



Overview

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System Management Overview

This chapter describes the following system management features:

- CDP
- Domains
- Server Connections
- Configuration Management
- File Management
- User Management
- NTP
- Local SPAN and ERSPAN
- SNMP System Messages
- NetFlow
- System Messages
- iSCSI Multipath
- Troubleshooting

CDP

The Cisco Discovery Protocol (CDP) runs over the data link layer and is used to advertise information to all attached Cisco devices and to discover and view information about attached Cisco devices. CDP runs on all Cisco-manufactured equipment.

Domains

You must create a domain ID for Cisco Nexus 1000V. This process is part of the initial setup of the Cisco Nexus 1000V when you are installing the software. If you need to create a domain ID later, use the **saves-domain** command.

You can establish Layer 3 Control in your VSM domain, which means that your VSM is Layer 3 accessible and able to control hosts that reside in a separate Layer 2 network.

Configuration Management

The Cisco Nexus 1000V enables you to change the switch name, configure messages of the day, and display, save, and erase configuration files.

File Management

Using a single interface, you can manage the file system including:

- Flash memory file systems
- Network file systems (TFTP and FTP)
- Any other endpoint for reading or writing data (such as the running configuration)

User Management

You can identify the users who are currently connected to the device and send a message to either a single user or all users.

NTP

The Network Time Protocol (NTP) synchronizes timekeeping among a set of distributed time servers and clients. This synchronization allows you to correlate events when you receive system logs and other time-specific events from multiple network devices.

Local SPAN and ERSPAN

The Ethernet switched port analyzer (SPAN) enables you to monitor traffic in and out of your device and duplicate packets from source ports to destination ports. You can also use the Cisco Network Analysis Module (NAM) to monitor ERSPAN data sources for application performance, traffic analysis, and packet header analysis. To use NAM to monitoring the Cisco Nexus 1000V ERSPAN data sources, see the *Cisco Nexus 1010 Network Analysis Module Installation and Configuration Note*.

SNMP

The Simple Network Management Protocol (SNMP) is an application-layer protocol that provides a message format for communication between SNMP managers and agents. SNMP provides a standardized framework and a common language that you can use to use to monitor and manage devices in a network.

NetFlow

NetFlow gives visibility into traffic that transits the virtual switch by characterizing IP traffic based on its source, destination, timing, and application information. You can use this information to assess network availability and performance, assist in meeting regulatory requirements (compliance), and help with troubleshooting.

You can also use the Cisco Network Analysis Module (NAM) to monitor NetFlow data sources.

System Messages

You can use system message logging to control the destination and to filter the severity level of messages that system processes generate. You can configure logging to a terminal session, a log file, and syslog servers on remote systems. System message logging is based on RFC 3164.

For more information about the system message format and the messages that the device generates, see the *Cisco Nexus 1000V Series NX-OS System Messages Reference*.

Troubleshooting

Ping and trace route are among the available troubleshooting tools. For more information, see the *Cisco Nexus 1000V for Microsoft Hyper-V Troubleshooting Guide*.

