



New Features and Enhancements

Cisco Data Center Network Manager (DCNM), Release 7.1.x includes the new features, enhancements, and hardware support that are described in the following sections:

- [New Features and Enhancements in Cisco Prime DCNM, Release 7.1\(2\), page 1](#)
- [New Features and Enhancements in Cisco Prime DCNM, Release 7.1\(1\), page 1](#)

New Features and Enhancements in Cisco Prime DCNM, Release 7.1(2)

Cisco Prime DCNM, Release 7.1(2), includes the new features, enhancements, and hardware support that are described in the following section:

Selective High Availability

From Cisco Prime DCNM, Release 7.1(2), the Cisco Prime DCNM appliances (OVA and ISO) allow you to selectively enable failover for certain applications rather than forcefully applying it for all applications. You can selectively enable high availability (HA) for auto configuration, which is a crucial feature in most deployments. Since HA is not enabled for all the applications, external database users or a Network File System (NFS) repository is not required, thus reducing dependencies in a production environment.

New Features and Enhancements in Cisco Prime DCNM, Release 7.1(1)

Cisco Prime DCNM, Release 7.1(1), includes the new features, enhancements, and hardware support that are described in the following section:

Border Leaf or Edge Router Auto Configuration

This feature streamlines the border leaf or edge router auto configuration. The auto configuration automatically selects border leaf or edge router based on device pairing, load sharing algorithm, and redundancy factor. The border leaf or edge router is notified after the pair is chosen and the partition extension configuration is available in the network database. The Power On Auto Provisioning (POAP) templates and network profiles

can be added. Border leaf or edge router auto configuration publishes the REST APIs' orchestrator and third-party application integration.

VxLAN Support for Cisco Nexus 5600 Series and Cisco Nexus 9000 Series Switches

Cisco Nexus 5600 Series and Cisco Nexus 9000 Series switches (in standalone mode) can identify VxLAN topology by marking the VxLAN Tunnel End Point (VTEP) with a different icon. VxLAN support allows you to perform the following:

- Visualization of VxLAN topology. This is available for Cisco Nexus 5600 Series and Cisco Nexus 9000 Series switches (in standalone mode). The VTEPs are marked with a different icon.
- Search the VTEP devices based on Visual Networking Index (VNI) or multicast address.
- Display VNI, multicast address, mapped VLAN and VNI status in tabular format for a given VNI or multicast address.
- Highlight mismatch in multicast address configuration for a given VNI.
- Display active peers of VTEP for a given VNI.
- Display all VNIs, multicast addresses, VNI statuses, and mapped VLANs of a particular VTEP in the switch inventory window.

Configuring Synchronization on POAP

If you use POAP to configure switches, this feature allows you to track the configuration changes made to the device after the initial POAP definition.

Multiple Orchestrators' Support

The Multiple Orchestrators' Support feature allows you to create a new Segment ID range from either the Cisco Prime DCNM Web Client or by using a REST API, and provides the orchestrator ID. Cisco Prime DCNM will associate the range with the specified orchestrator ID.

Auto-Configuration Deployment

This feature allows you to selectively push or clear configuration on the devices in a network.

Three Tier Topology

Cisco Prime DCNM supports three-tier topology visualization for the Fabric dashboard consisting of super spines, spines, and leaves.

Secure LDAP for Fabric

When you install DCNM ISO or OVA, the DCNM-secure LDAP is configured during installation. By default, this supports LDAP (port 389), StartTLS (port 389), and LDAPS (port 636). A self-signed CA certificate and server certificate are generated with the Cisco Prime DCNM server name as CN (common name). No additional action is required to enable secure LDAP.

Multiple Mobility Domains with VLAN Translation

In the VLAN translation feature, upon ingress on a port, a user frame that is tagged with an original VLAN (also called *from* VLAN), will be mapped into a translated VLAN (also called *to* VLAN). The subsequent functionalities, such as MAC learning and MAC lookup, will be performed on the translated VLAN. On the

other hand, a frame that is switched on the translated VLAN will be mapped to the original VLAN before egressing in a port. VLAN translation is carried out on the per-port basis. When multiple mobility domains are supported on a leaf switch, in addition to the leaf device-wide mobility domain, port-level mobility domains are introduced. Each port can be configured with a mobility domain that is different from the device-wide mobility domain.

Cisco Prime DCNM ISO Packaging

The Cisco Prime DCNM ISO virtual appliance has an operating system (CentOS 6.3) with Cisco Prime DCNM. It also provides an option to install additional packages to manage scalable fabrics, including Cisco DFA on demand.

Advanced Feature Trial License

The Advanced Feature Trial License exists on the server after the initial installation, and displays a filename and PID text (30DayTrialLicense). This provides 500 SAN and 500 advanced feature licenses without users having to download or install a single file. This license will work for any licensable switch, and expires after 30 days.

Configuring Archive Enhancement

This enhancement allows you to display a preview, show configuration differences, and add bookmarks for configuration differences.

Slow Drain

Cisco Prime DCNM provides online slow-drain diagnostics, and displays the list of devices with potential slow-drain issues. The significance of the Slow Drain feature is as follows:

- Automates troubleshooting—Troubleshooting that might have taken hours or days can be reduced to minutes.
- Automates collection or polling—On-demand collection of Slow Drain-related counters is available across Cisco Nexus and Cisco MDS fibre channel fabrics. The entire switch fabric data can be collected.
- Reduces false positives—Slow Drain diagnostics fetches a list of host, storage, and switch ports, prioritized by slow drain severity by checking the rate of change in the counters.
- Provides visual representation—Statistics can be displayed in the bar chart format, showing fluctuations in counters over the polling interval.
- Provides customization—Provides symptom priority fields that can be sorted to find specific devices.

EMC Enhancement

Cisco Prime DCNM enhances EMC call-home messages and adds version-specific information in a call-home message body.

Storage VDC for FCoE on Cisco Nexus 7706

Cisco Prime DCNM now supports Storage VDC on Cisco Nexus 7706 equipment. The Cisco Nexus 7706 FCoE support allows Cisco Prime DCNM to discover Cisco Nexus 7706 Storage VDC as seed for SAN management. Cisco Nexus 7706 Storage VDC is managed as a fabric switch. After you install and enable the FCoE feature set, all the SAN management features are available from Cisco Prime DCNM for Cisco Nexus 7706.

Orphan LUN

Cisco Prime DCNM supports reporting a list of LUNs that are configured in the storage system, but not assigned any ports. After initial storage discovery, choose **Report Feature > Orphan LUN** to view the report. You can generate ad hoc reports or schedule the generation of a recursive report at a specified time. The report can be exported as .html, .xls, or email formats for further analysis.

Storage System Capacity Trend

Cisco Prime DCNM allows you to generate the storage system capacity trend and the storage pool level capacity trend. You can view the capacity trend for storage system on the web client after the system collects data for more than two days.