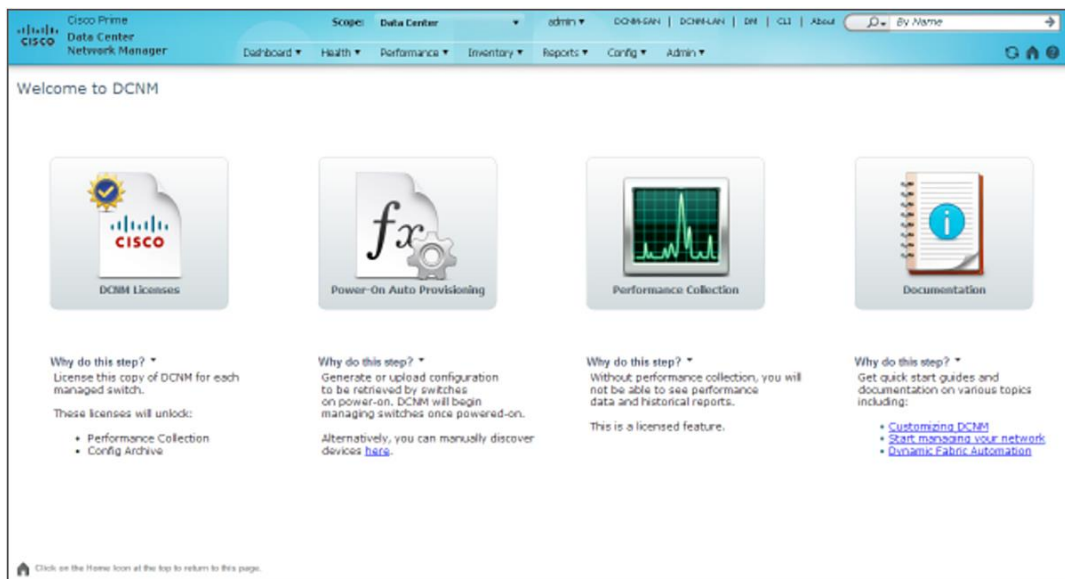


# Cisco Prime Data Center Network Manager Release 7.1

PB733518



Cisco Prime™ Data Center Network Manager (DCNM) software is an advanced network management system (NMS) for storage, LAN, and scalable fabric management. Cisco Prime DCNM Release 7.1 adds storage area networking (SAN) and general-purpose LAN management functions to the scalable Data Center fabric management functions of Cisco Prime DCNM Release 7.

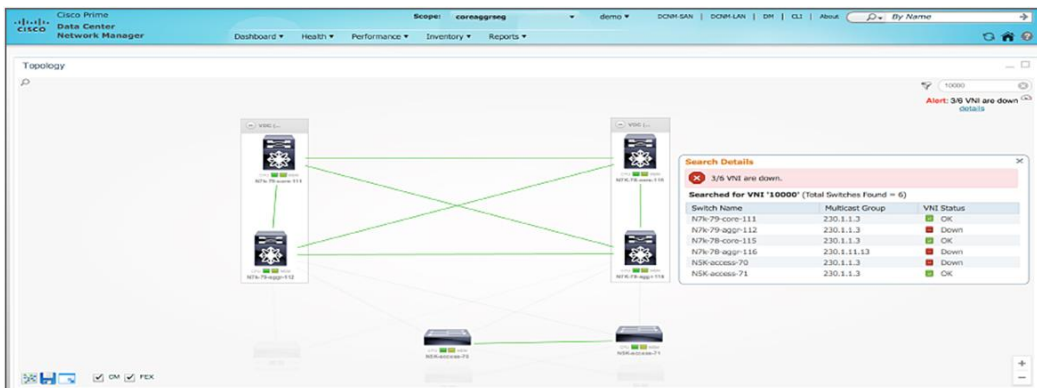
Cisco Prime DCNM 7.1 continues to support multitenant cloud deployments and scalable fabric management by integrating with popular hypervisor solutions such as VMware vCloud Director and OpenStack alongside orchestration mechanisms such as Cisco UCS® Director. Cisco Prime DCNM 7.1 provides a virtual appliance form factor to simplify deployment and reduce labor and operating expenses (OpEx).

## New Features

### VXLAN Fabric Management

Cisco Prime DCNM 7.1 includes new management functions for Virtual Extensible LAN (VXLAN) technology. New features include a topology view, search capabilities, and Cisco Visual Networking Index (VNI) status, and inventory. Users can view VXLAN overlays and search a multicast group for VNI members (Figure 1).

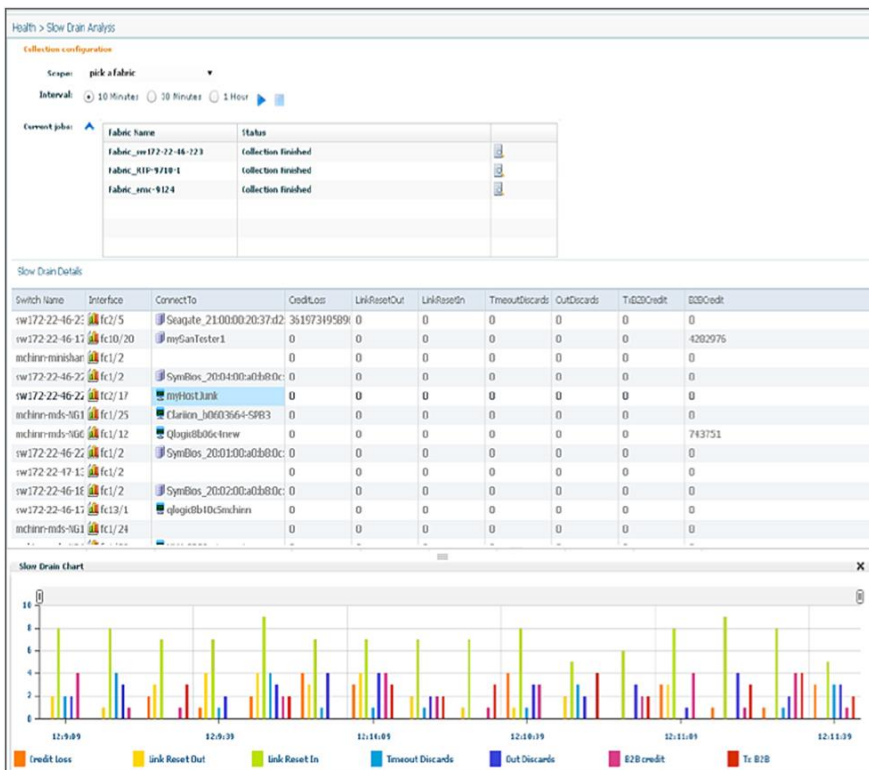
**Figure 1.** Cisco Prime DCNM VXLAN Overlay Topology View



### Slow-Drain Storage Analysis

Cisco Prime DCNM 7.1 includes slow-drain storage analysis, which helps automate troubleshooting of the user's storage fabric. This feature provides on-demand collection of slow-drain counters across an entire Cisco Nexus and Cisco MDS 9000 Family Fibre Channel fabric. This feature significantly reduces the effort needed to troubleshoot slow-drain issues (Figure 2). Host, Storage and Switch ports are included in the analysis.

**Figure 2.** Cisco Prime DCNM Slow-Drain Analysis Function



### POAP Configuration Diff/Sync

Power-On Auto Provisioning (POAP) allows new switches added to a Cisco DFA fabric to be provisioned automatically simply by attaching a new, unconfigured device to the fabric. Cisco Prime DCNM manages this POAP workflow so that a user simply assigns a device to a preconfigured template.

The POAP configuration Diff/Sync feature lets the user know if a device's configuration does not match its POAP template and then lets the user resolve these differences. This feature helps ensure compliance consistency on the fabric (Figure 3).

**Figure 3.** Cisco Prime DCNM Configuration Compliance Window



### Ready-to-Use ISO-Format Virtual Appliance

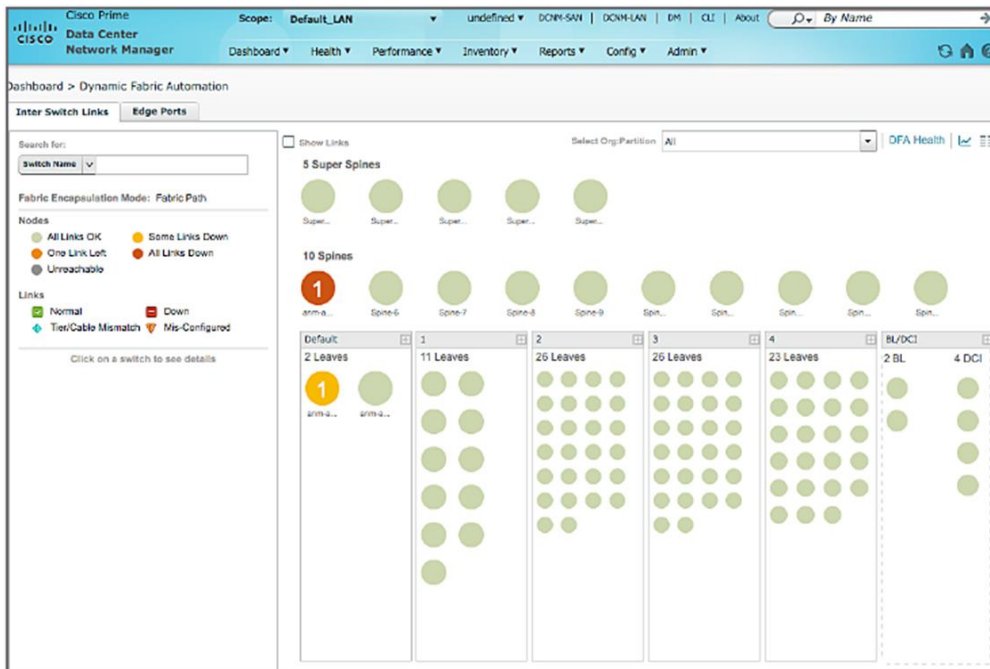
Cisco Prime DCNM helps you rapidly deploy a new fabric by providing a preintegrated virtual appliance. The virtual appliance is available to provide all infrastructure necessary for a fully functioning Cisco scalable fabric.

An ISO virtual appliance form factor is available in addition to the existing Open Virtual Appliance (OVA) format. The ISO appliance can be installed on an alternative hypervisor or on a bare-metal physical server.

### Three-Tier Fabric Display Visualization

Cisco Prime DCNM 7.1 includes an updated fabric health display to provide insight into very large fabrics (Figure 4). This highly scalable display shows link-related anomalies, including misconfigurations. The fabric display now supports three-tier views showing Leaf, Spine and Super-Spine for additional flexibility.

**Figure 4.** Cisco Prime DCNM Enhanced Multi-Tier Fabric Display



### Multiple Orchestrator Support

DCNM integrates with multi-tenant orchestration mechanisms such as OpenStack, Cisco UCS Director and VMware VCD. This release adds multiple orchestrator support whereby Cisco DCNM allows you to create a new Segment ID range and associate that range to an orchestrator ID. This allows the system to prescribe Segment IDs for different orchestrators.

### Secure LDAP for Fabric Auto-Configuration

LDAP is used in the DCNM Virtual Appliance. The DCNM ISO or OVA installer now supports secure LDAP by default using a self-signed CA certificate. No action is required to enable secure LDAP.

### Multiple Mobility Domains with VLAN Translation

DCNM now supports the Multiple Mobility Domain capability of Nexus switches where a given switch can have different Mobility Domains on different ports. Previously, a given switch was limited to a single device-wide Mobility Domain.

### Advanced Feature Trial License

The Advanced feature license trial period exists on the server after the initial installation and displays a filename and PID text of "30DayTrialLicense". This provides 500 SAN and 500 LAN licenses without having to download or install a license file. This license will work for any licensable switch and expires after 30 days.

### SAN Management

Cisco Prime DCNM 7.1 incorporates SAN management, including support for Cisco® MDS 9000 Family devices and storage functions on Cisco Nexus® Family switches. Previously, these features were supported in Release 6.0 and earlier.

## General-Purpose LAN Management

Cisco Prime DCNM 7.1 incorporates general-purpose LAN management of Cisco Nexus switches. The earlier release, Cisco Prime DCNM 7.0, focused on scalable fabric management including devices running Cisco Dynamic Fabric Automation (DFA) and corresponding software releases. Release 7.1 adds general support for devices running Cisco NX-OS Software and corresponding software releases as found in Cisco Prime DCNM Release 6.0 and earlier.

## Targeted Users

Cisco Prime DCNM 7.1 is a general-purpose release for Cisco Nexus switches and Cisco MDS 9000 Family storage switches running Cisco NX-OS Software. Cisco customers using storage area networking (SAN), LAN, or scalable Data Center fabrics should consider deploying Cisco DCNM 7.1.

Existing Cisco Prime DCNM users also should consider deploying Release 7.1. Customers who want GUI management capabilities for Cisco Nexus 9000 Series Switches in standalone mode also should consider deploying Release 7.1.

Customers deploying the Cisco Prime DCNM 7.1 virtual appliance form factor (either the ISO or OVA version) should follow the instructions provided in the installation guide with regard to virtual machine host requirements. The Cisco Prime DCNM 7.1 virtual appliance form factor requires a suitable hypervisor or bare-metal server host.

## Ordering Information

Cisco Prime DCNM 7.1 software is offered for order at no charge though additional functions are enabled with the purchase of an Advanced feature licenses for a given device type. You can download software [here](#), or see Table 1 for ordering information. Baseline Cisco DFA support is included without additional per-device licensing.

Cisco Prime DCNM 7.1 is available for Windows Server, RedHat Enterprise Linux and as an .ISO or OVA file for VMware vSphere deployments.

Base server software without Advanced feature licenses will be made available in Q1 calendar year 2015. Table 1 below shows the ordering information which will become available at that time.

**Table 1.** Ordering Information

Product Name	Part Numbers	Description
Cisco Prime Data Center Networking Manager	R-DCNM-SVR-70-K9=	DCNM Server 7 Spare Electronic Delivery
	R-DCNM-SVR-70-K9	DCNM Server 7 Electronic Delivery

## For More Information

For more information about Cisco Prime DCNM, visit <http://www.cisco.com/go/DCNM> or contact your local account representative.

For more information about Cisco scalable Data Center fabrics such as DFA, visit <http://www.cisco.com/go/DFA> or contact your local account representative.




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