



# System Requirements

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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, on page 1](#)

## System Requirements

This section describes the various system requirements for proper functioning of your Cisco DCNM Release 11.5(2).



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**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 causes performance issues.

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**Note** If you are deploying Network Insights applications on the Cisco DCNM Compute cluster, refer to the app-specific release notes for additional CPU or memory requirements for Computes.

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### Java Requirements

The Cisco DCNM server is distributed with JRE 11.0.8 into the following directory:

DCNM\_root\_directory/java/jdk11

### Server Requirements

Cisco DCNM Release 11.5(2), supports the Cisco DCNM server on these 64-bit operating systems:

- **SAN Deployments:**

- Microsoft Windows 2016
- Microsoft Windows 2012 R2 update 2919355
- Red Hat Enterprise Linux Release 7.8, 8.1, and 8.2
- Open Virtual Appliance (OVA) with an integrated CentOS Linux release 7.8
- ISO Virtual Appliance (ISO) with an integrated CentOS Linux release 7.8

- **LAN Fabric Deployments:**

- Open Virtual Appliance (OVA) with an integrated CentOS Linux release 7.8
- ISO Virtual Appliance (ISO) with an integrated CentOS Linux release 7.8

### Database Requirements

Cisco DCNM Release 11.5(2) 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)



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**Note** Oracle 12c pluggable database version installation is not supported.

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- Oracle 12c RAC (nonpluggable installation)
- PostgreSQL 10.15 - For OVA/ISO deployments
- PostgreSQL 10.15 - For Linux/OVA/ISO deployments
- PostgreSQL 10.15 - For Windows deployments



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**Note** The database size 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 an Oracle database, we recommend that you use Oracle SE or Enterprise edition, instead of Oracle XE due to table space limitations.

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**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 backup of the database; either daily or weekly, to ensure that all the data is preserved.



**Note** The ISO and OVA installations support only the embedded PostgreSQL database.

### Server Resource (CPU/Memory) Requirements



**Note** 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.

**Table 1: System Requirements for Cisco DCNM SAN Deployment**

Deployment Type	Small (Lab or POC)	Large (Production)	Huge (Production with SAN Insights)
Windows	CPU: 8 vCPUs RAM: 24 GB DISK: 500 GB	CPU: 16 vCPUs RAM: 32 GB DISK: 500 GB	Not supported
Linux (RHEL)	CPU: 8 vCPUs RAM: 24 GB DISK: 500 GB	CPU: 16 vCPUs RAM: 32 GB DISK: 500 GB	CPU: 32 vCPUs RAM: 128 GB DISK: 2 TB

If the existing Elasticsearch database is more than 250GB, Cisco DCNM Server requires more than 500GB HDD space to complete reindexing.

Ensure that there is enough disk space to the root partition or mount another disk where the `/tmp` directory can be mounted during the installation or upgrade.

Allocate sufficient disk space to the root partition to complete DCNM installation and for stable continuous operation of the DCNM applications. Refer to the applications' User guides for disk space requirements. You can mount another disk where the `/tmp` directory can be mounted during the installation or upgrade. You can also add additional disk space and the disk file system using `appmgr system scan-disks-and-extend-fs` command.



- Note**
- From Release 11.3(1), Cisco DCNM Windows deployments does not support the SAN Insights feature.
  - Cisco SAN Insights feature is only supported with the Huge deployment.
  - Every federation deployment consists of three large configuration nodes.
  - From Cisco DCNM Release 11.2(1), synchronize the Federation nodes from the Primary node only.

### Client Hardware Requirements

Cisco DCNM SAN desktop client and Cisco Device Manager support Microsoft Windows 10, Microsoft Windows 2012, Microsoft Windows 2016, and Red Hat Linux. The following table lists the minimum hardware requirements for these client systems.

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, 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, 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](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: 86.0.4240.198
- Mozilla Firefox version: 82.0.3 (64-bit)
- Microsoft Edge version: 86.0.622.63

### Other Supported Software

The following table lists the other software that is supported by Cisco DCNM Release 11.5(2).

**Table 2: Other Supported Software**

Component	Features
Security	<ul style="list-style-type: none"><li>• ACS versions 4.0, 5.1, 5.5, and 5.8</li><li>• ISE version 2.6</li><li>• ISE version 3.0</li><li>• Telnet Disabled: SSH Version 1, SSH Version 2, Global Enforce SNMP Privacy Encryption.</li><li>• Web Client and Cisco DCNM-SAN Server Encryption: HTTPS with TLS 1, 1.1 and 1.2</li><li>• TLS 1.3</li></ul>
OVA\ISO Installers	CentOS 7.8/Linux Kernel 3.10.x

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

