



Cisco Prime DCNM Release Notes, Release 7.0.(2)

Release Date: April, 2014
Part Number: OL-31385-01
Current Release: 7.0.(2)

This document provides the release notes for Cisco Prime Data Center Network Manager (DCNM), Release 7.0.(2). Use this document in combination with the documents listed in the [“Obtaining Documentation and Submitting a Service Request”](#) section on page 19.

Cisco DCNM Release 7.0 is specifically targeted to manage Dynamic Fabric Automation (DFA) architecture. This release is not intended for traditional DCNM LAN/SAN users, looking for 6.x upgrade for bug fixes and regular maintenance updates.



Note

Release notes are sometimes updated with new information about restrictions and caveats. See the following website for the most recent version of the Cisco DCNM Release Notes:

http://www.cisco.com/en/US/products/ps9369/prod_release_notes_list.html

Table 1 shows the online change history for this document.

Table 1 Online History Change

Part Number	Revision	Date	Description
OL-31385-01	A0	January 31, 2014	Created release notes for Release 7.0.(1)
OL-31385-01	A0	April 10, 2014	Release notes update for Release 7.0.(2)

Contents

This document includes the following sections:

- [Introduction, page 2](#)
- [System Requirements, page 2](#)



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- [Hardware Supported, page 10](#)
- [Software Download Site, page 4](#)
- [Deployment Best Practices, page 4](#)
- [Installation Notes, page 5](#)
- [New Features and Enhancements in Cisco DCNM Release 7.0 \(1\), page 5](#)
- [Supported Cisco Platforms and Software Versions, page 9](#)
- [Licensing, page 12](#)
- [Limitations in Cisco DCNM Release 7.x, page 14](#)
- [Caveats, page 14](#)
- [Related Documentation, page 17](#)
- [Obtaining Documentation and Submitting a Service Request, page 19](#)

Introduction

Cisco Prime DCNM combines the management of Ethernet and storage networks into a single dashboard to help network and storage administrators manage and troubleshoot health and performance across the following product families that run Cisco NX-OS software. DCNM 7.x specifically addresses the deployment of Cisco Dynamic Fabric Automation (DFA). The following devices are supported for DFA deployments:

- Cisco Nexus 5000, 6000, and 7000 Series Switches
- Cisco Nexus 2000 Series Fabric Extenders

System Requirements

This section lists the tested and supported hardware and software specifications for Cisco DCNM server and client architecture. The application has been tested in English locales only.

This section includes the following topics:

- [Java Requirements, page 2](#)
- [Server Requirements, page 3](#)
- [Client Requirements, page 3](#)
- [Browsers, page 4](#)
- [Other Supported Software, page 4](#)
- [Software Download Site, page 4](#)
- [Hardware Supported, page 10](#)

Java Requirements

Cisco DCNM Server is distributed with Java JRE 1.6.0_31. Cisco DCNM clients should also use Java JRE 1.6.0_31. The DCNM installer installs JRE 1.6.0_31 to the following directory:
DCNM_root_directory/java/jre1.6.

Server Requirements

Cisco DCNM Release 7.x supports the following databases:

- Oracle 11g Express (XE), Standard, and Enterprise Editions, and Oracle 11g Real Application Clusters (RAC).

For deployment best practices, see the [“Deployment Best Practices” section on page 4](#).



Note

Customers are responsible for all support associated with Oracle database, including maintenance, troubleshooting, and recovery. Cisco recommends that customers perform regular database backups, either daily or weekly, to ensure that all data is preserved.

Cisco DCNM Release 7.x supports running the Cisco DCNM server on the following hypervisor:

- VMware ESXi 5.1, VMware vCenter 5.1

[Table 2](#) lists the minimum and recommended database server system requirements for running Cisco DCNM and using an external Oracle Database.

Table 2 Database Server System Requirements

Component	Minimum Requirements	Recommended Requirements
RAM (free)	2 GB	3 GB
CPU speed	2.5 GHz with dual-processor or dual-core CPU	3.45 GHz with dual-processor or dual-core CPU
Disk space (free)	80 GB	100 GB

DCNM Host Requirements

[Table 3](#) lists the server resource requirements for deploying Cisco DCNM 7.x Virtual Appliance (OVA).

Table 3 Cisco DCNM Host Resources for OVA deployment

Small Deployment: Up to 50 Switches	Large Deployment: More than 50 Switches
2 vCPUs, 2 GHz (or faster)	4 vCPUs, 2 GHz (or faster)
8-GB memory, 100 GB in case of thick provisioning	12-GB memory, 100 GB in case of thick provisioning

Client Requirements

Cisco DCNM clients support Windows 7, Windows 2008, and Red Hat Linux. [Table 4](#) lists the minimum hardware requirements for these client systems.

Table 4 Client Hardware Requirements

Hardware	Minimum Requirements
RAM (free)	2 GB
CPU speed	2.16 GHz (or faster) with one dual core processor or two single-core processors
Disk space (free)	4 GB

Some Cisco DCNM features require a license. Before you can use the licensed features, you must install the Cisco DCNM license. For more information, see the *Cisco DCNM OVA Installation Guide, Release 7.x*.

Be sure to set the correct time zone value on the client system's clock (for example, UTC). Otherwise, Cisco DCNM-LAN cannot manage the switch properly.

Browsers

Web browsers that support Adobe Flash 10 are qualified for use with Cisco DCNM. These include Internet Explorer, Firefox, and Safari.

Other Supported Software

Table 5 lists other software supported by Cisco DCNM Release 7.x.

Table 5 **Other Software Supported by Cisco DCNM**

Other Supported Software
Security:
ACS Versions, 4.0, and 5.1
Telnet Disabled: SSH version 1, SSH version 2, Global Enforce SNMP Privacy Encryption
Web Client and Cisco DCNM-SAN Server Encryption: HTTPS
DHCP Server:
Cisco Prime Network Registrar 8.2

In addition, Cisco DCNM supports the following types of events: EMC Call Home events, fabric change events, and events that are forwarded by traps and e-mail.

Software Download Site

To download the Cisco DCNM 7.x software, go to <http://www.cisco.com/go/dcnm> and click Download Software.

Deployment Best Practices

Observe the following guidelines when deploying Cisco DCNM:

- Database
 - Deploy an Oracle database when managing production or mission critical environments.
 - Deploy an Oracle database on a separate server from the Cisco DCNM application server.
 - If you plan to use an Oracle 11g database, configure the Oracle database as follows:

Increase the number of sessions and processes to 150 each from the default of 50.

Increase the number of open cursors to 1000 from the default of 300.

- We recommend deploying Oracle 11g for mission-critical production environments.



Note The password for the Oracle 11g Express (XE) database expires after 180 days. You must change this setting by using the following steps.

1. Log in to the Oracle database.
2. Enter the commands as shown in this example:

```
SQL> GRANT CONNECT,RESOURCE,UNLIMITED TABLESPACE TO username IDENTIFIED by password;
Grant succeeded.
SQL> select username,password from dba_users where username='username';
SQL> ALTER PROFILE DEFAULT LIMIT
      2 FAILED_LOG_ATTEMPTS UNLIMITED
      3 PASSWORD_LIFE_TIME UNLIMITED;
Profile altered.
SQL> EXIT
```

- Network Time Protocol
 - We recommend that the Cisco DCNM server run the Network Time Protocol (NTP) to synchronize its clock with those of the managed devices.
- General Guidelines
 - Do not deploy Cisco DCNM when network latency is more than 50 ms from the switch management subnet to the Cisco DCNM server and Cisco DCNM database.
 - Deploy Cisco DCNM on high-performance tier storage (2 ms to 4 ms response time).

Installation Notes

The following installation notes apply to Cisco DCNM Release 7.x:

- The Cisco DCNM virtual appliance includes the Cisco DCNM server and clients, Device Manager, PostgreSQL, Cisco XCP, OpenLDAP, RabbitMQ, DHCPD, all of which are installed on a 64-bit CentOS.
- Upgrade support is available from Cisco DCNM 7.0.(1) to Cisco DCNM 7.0.(2).

For information about installing Cisco DCNM Release 7.x, see the Cisco DCNM Installation Guide. You can find this publication on Cisco.com at this location:

http://www.cisco.com/en/US/products/ps9369/tsd_products_support_series_home.html

New Features and Enhancements in Cisco DCNM Release 7.0 (1)

DCNM 7.x Open Virtual Appliance (OVA) form factor is not intended to be used to upgrade from DCNM6.x.

This release is specifically targeted with special features related to the DFA architecture. Traditional DCNM6.x LAN/SAN users should use DCNM6.x release train for bug fixes and updates.

Cisco DCNM Release 7.0 includes the new features, enhancements, and hardware support that are described in the following sections:

- [OVA Form Factor Packaged with all DFA Components, page 6](#)
- [Enhanced Visualization and Topology, page 6](#)
- [POAP, page 6](#)
- [Auto-Configuration, page 7](#)
- [DCNM REST API, page 7](#)
- [Network Services, page 8](#)
- [Platform-Specific Features, page 8](#)
- [Supported Cisco Platforms and Software Versions, page 9](#)

OVA Form Factor Packaged with all DFA Components

- DCNM 7.x release provides DCNM as an Open Virtual Appliance (OVA), that can be deployed on VMware vSphere infrastructure. DCNM 7.x ships only in the OVA format. The vCenter and ESXi must be version 5.1 or higher for a successful deployment.
- This Virtual Appliance has a pre-installed operating system (CentOS) with pre-installed DCNM Cisco Data Center Network Manager components for Dynamic Fabric Architecture.
- After deployment of the OVA, you can access DCNM Web UI at the configured IP address with credentials: admin/<user provided password>. To login to an ssh session of this deployment you can use the credentials: **root/** <user provided password>.

Enhanced Visualization and Topology

A new topology paradigm with color-coded icons and leaf or spine representation with links is designed to give you a quick and useful view of health and functionality of the fabric and end hosts. You can view the topology at **Dashboard->Dynamic Fabric Automation**.

Following are a few highlights of the new DFA topology:

- Inter Switch Link view and Edge Ports view of Fabric.
- Node and Link status clearly color-coded for easy problem-recognition and reconciliation in large networks.
- Easy Search and Filter options based on:
 - Switch name
 - Real-time End Host Virtual/Physical Machine association (Tenant-awareness)
 - Org/Partition defined in LDAP.

POAP

Power On Auto Provisioning (POAP). This is a feature that allows a device to automatically bootup with the desired configuration and images. You can access the configuration at **config->Power On Auto Provisioning (POAP)**.

To facilitate this feature, DCNM has useful GUI and packaged utilities for:

- DHCP Scope definition
- Image and Configuration repository definitions
- Default POAP Templates for Leaf or Spine etc
- Creating required POAP template definition
- Associating a single template to multiple Device instances using a simple UI
- Viewing CLI-previews of deployed templates before they are applied on the device
- Cable plan management from POAP templates or learned Inter-switch links for a given fabric
- Automatically import and management of POAP devices in DCNM, when a device is powered up

Auto-Configuration

Auto-configuration feature enables Automated Network provisioning by integrating and interacting with:

- Network database

Internal or External LDAP server to which DCNM can read or write profile, organization, partition and network definition These provide data read by the Leaf switches.

- Message broker

Internal or external Advanced Message Queuing Protocol (AMQP) server to monitor any creation/update/deletion of auto-configuration elements.

- IP address management

Local DHCPD packaged by default where user can define DHCP scopes to be used by DHCP requests coming from the Leaf.

- Extensible messaging

Internal or external Extensible Messaging and Presence Protocol (XMPP) server used for multi device communication by DCNM leaves and spines. DCNM can notify leaf switches via XMPP when an auto-configuration event occurs.

- DCNM OVA packages a reference synchronization script for VMware vCD (vCloud Director) integration
- DCNM OVA packages reference script for Cisco Prime Network Registrar (CPNR) integration

Settings for auto-config are available at **Admin> Dynamic Fabric Automation (DFA) > Settings**

DCNM REST API

DCNM Provides REST based API for the following operations:

- Authentication
- Auto-Config
- POAP
- Cable Plan

For more details on actual usage guidelines and request/response samples, please refer to the *Cisco DCNM REST API Guide, Release 7.x*.

Network Services

In the Cisco DFA solution, traditional services, such as firewalls and load balancers, are deployed at regular leaf nodes within the spine-leaf topology, and at border leaf nodes. This is unlike more traditional data centers where these services are deployed at the aggregation layer.

Cisco Prime Network Services Controller (Prime NSC) provides the orchestration and automation of network services in Cisco DFA. The Prime NSC supports integration with virtual compute and storage managers such as UCS Director and Openstack Controller to provide end-to-end orchestration and automation for services in Cisco DFA.

A Prime NSC Adapter is bundled within the Cisco DCNM OVA. It performs the following functions:

- Enables DCNM to interoperate with one or more instances of the Prime NSC.
- Provides translation of DCNM language and objects into the Prime NSC language and objects.
- Ensures that the Prime NSC and DCNM are always synchronized.
- Maps the tenants and virtual data centers to the Prime NSC instances responsible for network services.

Platform-Specific Features

Cisco DCNM Release 7.x supports the following platform-specific features:

- Cisco Nexus 6004P-96Q switch
 - N6004P LEM module 12xQSFP+
- Cisco Nexus 3548P switch
 - Cisco Nexus 3000 buffer usage charts and tabular data for microburst monitoring
- UCS B-series enhanced visibility into blade attributes and LAN features
- Cisco Nexus 1000v Hyper-V

Cisco DCNM Release 7.x supports the following platform-specific features:

- Cisco Nexus 7000 Series
 - Cisco Nexus 7718 18-slot chassis
 - Cisco Nexus 7710 10-slot chassis
 - Cisco Nexus 7700 Enhanced 48-port 1/10 Gigabit Ethernet SFP+ I/O module (F2 Series)
- Cisco Nexus 2000 Series,
- Cisco Nexus 1000V for Microsoft Hyper-V

New Features and Enhancements in Cisco DCNM Release 7.0 (2)

Cisco DCNM Release 7.0.(2) includes the new features, enhancements, and hardware support that are described in the following sections:

- [Auto Instantiation of OSPF config profiles behind VPC+, page 9](#)
- [Service Automation, page 9](#)
- [DFA template/script support for In-band POAP and Management, page 9](#)

- [Migration from DCNM 7.0.\(1\) to DCNM 7.0.\(2\), page 9](#)

Auto Instantiation of OSPF config profiles behind VPC+

OSPF config behind vPC+ needs different IP addresses for VPC peering, primary switch and secondary switch need different gateway IP Address. In order to support this, a new field Secondary Gateway IP has been added to the Cisco DCNM Web Client at **Config>Auto Configuration>network** screen, in the Service Configuration Parameters area. Also, you must provide and receive this attribute when you use the DCNM REST API to create, update and get a network.

Service Automation

once the tenant and associated service segments are created, service virtual machines should be instantiated dynamically. In order to support this, in the Cisco DCNM Web Client, a new Network Role mandatory field has been added to the network screen at **Config>Auto Configuration**. The following values are available for the Network Role.

- Host network (Default)
- Service-ES Network
- Service-LB Network
- Management Network
- External Network
- Service-vPath Network

DFA template/script support for In-band POAP and Management

Updated DFA POAP templates are included with added options including In-band POAP and Management. This option allows POAP, as well as management through the fabric (rather than using an out-of-band management network connected to mgmt0 ports); also XMPP, LDAP, and VPC keep-alive traffic will be sent over a management VLAN.

Migration from DCNM 7.0.(1) to DCNM 7.0.(2)

There are types of migration scenario from DCNM 7.0.(1) to DCNM 7.0.(2).

- Cisco DCNM Migration with a local PostgreSQL database.
- Cisco DCNM Migration with an external Oracle database.
- Cisco DCNM migration in a HA environment.

Supported Cisco Platforms and Software Versions

For information about the software platforms and versions that Cisco DCNM supports, see the [Cisco DCNM Release Compatibility Matrix](#).

**Note**

For compatibility reasons, we recommend that you run the same version (or a later version) of Cisco DCNM as Cisco NX-OS software.

Hardware Supported

Table 6 lists the products and components that Cisco DCNM Release 7.0.(2) supports.

Table 6 *Hardware Features Supported by Cisco DCNM Release 7.0.(2)*

Product/Component	Part Number
Cisco Nexus 7000 Series	
Cisco Nexus 7710 chassis	N7K-C7710
Cisco Nexus 7718 chassis	N7K-C7718
Cisco Nexus 7004 chassis	N7K-C7004
Cisco Nexus 7009 chassis	N7K-C7009
Cisco Nexus 7010 chassis	N7K-C7010
Cisco Nexus 7018 chassis	N7K-C7018
Supervisor 1 module	N7K-SUP1
Supervisor 2 module	N7K-SUP2
Supervisor 2 Enhanced module	N7K-SUP2E
Cisco Nexus 7700 Supervisor 2 Enhanced module	N77-SUP2E
Fabric module, Cisco Nexus 7718 chassis	M77-C7718-FAB-2
Fabric module, Cisco Nexus 7710 chassis	M77-C7710-FAB-2
Fabric module, Cisco Nexus 7018 chassis	N7K-C7018-FAB-2
Fabric module, Cisco Nexus 7018 chassis	N7K-C7018-FAB-1
Fabric module, Cisco Nexus 7010 chassis	N7K-C7010-FAB-2
Fabric module, Cisco Nexus 7010 chassis	N7K-C7018-FAB-1
Fabric module, Cisco Nexus 7009 chassis	N7K-C7009-FAB-2
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
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
8-Port 10-Gigabit Ethernet Module with XL Option (requires X2)	N7K-M108X2-12L
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
24-port 10-Gigabit Ethernet I/O module with XL option	N7K-M224XP-23L
32-port 1- and 10-Gigabit Ethernet SFP+ I/O module	N7K-F132XP-15

Table 6 *Hardware Features Supported by Cisco DCNM Release 7.0.(2) (continued)*

Product/Component	Part Number
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
Cisco Nexus 7700 Enhanced 48-port 1/10 Gigabit Ethernet SFP+ I/O module (F2 Series)	N77-F248XP-23E
48 Port 1/10 GBase-T RJ45 Module (Enhanced F2-Series)	N7K-F248XT-25E
Cisco Nexus 6000 Series Switches	
Cisco Nexus 6001-64P Switch	N6K-C6001-64P
Cisco Nexus 6004P-96Q Switch	N6K-C6004-96Q
Cisco Nexus 6001-64T Switch	N6K-C6001-64T
Cisco Nexus 6004-EF Switch	N6K-C6004
Cisco Nexus 6004	N6K-M20UP
Cisco Nexus 5000 Series Switches	
Cisco Nexus 5672UP Switch	N5K-C5672UP
Cisco Nexus 56128P Switch	N5K-C56128P
Cisco Nexus 5596T Switch	N5K-C5596T-FA
Cisco Nexus 5596UP Switch	N5K-C5596UP-FA
Cisco Nexus 5548UP Switch	N5K-C5548UP-FA
Cisco Nexus 5548P Switch	N5K-C5548P-FA
Cisco Nexus 5010 chassis	N5K-C5010P-BF
Cisco Nexus 5020 chassis	N5K-C5020P-BF
	N5K-C5020P-BF-XL
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
N5000 1000 Series Module 6port 10GE	N5K-M1600(=)
N5000 1000 Series Mod 4x10GE 4xFC 4/2/1G	N5K-M1404=
N5000 1000 Series Module 8port 4/2/1G	N5K-M1008=
N5000 1000 Series Module 6port 8/4/2G	N5K-M1060=
Cisco Nexus 4000 Series Switches	
Cisco Nexus 4001I Switch Module	N4K-4001I-XPX
Cisco Nexus 4005I Switch Module	N4K-4005I-XPX
Cisco Nexus 3000 Series Switches	
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-T Switch	N3K-C3064TQ-10GT

Table 6 Hardware Features Supported by Cisco DCNM Release 7.0.(2) (continued)

Product/Component	Part Number
Cisco Nexus 3064-X Switch	N3K-C3064PQ-10GX
Cisco Nexus 3548 Switch	N3K-C3548P-10G
Cisco Nexus 2000 Series Fabric Extenders	
Cisco Nexus 2348UPQ 10GE Fabric Extender	N2K-C2348UPQ
Cisco Nexus 2000	N2K-B22IBM
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 1000V Series Switch	
Cisco Nexus 1010 Virtual Services Appliance	N1K-C1010
Cisco Nexus 1010-X Virtual Services Appliance	N1K-C1010-X
Cisco Nexus 1110-S Virtual Services Appliance ¹	N1K-1110-S
Cisco Nexus 1110-X Virtual Services Appliance ¹	N1K-1110-X
Cisco Unified Computing System	UCS-6100

1. Cisco DCNM cannot be installed on a Cisco Nexus 1110-S or 1110-X Virtual Services Appliance. These devices can be discovered by Cisco DCNM.

Licensing

The free product features that come with Cisco Prime DCNM are referred to as Essentials Edition. This includes base functionality required for DFA Fabric Management. No license is required to use these features because they are unlocked with the image. They are included at no cost and are a part of the image that can be downloaded from <http://www.cisco.com/cisco/software/navigator.html?a=a&i=rpm>.

For the list of these features, see the [Cisco DCNM Installation and Licensing Guide](#).

Cisco DCNM Advanced Edition can be licensed for both LAN and SAN switches using the product IDs listed in [Table 7](#).

Table 7 Cisco DCNM Advanced Edition License Product IDs

Product	PID, Paper Delivery (envelope)	PIDS, Electronic Delivery (e-mail)	Chassis PIDs
Cisco Nexus 7000 LAN	DCNM-N7K-K9=	L-DCNM-N7K-K9=	DCNM-N7K-K9
Cisco Nexus 7700 SAN	DCNM-SAN-N77-K9	L-DCNM-S-N77-K9	DCNM-SAN-N77-K9
Cisco Nexus 7700 LAN	DCNM-LS-N77-K9	L-DCNM-LS-N77K9	DCNM-LS-N77-K9
Cisco Nexus 7700 SAN and LAN	DCNM-LS-N77-K9=	L-DCNM-LS-N77K9=	DCNM-LS-N77-K9
Cisco Nexus 6001 SAN	DCNM-SAN-N61-K9=	L-DCNM-S-N61-K9=	DCNM-SAN-M61-K9
Cisco Nexus 6001 LAN	DCNM-LAN-N61-K9=	L-DCNM-L-N61-K9=	DCNM-LAN-N61-K9
Cisco Nexus 6001 SAN and LAN	DCNM-LS-N61-K9=	L-DCNM-LS-N61K9	DCNM-LS-N61-K9
Cisco Nexus 6004 SAN	DCNM-SAN-N64-K9=	L-DCNM-S-N64-K9=	DCNM-SAN-M64-K9
Cisco Nexus 6004 LAN	DCNM-LAN-N64-K9=	L-DCNM-L-N64-K9=	DCNM-LAN-N64-K9
Cisco Nexus 6004 SAN and LAN	DCNM-LS-N64-K9=	L-DCNM-LS-N64K9	DCNM-LS-N64-K9
Cisco Nexus 5000 SAN	DCNM-SAN-N5K-K9=	L-DCNM-SAN-N5K-K9=	DCNM-SAN-N5K-K9
Cisco Nexus 5000 LAN	DCNM-LAN-N5K-K9=	L-DCNM-LAN-N5K-K9=	DCNM-LAN-N5K-K9
Cisco Nexus 5000 SAN and LAN	DCNM-LS-N5K-K9=	NA	DCNM-LS-N5K-K9
Cisco Nexus 3000	DCNM-LAN-N3K-K9=	L-DCNM-L-N3K-K9=	DCNM-LAN-N3K-K9



Note

Cisco Nexus Access licenses (DCNM-NXACC-100-K9 and DCNM-NXACC-250-K9) are no longer available in Cisco DCNM Release 6.1(1a) and later releases. Use DCNM-LAN-N3K and DCNM-LAN-N5K licenses above in place of DCNM-NXACC licenses.

Service contract PIDs are required for opening a case with TAC for breakage or repair and for upgrade from older versions of Cisco DCNM and Fabric Manager. You can also select Cisco DCNM as part of the purchase of a switch chassis, under software options. For more information on licensing, see the FAQs at this URL: http://www.cisco.com/en/US/products/ps9369/prod_literature.html.

Registering a Product Authorization Key

To receive a Cisco DCNM license, you must register the Product Authorization Key (PAK) that you receive when you purchase Cisco DCNM. To register the PAK, follow these steps:

1. Go to <http://www.cisco.com/go/license>.
2. Enter the PAK, contact information, and MAC address or host ID of the Cisco DCNM server.

The license is sent as an e-mail attachment that is uploaded to Cisco DCNM Server and then assigned from the licensing pool to individual switches.

Limitations in Cisco DCNM Release 7.x

[General Limitations for Cisco DCNM Release 7.x, page 14](#)

General Limitations for Cisco DCNM Release 7.x

License Installer

The license installer in Cisco DCNM Release 6.2 supports only US English. Attempting to install a license for any locale other than US English results in an error.

Caveats

This section includes the following topics:

- [Open Caveats—Cisco DCNM Release 7.0.\(1\), page 14](#)
- [Open Caveats—Prime NSC adapter Release 1.0.1, page 15](#)
- [Open Caveats—Cisco DCNM Release 7.0.\(2\), page 16](#)
- [Resolved Caveats—Cisco DCNM Release 7.0.\(2\), page 16](#)

Open Caveats—Cisco DCNM Release 7.0.(1)

This section lists caveats that apply to both Cisco DCNM-LAN and Cisco DCNM-SAN.

- CSCum13457
Symptom: OVA gets deployed successfully, but the user is unable to login to DCNM Web UI or connect to XMPP. However, the user is able to login to the virtual appliance using SSH terminal.
Conditions: Either the administrative password or hostname entered while deploying the OVA does not conform to the expected format. The format is indicated in the help text shown in the vSphere client screen during deployment.
Workaround: Redeploy the virtual appliance using a proper password that conforms to the description in the help text and a hostname as a fully qualified domain name.
- CSCuf73759
Symptom: The two layer VPC id is not shown on topology pane and links do not display correctly on Topology--> port channel and VPC view.
Conditions: When you discover the two n5k and n1k one by one with hop 0.
Workaround: Discover all the devices (2N5ks and 1 n1k) in one task Or rediscover the 2 uplink N5ks one by one.
- CSCul88797
Symptom: Connection between Fex and N1k not shown for 2 layer vPC.
Conditions: When using 2 layer vPC setup, the connection between the Fex and N1k is not shown. This is a rare occurrence.
Workaround: Discover the devices in 2 layer vPC serially, one after the other.

- CSCul07068

Symptom: When a switch is discovered, the mgmt0 interface is not shown in the Interface listing page for the switch.

Conditions: Always.

Workaround: There is no workaround.

- CSCum62685

Symptom: From POAP definitions, if user edits a definition, goes through all the steps, and finally publishes it, and then tries to go to DFA topology, the screen becomes blank and unresponsive.

The same issue occurs when POAP definition is saved and published, then the user navigates to the DFA screen.

Conditions: When the POAP definition is saved or edited and published and the user goes to DFA topology screen.

Workaround: Doing a browser reload (clicking the reload button on the browser being used) fixes the issue.

Open Caveats—Prime NSC adapter Release 1.0.1

- CSCum80871

Symptom: Some tenants or networks are missing in NSC after adding VM-mgr for a deployment where VM-mgr has existing tenants or networks.

Conditions: When a VM-mgr is added to a Prime NSC instance where VM-mgr has tenants or networks already present. In some cases, all the tenants or networks are not synced to Prime NSC.

Workaround: Remove the NSC instance using **nsc-adapter-mgr nsc remove <ip>** command and then add the NSC instance again using **nsc-adapter-mgr nsc add <ip-address> <user-name> <password>** command.

- CSCum55604

Symptom: Upon restarting the NSC adapter, the adapter connections command shows "initializing" state.

Conditions: This happens when one of the NSC instance specified in config.ini file is unreachable due to NSC load.

/opt/nscadapter/bin/nsc-adapter-mgr adapter connections

CONNECTION	STATUS	REASON
dcnm	inactive	Initializing

Workaround: Using the GUI login, verify the NSC instance reachability. Identify the NSC instance where GUI is not reachable to find out if NSC is unreachable even though pingable. Then follow these steps:

1. Stop the NSC adapter.
2. Remove the incorrect NSC instances using CLI.
3. Start NSC adapter.

Open Caveats—Cisco DCNM Release 7.0.(2)

This section lists caveats that apply to both Cisco DCNM-LAN and Cisco DCNM-SAN.

- CSCuf73759
Symptom: The two layer VPC id is not shown on topology pane and links do not display correctly on Topology--> port channel and VPC view.
Conditions: When you discover the two n5k and n1k one by one with hop 0.
Workaround: Discover all the devices (2N5ks and 1 n1k) in one task Or rediscover the 2 uplink N5ks one by one.
- CSCul88797
Symptom: Connection between Fex and N1k not shown for 2 layer vPC.
Conditions: When using 2 layer vPC setup, the connection between the Fex and N1k is not shown. This is a rare occurrence.
Workaround: Discover the devices in 2 layer vPC serially, one after the other.
- CSCun86190
Symptom: While generating a POAP, the value of the last column in the array type parameters do not get modified.
Conditions: On opening the pop-up to modify the array type parameters, the last column still displays the default value. All the other columns and the non-array type parameters are updated with the modified values.
Workaround: Do not open the pop-up to modify the array type parameters, you can directly edit the parameters in-line.

Resolved Caveats—Cisco DCNM Release 7.0.(2)

This section lists caveats that apply to both Cisco DCNM-LAN and Cisco DCNM-SAN.

- CSCum62685
Symptom: From POAP definitions, when you edit a definition, follows all the steps, publishes it, and then tries to view the DFA topology, the screen is blank and unresponsive.
The same issue occurs when POAP definition is saved and published and, then you navigate to the DFA screen.
Conditions: When the POAP definition is saved or edited and published and, then you view the DFA topology screen.
Workaround: You must reload/refresh the browser to resolve this issue.
- CSCul07068
Symptom: When a switch is discovered, the **mgmt0** interface is not shown in the Interface listing page for the switch.
Conditions: Always.
Workaround: None.

Related Documentation

This section contains information about the documentation available for Cisco DCNM and for the platforms that Cisco DCNM manages.

This section includes the following topics:

- [Cisco DCNM Documentation](#)
- [Cisco Nexus 1000V Series Switch Documentation](#)
- [Cisco Nexus 2000 Series Fabric Extender Documentation](#)
- [Cisco Nexus 3000 Series Switch Documentation](#)
- [Cisco Nexus 4000 Series Switch Documentation](#)
- [Cisco Nexus 5000 Series Switch Documentation](#)
- [Cisco Nexus 6000 Series Switch Documentation](#)
- [Cisco Nexus 7000 Series Switch Documentation](#)

Cisco DCNM Documentation

The Cisco DCNM documentation is available at the following URL:

http://www.cisco.com/en/US/products/ps9369/tsd_products_support_series_home.html

The documentation set for Cisco DCNM includes the following documents:

Release Notes

[Cisco DCNM Release Notes, Release 7.x](#)

Installation and Licensing

[Cisco DCNM OVA Installation Guide, Release 7.x](#)

Cisco DCNM Fundamentals Guide

[Cisco DCNM Fundamentals Guide, Release 7.x](#)

Cisco DCNM REST API Guide

[Cisco DCNM REST API Guide, Release 7.x](#)

Cisco DCNM Troubleshooting Guide

[Cisco DCNM Troubleshooting Guide](#)

Cisco DCNM for LAN Configuration Guides

[FabricPath Configuration Guide, Cisco DCNM for LAN, Release 6.x](#)

[Cisco DCNM Interfaces Configuration Guide, Release 6.x](#)

[Cisco DCNM Layer 2 Switching Configuration Guide, Release 6.x](#)

[Cisco DCNM Security Configuration Guide, Release 6.x](#)

Cisco DCNM System Management Configuration Guide, Release 6.x
Cisco DCNM Unicast Routing Configuration Guide, Release 6.x
Cisco DCNM Virtual Device Context Configuration Guide, Release 6.x
Cisco DCNM Getting Started with Virtual Device Contexts, Release 6.x
Cisco DCNM Web Services API Guide, Release 6.x

Cisco DCNM for SAN Configuration Guides

System Management Configuration Guide, Cisco DCNM for SAN, Release 6.x
Interfaces Configuration Guide, Cisco DCNM for SAN, Release 6.x
Fabric Configuration Guide, Cisco DCNM for SAN, Release 6.x
Quality of Service Configuration Guide, Cisco DCNM for SAN, Release 6.x
Security Configuration Guide, Cisco DCNM for SAN, Release 6.x
IP Services Configuration Guide, Cisco DCNM for SAN, Release 6.x
Intelligent Storage Services Configuration Guide, Cisco DCNM for SAN, Release 6.x
High Availability and Redundancy Configuration Guide, Cisco DCNM for SAN, Release 6.x
Inter-VSAN Routing Configuration Guide, Cisco DCNM for SAN, Release 6.x
SMI-S and Web Services Programming Guide, Cisco DCNM for SAN, Release 6.x

Cisco Nexus 1000V Series Switch Documentation

The Cisco Nexus 1000V Series switch documentation is available at the following URL:
http://www.cisco.com/en/US/products/ps9902/tsd_products_support_series_home.html

Cisco Nexus 2000 Series Fabric Extender Documentation

The Cisco Nexus 2000 Series Fabric Extender documentation is available at the following URL:
http://www.cisco.com/en/US/products/ps10110/tsd_products_support_series_home.html

Cisco Nexus 3000 Series Switch Documentation

The Cisco Nexus 3000 Series switch documentation is available at the following URL:
http://www.cisco.com/en/US/products/ps11541/tsd_products_support_series_home.html

Cisco Nexus 4000 Series Switch Documentation

The Cisco Nexus 4000 Series switch documentation is available at the following URL:
http://www.cisco.com/en/US/products/ps10596/tsd_products_support_series_home.html

Cisco Nexus 5000 Series Switch Documentation

The Cisco Nexus 5000 Series switch documentation is available at the following URL:

http://www.cisco.com/en/US/products/ps9670/tsd_products_support_series_home.html

Cisco Nexus 6000 Series Switch Documentation

The Cisco Nexus 6000 Series documentation is available at the following URL:

http://www.cisco.com/en/US/products/ps12806/tsd_products_support_general_information.html

Cisco Nexus 7000 Series Switch Documentation

The Cisco Nexus 7000 Series switch documentation is available at the following URL:

http://www.cisco.com/en/US/products/ps9902/tsd_products_support_series_home.html

Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, submitting a service request, and gathering additional information, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation, at:

<http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html>

Subscribe to the *What's New in Cisco Product Documentation* as a Really Simple Syndication (RSS) feed and set content to be delivered directly to your desktop using a reader application. The RSS feeds are a free service and Cisco currently supports RSS Version 2.0.

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