



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 11.1\(1\), on page 1](#)
- [Cisco DCNM Supported Scale Parameters , on page 5](#)

System Requirements for Cisco DCNM, Release 11.1(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 11.1(1), supports the Cisco DCNM Server on these 64-bit operating systems:

- **SAN Deployments:**
 - Microsoft Windows 2016
 - Microsoft Windows 2012 R2
 - Red Hat Enterprise Linux Release 7.3 and 7.4
- **LAN Fabric and Classic LAN Deployments:**
 - Open Virtual Appliance (OVA) with an integrated CentOS Linux release 7.6.1810 (Core)
 - ISO Virtual Appliance (ISO) with an integrated CentOS Linux release 7.6.1810 (Core)

Cisco DCNM Release 11.1(1) supports the following databases:

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



Note Cisco DCNM Release 11.1(1) does not support the Oracle 12c pluggable database version installation.

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



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 11.1(1) supports the ISO installation on a bare-metal server (no hypervisor) on the following server platforms:¹

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)
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)

¹ 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 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.

Cisco DCNM Release 11.1(1) supports the running of the Cisco DCNM Server on the following hypervisors:

Table 1: VMware Snapshot Support for DCNM LAN Fabric and DCNM LAN Classic Deployments

VMware vSphere Hypervisor (ESXi)	6.0	6.5	6.7	6.7 update 1
VMware vCenter Server	6.0	6.5	6.7	6.7 update 1



Note Only Warm and Cold VMware snapshot is supported
vCenter server is mandatory to deploy the Cisco DCNM OVA Installer.

Server Resource Requirements

Table 2: Server Resource Requirements

Deployment	Deployment Type	Small (Lab or POC)	Large (Production)	Compute
SAN	Windows, Linux (standalone or VM)	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 (with SAN Insights) or 500 GB (without SAN Insights)	Not Applicable
IP for Media (IPFM)	<ul style="list-style-type: none"> • OVA • ISO 	CPU: 8 vCPUs RAM: 24 GB DISK: 500 GB	CPU: 16 vCPUs RAM: 32 GB DISK: 500 GB	Not Applicable
LAN Fabric Classic LAN	<ul style="list-style-type: none"> • OVA • ISO 	CPU: 8 vCPUs RAM: 24 GB DISK: 500 GB	CPU: 16 vCPUs RAM: 32 GB DISK: 500 GB	CPU: 16 vCPUs RAM: 64 GB DISK: 500 GB



Note

- 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 71.0.3578.80
- Mozilla Firefox Version 63.0.3 (32/64 bit)
- Microsoft Internet Explorer 11.0.96 update version 11.0.90

Other Supported Software

The following table lists the other software that is supported by Cisco DCNM, Release 11.1(1).

Table 4: Other Supported Software

Component	Features
Security	<ul style="list-style-type: none"> • 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 11.1\(1\)](#).

