Cisco Content Distribution Manager 4650

Product Number: CDM-4650

You have just purchased a Cisco Content Distribution Manager 4650 (CDM-4650) with one of the following software releases installed:

- Cisco CDN Software, Enterprise Solution, Version 2.0 or a later release of Enterprise Solution software

- Cisco Enterprise CDN software, Version 3.0 or a later release of Enterprise CDN software

  Cisco Enterprise CDN software, Version 3.0 supports the Content Router. It can support up to five Content Routers in conjunction with a CSS 11000 Content Services Switch. The Content Router provides redundancy to the Content Distribution Manager by supporting HTTP request routing, building and maintaining the routing hierarchy, and heartbeating with the Content Engine to maintain reliability.

- Cisco Application and Content Networking Software (ACNS) software, Release 4.0.3 or a later release of ACNS software

  ACNS software combines Cisco Cache software and Cisco Enterprise CDN software functionality.

Functional Overview

The Cisco Content Distribution Manager is the content distribution and management element of a larger, Cisco Content Delivery Network (CDN) solution, which includes content routing, content switching, content delivery, and content services, as well as content distribution and management.

The CDM-4650 should be located at the logical central point of your WAN to give you complete control over your entire media distribution network. It operates in conjunction with Cisco Content Engines (located at your end user sites) that receive and transmit streaming media to audiences over the LAN.

The CDM-4650 uses a powerful yet simple web browser-based user interface that allows you to configure and monitor Cisco Content Engines anywhere in the world, import and preview any rich media—including TV-quality video—and generate media URLs for your internal and external websites. You can also set maximum bandwidth usage rates for distributing media to Cisco Content Engines over the WAN, as well as from Content Engines to end users over the LAN to ensure that you never congest the network.

CISCO SYSTEMS

Corporate Headquarters:
Cisco Systems, Inc., 170 West Tasman Drive, San Jose, CA 95134-1706 USA

Content Distribution Manager 4650 Description

The CDM-4650 is configured for AC-input power. The default factory configuration comes with three power supplies installed. The CDM-4650 has eight internal 18-GB data drives, a Quantum DLT 7000 tape drive used for backing up data, and a Dell hardware RAID controller with one external port for attaching a Cisco Storage Array 12 (SA-12).

Note   For information on using the DLT 7000 tape drive to back up data when upgrading from a SightPath Studio device to the Cisco CDM-4650, refer to the *SightPath to Cisco Hardware Migration Procedure* document. For information on general backup and restore procedures, refer to Chapter 4 of the *Cisco Enterprise CDN Software User Guide Version 3.0*, or to the ACNS software documentation.

Note   For information on setting up the CDM-4650 RAID configuration for the Cisco Storage Array with Enterprise CDN software, refer to the *Release Notes for Cisco Enterprise CDN Software Version 3.0.2* document.

For network connections, the CDM-4650 has one onboard 10BASE-T/100BASE-TX Ethernet/ Fast Ethernet port and a four-port 10BASE-T/100BASE-TX Ethernet/Fast Ethernet network interface card with autodetect speed mode and full-duplex operation. In E-CDN software releases prior to ACNS 4.0, the onboard port is the only Ethernet interface that is recognized. However, in ACNS 4.0 and later ACNS software releases, the ports on the four-port Ethernet card are the only interfaces that are recognized; the single onboard port is ignored.

Although ACNS software recognizes all four of the ports on the four-port Ethernet card, the ACNS E-CDN application only uses one of those ports. The primary interface configuration designates which of these ports is used by the ACNS E-CDN application.

Table 1 lists the storage, memory, and CPU specifications for the CDM-4650.

Table 1   Storage, Memory, and CPU Specifications

Specification	Description
Internal hard disk storage	8 18-GB Ultra2 LVD SCSI hard drives
External hard disk storage	SA-12
Memory	1-GB SDRAM
CPU	1-GHz Xeon

Hardware and Software Features

The CDM-4650 has the following major hardware features:

- One 1-GHz Xeon microprocessor
- Front side bus (FSB) with an external bus speed of 133 MHz
- 1 GB of system memory SDRAM
- Eight 18-GB SCSI hard disk drives
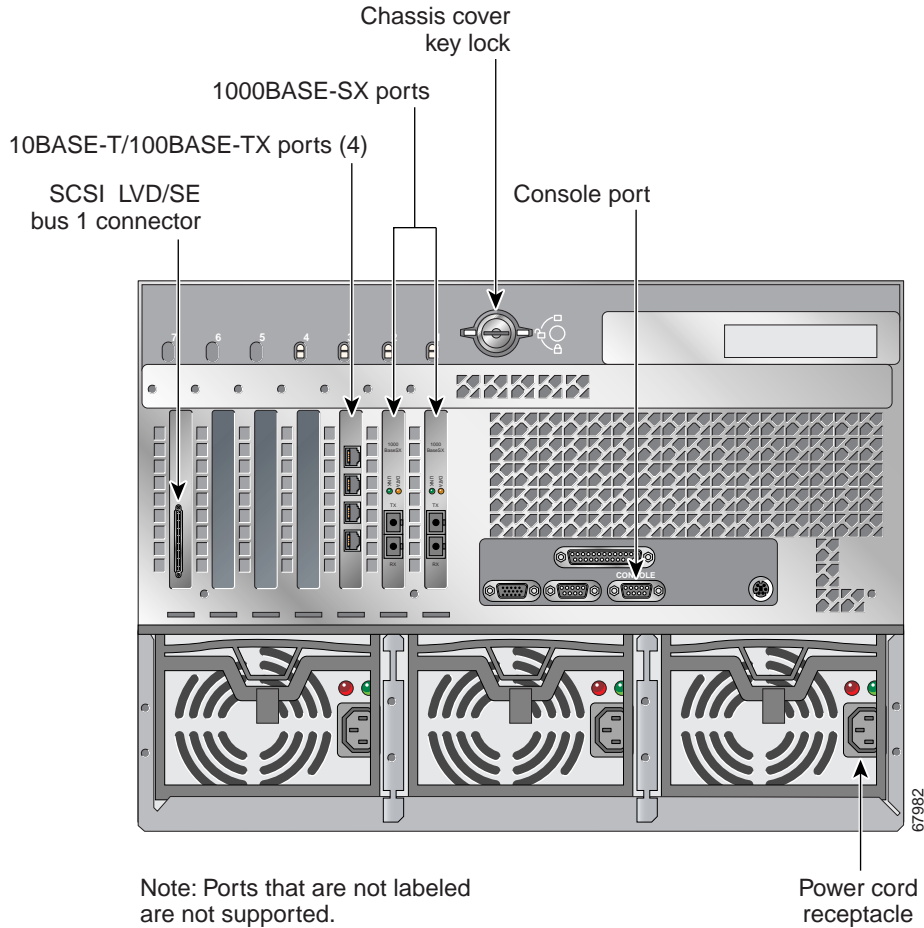- Dell PERC2 or PERC3 RAID controller

- Three independent power supplies (the third power supply provides redundancy)
- Redundant, hot-pluggable fans that run independently

The CDM-4650 manages up to 1000 Content Engines and has the following software features:

- Device manager with remote software update capability
- Channel manager licensed for 100 channels
- Bandwidth manager
- Media importer with web page creation capability
- Media previewer with test streaming capability
- Media replication engine with Self-Organizing Distributed Architecture (SODA) router
- Replica router for Content Engine selection

The Enterprise CDN software does not support the PowerEdge Expandable Redundant Array of Inexpensive Disks Controller 3 Small Computer System Interface card (PERC3 SCSI card). Therefore, a CDM-4650 operating with ACNS software and a PERC3 SCSI card cannot be downgraded to Enterprise CDN software. A CDM-4650 operating with Enterprise CDN software and a PERC2 card can be upgraded to ACNS software. Recently manufactured CDM-4650 units are shipped with the PERC3 rather than the PERC2 card. For either card, the SCSI bus 1 interface is active and the SCSI bus 0 interface is factory-sealed. A PERC3 card has two connectors mounted one above the other; SCSI bus 1 is the lower connector, as shown in Figure 1. A PERC2 card has two SCSI bus connectors mounted side by side; SCSI bus 1 is the left connector.

Figure 1   CDM-4650 with PERC3 SCSI Card–Connectors and Ports

Chassis cover
key lock

1000BASE-SX ports

10BASE-T/100BASE-TX ports (4)

SCSI LVD/SE
bus 1 connector

Console port

Note: Ports that are not labeled
are not supported.

Power cord
receptacle