CHAPTER 18

Managing Virtual Devices

This chapter describes virtual device contexts (VDCs) supported on Cisco NX-OS devices.

This chapter includes the following sections:

For detailed configuration guide, please refer to *Virtual Device Context Configuration Guide, Cisco DCNM for LAN, Release 7.x*.

Managing Virtual Switches

The Cisco Nexus 1000V is a virtual access software switch that works with VMware vSphere 4.0 and has the following components:

- Virtual Supervisor Module (VSM)—Control plane of the switch and a virtual machine that runs Cisco NX-OS.
- Virtual Ethernet Module (VEM) —Virtual line card embedded in each VMware vSphere (ESX) host.

Managing a virtual switch involves configuring its domain and server connections.

A domain is an instance of a Cisco Nexus 1000V Series switch device, including dual redundant VSMs and managed VEMs, within a VMware vCenter server. Each domain is distinguished by a unique integer called the domain identifier.

In order for the Cisco Nexus 1000V to connect to a vCenter Server or an ESX server, you must first define the connection parameters. All communication with the vCenter Server is secured by the Transport Layer Security (TLS) protocol.

This chapter in *Virtual Device Context Configuration Guide, Cisco DCNM for LAN, Release 7.x* describes how to manage virtual switches using Cisco Data Center Network Manager (DCNM).

Creating VDCs with the VDC Setup Wizard

This chapter in *Virtual Device Context Configuration Guide, Cisco DCNM for LAN, Release 7.x* describes how to create virtual device contexts (VDCs) on Cisco NX-OS devices.

This chapter in *Virtual Device Context Configuration Guide, Cisco DCNM for LAN, Release 7.x* describes how to create virtual device contexts (VDCs) on Cisco Data Center Network Manager (DCNM). In Cisco NX-OS, only a user with the network-admin role can create VDCs. You can create up to three VDCs. Beginning with the Cisco NX-OS Release 5.2(1), you can run FCoE on the Cisco Nexus 7000 Series devices. You must create a storage VDC to run FCoE. The storage VDC cannot be the default VDC and you can have one storage VDC on the device.

Managing VDCs

This chapter in *Virtual Device Context Configuration Guide, Cisco DCNM for LAN, Release 7.x* describes how to manage virtual device contexts (VDCs) on Cisco Data Center Network Manager (DCNM).

This chapter describes how to manage virtual device contexts (VDCs) on Cisco NX-OS devices.

After you create a VDC, you can change the interface allocation, VDC resource limits, and the high availability (HA) policies. You can also save the VDC configuration on the physical device to the startup configuration or to a bootflash file