco DCNM

Command	Reason
systemctl restart network	This is a common Linux command that the network administrators use when editing the interface properties. The command has shown to render the DCNM useless when converting to the cluster mode. Use the equivalent appmgr commands for changing any IP addresses for eth0, eth1, or eth2 interfaces.

Guidelines and Limitations



New Features and Enhancements

• New Features and Enhancements, on page 15

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 11.0(1)

This section includes information about the new features, enhancements, and hardware support for Cisco DCNM, Release 11.0(1).

LAN Fabric

The Fabric Builder replaces the POAP menu for VXLAN Fabric deployments. This feature significantly reduces the labor necessary to configure and deploy new VXLAN Fabrics by automatically bootstrapping not provisioned switches with minimal input and automatically applying preconfigured best-practice policy templates that express the fabric intent. LAN Fabric incorporates Configuration Compliance so that the Underlay is constantly monitored to ensure the intent of the fabric is consistent.

For the greenfield deployments, there are two ways to add switches:

- Via Bootstrap which employs the newly introduced 2-phase POAP.
- Add switches, where the switches can be discovered and imported via their management IP.

In the case of the Add switches option, Cisco DCNM will cleanup all configuration from that switch on a best-effort basis, including all interface configurations. Cisco recommends Bootstrap as the preferred option for greenfield deployments. If you want to use the Add Switches option, then it is recommended that you have a switch with minimal configurations like hostname, mgmt0 configuration and so on.

The LAN Fabric provides a controller-centric top-down approach. The three easy steps to deploy the VXLAN BGP EVPN fabric are:

- Underlay (POAP + Bootstrap)
- · Interfaces
- Overlay

The key features of LAN Fabric underlay are:

- Supports Multi-Site deployment
- Provides External Fabric connectivity provisioning
- Customizable template-based configuration
- Migration tools for Brownfield and upgrade environments

In addition, the Fabric Builder provides the following benefits:

- Create and edit fabrics using predefined templates.
- Default templates are prepacked along with DCNM 11.0(1).
- Customize templates in the Template Library.
- Management of fabrics separately for LAN Fabrics, NFM, External & Multi-Site Domains.
- Single place to manage all types of fabrics in Fabric Builder.
- Easy movement of fabrics and managing common network & VRF elements to apply across all interconnected fabrics.
- In-built support for migrating the Default_LAN and LAN fabrics to LAN Fabrics and import the existing setup.

Configuration Compliance

Configuration Validation is required in any Network Management Solution. Configurations need to be pushed down from the controller onto their devices. More importantly, configurations need to be in sync and in compliance with the intent expressed in the controller. Any deviation from the intended configuration has to be recognized, reported and remediated. In LAN Fabric mode, Configuration Compliance is supported for VXLAN EVPN. Configuration Compliance is embedded and integrated with the Fabric builder (underlay), Global Interfaces manager and Top-Down overlay provisioning GUI screens on Cisco DCNM.

Compute Visualization

This feature allows you to visualize the vCenter-managed hosts and their leaf switch connections in the topology page. Cisco DCNM supports VMware vCenter Server for this feature. The visualization options include viewing only the attached physical hosts or only the VMs or all. The latter option displays the topology all the way from the leaf switches to the VMs including the virtual switches. The VM Search option highlights the VM's path. You can hover your mouse cursor over a host or the connected uplink that highlights key information relevant to that entity. Up to four centers are supported.

vCenter can be imported from the Virtual Machine Manager in the **Inventory** page (**Inventory > Discover > Virtual Machine Manager**).

NFM Migration

In the earlier releases of Cisco DCNM, only NFM overlay migration was supported. Cisco DCNM Release 11.0(1) supports underlay migration as well. You need to migrate both underlay and overlay if you want to migrate from the NFM system to Cisco DCNM. See the Fabric Builder feature in LAN Fabric mode for the Compatible VXLAN Fabric Settings.

Multi-Site Domain (MSD)

MSD is a logical construct or container that has member fabrics. Cisco DCNM Release 10.4(2) enabled you to connect multiple sites. In Cisco DCNM Release 11.0(1), you can provision networks or VRFs for the overlay at once, to all member sites. Remember that overlay networks (and VRFs) are common (that is, the same networks are being stretched across fabrics) but underlay configurations are specific (mostly interface and IGP configs, etc). So, MSD only refers about overlay, so you have to selectively explain.

Single-click Return Material Authorization (RMA) Workflow

The RMA workflow enables you to replace a physical switch in a Fabric when using Cisco DCNM LAN Fabric.

Device Manager for Storage Devices

Cisco DCNM 11.0.(1) enables you to launch the device manager from your web browser. The Device Manager can be launched from the switch dashboard or topology pages.



Note

Due to the changes in the SNMP Max VarBinds size fo Cisco MDS 9000 series switches that run NX-OS 8.3(1) and above, the Device Manager provides two new properties that allow you to configure the number of VarBinds in request PDU in the Device Manager Properties dialog box. The default values for the Device View Polling and Summary View Discovery fields are 30 and 15 respectively. You can configure these fields to smaller numbers if too many request SNMP errors occur.

IVR Zoning

Since there are fundamental differences between regular zoning and IVR zoning, Cisco DCNM web interface provides a separate menu for IVR Zoning under the Configuration menu. IVR Zoning support is limited to switches that have IVR CFS, IVR NAT and AutoTopology enabled. If the IVR CFS is not enabled then Activation/Deactivation/Commit and Discard Pending changes will be blocked. If IVR NAT and AutoTopology are not enabled, nothing is blocked but the you will be warned that the features are not enabled.

VSAN Wizard Support

Beginning with Cisco DCNM Release 11, you can configure and manage VSANs from the Cisco DCNM Web Client. From the menu bar, choose Configure > SAN > VSAN to view VSAN information. You can view or configure VSAN for the discovered fabrics, with either Manageable or Manage Continuously status. For the selected fabric, a VSAN Scope tree is displayed in the left panel.

You can achieve higher security and greater stability in Fibre Channel fabrics by using virtual SANs (VSANs) on Cisco Data Center Switches and Cisco MDS 9000 Family switches. VSANs provide isolation among devices that are physically connected to the same fabric. With VSANs you can create multiple logical SANs over a common physical infrastructure. Each VSAN can contain up to 239 switches and has an independent address space that allows identical Fibre Channel IDs(FC IDs) to be used simultaneously in different VSANs.

SAN Port Channel Wizard

Port Channels refer to the aggregation of multiple physical interfaces into one logical interface to provide higher aggregated bandwidth, load balancing, and link redundancy. Port Channels can connect to interfaces across switching modules, so a failure of a switching module cannot bring down the Port Channel link.

Beginning with Cisco Data Center Network Manager 11.0(1), you can configure and edit Port Channels from the Web UI. Navigate to **Configure > SAN > Port Channel** to create or edit Port Channels. Click **Create**New Port Channel to launch the wizard to create new Port Channel. Click **Edit Existing Port Channel** to launch the wizard to edit an existing Port Channel.

DCNM Server Health Mib Support on Server

In Cisco DCNM 11.0(1), an SNMP client or MIB Browser can send SNMP Get queries to DCNM server for OIDs in CISCO-NMS-APPL-HEALTH-MIB to get the health status of the DCNM server, such as its Database Server, Search Indexer, Performance Collector, and SMI-S Agent.

Switch Feature License Install

Cisco DCNM 11.0(1) allows you to install switch feature license from the web interface.

Application Hosting Framework

The Application Framework provides an ability for applications to be packaged as a software image. The software image can be uploaded to Cisco DCNM through its front-end GUI interface or pre-packaged along with a Cisco DCNM release.

The application package comprises of the following:

- Application specification.
- · Application image.
- Application front-end package that should be hosted in Cisco DCNM.
- An icon depicting a logo of the application.

Alarm Management

Currently DCNM gets and stores events which are based on traps, periodic polls, sys log etc. Using the alarm management feature, the events can be correlated to create user-defined alarms. You can add, edit, delete, activate, deactivate, import, export, the policies of device health, interface health, and syslog alarm. Cisco DCNM can generate/clear Alarms based on the policy. In this release, support is available only for the LAN devices.

IP for Media (IPFM) Enhancements

In Cisco DCNM 11.0(1), the following enhancements have been made to the IP For Media (IPFM) enhancements.

- Flow visibility, Host/Flow Policy and Endpoint Monitoring via Nexus Telemetry.
- Enhanced Host and Flow Policy Management.
- Extension to NB API and AMQP notifications to support new capabilities.
- Multifold increase in scalability/performance numbers for the number of managed flows, endpoints and host/flow policies.
- Support batching in static API join/leave.
- Support for hybrid topology that allows connecting endpoints to Spine.

Support for New Hardware

The following is a list of new Cisco Nexus 9000 hardware supported in Cisco DCNM Release 11.0(1).

Hardware Description	Part Number
Cisco Nexus 9336C-FX2, 1-RU, fixed-port switch	N9K-C9336C-FX2
Cisco Nexus 9000 Fixed with 48p 1/10G/25G SFP and 12p 40G/100G QSFP28	N9K-C93240YC-FX2
32-port 100 Gigabit Ethernet Quad Small Form-Factor Pluggable 28 (QSFP28) line card	N9K-X9732C-FX
48-port 1 and 10GBASE-T plus 4-port 40/100 Gigabit Ethernet QSFP 28 line card	N9K-X9788TC-FX
Fabric Module for Nexus 9516 chassis 100G support (100G/flow), NX-OS and ACI Spine	N9K-C9516-FM-E2
Nexus 3548-XL Switch, 48 SFP+	N3K-C3548P-XL
LC,N77, FANGIO CB100, 30PT,40GE, zQFSP+	N77-F430CQ-36
Cisco MDS 9396T 32-Gbps 96-Port Fibre Channel Switch	DS-C9396T-K9
Cisco MDS 9148T 32-Gbps 48-Port Fibre Channel Switch	DS-C9148T-K9
Cisco Nexus 7700 Supervisor 3	N77-SUP3E
Cisco Nexus 7700 Fabric module 3	N77-C7706-FAB-3, N77-C7710-FAB-3
Fabric Module for Nexus 9504 R-Series LC, NX-OS only	N9K-C9504-FM-R
Fretta 48p 1/10/25G + 4p 100G Line card	N9K-X96160YC-R
100-Gigabit N9K-C9508-FM-E2 Fabric Module	N9K-C9508-FM-E2
Nexus 3264C-E switch with 64 QSFP28	N3K-C3264C-E
Nexus 34180YC programmable switch, 48 10/25G SFP and 6 40/100G QSFP28 ports	N3K-C34180YC
Cisco Nexus 3132Q Switch	N3K-C3132C-Z
Cisco Nexus 3132Q-V Switch	N3K-C3132Q-V
Whitebox Edge core devices	7312-54X-O-AC-B / 7712-32X-O-AC-B

Support for New Hardware



Upgrading Cisco DCNM

This chapter provides information about upgrading Cisco DCNM, and contains the following section:

• Upgrading Cisco DCNM, on page 21

Upgrading Cisco DCNM

You can upgrade the following versions of Cisco DCNM directly to Cisco DCNM 11.0(1):

- 10.4(2) to 11.0(1) for OVA/ISO
- 10.4(1) (SAN) /10.4(2) to 11.0(1) for Windows/Linux



Note

You cannot upgrade the IP For Media (IPFM) to Cisco DCNM 11.0(1).

For more information about upgrading, see the "Upgrading Cisco DCNM" section of the *Cisco DCNM Installation Guide*, *Release 11.0(1)* at:

http://www.cisco.com/c/en/us/support/cloud-systems-management/prime-data-center-network-manager/products-installation-guides-list.html

Upgrading Cisco DCNM



Supported Cisco Platforms and Software Versions

• Hardware Supported in Cisco DCNM, Release 11.0(1), on page 23

Hardware Supported in Cisco DCNM, Release 11.0(1)

The following tables list the products and components supported in Cisco DCNM, Release 11.0(1).

Table 6: Cisco MDS 9000 Family

Product/Component	Part Number
Cisco MDS 9396T 32-Gbps 96-Port Fibre Channel Switch	DS-C9396T-K9
Cisco MDS 9148T 32-Gbps 48-Port Fibre Channel Switch	DS-C9148T-K9
Cisco MDS 9700 48-Port 32-Gbps Fibre Channel Switching Module	DS-X9648-1536K9
Cisco MDS 9250i Multilayer Fabric Switch	DS-9250I-K9
Cisco MDS 9124 24-Port Multilayer Fabric Switch	DS-C9124-K9
Cisco MDS 9134 34-Port Multilayer Fabric Switch	DS-C9134-K9
Cisco MDS 9148 48-Port Multilayer Fabric Switch	DS-C9148-K9
Cisco MDS 9148 48-Port Multilayer Fabric Switch	DS-C9148S-K9
Cisco MDS 9216i Multilayer Fabric Switch	DS-C9216i-K9
Cisco MDS 9222i Multilayer Fabric Switch	DS-C9222i-K9
Cisco MDS 9506 Multilayer Director	DS-C9506
Cisco MDS 9509 Multilayer Director	DS-C9509
Cisco MDS 9513 Multilayer Director	DS-C9513
Cisco MDS 9706 Multilayer Director	DS-C9706

Cisco MDS 9718 Multilayer Director Cisco MDS 9000 32-Port 2-Gbps Fibre Channel Switching Module Cisco MDS 9000 32-Port Storage Services Module Cisco MDS 9000 12-port 4-Gbps Fibre Channel Switching Module Cisco MDS 9000 12-port 4-Gbps Fibre Channel Switching Module Cisco MDS 9000 12-port 4-Gbps Fibre Channel Switching Module Cisco MDS 9000 12-port 4-Gbps Fibre Channel Switching Module Cisco MDS 9000 24-port 4-Gbps Fibre Channel Switching Module Cisco MDS 9000 24-port 4-Gbps Fibre Channel Switching Module Cisco MDS 9000 24-port 4-Gbps Fibre Channel Switching Module Cisco MDS 9000 24-Port 8-Gbps Fibre Channel Switching Module Cisco MDS 9000 32-port 8-Gbps Fibre Channel Switching Module Cisco MDS 9000 32-port 8-Gbps Advanced Fibre Channel Switching Module Cisco MDS 9000 48-port 8-Gbps Advanced Fibre Channel Switching Module Cisco MDS 9000 44-Port Host-Optimized 8-Gbps Fibre Channel Switching Module Cisco MDS 9000 48-Port 8-Gbps Fibre Channel Switching Module Cisco MDS 9000 Family 14-Port Fibre Channel Switching Module Cisco MDS 9000 Family 14-Port Fibre Channel Switching Module Cisco MDS 9000 Family 14-Port Fibre Channel Switching Module Cisco MDS 9000 Family 14-Port Storage Module DS-X9304-18K9 DS-X9304-18K9 DS-X9304-SMIP Cisco MDS 9000 Family 16-Port Storage Services Node (SSN-16) Cisco MDS 9000 Family 14-Port Storage Services Node (SSN-16) Cisco MDS 9000 Family 14-Port Storage Services Nodel (SSN-16) Cisco MDS 9000 Family 24/10 SAN Extension Module	Product/Component	Part Number
Cisco MDS 9000 32-Port 2-Gbps Fibre Channel Switching Module Cisco MDS 9000 12-port 4-Gbps Fibre Channel Switching Module Cisco MDS 9000 12-port 4-Gbps Fibre Channel Switching Module Cisco MDS 9000 12-port 4-Gbps Fibre Channel Switching Module Cisco MDS 9000 12-port 4-Gbps Fibre Channel Switching Module Cisco MDS 9000 12-port 4-Gbps Fibre Channel Switching Module Cisco MDS 9000 24-port 4-Gbps Fibre Channel Switching Module Cisco MDS 9000 48-port 4-Gbps Fibre Channel Switching Module Cisco MDS 9000 48-port 4-Gbps Fibre Channel Switching Module Cisco MDS 9000 32-port 8-Gbps Fibre Channel Switching Module Cisco MDS 9000 32-port 8-Gbps Advanced Fibre Channel Switching Module Cisco MDS 9000 48-port 8-Gbps Advanced Fibre Channel Switching Module Cisco MDS 9000 48-port 8-Gbps Advanced Fibre Channel Switching Module Cisco MDS 9000 48-port 8-Gbps Fibre Channel Switching Module Cisco MDS 9000 48-port 8-Gbps Fibre Channel Switching Module Cisco MDS 9000 48-port 8-Gbps Fibre Channel Switching Module Cisco MDS 9000 144-Port Host-Optimized 8-Gbps Fibre Channel Switching Module Cisco MDS 9000 184-Port 8-Gbps Fibre Channel Switching Module Cisco MDS 9000 184-Port Bultiservice Module DS-X9302-14K9 Cisco MDS 9000 184-Port Multiservice Module DS-X9304-18K9 MSM-18/4) Cisco MDS 9000 8-port 1-Gbps IP Storage Module DS-X9304-SMIP Cisco MDS 9000 Family 14-Port Storage Services Vode (SSN-16) Cisco MDS 9000 Family 24/10 SAN Extension Module DS-X9334-K9	Cisco MDS 9710 Multilayer Director	DS-C9710
Switching Module Cisco MDS 9000 32-Port Storage Services Module DS-X9032-SSM DS-X9112 Switching Module Cisco MDS 9000 12-port 4-Gbps Fibre Channel Switching Module Cisco MDS 9000 12-port 4-Gbps Fibre Channel Switching Module Cisco MDS 9000 12-port 4-Gbps Fibre Channel Switching Module Cisco MDS 9000 24-port 4-Gbps Fibre Channel Switching Module Cisco MDS 9000 24-port 4-Gbps Fibre Channel Switching Module Cisco MDS 9000 48-port 4-Gbps Fibre Channel Switching Module Cisco MDS 9000 24-Port 8-Gbps Fibre Channel Switching Module Cisco MDS 9000 32-port 8-Gbps Fibre Channel Switching Module Cisco MDS 9000 32-port 8-Gbps Advanced Fibre Channel Switching Module Cisco MDS 9000 44-Port Host-Optimized 8-Gbps Fibre Channel Switching Module Cisco MDS 9000 48-Port 8-Gbps Fibre Channel Switching Module Cisco MDS 9000 48-Port 8-Gbps Fibre Channel Switching Module Cisco MDS 9000 18/4-Port Host-Optimized 8-Gbps Fibre Channel Switching Module Cisco MDS 9000 18/14-Port Fibre Channel Switching Module Cisco MDS 9000 18/14-Port Fibre Channel and DS-X9248-96K9 Switching Module Cisco MDS 9000 Family 14-Port Fibre Channel and DS-X9302-14K9 -2-port Gigabit Ethernet Module Cisco MDS 9000 18/4-Port Multiservice Module MSM-18/4) Cisco MDS 9000 8-port 1-Gbps IP Storage Module DS-X9304-SMIP Cisco MDS 9000 8-port 1-Gbps IP Storage Module Cisco MDS 9000 Family 16-Port Storage Services Node (SSN-16) Cisco MDS 9000 Family 24/10 SAN Extension Module	Cisco MDS 9718 Multilayer Director	DS-C9718
Cisco MDS 9000 12-port 4-Gbps Fibre Channel Switching Module Cisco MDS 9000 12-port 4-Gbps Fibre Channel Switching Module Cisco MDS 9000 12-port 4-Gbps Fibre Channel Switching Module Cisco MDS 9000 24-port 4-Gbps Fibre Channel Switching Module Cisco MDS 9000 24-port 4-Gbps Fibre Channel Switching Module Cisco MDS 9000 48-port 4-Gbps Fibre Channel Switching Module Cisco MDS 9000 24-Port 8-Gbps Fibre Channel Switching Module Cisco MDS 9000 32-port 8-Gbps Advanced Fibre Channel Switching Module Cisco MDS 9000 48-port 8-Gbps Advanced Fibre Channel Switching Module Cisco MDS 9000 44-Port Host-Optimized 8-Gbps Fibre Channel Switching Module Cisco MDS 9000 44-Port Host-Optimized 8-Gbps Fibre Channel Switching Module Cisco MDS 9000 48-Port 8-Gbps Fibre Channel Switching Module Cisco MDS 9000 18-Port Host-Optimized 8-Gbps Fibre Channel Switching Module Cisco MDS 9000 48-Port 8-Gbps Fibre Channel Switching Module Cisco MDS 9000 48-Port B-Gbps Fibre Channel Switching Module Cisco MDS 9000 48-Port B-Gbps Fibre Channel Switching Module Cisco MDS 9000 48-Port B-Gbps Fibre Channel Switching Module Cisco MDS 9000 8-Port I-Gbps IP Storage Module Cisco MDS 9000 8-port I-Gbps IP Storage Module Cisco MDS 9000 Family 16-Port Storage Services Node (SSN-16) Cisco MDS 9000 Family 24/10 SAN Extension Module DS-X9334-K9	Cisco MDS 9000 32-Port 2-Gbps Fibre Channel Switching Module	DS-X9032
Switching Module Cisco MDS 9000 12-port 4-Gbps Fibre Channel Switching Module Cisco MDS 9000 12-port 4-Gbps Fibre Channel Switching Module Cisco MDS 9000 24-port 4-Gbps Fibre Channel Switching Module Cisco MDS 9000 24-port 4-Gbps Fibre Channel Switching Module Cisco MDS 9000 48-port 4-Gbps Fibre Channel Switching Module Cisco MDS 9000 24-Port 8-Gbps Fibre Channel Switching Module Cisco MDS 9000 32-port 8-Gbps Advanced Fibre Channel Switching Module Cisco MDS 9000 48-port 8-Gbps Advanced Fibre Channel Switching Module Cisco MDS 9000 44-Port Bobs Advanced Fibre Channel Switching Module Cisco MDS 9000 44-Port Host-Optimized 8-Gbps Fibre Channel Switching Module Cisco MDS 9000 48-Port 8-Gbps Fibre Channel Switching Module Cisco MDS 9000 48-Port Bobs Fibre Channel Switching Module Cisco MDS 9000 18/4-Port Hust-Optimized 8-Gbps Fibre Channel Switching Module Cisco MDS 9000 48-Port 8-Gbps Fibre Channel Switching Module Cisco MDS 9000 48-Port 8-Gbps Fibre Channel Switching Module Cisco MDS 9000 48-Port 8-Gbps Fibre Channel Switching Module Cisco MDS 9000 48-Port 8-Gbps Fibre Channel Switching Module Cisco MDS 9000 8-Port 1-Gbps IP Storage Module Cisco MDS 9000 8-port 1-Gbps IP Storage Module Cisco MDS 9000 8-port 1-Gbps IP Storage Module Cisco MDS 9000 Family 16-Port Storage Services Node (SSN-16) Cisco MDS 9000 Family 24/10 SAN Extension Module	Cisco MDS 9000 32-Port Storage Services Module	DS-X9032-SSM
Switching Module Cisco MDS 9000 12-port 4-Gbps Fibre Channel Switching Module Cisco MDS 9000 24-port 4-Gbps Fibre Channel Switching Module Cisco MDS 9000 44-port 4-Gbps Fibre Channel Switching Module Cisco MDS 9000 44-port 4-Gbps Fibre Channel Switching Module Cisco MDS 9000 24-Port 8-Gbps Fibre Channel Switching Module Cisco MDS 9000 32-port 8-Gbps Advanced Fibre Channel Switching Module Cisco MDS 9000 32-port 8-Gbps Advanced Fibre Channel Switching Module Cisco MDS 9000 44-Port Host-Optimized 8-Gbps Fibre Channel Switching Module Cisco MDS 9000 4/44-Port Host-Optimized 8-Gbps Fibre Channel Switching Module Cisco MDS 9000 48-Port 8-Gbps Fibre Channel Switching Module Cisco MDS 9000 48-Port 8-Gbps Fibre Channel Switching Module Cisco MDS 9000 18/4-Port Multiservice Module DS-X9248-96K9 Switching Module Cisco MDS 9000 18/4-Port Multiservice Module MSM-18/4) Cisco MDS 9000 4-port 1-Gbps IP Storage Module DS-X9304-SMIP Cisco MDS 9000 Family 16-Port Storage Services Node (SSN-16) Cisco MDS 9000 Family 24/10 SAN Extension Module DS-X9334-K9	Cisco MDS 9000 12-port 4-Gbps Fibre Channel Switching Module	DS-X9112
Switching Module Cisco MDS 9000 24-port 4-Gbps Fibre Channel Switching Module Cisco MDS 9000 48-port 4-Gbps Fibre Channel Switching Module Cisco MDS 9000 24-Port 8-Gbps Fibre Channel Switching Module Cisco MDS 9000 32-port 8-Gbps Fibre Channel Switching Module Cisco MDS 9000 32-port 8-Gbps Advanced Fibre Channel Switching Module Cisco MDS 9000 48-port 8-Gbps Advanced Fibre Channel Switching Module Cisco MDS 9000 44-Port Host-Optimized 8-Gbps Fibre Channel Switching Module Cisco MDS 9000 48-Port 8-Gbps Fibre Channel Switching Module Cisco MDS 9000 48-Port 8-Gbps Fibre Channel Switching Module Cisco MDS 9000 18-Port 8-Gbps Fibre Channel and 2-port Gigabit Ethernet Module Cisco MDS 9000 18/4-Port Multiservice Module MSM-18/4) Cisco MDS 9000 4-port 1-Gbps IP Storage Module DS-X9304-SMIP Cisco MDS 9000 8-port 1-Gbps IP Storage Module DS-X9308-SMIP Cisco MDS 9000 Family 16-Port Storage Services Node (SSN-16) Cisco MDS 9000 Family 24/10 SAN Extension Module	Cisco MDS 9000 12-port 4-Gbps Fibre Channel Switching Module	DS-X9112
Switching Module Cisco MDS 9000 48-port 4-Gbps Fibre Channel Switching Module Cisco MDS 9000 24-Port 8-Gbps Fibre Channel Switching Module Cisco MDS 9000 24-Port 8-Gbps Fibre Channel Switching Module Cisco MDS 9000 32-port 8-Gbps Advanced Fibre Channel Switching Module Cisco MDS 9000 48-port 8-Gbps Advanced Fibre Channel Switching Module Cisco MDS 9000 4/44-Port Host-Optimized 8-Gbps Fibre Channel Switching Module Cisco MDS 9000 4/44-Port B-Gbps Fibre Channel Switching Module Cisco MDS 9000 48-Port 8-Gbps Fibre Channel Switching Module Cisco MDS 9000 Family 14-Port Fibre Channel Cisco MDS 9000 Family 14-Port Fibre Channel and C-port Gigabit Ethernet Module Cisco MDS 9000 18/4-Port Multiservice Module Cisco MDS 9000 4-port 1-Gbps IP Storage Module Cisco MDS 9000 8-port 1-Gbps IP Storage Module Cisco MDS 9000 Family 16-Port Storage Services Node (SSN-16) Cisco MDS 9000 Family 24/10 SAN Extension Module DS-X9334-K9 DS-X9334-K9	Cisco MDS 9000 12-port 4-Gbps Fibre Channel Switching Module	DS-X9112
Switching Module Cisco MDS 9000 24-Port 8-Gbps Fibre Channel Switching Module Cisco MDS 9000 32-port 8-Gbps Advanced Fibre Channel Switching Module Cisco MDS 9000 48-port 8-Gbps Advanced Fibre Channel Switching Module Cisco MDS 9000 48-port 8-Gbps Advanced Fibre Channel Switching Module Cisco MDS 9000 4/44-Port Host-Optimized 8-Gbps Fibre Channel Switching Module Cisco MDS 9000 48-Port 8-Gbps Fibre Channel Switching Module Cisco MDS 9000 Family 14-Port Fibre Channel and 2-port Gigabit Ethernet Module Cisco MDS 9000 18/4-Port Multiservice Module MSM-18/4) Cisco MDS 9000 4-port 1-Gbps IP Storage Module Cisco MDS 9000 8-port 1-Gbps IP Storage Module Cisco MDS 9000 Family 16-Port Storage Services Node (SSN-16) Cisco MDS 9000 Family 24/10 SAN Extension Module DS-X9334-K9 Module	Cisco MDS 9000 24-port 4-Gbps Fibre Channel Switching Module	DS-X9124
Switching Module Cisco MDS 9000 32-port 8-Gbps Advanced Fibre Channel Switching Module Cisco MDS 9000 48-port 8-Gbps Advanced Fibre Channel Switching Module Cisco MDS 9000 4/44-Port Host-Optimized 8-Gbps Fibre Channel Switching Module Cisco MDS 9000 4/44-Port Host-Optimized 8-Gbps Fibre Channel Switching Module Cisco MDS 9000 48-Port 8-Gbps Fibre Channel Switching Module Cisco MDS 9000 Family 14-Port Fibre Channel and 2-port Gigabit Ethernet Module Cisco MDS 9000 18/4-Port Multiservice Module MSM-18/4) Cisco MDS 9000 4-port 1-Gbps IP Storage Module Cisco MDS 9000 8-port 1-Gbps IP Storage Module Cisco MDS 9000 Family 16-Port Storage Services Node (SSN-16) Cisco MDS 9000 Family 24/10 SAN Extension Module	Cisco MDS 9000 48-port 4-Gbps Fibre Channel Switching Module	DS-X9148
Channel Switching Module Cisco MDS 9000 48-port 8-Gbps Advanced Fibre Channel Switching Module Cisco MDS 9000 4/44-Port Host-Optimized 8-Gbps Fibre Channel Switching Module Cisco MDS 9000 48-Port 8-Gbps Fibre Channel Switching Module Cisco MDS 9000 Family 14-Port Fibre Channel and 2-port Gigabit Ethernet Module Cisco MDS 9000 18/4-Port Multiservice Module MSM-18/4) Cisco MDS 9000 4-port 1-Gbps IP Storage Module Cisco MDS 9000 8-port 1-Gbps IP Storage Module Cisco MDS 9000 Family 16-Port Storage Services Node (SSN-16) Cisco MDS 9000 Family 24/10 SAN Extension Module DS-X9248-256K9 DS-X9248-48K9 DS-X9248-96K9 DS-X9302-14K9 DS-X9302-14K9 DS-X9304-18K9 DS-X9304-18K9 DS-X9304-SMIP Cisco MDS 9000 Family 16-Port Storage Services Node (SSN-16) Cisco MDS 9000 Family 24/10 SAN Extension Module	Cisco MDS 9000 24-Port 8-Gbps Fibre Channel Switching Module	DS-X9224-96K9
Channel Switching Module Cisco MDS 9000 4/44-Port Host-Optimized 8-Gbps Fibre Channel Switching Module Cisco MDS 9000 48-Port 8-Gbps Fibre Channel Switching Module Cisco MDS 9000 Family 14-Port Fibre Channel and 2-port Gigabit Ethernet Module Cisco MDS 9000 18/4-Port Multiservice Module MSM-18/4) Cisco MDS 9000 4-port 1-Gbps IP Storage Module Cisco MDS 9000 8-port 1-Gbps IP Storage Module Cisco MDS 9000 Family 16-Port Storage Services Node (SSN-16) Cisco MDS 9000 Family 24/10 SAN Extension Module DS-X9248-48K9 DS-X9248-96K9 DS-X9302-14K9 DS-X9302-14K9 DS-X9304-18K9 DS-X9304-SMIP DS-X9304-SMIP DS-X9304-SMIP DS-X9308-SMIP DS-X9316-SSNK9 Node (SSN-16) DS-X9334-K9	Cisco MDS 9000 32-port 8-Gbps Advanced Fibre Channel Switching Module	DS-X9232-256K9
Fibre Channel Switching Module Cisco MDS 9000 48-Port 8-Gbps Fibre Channel Switching Module Cisco MDS 9000 Family 14-Port Fibre Channel and 2-port Gigabit Ethernet Module Cisco MDS 9000 18/4-Port Multiservice Module MSM-18/4) Cisco MDS 9000 4-port 1-Gbps IP Storage Module Cisco MDS 9000 8-port 1-Gbps IP Storage Module Cisco MDS 9000 Family 16-Port Storage Services Node (SSN-16) Cisco MDS 9000 Family 24/10 SAN Extension Module DS-X934-K9 DS-X9334-K9 Module	Cisco MDS 9000 48-port 8-Gbps Advanced Fibre Channel Switching Module	DS-X9248-256K9
Switching Module Cisco MDS 9000 Family 14-Port Fibre Channel and 2-port Gigabit Ethernet Module Cisco MDS 9000 18/4-Port Multiservice Module MSM-18/4) Cisco MDS 9000 4-port 1-Gbps IP Storage Module Cisco MDS 9000 8-port 1-Gbps IP Storage Module Cisco MDS 9000 8-port 1-Gbps IP Storage Module Cisco MDS 9000 Family 16-Port Storage Services Node (SSN-16) Cisco MDS 9000 Family 24/10 SAN Extension Module DS-X9304-18K9 DS-X9304-SMIP DS-X9308-SMIP DS-X9316-SSNK9 DS-X9316-SSNK9	Cisco MDS 9000 4/44-Port Host-Optimized 8-Gbps Fibre Channel Switching Module	DS-X9248-48K9
Cisco MDS 9000 18/4-Port Multiservice Module MSM-18/4) Cisco MDS 9000 4-port 1-Gbps IP Storage Module Cisco MDS 9000 8-port 1-Gbps IP Storage Module DS-X9304-SMIP Cisco MDS 9000 8-port 1-Gbps IP Storage Module DS-X9308-SMIP Cisco MDS 9000 Family 16-Port Storage Services Node (SSN-16) Cisco MDS 9000 Family 24/10 SAN Extension Module DS-X9304-18K9 DS-X9304-SMIP	Cisco MDS 9000 48-Port 8-Gbps Fibre Channel Switching Module	DS-X9248-96K9
Cisco MDS 9000 4-port 1-Gbps IP Storage Module Cisco MDS 9000 8-port 1-Gbps IP Storage Module Cisco MDS 9000 8-port 1-Gbps IP Storage Module Cisco MDS 9000 Family 16-Port Storage Services Node (SSN-16) Cisco MDS 9000 Family 24/10 SAN Extension Module DS-X9304-SMIP DS-X9316-SSNK9 DS-X9316-SSNK9 DS-X9334-K9	Cisco MDS 9000 Family 14-Port Fibre Channel and 2-port Gigabit Ethernet Module	DS-X9302-14K9
Cisco MDS 9000 8-port 1-Gbps IP Storage Module DS-X9308-SMIP DS-X9316-SSNK9 Node (SSN-16) DS-X9316-SSNK9 DS-X9334-K9 Module DS-X9334-K9	Cisco MDS 9000 18/4-Port Multiservice Module (MSM-18/4)	DS-X9304-18K9
Cisco MDS 9000 Family 16-Port Storage Services Node (SSN-16) Cisco MDS 9000 Family 24/10 SAN Extension Module DS-X9316-SSNK9 DS-X9334-K9	Cisco MDS 9000 4-port 1-Gbps IP Storage Module	DS-X9304-SMIP
Node (SSN-16) Cisco MDS 9000 Family 24/10 SAN Extension Module DS-X9334-K9	Cisco MDS 9000 8-port 1-Gbps IP Storage Module	DS-X9308-SMIP
Module	Cisco MDS 9000 Family 16-Port Storage Services Node (SSN-16)	DS-X9316-SSNK9
Ciggo MDS 0000 48 port 16 Char Eibra Channal DS V0448 768V0	Cisco MDS 9000 Family 24/10 SAN Extension Module	DS-X9334-K9
	Cisco MDS 9000 48-port 16-Gbps Fibre Channel Switching Module with SFP LC connectors	DS-X9448-768K9
Cisco MDS 9500 Series Supervisor-1 Module DS-X9530-SF1-K9	Cisco MDS 9500 Series Supervisor-1 Module	DS-X9530-SF1-K9

Product/Component	Part Number
Cisco MDS 9500 Series Supervisor-2 Module	DS-X9530-SF2-K9
Cisco MDS 9500 Series Supervisor-2A Module	DS-X9530-SF2A-K9
Cisco MDS 9000 Family 4-Port 10-Gbps Fibre Channel Switching Module	DS-X9704
Cisco MDS 9000 8-port 10-Gbps Fibre Channel over Ethernet (FCoE) Module	DS-X9708-K9
Cisco MDS 48-Port 10-Gigabit Fibre Channel over Ethernet (FCoE) Module with SFP LC connectors	DS-X9848-480K9
Cisco MDS 9132U 1RU Switch 32x32G-FC	DS-C9132U

Table 7: Cisco Nexus 9000 Series Switches

Product/Component	Part Number
Cisco Nexus 9000 Series Switches	
Cisco Nexus 9336C-FX2, 1-RU, fixed-port switch	N9K-C9336C-FX2
Cisco Nexus 9000 Fixed with 48p 1/10G/25G SFP and 12p 40G/100G QSFP28	N9K-C93240YC-FX2
32-port 100Gigabit EthernetQuad Small Form-Factor Pluggable 28 (QSFP28) line card	N9K-X9732C-FX
48-port 1 and 10GBASE-T plus 4-port 40/100Gigabit Ethernet QSFP 28 line card	N9K-X9788TC-FX
FabricModule for Nexus 9516 chassis 100G support (100G/flow), NX-OS and ACI Spine	N9K-C9516-FM-E2
FabricModule for Nexus 9504 R-Series LC, NX-OS only	N9K-C9504-FM-R
Fretta 48p 1/10/25G + 4p 100G Line card	N9K-X96160YC-R
100-Gigabit N9K-C9508-FM-E2 Fabric Module	N9K-C9508-FM-E2
48P 1/10/25G + 6x100G QSFP28 1RU	N3K-C36180YC-R
36 40/100G Ethernet module for Nexus 9500 Series	N9K-X9736C-FX
64x100G QSFP28 + 2x10GSFP 1RU	N9K-C9364C
36x100G Ethernet module for Nexus 9000 Series	N9K-X9636C-RX
1RU TOR, fixed module 48 100/1000Mbps + 4 25G SFP28 + 2 100G QSFP28	N9K-C9348GC-FXP
1RU TOR, fixed module 48 10/25G SFP28 + 6 40/100G QSFP28	N9K-C93180YC-FX

Product/Component	Part Number	
1RU TOR, fixed module for Nexus 9300 Series 6 40G/100G QSFP28 + 48 10G BASE-T	N9K-C93108TC-FX	
Broadwell CPU based Supervisor module for Nexus 9400 Series	N9K-SUPA-PLUS	
Broadwell CPU based Supervisor module for Nexus 9400 Series	N9K-SUPB-PLUS	
Nexus 9K Fixed with 48p 10G BASE-T and 6p 40G/100G QSFP28	N9K-C93108TC-EX	
N9K-C92300YC-Fixed Module	N9K-C92300YC	
48-port 1/10/25 Gigabit Ethernet SFP+ and 4-port 40/100 Gigabit Ethernet QSFP Line Card	N9K-X97160YC-EX	
Nexus N9K-C9232C Series fixed module with 32x40G/100G	N9K-C9232C	
Nexus 9K Fixed with 48p 1/10G/25G SFP+ and 6p 40G/100G QSFP28	N9K-C93180YC-EX	
Cisco Nexus 9000 Series 40GE Modules		
N9K 32p 40G Ethernet Module	N9K-X9432PQ	
36p 40G Ethernet Module	N9K-X9636PQ	
Cisco Nexus 9000 Series 10GE Fiber and Copper Modules		
8-port 100-Gigabit CFP2 I/O module	N9K-X9408PC-CFP2	
100 Gigabit Ethernet uplink ports	N9K-M4PC-CFP2	
Cisco Nexus 9500 Line Card support	N9K-X9564PX	
N9K 48x1/10G-T 4x40G Ethernet Module	N9K-X9464PX	
Cisco Nexus 9500 Line Card support	N9K-X9564TX	
N9K 48x1/10G SFP+ 4x40G Ethernet Module	N9K-X9464TX	
Cisco Nexus 9000 Series GEM Module		
N9K 40G Ethernet Expansion Module	N9K-M12PQ	
N9K 40G Ethernet Expansion Module	N9K-M6PQ	
Cisco Nexus 9200 Switches		
Nexus 92160YC-X with High performance 1RU box, 48 1/10/25-Gb host ports	N9K-C92160YC-X	
Nexus 9272Q with High-performance, 72-port/40-Gb fixed switching 2RU box, 5.76 Tbps of bandwidth	N9K-C9272Q	

Product/Component	Part Number
Nexus 9200 with 56p 40G QSFP+ and 8p 100G QSFP28	N9K-C92304QC
Nexus 9200 with 36p 40G 100G QSFP28	N9K-C9236C
Nexus 9200 with 48p 1/10G/25G SFP+ and 6p 40G QSFP or 4p 100G QSFP28	N9K-C92160YC-X
Nexus 9200 with 72p 40G QSFP+	N9K-C9272Q
Cisco Nexus 9300 Fixed Switches	
Nexus 9300 with 24p 40/50G QSFP+ and 6p 40G/100G QSFP28	N9K-C93180LC-EX
9372-PXE - 48 1/10-Gbps (SFP+) ports and 6 Quad SFP+ (QSFP+) uplink port, 1 RU box	N9K-C9372PX-E
Cisco Nexus 9396PX Switch	N9K-C9396PX
Cisco Nexus 9396TX Switch	N9K-C9396TX
Cisco Nexus 9372PX Switch	N9K-C9372TX
Cisco Nexus 9372PX Switch	N9K-C9372TX
Cisco Nexus 9372TX Switch	N9K-C9372TX
Cisco Nexus 9372TX Switch	N9K-C9372PX
Cisco Nexus 9332PQ Switch	N9K-C9332PQ
Cisco Nexus 93128TX Switch	N9K-C93128TX
Nexus 9300 with 48p 1/10G-T and 6p 40G QSFP+	N9K-C9372TX-E
Cisco Nexus 9500 Modular Chassis	
New fabric module for the Cisco Nexus 9516 Switch chassis	N9K-C9516-FM-E
40/100G Ethernet Module for Nexus 9500 Series chassis	N9K-X9736C-EX
Cisco Nexus 9504 Switch	N9K-C9504
Cisco Nexus 9508 Switch	N9K-C9508
Cisco Nexus 9516 Switch	N9K-C9516
Nexus 9500 linecard, 32p 100G QSFP aggregation linecard	N9K-X9732C-EX
Nexus 9500 linecard, 32p 100G QSFP28 aggregation linecard (Linerate >250 Bytes)	N9K-X9432C-S
Cisco Nexus 9500 Fabric Modules	

Product/Component	Part Number
Fabric Module for Nexus 9504 with 100G support, NX-OS and ACI spine	N9K-C9504-FM-E
Fabric Module for Nexus 9504 with 100G support, NX-OS only	N9K-C9504-FM-S
Fabric Module for Nexus 9508 chassis 100G support, NX-OS and ACI spine	N9K-C9508-FM-E
Fabric Module for Nexus 9508 chassis 100G support, NX-OS only	N9K-C9508-FM-S

Table 8: Cisco Nexus 7000 Series Switches

Product/Component	Part Number	
Supported Chassis		
Cisco Nexus 7004 chassis	N7K-C7004	
Cisco Nexus 7706 chassis	N77-C7706-FAB2	
Cisco Nexus 7009 chassis	N7K-C7009	
Cisco Nexus 7010 chassis	N7K-C7010	
Cisco Nexus 7018 chassis	N7K-C7018	
Cisco Nexus 7710 chassis	N7K-C7710	
Cisco Nexus 7718 chassis	N7K-C7718	
Fabric module, Cisco Nexus 7009 chassis	N7K-C7009-FAB-2	
Fabric module, Cisco Nexus 7010 chassis	N7K-C7010-FAB-1	
Fabric module, Cisco Nexus 7010 chassis	N7K-C7010-FAB-2	
Fabric module, Cisco Nexus 7018 chassis	N7K-C7018-FAB-1	
Fabric module, Cisco Nexus 7018 chassis	N7K-C7018-FAB-2	
Fabric module, Cisco Nexus 7710 chassis	N77-C7710-FAB-1	
Fabric module, Cisco Nexus 7710 chassis	N77-C7710-FAB-2	
Fabric module, Cisco Nexus 7718 chassis	N77-C7718-FAB-2	
Supported Supervisor		
Cisco Nexus 7000 Supervisor 1 Module	N7K-SUP1	
Cisco Nexus 7000 Supervisor 2 Module	N7K-SUP2	
Cisco Nexus 7000 Supervisor 2 Enhanced Module	N7K-SUP2E	
Cisco Nexus 7700 Supervisor 2 Enhanced Module	N77-SUP2E	
Cisco Nexus 7700 Supervisor 3	N77-SUP3E	

Product/Component	Part Number
Supported F Line Cards	
Cisco Nexus 7700 Fabric module 3	N77-C7706-FAB-3, N77-C7710-FAB-3
LC,N77, FANGIO CB100, 30PT,40GE, zQFSP+	N77-F430CQ-36
32-port 1/10 Gigabit Ethernet SFP+ I/O Module	N7K-F132XP-15
48-port 1/10 Gigabit Ethernet SFP+ I/O Module (F2 Series)	N7K-F248XP-25
48-port 1/10 Gigabit Ethernet SFP+ I/O Module (Enhanced F2 Series)	N7K-F248XP-25E
48-port 1/10 GBase-T RJ45 Module (Enhanced F2-Series)	N7K-F248XT-25E
Cisco Nexus 7700 Enhanced 48-port 1/10 Gigabit Ethernet SFP+ I/O Module (F2 Series)	N77-F248XP-23E
Cisco Nexus 7000 1 F3 100G	N7K-F306CK-25
Cisco Nexus 7000 F3-Series 6-Port 100G Ethernet Module	N7K-F306CK-25
Cisco Nexus 7000 F3-Series 12-Port 40G Ethernet Module	N7K-F312FQ-25
Cisco Nexus 7700 F3-Series 24-Port 40G Ethernet Module	N77-F324FQ-25
Cisco Nexus 7700 F3-Series 48-Port Fiber 1 and 10G Ethernet Module	N77-F348XP-23
Nexus 7000 F3-Series 48-Port Fiber 1 and 10G Ethernet Module	N7K-F348XP-25
Supported M Line Cards	
8-port 10-Gigabit Ethernet Module with XL Option (requires X2)	N7K-M108X2-12L
32-port 10-Gigabit Ethernet SFP+ I/O Module	N7K-M132XP-12
32-port 10-Gigabit Ethernet SFP+ I/O Module with XL Option	N7K-M132XP-12L
48-port 10/100/1000 Ethernet I/O Module	N7K-M148GT-11
48-port 1-Gigabit Ethernet SFP I/O Module	N7K-M148GS-11
48-port 1-Gigabit Ethernet Module with XL Option	N7K-M148GS-11L
2-port 100-Gigabit Ethernet I/O Module with XL Option	N7K-M202CF-22L
6-port 40-Gigabit Ethernet I/O Module with XL Option	N7K-M206FQ-23L

Product/Component	Part Number
24-port 10-Gigabit Ethernet I/O Module with XL Option	N7K-M224XP-23L
Network Analysis Module NAM-NX1	N7K-SM-NAM-K9

Table 9: Cisco Nexus 6000 Series Switches

Product/Component	Part Number
N6004X/5696 chassis	N5K-C5696Q
Note This has been rebranded as Cisco Nexus 5000 Series Switches Chassis	
Cisco Nexus 6001-64T Switch	N6K-C6001-64T
Cisco Nexus 6001-64P Switch	N6K-C6001-64P
Cisco Nexus 6004 EF Switch	N6K-C6004
Cisco Nexus 6004 module 12Q 40-Gigabit Ethernet Linecard Expansion Module/FCoE, spare	N6004X-M12Q
Cisco Nexus 6004 M20UP LEM	N6004X-M20UP
Cisco Nexus 6004P-96Q Switch	N6K-6004-96Q

Table 10: Cisco Nexus 5000 Series Switches

Product/Component	Part Number
Cisco Nexus 5648Q Switch is a 2RU switch, 24 fixed 40-Gbps QSFP+ ports and 24 additional 40-Gbps QSFP+ ports	N5K-C5648Q
Cisco Nexus 5624Q Switch 1 RU, -12 fixed 40-Gbps QSFP+ ports and 12 X 40-Gbps QSFP+ ports expansion module	N5K-C5624Q
20 port UP LEM	N5696-M20UP
12 port 40G LEM	N5696-M12Q
4 port 100G LEM	N5696-M4C
N5000 1000 Series Module 6-port 10GE	N5K-M1600(=)
N5000 1000 Series Module 4x10GE 4xFC 4/2/1G	N5K-M1404=
N5000 1000 Series Module 8-port 4/2/1G	N5K-M1008=
N5000 1000 Series Module 6-port 8/4/2G	N5K-M1060=
Cisco Nexus 56128P Switch	N5K-C56128P
Cisco Nexus 5010 chassis	N5K-C5010P-BF

Product/Component	Part Number
Cisco Nexus 5020 chassis	N5K-C5020P-BF
	N5K-C5020P-BF-XL
Cisco Nexus 5548P Switch	N5K-C5548P-FA
Cisco Nexus 5548UP Switch	N5K-C5548UP-FA
Cisco Nexus 5672UP Switch	N5K-C5672UP
Cisco Nexus 5596T Switch	N5K-C5596T-FA
Cisco Nexus 5596UP Switch	N5K-C5596UP-FA
Cisco Nexus 0296-UPT chassis and GEM N55-M12T support	N5K-C5596T-FA-SUP
16-port Universal GEM, Cisco Nexus 5500	N5K-M16UP
Version 2, Layer 3 daughter card	N55-D160L3-V2

Table 11: Cisco Nexus 4000 Series Switches

Product/Component	Part Number
Cisco Nexus 4001I Switch Module	N4K-4001I-XPX
Cisco Nexus 4005I Switch Module	N4K-4005I-XPX

Table 12: Cisco Nexus 3000 Series Switches

Product/Component	Part Number
Nexus 3548-XL Switch, 48 SFP+	N3K-C3548P-XL
Nexus 3264C-E switch with 64 QSFP28	N3K-C3264C-E
Cisco Nexus 3132Q Switch	N3K-C3132C-Z
Cisco Nexus 3132Q-V Switch	N3K-C3132Q-V
Nexus 34180YC programmable switch, 48 10/25G SFP and 6 40/100G QSFP28 ports	N3K-C34180YC
Cisco Nexus 3016 Switch	N3K-C3016Q-40GE
Cisco Nexus 3048 Switch	N3K-C3048TP-1GE
Cisco Nexus 3064-E Switch	N3K-C3064PQ-10GE
Cisco Nexus 3064-X Switch	N3K-C3064PQ-10GX
Cisco Nexus 3064-T Switch	N3K-C3064TQ-10GT
Nexus 31108PC-V, 48 SFP+ and 6 QSFP28 ports	N3K-C31108PC-V
Nexus 31108TC-V, 48 10GBase-T RJ-45 and 6 QSFP28 ports	N3K-C31108TC-V

Product/Component	Part Number
Cisco Nexus 3132Q Switch	N3K-C3132Q-40GE
Nexus 3132 Chassis	N3K-C3132Q-40GX
Cisco Nexus 3172PQ Switch	N3K-C3172PQ-10GE
Cisco Nexus 3548 Switch	N3K-C3548P-10G
Cisco Nexus 3636C-R Switch	N3K-C3636C-R

Table 13: Cisco Nexus 2000 Series Fabric Extenders

Product/Component	Part Number
Nexus 2348 Chassis	N2K-C2348TQ-10GE
Cisco Nexus 2348UPQ 10GE 48 x 1/10 Gigabit Ethernet and unified port host interfaces (SFP+) and up to 6 QSFP+ 10/40 Gigabit Ethernet fabric interfaces	N2K-C2348UPQ
Cisco Nexus 2148 1 GE Fabric Extender	N2K-C2148T-1GE
Cisco Nexus 2224TP Fabric Extender	N2K-C2224TP-1GE
Cisco Nexus 2232TM 10GE Fabric Extender	N2K-C2232TM-10GE
Cisco Nexus 2232TM 10GE Fabric Extender	N2K-C2232TM-E-10GE
Cisco Nexus 2232PP 10 GE Fabric Extender	N2K-C2232PP-10GE
Cisco Nexus 2248TP 1 GE Fabric Extender	N2K-C2248TP-1GE
Cisco Nexus 2248TP E GE Fabric Extender	N2K-C2248TP-E GE
Cisco Nexus 2248PQ Fabric Extender	N2K-C2248PQ-10GE
Cisco Nexus B22 Fabric Extender for HP	N2K-B22HP-P
Cisco Nexus B22 Fabric Extender for Fujitsu	N2K-B22FTS-P
Cisco Nexus B22 Fabric Extender for Dell	N2K-B22DELL-P
Cisco Nexus 2348TQ-E 10GE Fabric Extender	



Supported Hardware

This chapter contains information about the products and components supported in Cisco DCNM.

• Hardware Supported in Cisco DCNM, Release 11.0(1), on page 33

Hardware Supported in Cisco DCNM, Release 11.0(1)

The following tables list the products and components supported in Cisco DCNM, Release 11.0(1).

Table 14: Cisco MDS 9000 Family

Product/Component	Part Number
Cisco MDS 9396T 32-Gbps 96-Port Fibre Channel Switch	DS-C9396T-K9
Cisco MDS 9148T 32-Gbps 48-Port Fibre Channel Switch	DS-C9148T-K9
Cisco MDS 9700 48-Port 32-Gbps Fibre Channel Switching Module	DS-X9648-1536K9
Cisco MDS 9250i Multilayer Fabric Switch	DS-9250I-K9
Cisco MDS 9124 24-Port Multilayer Fabric Switch	DS-C9124-K9
Cisco MDS 9134 34-Port Multilayer Fabric Switch	DS-C9134-K9
Cisco MDS 9148 48-Port Multilayer Fabric Switch	DS-C9148-K9
Cisco MDS 9148 48-Port Multilayer Fabric Switch	DS-C9148S-K9
Cisco MDS 9216i Multilayer Fabric Switch	DS-C9216i-K9
Cisco MDS 9222i Multilayer Fabric Switch	DS-C9222i-K9
Cisco MDS 9506 Multilayer Director	DS-C9506
Cisco MDS 9509 Multilayer Director	DS-C9509
Cisco MDS 9513 Multilayer Director	DS-C9513
Cisco MDS 9706 Multilayer Director	DS-C9706

Product/Component	Part Number
Cisco MDS 9710 Multilayer Director	DS-C9710
Cisco MDS 9718 Multilayer Director	DS-C9718
Cisco MDS 9000 32-Port 2-Gbps Fibre Channel Switching Module	DS-X9032
Cisco MDS 9000 32-Port Storage Services Module	DS-X9032-SSM
Cisco MDS 9000 12-port 4-Gbps Fibre Channel Switching Module	DS-X9112
Cisco MDS 9000 12-port 4-Gbps Fibre Channel Switching Module	DS-X9112
Cisco MDS 9000 12-port 4-Gbps Fibre Channel Switching Module	DS-X9112
Cisco MDS 9000 24-port 4-Gbps Fibre Channel Switching Module	DS-X9124
Cisco MDS 9000 48-port 4-Gbps Fibre Channel Switching Module	DS-X9148
Cisco MDS 9000 24-Port 8-Gbps Fibre Channel Switching Module	DS-X9224-96K9
Cisco MDS 9000 32-port 8-Gbps Advanced Fibre Channel Switching Module	DS-X9232-256K9
Cisco MDS 9000 48-port 8-Gbps Advanced Fibre Channel Switching Module	DS-X9248-256K9
Cisco MDS 9000 4/44-Port Host-Optimized 8-Gbps Fibre Channel Switching Module	DS-X9248-48K9
Cisco MDS 9000 48-Port 8-Gbps Fibre Channel Switching Module	DS-X9248-96K9
Cisco MDS 9000 Family 14-Port Fibre Channel and 2-port Gigabit Ethernet Module	DS-X9302-14K9
Cisco MDS 9000 18/4-Port Multiservice Module (MSM-18/4)	DS-X9304-18K9
Cisco MDS 9000 4-port 1-Gbps IP Storage Module	DS-X9304-SMIP
Cisco MDS 9000 8-port 1-Gbps IP Storage Module	DS-X9308-SMIP
Cisco MDS 9000 Family 16-Port Storage Services Node (SSN-16)	DS-X9316-SSNK9
Cisco MDS 9000 Family 24/10 SAN Extension Module	DS-X9334-K9
Cisco MDS 9000 48-port 16-Gbps Fibre Channel Switching Module with SFP LC connectors	DS-X9448-768K9
Cisco MDS 9500 Series Supervisor-1 Module	DS-X9530-SF1-K9

Product/Component	Part Number
Cisco MDS 9500 Series Supervisor-2 Module	DS-X9530-SF2-K9
Cisco MDS 9500 Series Supervisor-2A Module	DS-X9530-SF2A-K9
Cisco MDS 9000 Family 4-Port 10-Gbps Fibre Channel Switching Module	DS-X9704
Cisco MDS 9000 8-port 10-Gbps Fibre Channel over Ethernet (FCoE) Module	DS-X9708-K9
Cisco MDS 48-Port 10-Gigabit Fibre Channel over Ethernet (FCoE) Module with SFP LC connectors	DS-X9848-480K9
Cisco MDS 9132U 1RU Switch 32x32G-FC	DS-C9132U

Table 15: Cisco Nexus 9000 Series Switches

Product/Component	Part Number
Cisco Nexus 9000 Series Switches	
Cisco Nexus 9336C-FX2, 1-RU, fixed-port switch	N9K-C9336C-FX2
Cisco Nexus 9000 Fixed with 48p 1/10G/25G SFP and 12p 40G/100G QSFP28	N9K-C93240YC-FX2
32-port 100Gigabit EthernetQuad Small Form-Factor Pluggable 28 (QSFP28) line card	N9K-X9732C-FX
48-port 1 and 10GBASE-T plus 4-port 40/100Gigabit Ethernet QSFP 28 line card	N9K-X9788TC-FX
FabricModule for Nexus 9516 chassis 100G support (100G/flow), NX-OS and ACI Spine	N9K-C9516-FM-E2
FabricModule for Nexus 9504 R-Series LC, NX-OS only	N9K-C9504-FM-R
Fretta 48p 1/10/25G + 4p 100G Line card	N9K-X96160YC-R
100-Gigabit N9K-C9508-FM-E2 Fabric Module	N9K-C9508-FM-E2
48P 1/10/25G + 6x100G QSFP28 1RU	N3K-C36180YC-R
36 40/100G Ethernet module for Nexus 9500 Series	N9K-X9736C-FX
64x100G QSFP28 + 2x10GSFP 1RU	N9K-C9364C
36x100G Ethernet module for Nexus 9000 Series	N9K-X9636C-RX
1RU TOR, fixed module 48 100/1000Mbps + 4 25G SFP28 + 2 100G QSFP28	N9K-C9348GC-FXP
1RU TOR, fixed module 48 10/25G SFP28 + 6 40/100G QSFP28	N9K-C93180YC-FX

Product/Component	Part Number	
1RU TOR, fixed module for Nexus 9300 Series 6 40G/100G QSFP28 + 48 10G BASE-T	N9K-C93108TC-FX	
Broadwell CPU based Supervisor module for Nexus 9400 Series	N9K-SUPA-PLUS	
Broadwell CPU based Supervisor module for Nexus 9400 Series	N9K-SUPB-PLUS	
Nexus 9K Fixed with 48p 10G BASE-T and 6p 40G/100G QSFP28	N9K-C93108TC-EX	
N9K-C92300YC-Fixed Module	N9K-C92300YC	
48-port 1/10/25 Gigabit Ethernet SFP+ and 4-port 40/100 Gigabit Ethernet QSFP Line Card	N9K-X97160YC-EX	
Nexus N9K-C9232C Series fixed module with 32x40G/100G	N9K-C9232C	
Nexus 9K Fixed with 48p 1/10G/25G SFP+ and 6p 40G/100G QSFP28	N9K-C93180YC-EX	
Cisco Nexus 9000 Series 40GE Modules		
N9K 32p 40G Ethernet Module	N9K-X9432PQ	
36p 40G Ethernet Module	N9K-X9636PQ	
Cisco Nexus 9000 Series 10GE Fiber and Copper Modules		
8-port 100-Gigabit CFP2 I/O module	N9K-X9408PC-CFP2	
100 Gigabit Ethernet uplink ports	N9K-M4PC-CFP2	
Cisco Nexus 9500 Line Card support	N9K-X9564PX	
N9K 48x1/10G-T 4x40G Ethernet Module	N9K-X9464PX	
Cisco Nexus 9500 Line Card support	N9K-X9564TX	
N9K 48x1/10G SFP+ 4x40G Ethernet Module	N9K-X9464TX	
Cisco Nexus 9000 Series GEM Module		
N9K 40G Ethernet Expansion Module	N9K-M12PQ	
N9K 40G Ethernet Expansion Module	N9K-M6PQ	
Cisco Nexus 9200 Switches		
Nexus 92160YC-X with High performance 1RU box, 48 1/10/25-Gb host ports	N9K-C92160YC-X	
Nexus 9272Q with High-performance, 72-port/40-Gb fixed switching 2RU box, 5.76 Tbps of bandwidth	N9K-C9272Q	

Product/Component	Part Number
Nexus 9200 with 56p 40G QSFP+ and 8p 100G QSFP28	N9K-C92304QC
Nexus 9200 with 36p 40G 100G QSFP28	N9K-C9236C
Nexus 9200 with 48p 1/10G/25G SFP+ and 6p 40G QSFP or 4p 100G QSFP28	N9K-C92160YC-X
Nexus 9200 with 72p 40G QSFP+	N9K-C9272Q
Cisco Nexus 9300 Fixed Switches	
Nexus 9300 with 24p 40/50G QSFP+ and 6p 40G/100G QSFP28	N9K-C93180LC-EX
9372-PXE - 48 1/10-Gbps (SFP+) ports and 6 Quad SFP+ (QSFP+) uplink port, 1 RU box	N9K-C9372PX-E
Cisco Nexus 9396PX Switch	N9K-C9396PX
Cisco Nexus 9396TX Switch	N9K-C9396TX
Cisco Nexus 9372PX Switch	N9K-C9372TX
Cisco Nexus 9372PX Switch	N9K-C9372TX
Cisco Nexus 9372TX Switch	N9K-C9372TX
Cisco Nexus 9372TX Switch	N9K-C9372PX
Cisco Nexus 9332PQ Switch	N9K-C9332PQ
Cisco Nexus 93128TX Switch	N9K-C93128TX
Nexus 9300 with 48p 1/10G-T and 6p 40G QSFP+	N9K-C9372TX-E
Cisco Nexus 9500 Modular Chassis	
New fabric module for the Cisco Nexus 9516 Switch chassis	N9K-C9516-FM-E
40/100G Ethernet Module for Nexus 9500 Series chassis	N9K-X9736C-EX
Cisco Nexus 9504 Switch	N9K-C9504
Cisco Nexus 9508 Switch	N9K-C9508
Cisco Nexus 9516 Switch	N9K-C9516
Nexus 9500 linecard, 32p 100G QSFP aggregation linecard	N9K-X9732C-EX
Nexus 9500 linecard, 32p 100G QSFP28 aggregation linecard (Linerate >250 Bytes)	N9K-X9432C-S
Cisco Nexus 9500 Fabric Modules	

Product/Component	Part Number
Fabric Module for Nexus 9504 with 100G support, NX-OS and ACI spine	N9K-C9504-FM-E
Fabric Module for Nexus 9504 with 100G support, NX-OS only	N9K-C9504-FM-S
Fabric Module for Nexus 9508 chassis 100G support, NX-OS and ACI spine	N9K-C9508-FM-E
Fabric Module for Nexus 9508 chassis 100G support, NX-OS only	N9K-C9508-FM-S

Table 16: Cisco Nexus 7000 Series Switches

Product/Component	Part Number	
Supported Chassis		
Cisco Nexus 7004 chassis	N7K-C7004	
Cisco Nexus 7706 chassis	N77-C7706-FAB2	
Cisco Nexus 7009 chassis	N7K-C7009	
Cisco Nexus 7010 chassis	N7K-C7010	
Cisco Nexus 7018 chassis	N7K-C7018	
Cisco Nexus 7710 chassis	N7K-C7710	
Cisco Nexus 7718 chassis	N7K-C7718	
Fabric module, Cisco Nexus 7009 chassis	N7K-C7009-FAB-2	
Fabric module, Cisco Nexus 7010 chassis	N7K-C7010-FAB-1	
Fabric module, Cisco Nexus 7010 chassis	N7K-C7010-FAB-2	
Fabric module, Cisco Nexus 7018 chassis	N7K-C7018-FAB-1	
Fabric module, Cisco Nexus 7018 chassis	N7K-C7018-FAB-2	
Fabric module, Cisco Nexus 7710 chassis	N77-C7710-FAB-1	
Fabric module, Cisco Nexus 7710 chassis	N77-C7710-FAB-2	
Fabric module, Cisco Nexus 7718 chassis	N77-C7718-FAB-2	
Supported Supervisor		
Cisco Nexus 7000 Supervisor 1 Module	N7K-SUP1	
Cisco Nexus 7000 Supervisor 2 Module	N7K-SUP2	
Cisco Nexus 7000 Supervisor 2 Enhanced Module	N7K-SUP2E	
Cisco Nexus 7700 Supervisor 2 Enhanced Module	N77-SUP2E	
Cisco Nexus 7700 Supervisor 3	N77-SUP3E	

Product/Component	Part Number
Supported F Line Cards	
Cisco Nexus 7700 Fabric module 3	N77-C7706-FAB-3, N77-C7710-FAB-3
LC,N77, FANGIO CB100, 30PT,40GE, zQFSP+	N77-F430CQ-36
32-port 1/10 Gigabit Ethernet SFP+ I/O Module	N7K-F132XP-15
48-port 1/10 Gigabit Ethernet SFP+ I/O Module (F2 Series)	N7K-F248XP-25
48-port 1/10 Gigabit Ethernet SFP+ I/O Module (Enhanced F2 Series)	N7K-F248XP-25E
48-port 1/10 GBase-T RJ45 Module (Enhanced F2-Series)	N7K-F248XT-25E
Cisco Nexus 7700 Enhanced 48-port 1/10 Gigabit Ethernet SFP+ I/O Module (F2 Series)	N77-F248XP-23E
Cisco Nexus 7000 1 F3 100G	N7K-F306CK-25
Cisco Nexus 7000 F3-Series 6-Port 100G Ethernet Module	N7K-F306CK-25
Cisco Nexus 7000 F3-Series 12-Port 40G Ethernet Module	N7K-F312FQ-25
Cisco Nexus 7700 F3-Series 24-Port 40G Ethernet Module	N77-F324FQ-25
Cisco Nexus 7700 F3-Series 48-Port Fiber 1 and 10G Ethernet Module	N77-F348XP-23
Nexus 7000 F3-Series 48-Port Fiber 1 and 10G Ethernet Module	N7K-F348XP-25
Supported M Line Cards	
8-port 10-Gigabit Ethernet Module with XL Option (requires X2)	N7K-M108X2-12L
32-port 10-Gigabit Ethernet SFP+ I/O Module	N7K-M132XP-12
32-port 10-Gigabit Ethernet SFP+ I/O Module with XL Option	N7K-M132XP-12L
48-port 10/100/1000 Ethernet I/O Module	N7K-M148GT-11
48-port 1-Gigabit Ethernet SFP I/O Module	N7K-M148GS-11
48-port 1-Gigabit Ethernet Module with XL Option	N7K-M148GS-11L
2-port 100-Gigabit Ethernet I/O Module with XL Option	N7K-M202CF-22L
6-port 40-Gigabit Ethernet I/O Module with XL Option	N7K-M206FQ-23L

Product/Component	Part Number
24-port 10-Gigabit Ethernet I/O Module with XL Option	N7K-M224XP-23L
Network Analysis Module NAM-NX1	N7K-SM-NAM-K9

Table 17: Cisco Nexus 6000 Series Switches

Product/Component	Part Number
N6004X/5696 chassis	N5K-C5696Q
Note This has been rebranded as Cisco Nexus 5000 Series Switches Chassis	
Cisco Nexus 6001-64T Switch	N6K-C6001-64T
Cisco Nexus 6001-64P Switch	N6K-C6001-64P
Cisco Nexus 6004 EF Switch	N6K-C6004
Cisco Nexus 6004 module 12Q 40-Gigabit Ethernet Linecard Expansion Module/FCoE, spare	N6004X-M12Q
Cisco Nexus 6004 M20UP LEM	N6004X-M20UP
Cisco Nexus 6004P-96Q Switch	N6K-6004-96Q

Table 18: Cisco Nexus 5000 Series Switches

Product/Component	Part Number
Cisco Nexus 5648Q Switch is a 2RU switch, 24 fixed 40-Gbps QSFP+ ports and 24 additional 40-Gbps QSFP+ ports	N5K-C5648Q
Cisco Nexus 5624Q Switch 1 RU, -12 fixed 40-Gbps QSFP+ ports and 12 X 40-Gbps QSFP+ ports expansion module	N5K-C5624Q
20 port UP LEM	N5696-M20UP
12 port 40G LEM	N5696-M12Q
4 port 100G LEM	N5696-M4C
N5000 1000 Series Module 6-port 10GE	N5K-M1600(=)
N5000 1000 Series Module 4x10GE 4xFC 4/2/1G	N5K-M1404=
N5000 1000 Series Module 8-port 4/2/1G	N5K-M1008=
N5000 1000 Series Module 6-port 8/4/2G	N5K-M1060=
Cisco Nexus 56128P Switch	N5K-C56128P
Cisco Nexus 5010 chassis	N5K-C5010P-BF

Product/Component	Part Number
Cisco Nexus 5020 chassis	N5K-C5020P-BF
	N5K-C5020P-BF-XL
Cisco Nexus 5548P Switch	N5K-C5548P-FA
Cisco Nexus 5548UP Switch	N5K-C5548UP-FA
Cisco Nexus 5672UP Switch	N5K-C5672UP
Cisco Nexus 5596T Switch	N5K-C5596T-FA
Cisco Nexus 5596UP Switch	N5K-C5596UP-FA
Cisco Nexus 0296-UPT chassis and GEM N55-M12T support	N5K-C5596T-FA-SUP
16-port Universal GEM, Cisco Nexus 5500	N5K-M16UP
Version 2, Layer 3 daughter card	N55-D160L3-V2

Table 19: Cisco Nexus 4000 Series Switches

Product/Component	Part Number
Cisco Nexus 4001I Switch Module	N4K-4001I-XPX
Cisco Nexus 4005I Switch Module	N4K-4005I-XPX

Table 20: Cisco Nexus 3000 Series Switches

Product/Component	Part Number
Nexus 3548-XL Switch, 48 SFP+	N3K-C3548P-XL
Nexus 3264C-E switch with 64 QSFP28	N3K-C3264C-E
Cisco Nexus 3132Q Switch	N3K-C3132C-Z
Cisco Nexus 3132Q-V Switch	N3K-C3132Q-V
Nexus 34180YC programmable switch, 48 10/25G SFP and 6 40/100G QSFP28 ports	N3K-C34180YC
Cisco Nexus 3016 Switch	N3K-C3016Q-40GE
Cisco Nexus 3048 Switch	N3K-C3048TP-1GE
Cisco Nexus 3064-E Switch	N3K-C3064PQ-10GE
Cisco Nexus 3064-X Switch	N3K-C3064PQ-10GX
Cisco Nexus 3064-T Switch	N3K-C3064TQ-10GT
Nexus 31108PC-V, 48 SFP+ and 6 QSFP28 ports	N3K-C31108PC-V
Nexus 31108TC-V, 48 10GBase-T RJ-45 and 6 QSFP28 ports	N3K-C31108TC-V

Product/Component	Part Number
Cisco Nexus 3132Q Switch	N3K-C3132Q-40GE
Nexus 3132 Chassis	N3K-C3132Q-40GX
Cisco Nexus 3172PQ Switch	N3K-C3172PQ-10GE
Cisco Nexus 3548 Switch	N3K-C3548P-10G
Cisco Nexus 3636C-R Switch	N3K-C3636C-R

Table 21: Cisco Nexus 2000 Series Fabric Extenders

Product/Component	Part Number
Nexus 2348 Chassis	N2K-C2348TQ-10GE
Cisco Nexus 2348UPQ 10GE 48 x 1/10 Gigabit Ethernet and unified port host interfaces (SFP+) and up to 6 QSFP+ 10/40 Gigabit Ethernet fabric interfaces	N2K-C2348UPQ
Cisco Nexus 2148 1 GE Fabric Extender	N2K-C2148T-1GE
Cisco Nexus 2224TP Fabric Extender	N2K-C2224TP-1GE
Cisco Nexus 2232TM 10GE Fabric Extender	N2K-C2232TM-10GE
Cisco Nexus 2232TM 10GE Fabric Extender	N2K-C2232TM-E-10GE
Cisco Nexus 2232PP 10 GE Fabric Extender	N2K-C2232PP-10GE
Cisco Nexus 2248TP 1 GE Fabric Extender	N2K-C2248TP-1GE
Cisco Nexus 2248TP E GE Fabric Extender	N2K-C2248TP-E GE
Cisco Nexus 2248PQ Fabric Extender	N2K-C2248PQ-10GE
Cisco Nexus B22 Fabric Extender for HP	N2K-B22HP-P
Cisco Nexus B22 Fabric Extender for Fujitsu	N2K-B22FTS-P
Cisco Nexus B22 Fabric Extender for Dell	N2K-B22DELL-P
Cisco Nexus 2348TQ-E 10GE Fabric Extender	



Caveats

- Caveats, on page 43
- Resolved Caveats, on page 43
- Open Caveats, on page 44

Caveats

Caveats describe unexpected behavior in a product. The Open Caveats section lists open caveats that apply to the current release and may apply to previous releases. A caveat that is open for a prior release and is still unresolved applies to all future releases until it is resolved.

To view the details of the software bugs pertaining to your product, perform the following task:

• Click the Caveat ID/Bug ID number in the table.

The corresponding **Bug Search Tool** window is displayed with details of the Caveat ID/Bug ID.

The Bug Search Tool (BST), which is the online successor to the Bug Toolkit, is designed to improve the effectiveness in network risk management and device troubleshooting. The BST allows partners and customers to search for software bugs based on product, release, and keyword, and aggregates key data, such as bug details, product, and version. The tool has a provision to filter bugs based on credentials to provide external and internal bug views for the search input.

To view the details of a caveat whose ID you do not have, perform the following procedure:

- Access the BST using your Cisco user ID and password at: https://tools.cisco.com/bugsearch/
- 2. In the **Bug Search** window that is displayed, enter the necessary information in the corresponding fields.

For more information about how to use the Cisco Bug Search Tool effectively, including how to set email alerts for bugs and to save bugs and searches, see Bug Search Tool Help & FAQ.

This chapter lists the Open and Resolved Caveats in Cisco DCNM, and contains the following section:

Resolved Caveats

The following table lists the Resolved bugs for Cisco DCNM, Release 11.0(1).

Caveat ID	Description
CSCvf99030	Deleting network is deleting VRF as well
CSCvg76382	Role change of leaf to BL with some vrfs deployed
CSCvg76798	Multisite: BGW loopback0 , loopback1 need to have 'tag 54321' configured
CSCvb40889	Unable to edit the default L2 L3 segment IDs in LAN fabric
CSCvg87498	NFM Migration: Handling of switch reload while Migration in progress
CSCvg87251	The appmgr change_pwd ssh root command thows error though it is changing the root password
CSCvg91823	Topdown: RMA of the devices after top-down deployment
CSCvh13788	When you upgrade to DCNM release 10.4(2), temperature data will not be backed up automatically as part of the appmgr backup script on an OVA/ISO setup where EPL is not enabled.
CSCvi37845	Alarm log files keep on incrementing in the /usr/local/cisco/dcm/fm/log folder.
CSCvi80510	Add security headers to DCNM to mitigate vulnerabilities.

Open Caveats

The following table lists the Open bugs for Cisco DCNM, Release 11.0(1).

Caveat ID	Description
CSCvi76216	SAN-related options to be removed from OVA/ISO deployments
CSCvj36153	Template validation passed for incorrect if-else syntax
CSCvj52616	Fabric stuck in disabling if reload dcnm while fabric disabling in progress
CSCvj79843	Default Policy needs to be deployed before importing custom policies
CSCvj98140	Upgrade DCNM 10.4.1 to DCNM 11.0.0. ES is started but unable to access over https://localhost:9200
CSCvk12803	AAA deploy via Fabric builder discovery will hit Failed to get SSH connection
CSCvk13092	Device shown as already managed when trying to add to a new fabric
CSCvj31399	BGP sections should be merged/handle existing router bgp cmd on device
CSCvj50232	Topdown upgrade: mapping file required for IFC templates
CSCvj43170	Cannot deploy vpc leg - Usability seen if per switch deploy done instead of save and deploy

Caveat ID	Description
CSCvk08681	Ingress routing mesh is broken after multiple failovers - port 7946 taken by DHCP
CSCvj49807	Legacy ZIP Templates are working while doing POAP - Need Release note in DCNM
CSCvk11181	Spinning/Loading wheel is not animated in various user actions in IE
CSCvj73078	Telemetry UTR can only stream for inband or outband not mgmt port
CSCvk10791	Host PTI switch name field accepts only 62 characters and accepts invalid characters
CSCvj41804	Time selection less than 1Hr will cause no-data error most of the time
CSCvk14526	PENDING networks failed to migrate/deploy after restart nfm migration post-reboot
CSCvk22427	NFM:Device GUI has no migration mode tag and PTIs after failover
CSCvk22938	Elasticsearch-database: Spike in IOPS at midnight
CSCvk21160	Since Eth1 gateway is not mandatory DHCP relay may not work
CSCvk02433	Subnet 172.17 and 172.18/16 cannot be reached from DCNM
CSCvk20750	Issues on various ACL configs application
CSCvk24422	Various errors after import > delete-> re-import of brownfield device
CSCvk26967	LAN Telemetry failed to enable on a setup using LAN Fabric.
CSCvk27505	After upgrade with EPL configs, DCNM config compliance is removing subnet peering neighbor statement
CSCvk27599	After POAPing the devices with bootstrap, few interface links show up red in the topology and these links show connections from one switch to multiple switches via the same interface.
CSCvk27831	On clicking vPC Peer in Topology > side pannel>Swtich details leads to ID issue
CSCvk27839	With VM move trigger the topology is not auto-reflecting shows VM attached previous host
CSCvk29220	Need guidelines on freeform CLI use for LAN and NFM fabrics
CSCvj31399	BGP sections should be merged/handle existing router BGP command on device
CSCvk40509	Image upload fails on ISO-deployed DCNM with VXLAN Fabric Install
CSCvn09821	Cisco DCNM 11.0(1) with NX-OS 9.2(x) discovery may be slow

Open Caveats



Related Documentation

This chapter provides information about the documentation available for Cisco Data Center Network Manager (DCNM) and the platforms that Cisco DCNM manages, and includes the following sections:

- Navigating the Cisco DCNM Documentation, on page 47
- Platform-Specific Documents, on page 48
- Documentation Feedback, on page 49
- Communications, Services, and Additional Information, on page 49

Navigating the Cisco DCNM Documentation

This document describes and provides links to the user documentation available for Cisco Data Center Network Manager (DCNM). To find a document online, use one of the links in this section.

Cisco DCNM 11.0(1) Documentation Roadmap

Table 22: Cisco DCNM 11.0(1) Documentation

Document Title	Description
Cisco DCNM Release Notes, Release 11.0(1)	Provides information about the Cisco DCNM software release, open caveats, and workaround information.
Cisco DCNM Compatibility Matrix, Release 11.0(1)	Lists the Cisco Nexus and the Cisco MDS platforms and their software releases that are compatible with Cisco DCNM.
Cisco DCNM Scalability Guide, Release 11.0(1)	Lists the supported scalability parameters for Cisco DCNM, Release 11.0(1)
Cisco DCNM Configuration Guides	These configuration guides provide conceptual and procedural information on the Cisco DCNM Web GUI.
	Cisco DCNM LAN Fabric Configuration Guide, Release 11.0(1)
	Cisco DCNM Media Controller Configuration, Release 11.0(1)
	Cisco DCNM Classic LAN Configuration, Release 11.0(1)
	Cisco DCNM SAN Management Configuration, Release 11.0(1)

Document Title	Description
Cisco DCNM Installation Guides	These documents guide you to plan your requirements and deployment of the Cisco Data Center Network Manager.
	Cisco DCNM Installation Guide for SAN Deployment, Release 11.0(1)
	Cisco DCNM Installation Guide for Classic LAN Deployment, Release 11.0(1)
	Cisco DCNM Installation Guide for Media Controller Deployment, Release 11.0(1)
	Cisco DCNM Installation Guide for LAN Fabric Management Deployment, Release 11.0(1)
Cisco DCNM Licensing Guide, Release 11.0(1)	Describes the procedure used to generate, install, and assign a Cisco Data Center Network Manager (DCNM) license.
Software Upgrade Matrix for Cisco DCNM 11.0(1)	Lists the software upgrade paths that are supported for DCNM.
Cisco Data Center Network Manager Open Source Licensing, Release 11.0(1)	Provides information about the Cisco Data Center Network Manager Open Source Licensing, Release 11.0(1).
Cisco DCNM REST API Guide, Release 11.0(1)	Cisco DCNM provides REST APIs that allow third parties to test and develop application software. The REST API documentation is packaged with Cisco DCNM, and can be accessed through any browser.
Cisco Data Center Network Manager Troubleshooting Guide, Release 11.x	Describes some common issues you might experience while using Cisco DCNM, and provides solutions.
Cisco DCNM SMI-S and Web Services Programming Guide for SAN, Release 11.x	Provides an industry standard application programming interface (API) using the Storage Management Initiative Specification (SMI-S).
Videos: Cisco Data Center Network Manager, Release 11	Lists all the videos created for Cisco DCNM 11.

Platform-Specific Documents

The documentation set for platform-specific documents that Cisco DCNM manages includes the following:

Cisco Nexus 2000 Series Fabric Extender Documentation

https://www.cisco.com/c/en/us/products/switches/nexus-2000-series-fabric-extenders/index.html

Cisco Nexus 3000 Series Switch Documentation

https://www.cisco.com/c/en/us/support/switches/nexus-3000-series-switches/series.html

Cisco Nexus 4000 Series Switch Documentation

https://www.cisco.com/c/en/us/support/switches/nexus-4000-series-switches/series.html

Cisco Nexus 5000 Series Switch Documentation

https://www.cisco.com/c/en/us/support/switches/nexus-5000-series-switches/series.html

Cisco Nexus 6000 Series Switch Documentation

https://www.cisco.com/c/en/us/support/switches/nexus-6000-series-switches/series.html

Cisco Nexus 7000 Series Switch Documentation

https://www.cisco.com/c/en/us/support/switches/nexus-7000-series-switches/series.html

Cisco Nexus 9000 Series Switch Documentation

https://www.cisco.com/c/en/us/support/switches/nexus-9000-series-switches/series.html

Day-2 Operation Applications Documentation

- Cisco Network Insights for Data Center
- Cisco Network Insights Base (Cisco NIB)

Documentation Feedback

To provide technical feedback on this document, or to report an error or omission, please send your comments to:

dcnm-docfeedback@cisco.com.

We appreciate your feedback.

Communications, Services, and Additional Information

- To receive timely, relevant information from Cisco, sign up at Cisco Profile Manager.
- To get the business impact you're looking for with the technologies that matter, visit Cisco Services.
- To submit a service request, visit Cisco Support.
- To discover and browse secure, validated enterprise-class apps, products, solutions and services, visit Cisco Marketplace.
- To obtain general networking, training, and certification titles, visit Cisco Press.
- To find warranty information for a specific product or product family, access Cisco Warranty Finder.

Cisco Bug Search Tool

Cisco Bug Search Tool (BST) is a web-based tool that acts as a gateway to the Cisco bug tracking system that maintains a comprehensive list of defects and vulnerabilities in Cisco products and software. BST provides you with detailed defect information about your products and software.