



Cisco TelePresence Recording Server Release 1.8 Administration Guide

October 2011

Americas Headquarters

Cisco Systems, Inc. 170 West Tasman Drive San Jose, CA 95134-1706 USA http://www.cisco.com Tel: 408 526-4000 800 553-NETS (6387) Fax: 408 527-0883

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Preface

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General Description



The initial release of CTRS is release 1.6.

The Cisco TelePresence Recording Server (CTRS) allows users to create recordings in Cisco TelePresence Studio Mode and using the Event Recording feature. The CTRS stores recordings created by both of these sources and enables users to manage the recordings as described:

- Share recordings with others for viewing.
- Make recordings public so that anyone with access to the CTRS can view them.
- Play back recordings on a TelePresence endpoint. •
- Play back recordings with a standard browser-based player. •
- Download your recordings or public recordings.
- Upload your recordings to a Cisco Show and Share video portal for editing and distribution.

Cisco TelePresence Studio Mode

CTRS enables users to record in Studio Mode. In Studio Mode, users can create team announcements, corporate messages, training modules, video blogs, and other similar recordings.

To record, users must have access to a CTS with CTRS functionality; they control recording through the CTS IP phone interface.

The recordings can be either HD video and audio, or Common Intermediate Format (CIF). All recorded content, including materials that users choose to display on a device that is connected to the VGA input or through a document camera, is shown on the TelePresence monitor from the viewer's perspective. CTRS acts as a viewer endpoint in a TelePresence session and records what it sees.

Users can then share a recording by sending it to a recipient's e-mail address. To play a recording, the recipient must log into the browser-based Cisco TelePresence Video Portal with a corporate username and password (LDAP username and password). If the recipient wants to play a recording on a TelePresence display, he or she must sign in to CTRS through the CTS IP phone user interface with a corporate username and personal identification number (PIN).

Event Recording

Event Recording enables event controllers to record highly scripted events, such as company meetings. A CTRS records the event, while the Cisco TelePresence Multipoint Switch (CTMS) manages the recording session with the CTRS.

An event controller can manage an Event Recording session from the CTMS Administrative UI only. The CTMS Administrative UI enables the event controller to start, pause/resume, and stop the recording of the event.

After the event controller finishes recording an event, the recording is available through these interfaces:

- Cisco TelePresence Video Portal, which you can access using the following:
 - Cisco Unified IP Phone
 - Cisco Touch
 - A web browser
- CTRS Administrative UI

New in CTRS Release 1.8

The following features are new in Release 1.8.0:

- Event Recording
- Troubleshoot > Dashboard Page
- Browser Security
- UCS Server
- TIP Support

Event Recording

For information about the Event Recording feature, see the following:

- For a description of this feature, see the "Event Recording" section on page viii.
- For information about creating an Event Recording from the CTMS Administrative UI, see the *Cisco TelePresence Multipoint Switch Administration Guide*.

- For information about managing event recordings from the Cisco TelePresence Video Portal and using a Cisco Unified IP Phone or web browser, see the *Cisco TelePresence System User Guide*.
- For information about managing event recordings using the Cisco TelePresence Touch 12, see the *Cisco TelePresence Touch 12 User Guide*.
- For information about managing event recordings from the CTRS Administrative UI, see Chapter 5, "Managing CTRS Recordings."

Troubleshoot > Dashboard Page

After you log into the CTRS Administrative UI, the Troubleshoot > Dashboard page appears. You can also access this page by clicking **Dashboard** in the left navigation.

The Troubleshoot > Dashboard page enables you to scan high-level reports on the following aspects of the CTRS:

- Disk usage for media storage
- Users
- Recordings
- Time
- Services

For more information on this page, see the "Dashboard" section on page 6-1.

Browser Security

This new feature secures communication between the CTRS web server and the browser through which you access the CTRS Administrative UI. Browser security eliminates website security certificate warnings, which you receive if your web server is not secure.



To implement browser security, you must buy a Secure Sockets Layer (SSL) certificate from a certificate authority (CA), then install it on the CTRS.



Note On a CTRS, you can set up either inter-device security, which is an existing feature, or browser security, which is introduced in CTRS release 1.8. We do not support the deployment of both security features at the same time.

For more information on browser security, see the "Configuring Cisco TelePresence Browser Security" chapter of *Securing Cisco TelePresence Products, Release 1.8.*

UCS Server

CTRS release 1.8 can be installed and run on a UCS C-210 M2 server. For more information about configuring and setting up the server before the CTRS software is installed, see Chapter 3, "Installing CTRS Administration Software."

TIP Support

CTRS release 1.8 introduces support of Telepresence Interoperability Protocol (TIP) version 6.0 and version 7.0.

System Requirements

For Release 1.8 system requirements and hardware compatibility, please see the *Release Notes for Cisco TelePresence Recording Server, Release 1.8.*

CTRS Release 1.8 Administration Guide Organization

The CTRS Release 1.8 Administration Guide is organized into the following chapters:

- Chapter 1: "Using CTRS Administration Software" This section provides information about the CTRS Administration software interface
- Chapter 2: "Configuring Cisco Unified Communications Manager for CTRS" This section provides instructions on how to configure Cisco Unified Communications Manager (Cisco Unified CM) so that is supports CTRS functionality.
- Chapter 3: "Installing CTRS Administration Software" This section describes how to install the CTRS administration software on the Cisco UCS-C210-M2 server and Cisco MCS-7800 Series Media Convergence Server.
- Chapter 4: "Configuring CTRS Administration Software" This section provides information about configuring the initial CTRS system settings.
- Chapter 5: "Managing CTRS Recordings" This section describe how to record meetings using CTRS Administration software.
- Chapter 6: "Troubleshooting CTRS" This section describes how to monitor the CTRS system processes using the tools available in CTRS. It also explains how to view and categorize system error messages and alerts, and how to filter and download log files.

Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, submitting a service request, and gathering additional information, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation, at:

http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html

Subscribe to the *What's New in Cisco Product Documentation* as a Really Simple Syndication (RSS) feed and set content to be delivered directly to your desktop using a reader application. The RSS feeds are a free service and Cisco currently supports RSS Version 2.0.



CHAPTER

Using CTRS Administration Software

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- Overview of CTRS Tasks and Roles, page 1-1
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Overview of CTRS Tasks and Roles

Administrators use the CTRS Administration software to configure, to manage, to troubleshoot and to monitor activities related to the Cisco TelePresence Recording Server. Administrative tasks include the following:

- Configuring system settings. These tasks include configuring general system, security, interface failover, and LDAP settings, importing or exporting files, defining different levels of administrators, upgrading software and importing and exporting files. System settings tasks are described in "Chapter 4: Configuring CTRS Administration Software."
- Managing Recordings. These tasks include defining recording defaults, managing active recording sessions, and viewing a list of completed recordings. Recording management tasks are described in "Chapter 5: Managing CTRS Recordings."
- Troubleshooting the system. These tasks include monitoring system errors and log files to determine the causes of system errors. Troubleshooting is described in "Chapter 7: Troubleshooting CTRS."
- Monitoring the system. These tasks include restarting the system and monitoring a variety of system processes. System monitoring tasks are described in "Chapter 6: Monitoring CTRS System Processes."

Prior to configuring CTRS Administration software, you must configure Cisco Unified Communications Manager (Cisco Unified CM) to support recording. Cisco Unified CM for CTRS configuration tasks are described in "Chapter 2: Configuring Cisco Unified Communications Manager for CTRS."

Installing CTRS Administration software is described in "Chapter 3: Installing CTRS Administration Software."

Administrative Roles

CTRS administration software recognizes three different administrative roles; access to task folders is dependent on defined administrative roles.

- Administrator: Administrators have the authority to perform all tasks associated with configuring, administering, monitoring and troubleshooting CTRS.
- **Content Manager**: Content Managers primarily are responsible for managing activities associated with recording. They can only access CTRS Recording Management and System Status windows.
- **Diagnostic Technician**: Diagnostic Technicians have the authority to perform CTRS monitoring and troubleshooting tasks. They can only access CTRS Troubleshooting and Monitoring windows. You can select both Content Manager and Diagnostic Technician and this will allow a combination of accessibility of both roles for the user.

Administrative role configuration is described in "Chapter 4: Configuring CTRS Administration Software."

Supported Web Browser Types

You can access the CTRS administrative interface using Internet Explorer version 7.x or 8.x, or with Firefox version 3.6.

Logging in to the CTRS Administrative Interface

To log in to the CTRS administrative interface, do the following:

Step 1	Open a supported web browser.		
Step 2	In the address bar, enter https://CTRS_URL/admin.		
	Note	You must add /admin to the CTRS URL to get to the administrative interface. If you enter the CTRS URL without appending /admin , you go to the Cisco TelePresence Video Portal.	

Step 3 Enter your username and password.

For more information about the initial installation of CTRS, including setting the administrator username and password for the first time, see Chapter 3, "Installing CTRS Administration Software,"

Overview of the Administrative Interface

CTRS Administration software user interface is similar to the interface used in Cisco TelePresence System software suite. The user interface is organized as follows:

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- System Status, page 1-3

- Left Navigation, page 1-4
- Content Area, page 1-4

Figure 1-1 shows an example of the CTRS Administration software user interface.

Figure 1-1 CTRS Administration Software User Interface



Header

The header at the top of all CTRS administration pages list the name of the software application, the username of the user who is logged in, and links:

- <username>—In Figure 1-1, the username is admin.
- Preferences—Click to display the Preferences window, where you can change the time zone. The first time you login you need to specify the time zone you are in. This localizes recording times to your location.
- Help—Click to display online help.
- Logout—Click to log out of the system.
- About—Click to display software version and licensing information.

System Status

System status is always in view in the lower left corner of the CTRS Administration window. The system status is updated every 60 seconds. Click the **Refresh** button in the upper right corner of the box to obtain an immediate update.

The system status box shows the following information:

- Active Sessions: Shows the number of active recording sessions currently in progress.
- Errors: Shows the total number of system errors that are defined as Emergency, Alert, Critical, or Error. If the total number of system errors is 0, a green check is displayed. If the total number of system errors is more than 0, a red cross is displayed. System errors are described in "Chapter 6: Troubleshooting CTRS."
- Warnings: Shows the total number of system errors defined as WARN. If the total number of system errors is 0, a green check is displayed. If the total number of system errors is more than 0, a red cross is displayed. System warnings are described in "Chapter 6: Troubleshooting CTRS."
- Status: Shows the current state of all system processes. If all system processes are in the RUNNING state, a green check is displayed. If one or more processes are in the STOPPED state, a red check is displayed. System processes are described in "Chapter 7: Monitoring CTRS System Processes."

Left Navigation

In the left navigation, CTRS tasks are organized under Manage, Configure, and Troubleshoot. The most frequently performed tasks are at the top of the navigation and the lesser tasks are toward the bottom.

When you click a link in the left navigation, content specific to that task is displayed in the content area of the page.

Content Area

The right side of the page is the content area. When you click a link in the left navigation, the content associated with that item displays in the content area.

System Information

Click **System Information** under **Troubleshooting** in the left navigation to view information about the Cisco TelePresence Recording Server. The information displayed under System Information is configured during CTRS software installation.

- SKU
- Hostname: Hostname of the CTRS.
- IP Address and subnet mask: IP address and corresponding subnet mask of the Cisco TelePresence Recording Server.
- MAC Address: MAC address of the Cisco MCS-7845-I3 CCE4 Media Convergence Server on which the CTRS is running
- Hardware Model: Model number of the Cisco MCS-7845-I3 CCE4 Media Convergence Server on which the CTRS is running.
- Software Version: Version of CTRS Administration software currently installed.
- Operating System (OS) Version
- Kernel Version





Configuring Cisco Unified Communications Manager for CTRS

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- Configuring a Route Pattern, page 2-4

Overview

Before installing the CTRS Administration software on your Cisco MCS-7845-I3 Media Convergence Server, you need to perform the following configuration tasks in Cisco Unified Communications Manager (Cisco Unified CM):

- Create a SIP security profile. This security profile will be used on the SIP trunk between CTRS and Cisco Unified CM.
- Create a Session Initiation Protocol (SIP) trunk. The SIP trunk is used for communication between Cisco Unified CM and CTRS.
- Create route patterns. A route pattern comprises a string of digits (an address) and a set of associated digit manipulations that route calls to a route list or a gateway. Route patterns are used for routing conferences numbers to the CTRS.

Prerequisites

Before starting the tasks in this chapter, make sure that the following conditions are met or that you understand the following information:

• Cisco Unified Communications Manager (Cisco Unified CM), Release 7.1.5, Release 8.5.1, or Release 8.6.1.

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Note
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If recording meetings that will include Cisco TelePresence TC version 5.0 endpoints, Cisco Unified CM Release 8.6.1 is required

• Cisco TelePresence System is running Release 1.6 or later software.

For additional information about configuring Cisco Unified CM for Cisco TelePresence System, refer to the Cisco Unified Communications Manager Installation Guide for the Cisco TelePresence System.

For compatibility information, refer to *Cisco TelePresence Administration Software Compatibility Information*.

Logging into the Cisco Unified CM Administration Application

To log into the Cisco Unified CM Administration application:

- Step 1 Open a web browser.
- **Step 2** Access a web browser that is supported by the Cisco Unified CM Administration application from any user PC in your network. In the address bar of the web browser, enter the following URL:

https://CUCM-server-name

where CUCM-server-name is the name or IP address of the server.



You may need to specify the address of the server where Cisco Unified CM is installed. If your network uses DNS services, you can specify the hostname of the server. If your network does not use DNS services, you must specify the IP address of the server.

Step 3 Log in with your assigned administrative privileges.

Step 4 Select Cisco Unified Communications Manager Administration in the Navigation field at the upper right corner of the page and click Go to return to the Cisco Unified Communications Manager Administration home page.

Creating a SIP Trunk Security Profile

To create a SIP trunk security profile:

- Step 1 Click System. Under Security Profile, click SIP Trunk Security Profile.
- Step 2 Click the Add New button at the bottom of the page or click the + sign at the top of the page.

Step 3 Enter the settings as indicated in Table 2-1 to configure the SIP trunk security profile. Leave default settings for fields not included in Table 2-1.

Field	Required	Setting
Name	Yes	Enter a text string identifying this SIP trunk security profile.
Description		Enter a text string describing this SIP trunk security profile.
Device Security Mode	Yes	If you are running in non-secure mode, select <i>Non</i> <i>Secure</i> . If you are running SIP security, select <i>Encrypted</i> .
Incoming Transport Type	Yes	Select <i>TCP+UDP</i> . If Encrypted is selected, TLS will be entered automatically.
Outgoing Transport Type	Yes	Select <i>TCP</i> .
Incoming Port	Yes	Enter 5060 for non-secure trunk. If running SIP security, then enter a different unused port, for example 5275.

 Table 2-1
 SIP Trunk Security Profile Settings

Step 4 Click the *Save* button at the bottom of the page.

Creating a SIP Trunk

To create a SIP trunk:

- Step 1 Click *Device*. Click *Trunk*.
- Step 2 Click the *Add New* button at the bottom or click the + *sign* at the top of the Trunk Configuration page.
- Step 3 Select SIP Trunk from the Trunk Type pull-down menu, then click Next.
- **Step 4** Enter the settings as indicated in Table 2-2 to configure the SIP trunk. Leave default settings for fields not included in Table 2-2.

Field	Required	Setting
Device Information		
Device Name	Yes	Enter a text string identifying this SIP trunk.
Description		Enter a text string describing this SIP trunk.
Device Pool	Yes	Select Default.
SIP Information		
Destination Address	Yes	Enter the IP address of the CTRS.

Table 2-2 SIP Trunk Settings

Field	Required	Setting
SIP Trunk Security Profile	Yes	Select the SIP trunk security profile that you created for CTRS.
SIP Profile	Yes	Select Standard SIP Profile.

Step 5 Click the *Save* button at the bottom of the page.

Configuring a Route Pattern

A route pattern allows a Cisco Unified CM-managed device to access another device by dialing its number. Such devices may include gateways, CTRS, CTMS and CTS systems, or Cisco Unified Videoconferencing 5230 (CUVC) MCUs. Each device requires its own unique route pattern.

To configure a route pattern:

- Step 1 Click Call Routing. Under Route/Hunt, click Route Pattern.
- **Step 2** Click the *Add New* button at the bottom or click the + *sign* at the top of the Route Pattern Configuration page.

Step 3 Enter the settings as indicated in Table 2-3 to configure the SIP trunk. Leave default settings for fields not included in Table 2-3.

Field	Required	Setting
Pattern Definition		
Route Pattern	Yes	Enter the route pattern, including numbers and wildcards (do not use spaces); for example, for NANP, enter 9.@ for typical local access, or 8XXX for a typical private network numbering plan. The uppercase characters A, B, C, and D are valid characters. Note See the "Wildcards and Special Characters in Route Patterns and Hunt Pilots" section in the <i>Cisco CallManager</i> <i>System Guide</i> for more information about wildcards.
Description	—	Enter a text string describing this route pattern.
Gateway/Route List	Yes	Select the SIP trunk that you created for CTRS.
Call Classification	Yes	Select OnNet.

 Table 2-3
 Route Pattern Configuration Settings

Step 4 Click the *Save* button at the bottom of the page.

Configuring a Route Pattern





Installing CTRS Administration Software

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Overview

This chapter explains how to install Cisco TelePresence Recording Server (CTRS) release 1.8 software on the following servers:

- UCS C-210 M2 server
- Cisco MCS-7845-XX-CTRS server, where XX can be I2 or I3

Before installing CTRS software on a UCS C-210 M2 server, you must configure the server and install VMWare. For an MCS-7845-XX-CTRS server, no server preparation is required. You simply install the software on the server.

Prerequisites

Before you install the CTRS administration software system files, you need the following equipment and information:

- Cisco TelePresence System assembled and configured to support TelePresence conferencing. For more information, refer to the appropriate *Cisco TelePresence System Administrator's Guide* and the appropriate *Cisco TelePresence Assembly Guide*.
- Cisco MCS-7845-XX-CTRS server, where XX can be I2 or I3, with eight 146 gigabytes drives, installed and connected to a Domain Name System (DNS) server and your network.
- Console able to access the Cisco MCS-7845-XX-CTRS server, where XX can be I2 or I3.

- DVD that contains the CTRS Administration software application.
- Cisco Unified Communications Manager (Cisco Unified CM) Release 7.0.2, Release 7.1.5, Release 8.5.1, or Release 8.6.1, configured to support CTS Release 1.6 and integrated to work with CTRS, meaning that a SIP security profile, SIP trunk, and route pattern specific to CTRS have been created. For more information about Cisco Unified CM for CTS configuration, refer to Cisco Unified Communications Manager Configuration Guide for the Cisco TelePresence System.



If recording meetings that will include Cisco TelePresence TC version 5.0 endpoints, Cisco Unified CM Release 8.6.1 is required

Preparing an UCS C-210 M2 Server for CTRS Software Installation

Before installing CTRS administration software on a UCS C-210 M2 server, you must configure and install VMWare on the server. This section is comprised of the following topics:

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- Installing VMware on the UCS Server, page 3-6
- Installing the VMware Client and Creating the Virtual Machine, page 3-7
- Disabling LRO (ESXi 4.1 only), page 3-9
- Importing the OVF Template, page 3-10
- Installing CTRS Software, page 3-11
- Upgrade VMware Tools, page 3-11
- Installing the VMware License, page 3-12

Requirements

Before you begin, make sure you have the following items:

- Hostname and IP address for the VMware ESXi host
- Hostname and IP address for the CTRS
- IP address of DNS server
- Subnet mask
- Default gateway
- Domain name
- IP address of NTP server
- Cisco UCS Server Configuration Utility CD
- VMware ESXi 4.1/vSphere 5 Standard for 1 processor (Purchase from Cisco or VMware.)
 - When purchasing from Cisco, use the following SKU: VMW-VS5-STD-1A
 - When downloading the VMware software, make sure to select ESXi 4.1.

- ESXi 4.0 is also supported.
- OVF template file for CTRS (Download from Cisco.com)
- PC running Microsoft Windows connected to the same network as the UCS server

Firmware Recommendation and Upgrade

For the best results, Cisco recommends UCS firmware version 1.2.2d or later.

Checking the Firmware Version on the UCS Server

To check the firmware version on the UCS server:

Step 1	Set up Cisco Integrated Management Controller (CIMC) for your UCS Server.	
	For details, refer to: http://www.cisco.com/en/US/products/ps10493/products_configuration_example09186a0080b10d66.s html	
Step 2	In the CIMC Configuration Utility, configure the IP address and save the changes:	
	NIC mode: dedicated	
	NIC redundancy: none	
Step 3	Open a browser and go to the CIMC IP address.	
Step 4	Log in to the CIMC	
	By default, the username is admin and the password is password .	
Step 5	Go to Admin > Firmware Management.	
	The firmware version is displayed here. It is also displayed on the login page.	
Step 6	If you want to upgrade the firmware, go to the next section: Upgrading the Firmware on the UCS Server, page 3-3	

Upgrading the Firmware on the UCS Server

To upgrade the firmware on the UCS server:

- **Step 1** Download the firmware from Cisco:
 - a. Go to: http://cisco.com/support
 - **b.** Click the **Downloads** tab
 - c. Click in the Find field, enter UCS and click Find. The Select a Product page appears.
 - d. Click the link for the Cisco UCS C-210 M2 Rack-Mount Server Software. The Download Software page appears.
 - e. Click the link for **Unified Computing System (UCS) Server Firmware**. The available firmware releases are displayed.

- f. Select a firmware release and click Download Now.
- g. Log in to Cisco.com (if required).
- h. In the Download Cart page, click Proceed With Download. The End User License Agreement page appears.
- i. Click Agree.
- j. Select one of the available download options.
- **k.** Click the **Download** link.
- **Step 2** Log in to the CIMC (if not already logged in).
- Step 3 Go to Admin > Firmware Management
- Step 4 Click Install CIMC Firmware through Browser Client. The Install Firmware window appears.
 Step 5 Click Browse, select the firmware you downloaded and click Install Firmware.
- Step 6 When a message appears indicating the upgrade is completed successfully, click Activate CIMC Firmware.
- **Step 7** The upgrade takes about 20 minutes.
- **Step 8** When the upgrade is complete, reboot the UCS server.

Configuring RAID on the UCS Server

This section describes the process for configuring RAID on the UCS server. RAID must be configured before installing VMware, setting up the virtual machine and installing the CTRS software.

Note If the UCS server was purchased from the TelePresence Technology Group (TTG) or Voice Technology Group (VTG) at Cisco, the RAID will be preconfigured. In this case, skip this section and start in the "Installing VMware on the UCS Server" section on page 3-6.

To configure RAID on the UCS Server:

Step 1 Insert the Cisco UCS Server Configuration Utility CD and reboot UCS server. Cisco UCS Server Configuration Utility version 1.0.0 screen appears.
Step 2 Wait for application to load and the License Agreement screen to appear.
Step 3 Click I Accept and click Next. The My Server screen appears.
Step 4 Click RAID Configuration The Choose RAID Controllers screen appears.
Step 5 Click LSI MegaRAID SAS 9261-8i (External) and click Next.
Step 6 The RAID Configuration screen appears. Step 7 Click Create custom or multiple RAID Arrays (advanced) and click Next.

The Select Drives for Logical Drive screen appears.

Step 8Select Disks 0 and 1 and click Next.

The Select Hotspare Drives screen appears.

Step 9 Click Next.

The Define Array Attributes screen appears.

- **Step 10** Set the fields the following way:
 - RAID Level: 1
 - Stripe size: **64k** (only option)
 - Read policy: Read Ahead (other options: No Read Ahead, Adaptive Read Ahead)
 - Write Policy: Write Through (other option: Write Back)
 - Cache Policy: **Direct IO** (other option: Cache IO)
 - Size (MB): 139236
- Step 11 Click Next.

The Summary screen appears displaying RAID array information.

Step 12 Click Create Array.

The Array Definition Complete screen appears with the message "Virtual Drive Created Successfully".

Step 13 Click Create Another Array.

The Choose RAID Controllers screen appears.

- Step 14 Click LSI MegaRAID SAS 9261-8i (External) and click Next.
- Step 15 Click Create custom or multiple RAID Arrays (advanced) and click Next.

The Select Drives for Logical Drive screen appears.

Step 16 Select disks **2** through **9** and click **Next**.

The Define Array Attributes screen appears.

- **Step 17** Set the fields the following way:
 - RAID Level: 5
 - Stripe size: **64k** (only option)
 - Read policy: Read Ahead (other options: No Read Ahead, Adaptive Read Ahead)
 - Write Policy: Write Through (other option: Write Back)
 - Cache Policy: **Direct IO** (other option: Cache IO)
 - Size (MB): 974652
- Step 18 Click Next.

The Summary screen appears displaying RAID array information.

Step 19 Click Create Array.

The Array Definition Complete screen appears with the message "Virtual Drive Created Successfully."

Step 20 Click Finish.

The My Server screen appears.

Step 21 Eject the CD.

Installing VMware on the UCS Server

This section describes how to install VMware on the UCS C-210 M2 server. VMware ESXi 4.0 and 4.1 are supported for this version of CTRS on the UCS C-210 M2 server.

To install VMware on the UCS server:

Step 1	Insert the VMware Installer CD.				
Step 2	Reboot the UCS server by doing either of the following:				
	• If RAID on your UCS server was preconfigured by Cisco: Reboot the UCS server.				
	• If you configured RAID on your UCS (following the steps in the previous section): In the My Server screen, click Exit and then click OK to confirm and reboot the UCS server.				
	The VMware screen appears.				
Step 3	Wait for the bootup process to complete. Do not press any keys.				
	The bootup is complete when the VMware ESXi Installer screen appears with a welcome message.				
Step 4	Press Enter to install VMware.				
	The End User License Agreement (EULA) screen appears.				
Step 5	Press F11 to accept the agreement and continue.				
	The Select a Disk screen appears displaying the installed disks and their size.				
Step 6	Use the arrow keys to select the disk for the RAID 1 array and press Enter.				
Note	The RAID 1 array is the smaller of the two RAID arrays.				
	The Confirm Install screen appears.				
Step 7	Press F11 to start the installation.				
	The installation begins.				
	The installation is finished when the Installation Complete screen appears.				
Step 8	Eject the VMware CD.				
Step 9	Press Enter to reboot the UCS server.				
	When bootup is complete, the VMware ESXi screen appears with the message:				
	"Download tools to manage this host from:" followed by a URL.				
Step 10	Press F2 to customize the system.				
	The System Customization screen appears.				
Step 11	Select Configure Password (selected by default) and press Enter.				
	The Configure Password screen appears.				
Step 12	In the New Password field, enter a password and press Tab .				

- Step 13 In the Confirm Password field, re-enter that password and press Enter.
- Step 14Select Configure Management Network and press Enter.The Configure Management Network screen appears.
- Step 15Select Network Adaptors (selected by default) and press Enter.The Network Adaptors screen appears.
- **Step 16** Select the adaptor which is connected and press **Enter.**
- Step 17 Select IP configuration and press Enter.The IP Configuration screen appears.
- Step 18 Select Set Static IP address and network configuration.
- **Step 19** Enter IP address, Subnet Mask and Default Gateway and press **Enter**.
- Step 20 Select DNS Configuration and press Enter.
- **Step 21** The DNS Configuration screen appears.
- Step 22 Select Use the following DNS server addresses and hostname.
- Step 23 Enter Primary DNS Server and Hostname and press Enter.
- Step 24 Select Custom DNS Suffixes and press Enter.

The Custom DNS Suffixes screen appears.

- Step 25 Enter your company's domain followed by a comma, a space and "localdomain" and press Enter. For example: yourcompany.com, localdomain
- **Step 26** In the Configure Management Network window, press **Esc** to return to the System Customization window.
- Step 27 Select Test Management Network and press Enter.The Test Management Network screen appears.
 - -----
- Step 28 Press Enter.

The VMware software will attempt to ping your default gateway, DNS server and hostname. The test should display "OK" for each ping attempt.

Step 29 Press Enter.

The System Customization window appears.

Step 30 Log out of the VMware ESXi Installer by pressing **Esc**.

The VMware ESXi screen appears.

Step 31 Note the IP address displayed on this screen. You will use this IP address to download the VMware vSphere client to your PC to create your virtual machine in the next section.

Installing the VMware Client and Creating the Virtual Machine

This section describes how to install the VMware vSphere Client and create the virtual machine. To complete this procedure, you must use a PC that is connected to the same network as your UCS server.

To set up the virtual machine:

Step 1 From your PC, open a web browser and go to the IP address displayed on the VMware ESXi screen at the end of the previous section.

The VMware ESXi Welcome page appears.

- **Step 2** Click Download vSphere Client and follow the on-screen instructions to install the vSphere Client on your PC.
- **Step 3** Open the VMware vSphere Client.
- **Step 4** Log in to the ESXi host on the UCS server using the following information:
 - IP address / name: IP address of UCS server (used in step 1)
 - User name: root
 - Password: VMware password created during installation on the UCS server

A Security Warning window appears, indicating that an untrusted SSL certificate is installed.

Step 5 Click the checkbox for "Install this certificate and do not display any security warnings" and click Ignore.

A VMware Evaluation Notice window appears, indicating that you must upgrade your ESX Host license. The initial evaluation license expires 60 after installation.

Step 6 You can upgrade it now, by following the instructions starting in step 2 of Installing the VMware License, page 3-12 or click **OK** if you want to upgrade later.

The vSphere Client window opens with the UCS server (identified by IP address) displayed in the left-hand side of the window.

The next step is to align the datastore on which you will set up your virtual machine (the largest volume). This improves disk performance and prevents disk blocks from being fragmented.

- **Step 7** Click the **Summary** tab.
- **Step 8** In the Datastore area, right-click the datastore with the largest capacity and select **Delete**.

A confirmation window appears.

Step 9 Click **Yes** to confirm you want to delete the datastore.

In the Recent Tasks area at the bottom of the window, the Remove Datastore task appears.

- **Step 10** Wait for the task to display a status of "Completed."
- Step 11 Click the Configuration tab.
- **Step 12** In the Hardware area on the left, click **Storage**.

In the Datastores area, the remaining datastore is displayed.

Step 13 In the upper right above the Datastores area, click **Add Storage...**.

The Add Storage window opens and the Select Storage Type screen is displayed.

Step 14 Select Disk/LUN (selected by default) and click Next.

The Select Disk/LUN screen appears.

Step 15 Click the **Local LSI Disk** and click **Next**.

The Current Disk Layout screen appears confirming the disk partition you will create.

Step 16 Click Next.

The Properties screen appears.

- Step 17 Enter a name for your datastore and click Next.The Disk/LUN Formatting screen appears.
- Step 18 From the Maximum file size drop-down list, choose 256 GB, Block size: 1 MB and make sure Maximize Capacity is checked.
- Step 19 Click Next.

The Ready to Complete screen appears.

Step 20 Click Finish.

In the Recent Tasks area at the bottom of the window, the Create VMFS Datastore task appears.

Step 21 Wait for the task to display a status of "Completed."

After completion, you have two datastores. The datastore with the smaller capacity is the RAID 1 configuration, where the VMware software is installed, and the datastore with the larger capacity is the RAID 5 configuration, where you will deploy the virtual machine and install the CTRS software.

Disabling LRO (ESXi 4.1 only)

If you are running VMware ESXi 4.1 on the UCS server, you may experience slow TCP performance of the virtual machine. You can resolve this by disabling Large Receive Offload (LRO) on the ESXi host.

To disable LRO:

- Step 1 Log into the ESXi host on the UCS server with the VMware vSphere Client (if not already logged in).
- **Step 2** Click the UCS server icon in the left-hand side of the window.
- **Step 3** Click the **Configuration** tab.
- **Step 4** In the Software section, click **Advanced Settings**.
- **Step 5** Select **Net** and scroll down slightly more than half way.
- **Step 6** Set the following parameters from 1 to 0:
 - Net.VmxnetSwLROSL
 - Net.Vmxnet3SwLRO
 - Net.Vmxnet3HwLRO
 - Net.Vmxnet2SwLRO
 - Net.Vmxnet2HwLRO
- **Step 7** Right-click the UCS server and select **Reboot**.

Your virtual machine should now have normal TCP networking performance.

Importing the OVF Template

This section describes how to deploy the Open Virtualization Format (OVF) template for CTRS to create the virtual machine on which to install the CTRS software. OVF is a standard for packaging and distributing virtual machines. The OVF template streamlines the process of setting provided by Cisco contains all the virtual machine settings required for the CTRS.

The OVF template for CTRS is provided by Cisco.

To install the OVF template:

- **Step 1** Download the OVF template from Cisco:
 - a. Go to: http://cisco.com/support
 - **b.** Click the **Downloads** tab
 - **c.** Click in the Find field, enter **Cisco TelePresence Recording Server** and click **Find**. The Select a Product page appears.
 - d. Click the link for the Cisco TelePresence Recording Server Release 1.8. The Download Software page appears.
 - e. Select CTRS.ova and click Download Now.
 - f. Log in to Cisco.com (if required).
 - g. In the Download Cart page, click Proceed With Download.The End User License Agreement page appears.
 - h. Click Agree.
 - i. Select one of the available download options.
 - j. Click the Download link.
- Step 2 Log into the ESXi host on the UCS server with VMware vSphere Client (if not already logged in).
- Step 3 Select File > OVF Template.

The Deploy OVF Template window opens.

- Step 4 Select Deploy from File.
- Step 5 Click Browse
- Step 6 Select the OVF template for the TelePresence product you want to install and click Open.
- Step 7 Click Next.

The OVF Template Details page appears.

- Step 8 Click Next.
- **Step 9** Enter a name for your virtual machine and click Next.

The Datastore page appears.

- Step 10Click the largest datastore and click Next.The Ready to Complete page appears.
- Step 11 Click Finish.

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Note	After clicking in the console window, you can no longer use you

After clicking in the console window, you can no longer use your mouse. This is normal behavior, because you cannot use the mouse in the console. If at any time you need to regain control of your mouse, press Ctrl+Alt. To make the console window active again, click in the console window.

- Step 8 Follow the rest of the installation as detailed in "Installing the CTRS Administration Software" section on page 3-13
- Step 9 After completing the installation, press Ctrl+Alt to exit the console window and regain control of your mouse.
- Step 10 Close the VMware vSphere Client by selecting **File > Exit**.

Upgrade VMware Tools

This section describes how to upgrade the VMware tools which is required after installing CTRS.

To upgrade VMware tools:

- Step 1 Log into the ESXi host on the UCS server with VMware vSphere Client. Step 2 Make sure the virtual machine for CTRS is powered on.
- Step 3 Right-click the CTRS virtual machine, and choose **Guest > Install/Upgrade VMware Tools**.



- Step 4 In the popup window that appears, choose Automatic Tools Upgrade and click OK.
- **Step 5** In the Recent Tasks area at the bottom of the vSphere Client window, wait for the VMware Tools Installer Mount to display a status of Completed.

Installing the VMware License

This section describes how to install the VMware software license. After installation, the VMware vSphere Client software works for 60 days, after which you must upgrade to a host license to continue using it to manage the CTRS.

To install the VMware license:

Step 1	Log in to the VMware vSphere Client.
	The VMware vSphere Client opens and a VMware Evaluation Notice window appears, indicating that you must upgrade your ESX Host license.
Step 2	Click Upgrade your ESX host license .
	A browser window opens and the VMware vSphere page appears.
Step 3	Enter your First Name, Last Name, Email Address and click Continue.
	The Evaluate VMware Products page appears.
Step 4	Enter the additional required information, agree to the terms and conditions and click Register .
	The VMware vSphere Product Evaluation Center page appears.
Step 5	Check the email account for the email address you provided in step 4 and open the email titled "Activate VMware Account."
Step 6	Click Activate Now.
	A browser window opens and the Enter Your Password page appears.
Step 7	Enter the password you created in step 4 and click Continue.
	The Account Activate page appears informing you that your account has been activated and then the VMware vSphere Product Evaluation Center page appears.
Step 8	In the VMware vSphere Client, close the VMware Evaluation Notice window by clicking OK.
Step 9	Click the Configuration tab.
Step 10	In the Software area on the left side of the vSphere Client window, click Licensed Features.
	The Licensed Features information for the ESX Server License Type appears.
Step 11	In the upper-right part of the window, click Edit.
	The Assign License window appears.
Step 12	Click Assign a new license key to this host and click Enter Key.
Step 13	The Add License Key window appears.
Step 14	Enter the license key you received from VMware and click OK.
	License information appears below the key you entered.

Step 15 Click OK.

Step 16 In the Recent Tasks area at the bottom of the vSphere Client window, wait for the Installing license and Decode license tasks to display a status of Completed.

Installing the CTRS Administration Software

To install the CTRS Administration software application:

- **Step 1** Insert the CTRS Administration software application DVD into the appropriate drive in the server and boot up the host.
- Step 2 Media Check: The system asks if you wish to perform a media check on the inserted DVD. Select Yes or No and press the Enter key. If you select No, the system bypasses the media check. If you select Yes, the system performs a checksum to make sure that the media on the DVD is intact. When the checksum has successfully completed, select Okay and press the Enter key.



- **Note** If the checksum fails, it could be because of a problem with either the DVD or the DVD drive. The DVD or the DVD drive could need cleaning; the DVD data could be corrupted; or the software image you are trying to load could be the wrong image.
- **Step 3** Hard Drive Check: The system then checks the status of the hard drives in the server. When cued to update BIOS or to overwrite the hard drive, select *Yes* and press the Enter key to continue.
- **Step 4 Platform Installation Wizard:** Select *Proceed* and press the Enter key to continue.
- **Step 5** Automatic Negotiation of Ethernet NIC Speed and Duplex: Select *Yes* and press the Enter key to continue.
- **Step 6 DHCP**: Cisco Systems recommends that you use a static IP address instead of DHCP. Select *No* to define a specific static IP address and press the Enter key. Enter the following information:
 - Hostname: Hostname of the CTRS server
 - IP Address: IP address of the CTRS server
 - IP Mask: Subnet mask for the CTRS server IP address
 - Gateway Address: IP address for the gateway to the CTRS server

Select **Okay** and press the Enter key to continue.

- **Step 7 DNS Client**: Select *Yes* and press the Enter key. Enter the following information:
 - Primary DNS: IP address of the primary Domain Name System server
 - Secondary DNS: IP address of the secondary Domain Name System server

Domain: Domain name for your company

Select Okay and press the Enter key to continue.

Step 8 Platform Administrator Username and Password: Enter the following information:

- Administration ID
- Password
- Confirm Password

Select Okay and press the Enter key to continue.

Step 9 Certificate Information: Enter the following information:

- Organization
- Unit
- Location
- State
- Country

Select Okay and press the Enter key to continue.

Step 10 Network Time Protocol (NTP) Client Information: Enter the following information:

- NTP Server 1: IP address of the primary NTP server
- NTP Server 2: IP address of the secondary NTP server
- NTP Server 3 through 5: IP addresses of additional NTP servers

Select Okay and press the Enter key to continue.



The NTP servers identified must be the same for CTRS, CTMS, CTS and CTM. It is recommended that you provide at least three NTP servers.

- **Step 11** Database password: Enter the database password and then press the Enter key to continue.
- Step 12 Platform Configuration Confirmation: Select Okay to continue with installation. select Back to go to previous pages in the installation procedure, or Cancel to abort the installation. When you have made your selection, press the Enter key. If you select Okay, platform and application installation takes approximately 30 to 45 minutes. During installation, allow the default selection for the custom kernel to proceed.
- Step 13 After the CTRS Administration software application files have been installed, the system automatically reboots. The system then performs a check of the network connectivity and setup. If the system determines that any of the information you entered during the preceding steps is incorrect, a message is displayed on the console, giving the you the following options:
 - Retry: Select this option (and press the Enter key) to retry the installation procedure.
 - Review: Select this option (and press the Enter key) if you need to change any of the data you entered during the preceding installation steps. If you select this option, navigate to the appropriate installation data entry page, re-enter the data, and then proceed to the **Platform Configuration** page to re-initiate installation.

- Halt: Select this option (and press the Enter key) if you need to abort installation.
- Ignore: Select this option (and press the Enter key) to ignore the system warning.
- **Step 14** After the network connectivity and setup check, the system reboots again. Following this reboot, the CTRS Administration software log-on page is displayed. Enter your username and password to continue with CTRS Administration software configuration.

Replacing a Hard Disk Drive

This section describes how to replace a hard disk drive in a Cisco MCS-7845-Ix server on which CTRS software is running.



We do not recommend replacing a hard disk drive while the CTRS is powered on, a process known as hot swapping. Hot swapping a hard disk drive can result in configuration data loss as well as loss of stored videos.

Step 1 Perform a backup of the CTRS configuration data only.

A backup of the CTRS configuration data may be needed if the scenario described in step 6 occurs. If this scenario occurs, the CTRS configuration data cannot be restored from a backup of the full system data, so make sure to perform a backup of the CTRS configuration data only.

- **Step 2** Export the media files (videos) to an archive server.
- **Step 3** Power down the CTRS.
- **Step 4** Replace the hard disk drive.
- **Step 5** Power on the CTRS.
- Step 6 If the CTRS is unresponsive, you must re-install the CTRS software.

For complete information on how to install the software, see the *Cisco TelePresence Recording Server Administration Guide* at this location:

http://www.cisco.com/en/US/products/ps10341/prod_maintenance_guides_list.html

- **Step 7** Restore the configuration data.
- **Step 8** Import the archived media files to the CTRS.






Configuring CTRS Administration Software

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The following sections describe settings in the System Configuration pages for the Cisco TelePresence Recording Server (CTRS). System Configuration is divided into the following areas:

- Logging Into the Administrative Interface, page 4-2
- Left Navigation of the Administrative User Interface, page 4-2
- Access Management, page 4-3
- Alert Management, page 4-9
- Application Settings, page 4-10
- Backup Settings, page 4-12
- Cisco Show and Share, page 4-21
- CTS-Manager, page 4-25
- Email Server, page 4-26
- Interface Failover, page 4-27
- LDAP Configuration, page 4-28
- Security Settings, page 4-32
- Software Upgrades, page 4-32
- System Settings, page 4-34
- Unified CM, page 4-46

Logging Into the Administrative Interface

To log in to the CTRS administrative interface, do the following:

Step 1 Open a supported web browser.

Step 2 In the address bar, enter **https://***CTRS_URL***/admin**.



You must add **/admin** to the CTRS URL to get to the administrative user interface. If you enter the CTRS URL without appending **/admin**, you go to the Cisco TelePresence Video Portal.

Step 3 Enter your username and password.

For more information about the initial installation of CTRS, including setting the administrator username and password for the first time, see Chapter 3, "Installing CTRS Administration Software."

Left Navigation of the Administrative User Interface

You can access any of the Configure pages from the left navigation in the CTRS user interface (see Figure 4-1):

Figure 4-1 Configure – Left Navigation

۳	Manage	
	Active Recordings	
	Completed Recordings	
۳	Configure	
	Access Management	
	Alert Management	
	Application Settings	
	Backup Settings	
	Cisco Show and Share	
	Email Server	
	Interface Failover	
	LDAP Configuration	
	Security Settings	
	Software Upgrades	
	System Settings	
	Unified CM	
	Troubleshoot	
	Dashboard	
	Process Status	
	Hardware Status	
	System Information	
	System Status	
	System Messages	g
	Log Files	Т В
_		-

Access Management

Use the fields under Access Management to define CTRS administrators and to provide access to the Cisco TelePresence Video Portal. Access Management is divided into two tabs:

- Administrative Portal, page 4-3
- End-User Portal, page 4-6

Administrative Portal

In Access Management, click the **Administrative Portal** tab to display or configure CTRS administrative roles (see Figure 4-2).

configure > Access Management Administrative Portal					
Admi	nistrative Portal	End-user Portal			
	Username	Administrator	Content Manager	Diagnostic Technician	Email Address
0	admin	✓	×	×	

Figure 4-2 Configure > Access Management – Administrative Portal

Access to task menus within CTRS Administrative software is dependent on defined administrative roles. CTRS administration software recognizes three different administrative roles:

- Administrator: Administrators have the authority to perform all tasks associated with configuring, administering, monitoring and troubleshooting CTRS.
- **Content Manager**: Content Managers primarily are responsible for managing activities associated with recording. They can only access CTRS Recording Management and System Status windows.
- **Diagnostic Technician**: Diagnostic Technicians have the authority to perform CTRS monitoring and troubleshooting tasks. They can only access CTRS Troubleshooting and Monitoring windows.

Administrative Portal initially displays a table providing the following information about already-defined administrative users as described in Table 4-1:

Field	Description
User-Name	User-name of a specific CTRS user.
Administrator	Administrators have the authority to perform all tasks associated with CTRS. Administrators have access to all menus in CTRS Administration software. A green check in this field indicates that the selected user has been designated as an administrator.

 Table 4-1
 Administrative Portal Table Field Descriptions

Field	Description
Content Manager	Content managers are responsible for managing activities associated with recording. They can only access CTRS Recording Management and System Status windows. A green check in this field indicates that the selected user has been designated as a content manager.
Diagnostic Technician	Diagnostic Technicians have the authority to perform CTRS monitoring and troubleshooting tasks. Diagnostic Technicians have access to the Troubleshooting and Monitoring windows in CTRS Administration software. A green check in this field indicates that the selected user has been designated as a diagnostic technician.

Table 4-1 Administrative Portal Table Field Descriptions

- To delete one of the defined administrators, click the radio button to the left of the table entry, and then click **Delete**.
- To define a new administrator, click New.
- To edit one of the defined administrators, click the radio button to the left of the table entry, and then click **Edit**.

Creating a New Administrative User

When you click New, a dialog box appears (see Figure 4-3).

Figure 4-3 Configure > Access Management – Administrative Portal (New)

Configure > Access Management

🜣 User Name:		
🜣 Password:		
🗢 Verify Password:		
Email Address:		
🗢 Role:	🗌 Administrator 🔲 Content-Manager 🔲	Diagnostic-Technician
🗢 = Required fields		
Apply Close		

Enter settings as described in Table 4-2.

Field or Button	Setting		
User Name	Username identifying a defined role as selected from the Role field.		
	Note A username must be at least 5 characters, but not more than 64 characters in length. The username must contain letters and numbers, but it cannot contain special characters, except for the underscore character. Letters can be uppercase and lowercase.		
	The username cannot be all numbers.		
	The following usernames are not allowed: apache, daemon, nobody, operator, and shutdown.		
Password	Password for the username indicated in the User name field.		
	Note Passwords must be at least 6 characters, but not more than 64 characters.		
Verify Password	Re-enter the password defined for this user.		
Email Address	Email address for this defined user.		
Role	Defines a specific user role. In CTRS Administration software, there are three possible roles, each with specific levels of administrative access:		
	• Administrator: Administrators have access to all pages and configuration tasks in CTRS Administration software.		
	• Content Manager: Content managers are responsible for managing activities associated with recording. They can only access CTRS Recording Management and System Status windows.		
	• Diagnostic Technician: Diagnostic Technicians have access only to Monitoring and Troubleshooting windows and one task (system restart) in CTRS Administration software.		
	Note A single user can have more than one role.		
	Click the appropriate radio button(s).		

Table 4-2	New Access	Management	Settings
	NEW ALLESS	wanayement	Settings

- To register new or modified settings, click Apply.
- To close the window, click **Close**.

Note

When you add a new administrative user, the CTRS does not validate that administrative user against LDAP. When you add a user, the CTRS ensures that the user exists in LDAP.

Editing a Defined Administrative User

When you click the radio button for a particular administrative user and then click **Edit**, a dialog box appears. Enter settings as described in Table 4-3.

Field or Button	Setting	
User Name	(View only.) Administrative user's user name.	
Password	Click this option to change the password for a defined user.	
	Note Passwords must be at least 6 characters, but not more than 64 characters in length.	
Email Address	Email address for this defined user.	

Table 4-3	Edit Administrative	User Settings
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- To register new or modified settings, click Save.
- To close the window, click **Close**.

End-User Portal



You should configure LDAP servers before you create users for the user portal. To configure LDAP servers, go to System Configuration > LDAP Configuration.

In Access Management, click the **End-user Portal** tab to display or configure users of the user portal (see Figure 4-4).

۱am	inistrative Porta		
Admi	nistrative Portal End	-user Portal	
	Email Address	Last Name	First Name
	vty@cisco.com	Tuy	V
	shtel@cisco.com	Patel	S
	vson@cisco.com	Vinson	к
	dsu@cisco.com	Su	D
	tw@cisco.com	Wong	Т
	chllus@cisco.com	Gillus	С
	rlik@cisco.com	Malik	R

Figure 4-4 Configure > Access Management – Cisco TelePresence Video Portal

When you click the End-user Portal tab, you see a list of users with access to the Cisco TelePresence Video Portal using an IP phone, Cisco TelePresence 12" device, or through a web browser.

- To sort the list of users by Email Address, Last Name, or First Name, click the respective column header in the Configure > Access Management page, End-user Portal tab.
- To delete a user, click the radio button next to the user email address. Then click **Delete**. All recordings that belong to this user are deleted from the CTRS.
- To edit the settings for a user, click the radio button next to the user email address. Then click **Edit**. After you modify settings, click **Save**.
- To create a new user, click New.

Creating a New User or Modifying Settings for an Existing User

When you click New or Edit, a dialog box appears (see Figure 4-5).

Figure 4-5 Configure > Access Management – End-user Portal (New or Edit)

Configure > Access Management 🜣 Email Address: PIN: Verify PIN: (UTC+00:00) Etc/UTC 🜣 Time Zone: ¥ Observes DST: No 🔅 Language (Locale): English (United States) 🔽 Show Presentation When Connected: 💿 Yes 🔘 No Always See Yourself on Screen: 💿 Yes 🔘 No 💿 Yes 🔘 No Record Presentation: Use Count Down Timer: 💿 Yes 🔘 No 15 minutes Session Timeout: ¥ 🗢 = Required fields 343035 Submit Close

Enter settings as described in Table 4-4.

Table 4-4 User Settings

Field or Button	Setting	
Email Address	Email address of the user.	
PIN	Personal identification number for the user.	
	Note A PIN must be 6 numbers. Sequential numbers in the PIN must be nonrepeating.	
Verify PIN	Re-enter the PIN.	
First Name	First name of the user. (This field is not editable, and only appears when editing an existing user account.)	

Field or Button	Setting
Last Name	Last name of the user. (This field is not editable, and only appears when editing an existing user account.)
Time Zone	Time zone in which the user resides.
Observe DST	Whether or not the user's time zone observes Daylight Savings Time.
Language (Locale)	The language spoken by the user.
Show Presentation When Connected	Click Yes to display a presentation on a device (for example, a laptop) that is connected to the VGA input or to display a presentation on a document camera. With this setting enabled, the user sees the presentation on the recording screen.
Always See Yourself on Screen	Click Yes to display the user in the recording screen. If you click No , the camera records the user, but the user does not appear in the screen during recording.
Record Presentation	Click Yes to include the presentation in the video.
Use Count Down Timer	Click Yes to use the 5-second count-down timer. If you click No , the camera begins recording as soon as the user taps Record on the IP phone interface.
Session Timeout	Choose how much time must elapse before the IP phone or Cisco Touch 12 device times out because of inactivity.

Table 4-4	User Settings (continued)
-----------	---------------------------

- To save the settings for a new user, click Apply. To save settings for an existing user, click Save.
- To close the dialog box without saving the settings, click Close.

Note

The CTRS administrator does not have to create user accounts and PINs. Users can create their own accounts and PINs to access the browser-based Cisco TelePresence Video Portal. When users create accounts, they automatically appear in the user list in the End-user Portal tab in the CTRS administrative UI (see Figure 4-4).

To learn how to create their own accounts, users should read the "Creating and Viewing Recordings with the Cisco TelePresence Recording Server" chapter in the *Cisco TelePresence System User Guide*:

http://www.cisco.com/en/US/docs/telepresence/cts_admin/1_6/userguide/cts1_8_ug.html

Alert Management

Click **Alert Management** in the left menu to display or configure alert management settings (see Figure 4-6).

Figure 4-6 Configure > Alert Management

Configure > Alert Management	t
Disk Threshold Percentage:	80 %
Email Addresses:	inouye@example.com
	~
	Please enter multiple email addresses separated by Carriage Return(the ENTER Key).
Required fields	
Apply Reset	

Use the Alert Management page to define the CTRS disk threshold at which export data (either transfer to archive servers or data deletion) will be sent to the users and the email addresses to which these alerts will be sent. Enter settings as described in Table 4-5

Note

To see current disk utilization for media storage, go to Troubleshoot > Hardware Status.

Field or Button	SettingEnter a percentage. When the disk space reaches this threshold, CTRS sends an alert to the those listed in the Email Addresses field. 80% is the default.		
Disk Threshold Percentage			
Email Addresses	Enter email addresses. Recipients receive an email when the disk threshold reaches the percentage that is specified in the Disk Threshold Percentage field.		
	Note If you want to add more than one email address, press the Enter key after you add each address.		

 Table 4-5
 Alert Management Settings

- To register new or modified settings, click Apply.
- To restore default settings, click **Reset**.

Application Settings

Click Application Settings in the left menu to display or modify application settings (see Figure 4-7).

Figure 4-7 Configure > Application Settings

Configure > Applicatior	Settings
User Portal: Enable Dis Dis Recording Default Settings Resolution: ✓ HD Quality: Highest Detail, Best ✓ CIF Maximum Simultaneous Conr Recording/Replay: 24 Select locales for users who To install more locales of	Motion: 1080p
Available: German (Germany) Hebrew (Israel) Italian (Italy) Japanese (Japan) Korean (South Korea) Norwegian (Norway) Portuguese (Brazil) Russian (Russian Federation) Simplified Chinese (China) Spanish (Mexico)	Selected:
Locale Settings	
Locale	Default Number of Users
English (United States)	
 Required fields Apply Reset 	

Application Settings allow you to define general CTRS recording settings (see Table 4-6).

Field or Button	Setting	
User Portal	Click Enable to make the Cisco TelePresence Video Portal available to users; click Disable to make the portal unavailable. The portal is a browser-based interface containing recordings that were made by or shared with a user. The portal also contains public videos.	
Recording Default Settings		
Resolution	Resolution of the CTRS recordings. Options are HD and CIF.	
	Note By default, both HD and CIF are selected.	

Field or Button	Setting				
HD	High Definition. Click checkbox to choose.				
	 Note CTRS can generate two recording files. The file called "xxx_ts.mp4" is for playback on an endpoint. The file call "xxx_lo.mp4" is for playback in the browser-based Cisco TelePresence Video Portal. If you uncheck the HD checkbox, the CTRS does not 				
	generate the file for playback on an endpoint.				
CIF	Common Intermediate Format (CIF). Click checkbox to choose.				
	Note CTRS can generate two recording files. The file called " <i>xxx</i> _ts.mp4" is for playback on an endpoint. The file call " <i>xxx</i> _lo.mp4" is for playback in the browser-based Cisco TelePresence Video Portal.				
	If you uncheck the CIF checkbox, the CTRS does not generate the file for playback in the browser-based Cisco TelePresence Video Portal.				
Quality	Defines the recording quality. Choices are:				
	• Highest Details, Best Motion: 1080p				
	• Highest Details, Better Motion: 1080p				
	• Highest Details, Good Motion: 1080p				
	• High Detail, Best Motion: 720p				
	• High Detail, Better Motion: 720p				
	• High Detail, Good Motion: 720p				
	• High Detail, Limited Motion: 720P (Lite)				
	Highlight option to choose. Default value is Highest Detail, Best Motion: 1080p .				
	If the CTS is in 720p Lite mode, the CTRS generates only the HI version of the recording, not the CIF version. Used for playback an endpoint, the HD version filename includes "ts" (<i>xxx</i> _ts.mp4).				
Maximum Simultaneous Cor	nections				
Recording/Replay	Defines the number of simultaneous recording and replaying sessions that can occur. Range is from 1 to 24. Default is 24 .				
Select locales for users who					
Available and Selected locales	By default, English (United States) is the selected as well as the default locale. The Available and Selected windows allow you to select more locales that are available to users who create videos using Studio Mode and Event Recording and view videos using the Cisco TelePresence Video Portal.				
	Note Currently, language packs are not yet available on Cisco.com, so more locales cannot be selected.				

Table 4-6Application Settings (continued)

Field or Button	Setting			
Local Settings				
Locale	Displays each selected locale.			
Default	Indicates which of the selected locales is the default.			
Number of Users	Displays the number of users that have access to the Cisco TelePresence Video Portal. For information on managing access to the portal, see the "End-User Portal" section on page 4-6.			

Table 4-6	Application Setting	s (continued)

- To register new or modified settings, click **Apply**.
- To restore the original settings, click **Reset**.

Backup Settings

Backup Settings consist of the following tabs:

- Archive Servers, page 4-12
- Backup and Restore, page 4-15
- Export Media Files, page 4-18
- Import Media Files, page 4-20

Archive Servers

In Backup Settings, click the **Archive Servers** tab to display or configure archive servers (see Figure 4-8).

kup Setti						
	Backup/Restore	Export Media Files Im	oort Media Files			
						Showing 1-2 of 2 👖 💌 per page 😡
Host		Nickname	Connection	Port	User	Remote Path
ctb-02		server2	SFTP	22	root	/tmp
ctb-03		server3	SFTP	22	root	/tmp
	on New E	dit Delete				📢 ┥ Page 🔢 1 of 1 🕨 🕨

Figure 4-8 Configure > Backup Settings—Archive Servers

The Archive Servers tab displays a table providing the following information about previously defined archive servers:

Field	Description		
Host	Defined host name of the archive server.		
Nickname	Defined alias of the archive server.		
	Note In the CTRS Administration software, the nickname value is frequently used to identify the archive server.		
Connection	Web protocol through which this archive server is reached.		
Port	Port number over which this archive server is reached and is dependent on the connection type.		
User	FTP and SFTP usernames and passwords.		
Remote Path	Defines the directory on the FTP or SFTP server where CTRS files are stored.		

Table 4-7 Archive Servers Table Field Descriptions

- To display a defined number of table rows, click the down arrow next to **Rows per page**. Highlight and choose predetermined amounts.
- If the number of entries exceeds the Rows per Page value, click **First** to view the entries listed on the first page, **Next** to view the next page in sequence, **Previous** to view the preceding page, and **Last** to view the last page.
- To delete one of the defined archive servers, check the box to the left of the table entry, and then click **Delete**.
- To test whether your defined FTP or SFTP username, password and path are valid, check the box to the left of the table entry and then click **Test Connection**. If the connection is valid, CTRS displays a text box stating that the connection is valid. If the connection is not valid, CTRS displays a text box describing what part of the connection process failed.
- To edit one of the defined archive servers, check the box to the left of the table entry. Then click **Edit**. A dialog box appears (see Figure 4-9).
- To define a new server, click New. A dialog box appears (see Figure 4-9).

Figure 4-9	Configure > Backup Settings—Archive Servers (New or Edit)

Configure > Sto	orage Management	
🗢 = Required fields		
🗢 Host:		
🌣 Nickname:		
🗢 Connection:	● FTP ○ SFTP	
🗢 Port:	22	
🗢 User:		
🗢 Password:		
🜣 Storage Path:		
		ω
Apply Close		80 80 81

When you click **Edit** or **New**, CTRS administration software takes you to the Storage Management dialog box, as described in Table 4-8. Use this dialog box to edit existing archive server settings or to define new archive servers.

Field	Description	
Host	Enter the host name of the archive server.	
Nickname	Enter the nickname of the archive server. This nickname is used to identify the archive server throughout CTRS.	
Connection	Click the appropriate radio button to define the connection through which this archive server is reached. Choices are File Transfer Protocol (FTP) and Secure File Transfer Protocol (SFTP).	
Port	Enter the protocol-specific port number over which this server is reached.	
User	Enter the FTP or SFTP username.	
Password	Enter the password for FTP or SFTP.	
Storage Path	Enter the directory on the FTP or SFTP server where CTRS files are stored.	

 Table 4-8
 Storage Management Configuration Field Descriptions

• To register new or modified settings, click Apply.

• To close this window and return to the Archive Servers list, click Close.

Backup and Restore

In Backup Settings, click the **Backup/Restore** tab to display or configure settings for backup or system restoration (see Figure 4-10). From this tab, you can also perform a system backup or restoration.

Figure 4-10 Configure > Backup Settings—Backup/Restore

Configure >Backup Settings
Backup Settings
Archive Servers Backup/Restore Export Media Files Import Media Files
Backup Database and Configuration Files
Schedule 1: None Change Backup Configuration data To tsbu-Inx-4 Isbu-Inx-4 Backup Status: Configuration data Schedule to back-Inx-4 Isbu-Inx-4 Isbu-Inx-4 Backup Status: Configuration data Isbu-Inx-4 Isbu-Inx-4
Save Backup Settings Backup Now
Restore Database and Configuration Files
Restore Configuration data 💎 From dev5 🔹 Add Server Show Restore Status:No Restore Performed
Name Size Creation Time
O No data to display
Restore Now

The System Backup and Restore window is divided into two sections:

- Backup Database and Configuration Files (top part of the window)
- Restore Database and Configuration Files (bottom part of the window)

To schedule a system backup:

- **Step 1** In **Schedule**, click the **Change** button to set the backup schedule. In the dialog box that appears, set the backup start time and frequency. Click **OK** to apply.
- **Step 2** Choose the content to be backed up from the **Backup** drop-down list. Options are **Configuration data** and **Full system data**. Full system data includes configuration files, videos, and video metadata.
- Step 3 Choose the archive server where the data will be stored from the To drop-down list.
- **Step 4** Click **Save Backup Settings**. The contents of the CTRS database will be sent to the indicated server on the defined day(s) at the scheduled time.



The CTRS saves only the current system backup settings. The CTRS does not save previous backup settings.

To perform an immediate system backup:

• Click Backup Now. The CTRS content is sent to the indicated archive server.

Backup database fields are described in Table 4-9.

Table 4-9 Back Up Database and Configuration Files Field Descriptions

Field	Description	
Schedule Daily at <time></time>	This field shows the time (U.S. Pacific time zone, twenty-four hour format) when automatic backups are scheduled to occur.	
	To change the time scheduled for the automatic backup, click Change . From the Change window:	
	• Start Time : Choose the hour and minute (U.S. Pacific time zone, twenty-four hour format) from the drop-down menu for the scheduled backup.	
	• Frequency: Resend every : Defines the frequency of the backup. Click the appropriate radio button to choose Daily or Weekly backups; if you click Weekly , also choose the days of the week on which you want the backup to occur.	
	• Click OK to apply your changes, or Cancel to cancel your new changes.	
Backup	Define the content that you want to backup. Click the down arrow to view choices; highlight choice to select. Choices are:	
	Configuration data	
	• Full system data	
То	Indicates the already defined archive server on which you want to store the backup content.	

To restore the CTRS database:

- Step 1 Choose the CTRS database content that you want to restore from the Restore drop-down menu. Options are Configuration data and Full system data. Full system data includes configuration files, videos, and video metadata
- Step 2 Choose the archive server (where the content you want to restore is saved) from the From drop-down menu. If you need to add a new archive server to the list, click Add Server. CTRS takes you to the Archive Server: Storage Management window to add a new server.
- **Step 3** After you have chosen the appropriate archive server, click **Show** to display the databases available to be used to restore the CTRS database.
 - To display a defined number of table rows, click the down arrow next to **Rows per page**. Click to highlight and choose predetermined amounts.
 - If the number of files exceeds the Rows per Page value, click **First** to view the files listed on the first page, **Next** to view the next page in sequence, **Previous** to view the preceding page, and **Last** to view the last page.

Step 4 Click the radio button to the left of the appropriate database file.



Ensure that the database file that you want to restore was created successfully. Restoring a database file that was created during a failed backup will cause the CTRS to become corrupted, requiring re-installation of the CTRS Administrative software.

Step 5 Click **Restore Now**. CTRS content is retrieved from the indicated archive server and loaded on the CTRS.

Restore task fields are described in Table 4-10.

Field	Description	
Restore	Choose the content that you want to restore on this CTRS. Click th down arrow to view choices; highlight the choice to select: Option are:	
	Configuration data	
	• Full system data	
From	Indicates the already-defined archive server from which you want to retrieve content. Click the down arrow to view archive server choices; highlight the choice to select.	
Add Server	To add a new archive server to the list, click Add Server . CTRS takes you to the Archive Server: Storage Management window to add a new server.	
Show	Click Show to display the backed-up content available for restore.	
Name	Data file to be used for restoring content. Click the radio button to the left of Name to choose it.	
Size	Size of the data file in bytes.	
Creation Time	Date and time that the data file was created.	

 Table 4-10
 Restore Database and Configuration Files Field Descriptions

Export Media Files

In Backup Settings, click the **Export Media Files** tab to display or configure settings to export media files (see Figure 4-11).

Figure 4-11 Configure > Backup Settings – Export Media Files

Configure >Backup Settings
Backup Settings
Archive Servers Backup/Restore Export Media Files Import Media Files
Schedule 1: Weekly (Monday) @ 00:00 America/Los_Angeles Change
Condition
When media is older than (days): 60
Action
□ Export Media Files To a Server: Expo-Inx-4 ▼
Delete
Before deletion, email video owner every day for (days): ² Never 😒
Submit Reset
 To change the time zone, click Preferences link. Frequency: An e-mail notification will be sent to video owner every day until the video is deleted. Please make sure the remote archive server has enough disk space.

Use the Export Media Files tab to configure when CTRS transfers CTRS media data to a specified archive server. Export Media Files fields are described in Table 4-11.

Field	Description	
Schedule <frequency> at <start_time></start_time></frequency>	Check this box if you want to export CTRS data on a scheduled basis. This field shows the time in 24-hour format when automatic data exports are scheduled to occur. U.S Pacific time is the default. Click Preferences in the top right corner of the user interface to change the time zone.	
	To change the time scheduled for the automatic data export, click Change . From the Change window:	
	• Start Time : Choose the hour and minute in 24-hour format from the drop-down menus	
	• Frequency: Defines the frequency of the export. Click the appropriate radio button to choose Daily or Weekly export. If you choose Weekly , also choose the days of the week on which you want the export to occur.	
	• Click OK to apply your changes or Cancel to cancel your new changes.	
Condition	Condition lets you establish additional rules governing the data that is transferred.	
When media is older than (days):	Enter the number of days for the minimum age of the exported data. Valid values are 0–90 days. The default is 60 days.	
Action	Defines whether CTRS exports the data to an archive server, deletes the data, or both.	
Export Media Files	Check this box if you want CTRS to export this data to an archive server.	
To a Server:	Select the archive server where the data will be stored. Click the arrow to display a drop-down list of available archive servers.	
Delete	Check this box if you want CTRS to delete the specified data.	
Before deletion, email video owner every day for (days):	CTRS sends an e-mail to the owner of the video (the person who	

Table 4-11 Export Media Files Field Descriptions
--

- To register new or modified settings, click Submit.
- To restore the values that were last submitted, click **Reset**.

For example, in the Schedule field, you click the **Change** button. For Start Time, you choose **23:45**, and for Frequency, you choose **Daily**. In the Media is older than field, you enter **60**. As the Action to be taken daily at 23:45, you check the **Export** box and specify a server to which the CTRS will export videos that are older than 60 days. You also check **Delete**, and in the Notify video owner field, you enter **10**.

With this configuration, daily at 23:45, CTRS exports each video that is older than 60 days to the specified server. CTRS also marks for deletion each video that it exported. For the next ten days, CTRS marks the status of the video as "Delete Pending" (CTRS displays the status of each video in the list in

Recordings Management > Completed Recordings). CTRS also sends an e-mail notification to the video owner to alert the owner of the upcoming deletion. This notification is sent every day for ten days. At the end of the ten-day period, the video is deleted from CTRS.

Import Media Files

In Backup Settings, click the **Import Media Files** tab to display or configure settings to import media files (see Figure 4-12).

Configure >Backup Settings Backup Settings				
Archive Servers	Backup/Restore	Export Media Files	Import Media Files	
Import from: dev	5 💌 Show]		
File Name	Size			
No data to	display			
Import Files	Refresh			

Figure 4-12 Configure > Backup Settings—Import Media Files

The Import Media Files tab lets you choose data files from a list of defined archive servers to be imported into the CTRS database.

To import media files:

- **Step 1** Click the down arrow to the right of **Import From** to display the list of available archive servers; highlight to select.
- **Step 2** After you have selected the appropriate archive server, click **Show** to display the files available to be imported.
 - To display a defined number of table rows, click the down arrow next to **Rows per page**. Click to highlight and select predetermined amounts.
 - If the number of files exceeds the Rows per Page value, click **First** to view the files listed on the first page, **Next** to view the next page in sequence, **Previous** to view the preceding page, and **Last** to view the last page.
 - To refresh the list of files displayed, click **Refresh**.
- **Step 3** Check the box to the left of the file to choose it. To choose all files listed, check the box in the upper left of the table.

Step 4 Click Import Files.

Cisco Show and Share

You can configure a connection between a CTRS running version 1.8 and a Cisco Show and Share server running version 5.2.2 or 5.2.3. After the connection is established, Cisco Show and Share can be used for uploading, managing, sharing, and viewing video and audio content in your enterprise network.

To configure a connection between a CTRS and a Cisco Show and Share server, you will need:

- The superuser account credentials—The CTRS requires superuser access to the Cisco Show and Share server in order to upload media files.
- The Cisco Show and Share server security certificate—The CTRS uses the installed Cisco Show and Share server certificate to establish a trusted, secure connection between the CTRS and the Cisco Show and Share server. The Cisco Show and Share server security certificate file can be obtained from the Cisco Show and Share server administrator.

For information about downloading and installing the Cisco Show and Share server security certificate, see the "Installing the Cisco Show and Share Server Security Certificate on the CTRS" section on page 4-23.

Configuring the CTRS UI for Cisco Show and Share

Click Cisco Show and Share in the left menu to display or modify server settings (see Figure 4-13).

Figure 4-13 Configure > Cisco Show and Share		
System Configuration	> Cisco Show and Share	
CTRS connected to Show a	and Share showshare-b	
Connection Settings		
🗢 Hostname: 🛛 st	nowshare-b	
🗢 Username: 🛛 🛛 su	Iperuser	
🌣 Password: 🔹	••••••••••	
Enabled: 🧿) Yes 🔿 No	
You may contact the Show and Share administrator to create an account.		
Test Connection		
	email if their video does not upload. heir video is successfully uploaded.	
API Settings		
DMM User Name LDAP Attri	bute: sAMAccountName	
API Version (same as Show Share Version):	and 5.2.3	
Apply Reset	2002	

Use the Cisco Show and Share page to define the Show and Share server that CTRS uses as a video portal. Fields in the Cisco Show and Share page are described in Table 4-12.

 Table 4-12
 Cisco Show and Share Field Descriptions

Field or Button	Setting
Hostname	Enter the hostname of the Cisco Show and Share server.
Username	Enter the server superuser username. Contact the Cisco Show and Share server administrator for this information.
Password	Enter the server superuser password. Contact the Cisco Show and Share server administrator for this information

Field or Button	Setting	
Enabled	Click Yes to enable connection to the server. Click No to disable connection.	
Test Connection	Click Test Connection after entering the Show and Share hostname, username, and password.	
Send users an email when their video is successfully uploaded	Click Yes or No. Note Users always receive emails when their videos do not upload	
DMM User Name LDAP Attribute	The default setting of this field is sAMAccountName, which should work for most organizations.	
	To understand the circumstances under which you might need to change the default, see the "Understanding the DMM User Name LDAP Attribute Field" section on page 4-23.	
API Version (same as Show and Share Version)		

Table 4-12 Cisco Show and Share Field Descriptions

- To register new or modified settings, click Apply.
- To restore default settings, click Reset.

Understanding the DMM User Name LDAP Attribute Field

The DMM User Name LDAP Attribute field maps to the LDAP attribute specified in the Login User Name field of the Digital Media Manager (DMM), which manages Cisco Show and Share. This mapping ensures that the CTRS associates the correct username to a video while it is being uploaded to the Cisco Show and Share server. If the username is incorrect, the video will not be saved to the correct user account on the Cisco Show and Share server.

You need to change the default setting if your organization does not use the values of the LDAP samAccountName attribute as the source for the Cisco Show and Share usernames. Instead, your organization might use the values of another LDAP attribute or have created a customized LDAP attribute.

If one of these scenarios applies to your organization, contact the Show and Share administrator to get the LDAP attribute specified in the Login User Name field of the DMM, then enter the attribute in the DMM "Login User Name Attribute" field of the Cisco Show and Share page in the CTRS Administrative UI.

Installing the Cisco Show and Share Server Security Certificate on the CTRS

Once you have obtained the Cisco Show and Share server security certificate file from the Cisco Show and Share server administrator, perform the following steps to install it on the CTRS:

Step 1 Click Security Settings in the left menu.

Step 2 Click **Install**. The Certificate Upload window displays, as shown in Figure 4-14.

Configure > Security Settings						
Set up either inter-device security or browser security by installing the proper certificate(s).						
Browser Security: Unsecure						
Inter-Device Security: 🔘 Secure 🔘 Unsecure 💿 Best-Effort						
Appl						
Digita	l Security Certi	ficates				
Unit:	All	~	Category:	All	~	Filter
	Unit	Category	Certificate Name -		Expires On	
\bigcirc	tomcat	OWN	tomcat.pem		Tue Jul 05 22:58:	30 UTC 2016
\bigcirc	CAPF-trust	TRUST	CAPF.pem		Mon Jan 05 21:19	5:35 UTC 2015
\bigcirc	tomcat-trust	TRUST	tsbu-ctrs.cisco.com.pem		Tue Jul 05 22:58:	30 UTC 2016
\circ	CTM-trust	TRUST	CUCM0.pem		Mon Jan 05 21:19	5:33 UTC 2015
0	CTM-trust	TRUST	CUCM2.pem		Wed Jan 07 22:2	4:59 UTC 2015
0	CTM-trust	TRUST	CUCM1.pem		Wed Jan 07 23:2	5:26 UTC 2015
0	CAPF-LSC	OWN	CTMS_Cert_Chain.pem		Thu Sep 01 01:12	2:31 UTC 2016
Inst	all	load LSC	View Delete All			

Figure 4-14 Configure > Security Settings

- **Step 3** If the Browser Security field is set to anything other than **Unsecure**, click the **Unsecure** radio button in the Browser Security field. Remember your previous setting, you will need to return this field to that setting after installing the security certificate.
- Step 4 Click Install...

The Install Security Certificate Dialog Box appears.

Figure 4-15 Install Digital Security Certificate Dialog Box

stall a third-par	ty certificate for inter-device security:	
Unit:	CTM-trust 🔽	
Category:	TRUST 💌	
🜣 Certificate	Browse	
Install		
Required Field	2	

- **Step 5** Upload the Cisco Show and Share security certificate file to the CTRS by completing the following steps:
 - a. Select the Inter-Device Security radio button.
 - **b.** From the Unit drop-down list, select **CTM-trust** (this is the default value).
 - c. From the Category drop-down list, select TRUST (this is the default value).
 - d. Click the Browse button.
 - **e.** Navigate to the folder in which you stored the Cisco Show and Share security certificate file, and choose that file.
 - f. Click Install.

The Cisco Show and Share security certificate file installs on the CTRS.

Step 6 If you changed the Browser Security field setting in Step 3, click the appropriate radio button in the Browser Security field to return your Browser Security setting to the previous setting.

CTS-Manager

Note

The CTS-Manager page appears only for the CTRS application on a Cisco TelePresence Commercial Express platform.

Use the parameters in CTS-Manager to register a CTS-Manager in the CTRS admin interface. Parameters are described in Table 4-13.

Table 4-13	CTS-Manager Registration in CTRS
------------	----------------------------------

Field or Button	Setting
Description	Description of the CTRS. This description of the CTRS appears in the CTS-Man administrative interface in the Bridges and Servers list.
Time Zone	Time zone of the CTRS.
User	Administrative username of the CTS-Manager.
Password	Administrative password of the CTS-Manager.
Host	Hostname of the CTS-Manager.

- To register new or modified settings, select Apply.
- To restore the original settings, select **Reset**.

Email Server

Click Email Server in the left menu to display or modify e-mail server settings (see Figure 4-16).

 Protocol:
 SMTP

 Connection:
 Non-Secure

 Host:
 email.cisco.com

 Port:
 25

 User Name:
 Password:

 Password:
 email.cisco.com

 Password:
 email.cisco.com

 Reset
 email.cisco.com

Figure 4-16 Configure > Email Server

Use the Email Server page to define the e-mail server that CTRS uses to send out alerts and video attachments. Fields in the Email Server page are described in Table 4-14.

343045

Table 4-14	Email Server Field Descriptions
------------	---------------------------------

Field or Button	Setting
Protocol	View only. Email protocol.
Connection	Click the Non-Secure or the Secure radio button.
	If the SMTP server requires a secure connection, select Secure.
Host	Enter the hostname of the email server.
Port	Enter the port number associated with the email server.
SMTP User Name	Username of SMTP admin.
Password	Password of SMTP admin.

- To register new or modified settings, click Apply.
- To restore default settings, click Reset.

Interface Failover

Click **Interface Failover** in the left menu to display or modify failover settings for Ethernet adapters (see Figure 4-17).

Figure 4-17 Configure > Interface Failover

1	Configure > Interface Failover					
	Interface Failover:	O Enable ④ Disable The Interface Failover will be able to be configured, when both Network Interfaces are available or active.				
	Apply Reset					

When enabled, the secondary adapter handles all network traffic if the primary adapter or its connection fails.

To enable interface failover:

- **Step 1** Make sure that the primary Ethernet adapter (Ethernet interface 0) is connected to the network and that its static IP address and gateway parameters were correctly configured during system installation.
- **Step 2** Connect the secondary Ethernet cable (Ethernet interface 1) to a network switch. The connection port can be on the same switch as Ethernet interface 0 or on a different switch, but both Ethernet interface 0 and Ethernet interface 1 must be on the same gateway.
- Step 3 From the Interface Failover window, click the Enable button, then click Apply.



If both network interfaces are not available or active, you cannot enable interface failover. If the **Enable** and **Disable** radio buttons are dimmed, check the connectivity of the interfaces.

To disable interface failover:

- **Step 1** With no active meetings in progress, click the **Disable** button.
- Step 2 Click Apply. Your network adapters will be configured and restarted and the interface failover disabled.

LDAP Configuration

Click **LDAP Configuration** in the left menu to display or modify the Lightweight Directory Access Protocol (LDAP) configuration (see Figure 4-18).

Figure 4-18 Configure > LDAP Server

P Server ce Status: Connected (Connected to all LDAP servers)			
Hostname	User Name	Default context	
ds.example.com DEFAULT	cn=superuser,cn=users,DC=tsbu-ctms,DC=local	DC=tsbu-ctms,DC=local	

Use the LDAP Server page to assign and make changes to designated LDAP servers to be used with CTRS.

When you first open the LDAP Configuration window, CTRS displays a table listing all of the already-defined LDAP servers. LDAP table fields are described in Table 4-15.

Table 4-15 LDAP Configuration Table Field Descriptions

Field or Button	Setting
Hostname	Hostname of the LDAP server.
Username	Username for LDAP administration
Default context	Default naming context for the domain name, identifying the top entry in the local directory hierarchy.

- To refresh the list of available LDAP servers, click Refresh.
- To delete one of the LDAP servers, check the box to the left of the table entry, and then click **Delete**.
- To edit one of the definitions for an LDAP server, check the box to the left of the table entry, and then click **Edit**.
- To define a new LDAP server, click New.

When you click **Edit** or **New**, CTRS administration software takes you to the New LDAP Server configuration dialog box (see Figure 4-19), as described in Table 4-16. Use this dialog box to edit existing archive server settings or to define new archive servers.

Figure 4-19 System Configuration > LDAP Configuration (New or Edit)

Host:		
Bind Method:	🔿 Secure 💿 Normal	
Port:	389	
Deployment Type:	🔿 Active Directory 💿 Domino 🗹 Exchange	
🜣 Default Context:	Fetch DNs	
🛱 User Name:	Append default context	
🜣 Password:		
🛱 Certificate:	Upload	
🕫 Default Email Domain		
Connection Pool Size:	1	
🛱 User Containers:	Append default context	
Email Mapping Attribut	e.	

Configure > LDAP Server

 Table 4-16
 New or Edit LDAP Configuration Table Field Descriptions

Field or Button	Setting
Host	Enter the hostname of the LDAP server.
Bind Method	Click the appropriate radio button to choose the binding method. For CTRS, options are Secure and Normal .
	• Secure—Secure SSL connection requires the Distinguished Encoding Rules (DER) Certificate for the LDAP server.
	• Normal—CTS-Manager communicates with the Microsoft Exchange or IBM Domino server in cleartext using HTTP.
Port	Enter the appropriate port number depending on the bind method selected. For Normal bind mode, the port setting is 389. For Secure bind mode, the port setting is 636. In cases where deployments consist of multiple LDAP Directory Servers, this port should be configured with 3268, which is the Global Catalog port.

Field or Button	Setting	
Deployment Type	Defines the LDAP server type. Options are Active Directory and Domino. Click the appropriate radio button.	
	When Active directory is selected and the Exchange box is checked, the Active Directory is partnered with Exchange. This partnering means that a user account on the Active Directory server has an e-mail mapping attribute value that is prepended with SMTP.	
	If the checkbox is unchecked, the CTRS does not prepend.	
	By default, the Exchange box is checked.	
Default Context	Enter the default naming context for the distinguished name (DN), identifying the top entry in the local directory hierarchy. For a list of domain names, click Fetch DNs . Choose the context from the drop-down list.	
User Name	The username used to authenticate to the LDAP server. This must be in the LDAP fully qualified domain name (FQDN) format. Example: cn=administrator,cn=users,dc= <mydomain>,dc=com)</mydomain>	
	To append the DN, click Append default context.	
Password	Enter the password to access the LDAP server.	
Certificate	The name of the LDAP certificate. This is needed only if you are using the Secure Bind Mode. Click Upload to upload the appropriate security certificate.	
Default Email Domain	Enter the LDAP email domain. If this LDAP server is set as the default email server, then users logging into the Cisco TelePresence Video Portal do not need to append their email domain information to their username.	
	Note You can enter a Default Email Domain for only the default LDAP server.	
	Note The CTRS only validates that the default email domain is a valid email domain. Clicking the Test Connection button validates that the CTRS can connect to the LDAP server, not to the email server specified in the Default Email Domain field.	
Connection Pool Size	The number of concurrent connections used by the CTRS server to retrieve data from the LDAP server. This is primarily used for optimizing the server's access to the LDAP server.	

 Table 4-16
 New or Edit LDAP Configuration Table Field Descriptions

Field or Button	Setting	
User Containers	The containers from which queries are performed to retrieve user objects. More than one user container or user object can be specified. The Cisco Telepresence server uses the values entered to search through the containers in sequence to retrieve user and meeting room information from the Directory Server. Additionally, these containers are used to retrieve user information for authentication. To append the default context, check the Append default context box next to the user container field.	
	Note	If you have a LDAP peer domain configured you'll need to specify any user containers and context. For example, "cn=users,dc=domain2,dc=com." When specifying the container and context information for your peer domain, DO NOT check the Append default context box.
Email Mapping Attribute	Enter addres	the LDAP server tag (proxyAddresses) for mapping email sses.
	Note	You can enter an Email Mapping Attribute for only the default LDAP server.

Table 4-16	New or Edit LDAP Configuration Table Field Descriptions
------------	---

- To test the connection between CTRS and the LDAP server, click **Test Connection**. If the connection is valid, CTRS displays a text box stating that the connection is valid. If the connection is not valid, CTRS displays a text box describing what part of the connection process failed.
- To register new or modified settings, click Apply.
- To restore default settings, click Reset.
- To exit without applying changes, click Close.

Configuring Multiple Domains in an LDAP Forest

To configure multiple domains in an LDAP forest, you must configure all subsequent domains as user containers in the first domain's LDAP configuration page.

For example, you have these two servers:

• LDAP server 1: corporate-cor1

Default context: DC=cor1, DC=com

User container: cn=users, DC=cor1, DC=com

• LDAP server 2: corporate-cor2

Default context: DC=cor2, DC=com

User container: cn=users, DC=cor2, DC=com

For CTRS, you must configure LDAP server 1 to include LDAP server 2's user containers. In the configuration page for LDAP server 1, in the User Containers fields, you would enter the following, each in its own field:

- cn=users, DC=cor1, DC=com
- cn=users, DC=cor2, DC=com



Users in subsequent domains must sign in to the CTRS with their username and domain name—username@example.com.

Security Settings

The CTRS supports these security types:

- Inter-device—Secures communication between Cisco TelePresence devices, which include the CTRS, Cisco TelePresence Manager (CTS-Manager), and Cisco TelePresence Multipoint Switch (CTMS).
- Browser—Secures communication between the CTRS web server and the browser through which you access the CTRS Administrative UI. Browser security eliminates website security certificate warnings, which you receive if your web server is not secure.

You can set up either inter-device security or browser security on a CTRS, but not both at the same time.

For information on how to set up inter-device and browser security, see the *Cisco TelePresence Security Solutions for Release 1.8*, which you can access at this location:

http://www.cisco.com/en/US/docs/telepresence/security_solutions/1_8/CTSS.html

Software Upgrades

Click **Software Upgrades** in the left menu to display, switch, or upgrade software versions (see Figure 4-20).

Figure 4-20 Configure > Software Upgrade

Configure > Software Upgrades			
Active Version:	1.8.0.0-151		
Inactive Version:	1.7.4.0-149		
Switch Versions	Upgrade Software	J	
Most Recent Upgrade Attempt			
Hostname	IP Address	Status	
ctrs78.cisco.com	10.22.17.178	Upgrade Not in Progress	

There are two functions to assist you in maintaining the system software, as follows:

- Switch Version: The hard drive on the server on which CTRS is installed is partitioned into two areas. Each area can contain a system image. Switch Version allows you to switch the location of two stored versions of the system software.
- Upgrade Software: CTRS provides a patch file for upgrading system software. The Cisco-supplied patch file can be stored on a CD-ROM or a Secure FTP (SFTP) host network. A wizard displays dialog boxes to prompt you through the process.

To switch software versions:

• Click the **Switch Version** button.

The system will swap the software versions and reboot.

The active partition in the server hard drive contains the active system image. The software versions that are loaded will be displayed in the Active Version and Inactive Version fields.

To upgrade software:

Step 1 To start the software upgrade process, click the **Upgrade Software** button.

The Source Selection dialog box appears.

If you need to stop the software installation, click the *Cancel* button when the button is active.

Step 2 Click the **CD-ROM** or **Network** radio button to choose the location of the patch file.

If you chose CD-ROM, click Next to go to the File Selection window.

If you chose **Network**, provide the hostname, login username, password, and the path to the patch file. By default, port 22 is used to access the server; supply the correct port number, if required. Click *Next* to go to the **File Selection** window.

- **Step 3** At the **File Selection** window, choose the file to load by clicking its radio button. Then click **Next**.
- **Step 4** The **Patch File** Preparation window appears. Watch this window to monitor the progress of the file download. Buttons will be inactive until the patch file is loaded.

Once the file is loaded, the window displays a Confirmation message.

The software wizard displays the software versions that are installed and provides radio buttons so you can choose to switch the newly loaded software to the active partition.

- Step 5 Click Yes or No to make your choice. Then click Next to finish the software upgrade task.The install wizard displays a dialog window that logs the progress of the update.
- **Step 6** When the log indicates that the files have been switched, click **Finish** to complete this task.

System Settings

System Settings are initially configured during CTRS Administration software set up. Use the System Settings to make changes to these initial settings. System Settings consists of the following configuration areas:

- IP Settings, page 4-34
- NTP Settings, page 4-36
- QoS, page 4-37
- SNMP, page 4-41
- Restart or Shutdown CTRS, page 4-46

IP Settings

In System Settings, click the IP tab to display or configure IP settings (see Figure 4-21).

Configure > System Settings System Settings			
	SNMP Restart CTRS		
MAC Address: Hostname:	EF:1F:1F:F5:F4:0F ctrs78.cisco.com		
🜣 Domain Name:	cisco.com		
🜣 Primary DNS:	10.70.168.183		
Secondary DNS:	10.68.226.120		
Ethernet Card:	eth0		
🜣 IP Address:	10.22.157.178		
🜣 Subnet Mask:	255.255.255.0		
🜣 Default Gateway:	10.22.157.1		
🗢 = Required fields			
Apply Reset		343049	

Figure 4-21 Configure > System Settings—IP

Some of the settings displayed on the IP tab are configured during initial installation of the CTRS administration software. The following fields are configurable on this tab:

- Domain Name
- Primary DNS
- Secondary DNS
- IP Address
- Subnet Mark
- Default Gateway

Field or Button	Setting	
MAC Address	View only. MAC address of the MCU device on which the CTRS is located.	
Hostname	View only. Hostname configured for the MCU device on which the CTRS is located.	
Domain Name	Domain name in which the MCU device on which the CTRS is located.	
Primary DNS	IP address of the primary DNS for the MCU device on which the CTRS is located.	
Secondary DNS	IP address of the secondary DNS for the MCU device on which the CTRS is located.	
Ethernet Card	View only. Ethernet card being used on the MCU server to connect to the network.	
IP Address	IP address of the Cisco TelePresence Recording Server.	
	Note After changing the IP address, close your browser window, then log into CTRS again using your new IP address.	
Subnet Mask	Subnet mask of the Cisco TelePresence Multipoint Switch.	
Default Gateway	Default gateway IP address for the Cisco TelePresence Multipoint Switch.	

Table 4-17	IP Settings
------------	-------------

• To register new or modified settings, click Apply.

• To restore the original settings, click **Reset**.

NTP Settings

In System Settings, click the **NTP** tab to display or configure Network Time Protocol (NTP) servers (see Figure 4-22).

Figure 4-22 Configure > System Settings – NTP

Configure > System Settings System Settings IP NTP QoS SNMP Restart CTRS		
ONTP Server 1:	10.68.10.80	
NTP Server 2:	10.68.10.150	
NTP Server 3:		
NTP Server 4:		
NTP Server 5:		
🗢 = Required fields		
		0
Apply Reset		343062

NTP is used to synchronize the clocks on Cisco IP telephony servers with an external network time server that uses NTP.

Click the **NTP Setting** tab in the System Settings window to list the configured IP address of the NTP servers.

Table 4-18 NTP Settings

Field or Button	Setting
NTP Server 1-5	IP address of the NTP server. To add an NTP server to the configuration, type the IP address in an NTP Server field. To change an NTP server in the configuration, highlight and delete the IP address in the NTP Server field and type in the new address.

- To register new or modified settings, click Apply.
- To restore the original settings, click **Reset**.
QoS

In System Settings, click the **QoS** tab to display or configure quality of service (QoS) settings (see Figure 4-23).

Figure 4-23 Configure > System Settings – QoS

Configure > System Settings System Settings IP NTP QoS SNMP Restart CTRS				
DSCP for Playback Video: DSCP for Playback Audio:		~		
DSCP for Signaling:	CS3(precedence 3) DSCP (011000)	~		
Apply Reset			343055	

QoS values define the traffic marking values used for network queuing for CTRS. Enter or edit settings as described in Table 4-19.

I

Field or Button	Setting
DSCP for Playback Video	Quality of Service marking for the video packets during CTRS playback to CTS. Available settings are:
	• AF11 DSCP (001010)
	• AF12 DSCP (001100)
	• AF13 DSCP (001110)
	• AF21 DSCP (010010)
	• AF22 DSCP (010100)
	• AF23 DSCP (010110)
	• AF31 DSCP (011010)
	• AF32 DSCP (011100)
	• AF33 DSCP (011110)
	• AF41 DSCP (100010)
	• AF42 DSCP (100100)
	• AF43 DSCP (100110)
	• CS1 (precedence 1) DSCP (001000)
	• CS2 (precedence 2) DSCP (010000)
	• CS3 (precedence 3) DSCP (011000)
	• CS4 (precedence 4) DSCP (100000)
	• CS5 (precedence 5) DSCP (101000)
	• CS6 (precedence 6) DSCP (110000)
	• CS7 (precedence 7) DSCP (111000)
	• Default DSCP (000000)
	• EF DSCP (101110)
	The default value for this field is CS4 (precedence 4) (100000). It i recommended that you use the default value for this field.

Table 4-19 QoS

Field or Button	Setting
DSCP for Playback Audio	Quality of Service marking for the audio packets during CTRS Playback to CTS. Available settings are:
	• AF11 DSCP (001010)
	• AF12 DSCP (001100)
	• AF13 DSCP (001110)
	• AF21 DSCP (010010)
	• AF22 DSCP (010100)
	• AF23 DSCP (010110)
	• AF31 DSCP (011010)
	• AF32 DSCP (011100)
	• AF33 DSCP (011110)
	• AF41 DSCP (100010)
	• AF42 DSCP (100100)
	• AF43 DSCP (100110)
	• CS1 (precedence 1) DSCP (001000)
	• CS2 (precedence 2) DSCP (010000)
	• CS3 (precedence 3) DSCP (011000)
	• CS4 (precedence 4) DSCP (100000)
	• CS5 (precedence 5) DSCP (101000)
	• CS6 (precedence 6) DSCP (110000)
	• CS7 (precedence 7) DSCP (111000)
	• Default DSCP (000000)
	• EF DSCP (101110)
	The default value for this field is EF DSC (101110). We recommended that you set the value to CS4 (precedence 4) DSCP (100000) to match the default for DSCP for Playback Video.

QoS (continued) Table 4-19

Field or Button	Setting
DSCP for Signaling	Quality of Service marking for SIP Signaling packets.
	Available settings are:
	• AF11 DSCP (001010)
	• AF12 DSCP (001100)
	• AF13 DSCP (001110)
	• AF21 DSCP (010010)
	• AF22 DSCP (010100)
	• AF23 DSCP (010110)
	• AF31 DSCP (011010)
	• AF32 DSCP (011100)
	• AF33 DSCP (011110)
	• AF41 DSCP (100010)
	• AF42 DSCP (100100)
	• AF43 DSCP (100110)
	• CS1 (precedence 1) DSCP (001000)
	• CS2 (precedence 2) DSCP (010000)
	• CS3 (precedence 3) DSCP (011000)
	• CS4 (precedence 4) DSCP (100000)
	• CS5 (precedence 5) DSCP (101000)
	• CS6 (precedence 6) DSCP (110000)
	• CS7 (precedence 7) DSCP (111000)
	• Default DSCP (000000)
	• EF DSCP (101110)
	The default value for this field is CS3 (precedence 3) (011000). It is recommended that you use the default value for this field.

Table 4-19	QoS (continued)
Iable 4-15	QUS (continueu)

- To register new or modified settings, click Apply.
- To restore the original settings, click **Reset**.

SNMP

In System Settings, click the **SNMP** tab to display or configure Simple Network Management Protocol (SNMP) settings (see Figure 4-24).

Figure 4-24 System Configuration > System Settings – SNMP

	Restart CTR8							
SNMP Access Configur	ation							
Version	Username/Community String		Access	Password	Security Level		Authentication Algorithm	Encryption
No data to display								
Trap Receiver Configur	ation							
IP Address		Version	Usemame	Password	Engine ID	Security Level	Authentication Algorithm	Encryption
No configured trap dest	inations.							\$
Apply Reset								0000

The Simple Network Management Protocol (SNMP) is an application layer protocol that facilitates the exchange of management information between network devices. It enables network administrators to manage network performance, find and solve network problems, and plan for network growth by analyzing information gathered using MIBs. You configure all SNMP settings through the CTRS command line interface (CLI) commands.

SNMP is enabled by default, and it monitors the CTRS system status (go to Monitoring > System Status for system status details). You can designate a particular server where SNMP trap messages are gathered and stored. Configuration requires username and password authentication.

By default, SNMP service is enabled. The following default SNMP settings are also enabled:

- SNMPv3 username set to "mrtg." This name is for internal use of the system and should not be deleted.
- SNMPv2c username set to "public." This name is for internal use of the system and should not be deleted.
- No trap receiver is configured. Use CTRS CLI commands to configure SNMP trap receiver information. For information about configuring SNMP traps, see the "Configuring SNMP Traps on CTRS" section on page 4-42.

Table 4-20 describes the SNMP fields. All fields in this tab are view-only.

Field or Button	Setting		
Engine ID	View only. The engine ID for the SNMP agent on this Cisco TelePresence Recording Server. This number is usually based on the CTRS MAC address.		
	If you configure the trap receiver, this engine ID is used to create a trap user on the trap receiver system and to compute the security digest for authenticating and encrypting packets sent to a user on the remote host.		
SNMP	View only. Shows whether SNMP is enabled or disabled.		
System Location	View only. Physical location of the SNMP system associated with CTRS.		

Table 4-20 SNMP Settings

Field or Button	Setting			
System Contact	View only. Name of the SNMP system contact associated with CTRS.			
SNMP Access Configuration				
Version	View only. Lists the configured SMNP version, either 3 or 2C.			
Username/Community String	View only. SNMP server username.			
Access	View only. Indicates whether the access is read, writer or read/write.			
Password	View only. SNMP server password. The password must be 8 characters long. Enter it twice for verification.			
Security Level	View only. Level of security supported by the SNMP server.			
Authorization Algorithm	View only. Authentication algorithm supported by the SNMP server. Currently only MD5 algorithm is supported.			
Encryption	View only. Encryption used for SNMP requests.			
Trap Receiver Configuration				
IP Address	View only. IP address or hostname of the SNMP trap receiver (the remote SNMP system) where SNMP traps will be sent.			
Version	View only. Lists the configured SNMP version, either 3 or 2C.			
Username	View only. Username used to access the system where SNMP traps are received.			
	Note SNMP trap user names can be from 1 to 32 characters.			
Password	View only. Password used to access the system where SNMP traps are received.			
Engine ID	View only. Engine ID to use for trap; default is system engine ID.			
Security Level	View only. Level of security supported by the SNMP Trap Receiver.			
Authentication Algorithm	View only. Authentication algorithm supported by the SNMP Trap Receiver. Currently only MD5 algorithm is supported.			
Encryption	View only. Encryption used for SNMP requests.			

 Table 4-20
 SNMP Settings (continued)

Configuring SNMP Traps on CTRS

SNMP provides the ability to send traps, or notifications, to inform the system administrator when one or more conditions have occurred. Traps are network packets that contain information about a component of CTRS. The information is status or error-related.

To configure SNMP traps on CTRS, you must complete all of the following steps:

- Start the SNMP service
- Configure an SNMP user

- Configure an SNMP trap destination
- Enable CTRS to send SNMP trap notifications

Starting the SNMP Service

To start the SNMP service, you must do the following:

Step 1 Log in to the CTRS CLI.

Step 2 Run the **utils service start** command:

utils service start Cisco SNMP Service

Configuring an SNMP User

To configure an SNMP user on CTRS, you must do the following:

Step 1 In the CTRS CLI, configure an SNMP user with the command:

set snmp user add version username access [passphrase] [level]

Syntax Description

- version is the SNMP version, either 3 or 2c (both SNMP v3 and v2c are supported)
- username is the SNMP username (SNMP v3) or community string (SNMP v2c)
- *access* defines which SNMP tasks can be accessed; values are r (read), w (write), and rw (read and write)
- passphrase (optional) is the SNMP v3 user passphrase
- *level* (optional) is the SNMP v3 level; value is one of the following:
 - *authNoPriv* (default) is authentication with no encryption. The correct authentication key is
 required to write messages, but no encryption/decryption key is required to read the contents of
 the message.
 - *authPriv* is authentication with encryption. The correct authentication key is required to write messages and the correct encryption/decryption key is required to read the contents of the message.
 - noauthNoPriv is no authentication with no encryption. Neither an authentication key nor encryption/decryption key is required to write and read messages.



The *passphrase* and *level* parameters are not required for SNMP v2c.

The following example configures an SNMP v3 user, with the username **testusr**, granting read and write access, and with the passphrase **testpass**:

set snmp user add 3 testusr rw testpass

Configuring an SNMP Trap Destination

To configure an SNMP trap destination on CTRS, you must do the following:

Step 1 In the CTRS CLI, configure an SNMP trap destination with the command:

set snmp trapdest add version username destination [passphrase] [level] [engineID]

Syntax Description

- *version* is the SNMP version, either 3 or 2c
- username is the SNMP username (SNMP v3) or community string (SNMP v2c)
- *destination* is the destination host, in the format n.n.n.n[:port]
- passphrase (optional) is the SNMP v3 user passphrase
- *level* (optional) is the SNMP v3 level; value is one of the following:
 - *authNoPriv* (default) is authentication with no encryption. The correct authentication key is required to write messages, but no encryption/decryption key is required to read the contents of the message.
 - authPriv is authentication with encryption. The correct authentication key is required to write messages and the correct encryption/decryption key is required to read the contents of the message.
 - noauthNoPriv is no authentication with no encryption. Neither an authentication key nor encryption/decryption key is required to write and read messages.
- engineID (optional) is the SNMP v3 engine ID to use for the trap

The following example configures an SNMP v3 trap destination with the username **testusr**, at host **64.101.180.49:162**, passphrase **testpass**, and engine ID **0x8000DEECAFE8111BEEFADE**:

set snmp trapdest add 3 testusr 64.101.180.49:162 testpass authpriv
0x8000DEECAFE8111BEEFADE

Step 2 Configure the SNMP client device according to the instructions for that device. For instructions on configuring a CTS Release 1.8 endpoint, for example, see the SNMP Settings sections of the Cisco TelePresence Administration Guide for CTS Software Release 1.8.

Enabling CTRS to Send SNMP Trap Notifications

The final step to configuring an SNMP trap on CTRS is to enable CTRS to send SNMP trap notifications.

To enable CTRS to send SNMP trap notifications, you must do the following:

• Using an SNMP client, set the **clognotificationsenabled** MIB to **True**.

SNMP Trap notifications are now enabled for CTRS.

Modifying SNMP Trap Settings

You can modify existing SNMP trap destinations and user access.

To modify an SNMP trap destination, do the following:

Step 1 Delete the existing trap destination with the command:

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set snmp trapdest del

After entering the above command, the CTRS CLI lists all configured SNMP trap destinations and prompts you to specify the trap destination to delete.

Step 2 Configure the new SNMP trap destination with this command:

set snmp trapdest add version username destination [passphrase] [engineID] [level]

For details on the syntax, refer to Syntax Description, page 4-44.

The following example configures an SNMP v3 trap destination with the username **testusr**, at host **192.168.180.122**, passphrase **testpass**, and engine ID **0x8000DEECAFE8111BEEFADE**:

set snmp trapdest add 3 testusr 192.168.180.122 testpass 0x8000DEECAFE8111BEEFADE

To modify SNMP user access to CTRS SNMP traps, do the following:

Step 1 Delete an existing SNMP user with the command:

set snmp user del version username

Syntax Description

- *version* is the SNMP version, either 3 or 2c
- username is the SNMP username (SNMP v3) or community string (SNMP v2c)

The following example deletes the SNMP v3 user testusr:

set snmp user del 3 testusr

Step 2 Configure the new SNMP user with the command:

set snmp user add version username access [passphrase] [level]

For details on the syntax, refer to Syntax Description, page 4-43.

The following example configures an SNMP v3 user, with the username **newusr**, granting read and write access, and with the passphrase **newpass**:

set snmp user add 3 newusr rw newpass

Restart or Shutdown CTRS

In System Settings, click the Restart CTRS tab to restart or to shut down the CTRS (see Figure 4-25).

Figure 4-25 Configure > System Settings—Restart CTRS

Configure > System Settings				
System Settings				
IP NTP QoS SN	IMP Restart CTRS			
Restart	Shutdown			

To restart CTRS:

- Step 1 Click System Settings in the left menu.
- Step 2 Click the **Restart CTRS** tab.
- Step 3 Click Restart to restart CTRS. Restart means that the CTRS shuts down and then reboots.

To shutdown CTRS:

Step 1	Click System Settings in the left menu.
Step 2	Click the Restart CTRS tab.
Step 3	Click Shutdown to shut down CTRS.

Unified CM

Cisco Unified Communications Manager (Unified CM) settings consist of these configuration areas:

- Unified CM, page 4-47
- SIP Profile Settings, page 4-48
- Access Settings, page 4-50

Unified CM

In Unified CM, click the **Unified CM** tab to display or configure Cisco Unified CM servers and SIP ports (see Figure 4-26).

Configure > System Settings		
System Settings		
	SNMP Restart CTRS	
MAC Address:	EF:1F:1F:F5:F4:0F	
Hostname:	ctrs78.cisco.com	
🜣 Domain Name:	cisco.com	
🜣 Primary DNS:	10.70.168.183	
Secondary DNS:	10.68.226.120	
Ethernet Card:	eth0	
🜣 IP Address:	10.22.157.178	
🜣 Subnet Mask:	255.255.255.0	
🜣 Default Gateway:	10.22.157.1	
🗢 = Required fields		
Apply Reset		343049
		X

Figure 4-26 Configure > Unified CM—Unified CM

From the Unified CM tab, you can specify Cisco Unified Communications Manager servers and SIP ports (see Table 4-21).

Table 4-21 Cisco Unified CM Settings

Field or Button	Setting		
Cisco Unified CM 1 through 5	Hostnames or IP address(es) of the Cisco Unified Communications Manager (Unified CM) server.		
	Note It is important to add all Unified CM servers in the cluster.		
SIP Port	Port number for Cisco Unified SIP IP Phones that are using UDP to listen for SIP messages from Cisco Unified CM. The default setting is 5060.		

- To register new or modified settings, click Apply.
- To restore the original settings, click **Reset**.

SIP Profile Settings

In Unified CM, click the **SIP Profile Settings** tab to display or configure SIP profile settings (see Figure 4-27).

Figure 4-27 Configure > Unified CM—SIP Profile Settings

Configure > Unified CM	
Unified CM	
Unified CM SIP Profile Settings Access S	lettings
Count for SIP Invite:	6
Retry Count for SIP non Invite Request:	10
SIP Expires Timer:	1800
C SIP Timer T1:	500
SIP Timer T2:	4000
🗢 Start Media Port:	16384
🗢 Stop Media Port:	32766
Device Security:	Encrypted with SDP Keys 🛛 👻
Transport Layer Protocol:	TLS 💌
🗢 = Required fields	
Apply Reset	88

SIP profile settings, which are described in Table 4-22, are applied to all SIP ports that you specify in the Unified CM tab.

Field or Button	Setting
Retry Count for SIP Invite	Specifies the number of times that Cisco Unified Communications Manager (Unified CM) will re-send the INVITE message. This is a required field. Minimum is 1. Maximum is 10 Default is 6.
Retry Count for SIP non-Invite Request	Specifies the number of times that Unified CM will re-send the non-INVITE message. This is a required field. Minimum is 1. Maximum is 10 Default is 6.
SIP Expires Timer	Specifies the maximum time that an INVITE message remains valid. If Unified CM has not received an answer before this timer expires, Unified CM tears down the call. This is a required field. Minimum is 60000 (msec). Maximum is 300000 (msec). Default is 180000 (msec).
SIP Timer T1	Specifies the lowest value, in milliseconds, of the retransmission timer for SIP messages. Valid values include any positive number. Default specifies 500.

Table 4-22SIP Profile Settings

Field or Button	Setting			
SIP Timer T2	Specifies the highest value, in milliseconds, of the retransmission timer for SIP messages. Valid values include any positive number. Default specifies 4000.			
Start Media Port	Designates the start real-time protocol (RTP) port for media. Media port ranges from 16384 to 32766. The default for Cisco Unified Communications Manager (Unified CM) is 16384.			
Stop Media Port	Designates the stop real-time protocol (RTP) port for media. Media port ranges from 16384 to 32766. The default is for Cisco Unified Communications Manager (Unified CM) is 32766.			
Device Security	Specifies the type of security applied to this CTRS. Available choices are the following:			
	• Non-Secure			
	• Authenticated			
	• Encrypted with SDP Keys			
	• Encrypted without SDP Keys (select this option if you are using a version of Unified CM that does not support encryption with SDP keys)			
Transport Layer Protocol	Defines the transport protocol used. Available choices are:			
	• TCP			
	• UDP			
	Note Whenever the transport type is modified in CTRS, the corresponding transport type for the Cisco Unified CM trunk setting must be changed to match the CTRS transport type.			

Table 4-22	SIP Profile Settings	(continued)
------------	----------------------	-------------

- To register new or modified settings, click Apply.
- To restore the original settings, click **Reset**.

Access Settings

In Unified CM, click the **Access Settings** tab to display or configure route patterns or access settings (see Figure 4-28).

Figure 4-28 Configure > Unified CM—Access Settings

Configure > Unified CM Unified CM Unified CM SIP Profile Set	tings	Access Settings	
🜣 Route Pattern Start:	4940	1	
🜣 Route Pattern End:		3	
Access Number:			
🜣 Access Name:		78	
Required fields			
Apply Reset			343040

All of the settings on the Access Settings tab are derived from settings you configured in Cisco Unified Communications Manager (Cisco Unified CM).

Table 4-23 Access Settings

Field or Button	Setting
Route Pattern Start	Defines the first number in your defined route pattern as configured in Cisco Unified CM.
Route Pattern End	Defines the last number in your defined route pattern as configured in Cisco Unified CM.
Access Number	Displays the first number in the route pattern as defined in Cisco Unified CM. After you set the "SIP Trunk Minimum Number" value in Cisco Unified CM, CTRS automatically selects that number as this access number.
Access Name	Descriptive name for the access number as defined in Cisco Unified CM. Maximum number of characters is 20.

• To register new or modified settings, click Apply.

• To restore the original settings, click **Reset**.





Managing CTRS Recordings

October 2011

The Cisco TelePresence Recording Server (CTRS) stores and enables you to manage recordings created by the following sources:

- Cisco TelePresence Studio Mode
- Event Recording

The following sections describe the CTRS Recordings Management features. Recordings Management is divided into the following areas:

- Active Recording, page 5-1
- Completed Recordings, page 5-2
 - Exporting Recordings from the Completed Recordings List, page 5-4
 - Downloading a Recording to Your Computer, page 5-5

Active Recording

Click **Active Recordings** in the left menu to display all recordings that are currently being created (see Figure 5-1).

Figure 5-1 Manage > Active Recordings

Man	age > Acti∨e Recordir	ngs				
	Recording ID	Room	Туре	User	Duration	
	2011091223011968592926	88001	Ad Hoc Meeting Recording	Acorn@cisco.com	1 min 13 secs	
						amore.

The Active Recordings page displays a table that lists the following information about recording sessions that are currently in progress:

Field	Description		
Recording ID	Identification number for this recording session.		
Room	• For Studio Mode recordings, Cisco TelePresence room in which the recording is taking place.		
	• For Event Recordings, the CTMS Directory Number configured on the CTMS that initiated the recording.		
Туре	Type of recording.		
User	• For Studio Mode recordings, the user who logged in and started the recording.		
	• For Event Recordings, the CTRS User ID with which the CTMS administrator logged into the CTRS to start the recording.		
Duration	Length of time for this recording.		

Table 5-1	Active Recording Table Field Descriptions
	Active necolulity lable held Descriptions

- To stop a recording in progress, click **Stop**.
- To refresh the information displayed, click **Refresh**.

Completed Recordings

Click Completed Recordings in the left menu to display completed recordings (see Figure 5-2).

Figure 5-2 Manage > Completed Recordings

Com	pleted Recordings					Showi	ng 1-10 of 76 10	🔽 per page 🖸
Star	t on: 05/05/2011 📰 End	l on: 05/26/2011 🧱 Sta	tus: All 💌					
Own	ner: Title	e:	Filter					
	Recording ID	Title	Owner	Room	Date 🔹	Туре	Duration	Status
	2011052614361873944501	Barb's ad hoc meeting	bmatsumu@cisco.com	88001	05/26/2011 07:36 AM	Meeting	16 mins 42 secs	Available
	2011052523400847082156	switch source 500m	vtuy@cisco.com	88001	05/25/2011 04:40 PM	Meeting	1 min 20 secs	Available
	2011052523340767826100	shaan patch	vtuy@cisco.com	88001	05/25/2011 04:34 PM	Meeting	1 min 13 secs	Available
	2011052523135657334279	Quarterly meeting	vtuy@cisco.com	88001	05/25/2011 04:14 PM	Meeting	54 secs	Available
	2011052522472734431591	Quarterly meeting	bmatsumu@cisco.com	88001	05/25/2011 03:47 PM	Meeting	18 secs	Available
	2011052521495834433205	missing audio with patched	vtuy@cisco.com	88001	05/25/2011 02:50 PM	Meeting	3 mins 12 secs	Available
	2011052518154182591211	missing part of audio	vtuy@cisco.com	88001	05/25/2011 11:15 AM	Meeting	3 mins 33 secs	Available
	2011052501543295102912	downgrade no audio	vtuy@cisco.com	96810	05/24/2011 06:54 PM	Meeting	6 mins 33 secs	Available
	2011052421350189446519		vtuy@cisco.com	13113	05/24/2011 02:35 PM	Studio	20 secs	Available
	2011052421281749102644	downgrade no audio	vtuy@cisco.com	96810	05/24/2011 02:28 PM	Meeting	4 mins 7 secs	Available
Det	ails Download Delete	Export Refresh					Page	1 of 8 🕨 🕨

Use the Completed Recording page to view or edit a list of all completed recordings that are currently stored on CTRS.

To filter entries in the Completed Recordings table:

- **Step 1** Click the calendar icon to the right of the **Start on:** text box to display a calendar. Click the beginning date for filtering completed recordings information.
- **Step 2** Click the calendar icon to the right of the **End on:** text box to display a calendar. Click the ending date for filtering completed recording information.
- Step 3 Choose the appropriate value from the Status drop-down list. Choices are:
 - All
 - Available
 - Delete Pending
- **Step 4** To filter using the owner of a recording, enter the owner name in the **Owner** text box.
- **Step 5** To filter using the title of a recording, enter the recording title in the **Title** text box.
- Step 6 Click Filter.

Completed Recordings displays a table providing the following information about completed recordings, as described in Table 5-2:

Field	Description			
Select All	Check this box to select all defined static meetings.			
Recording ID	Recording identification number.			
Title	Recording title.			
Owner	• For Studio Mode recordings, the user who created and owns the recording.			
	• For Event Recordings, the CTRS User ID with which the CTMS administrator logged into the CTRS to create the recording.			
Room	• For Studio Mode recordings, the Cisco TelePresence System room in which recording was produced.			
	• For Event Recordings, the CTMS Directory Number configured on the CTMS that initiated the recording.			
Date	Date on which recording was produced.			
Туре	Displays the recording type, which can be one of the following:			
	• Meeting—Recording made using the Event Recording feature.			
	• Studio—Recording made while in Studio Mode.			

Table 5-2 Completed Recordings Table Field Descriptions

Field	Description		
Duration	Recording length.		
Status	Recording status. Statuses are as follows:		
	• All—all videos in the list.		
	• Available—videos that are available for deletion or export.		
	• Delete Pending—videos that are scheduled for deletion. Videos show the Delete Pending status based on the number of days that are configured in the Delete field (System Configuration > Backup Settings—Export Media Files tab).		

Table 5-2 Completed Recordings Table Field Descriptions

- To refresh the list of displayed recordings, click Refresh.
- To delete a recording, check the box for that recording and then click **Delete**.
- To see details about a recording, check the box for that recording and then click **Details**. CTRS displays the following information about the recording, as described in Table 5-3. After viewing details about the recording, click **Close** to return to the Complete Recordings window.

Field	Description
Recording ID	Recording identification number.
Title	Recording title (if defined)
Description	Description of recording (if defined)
Owner	• For Studio Mode recordings, the user who created and owns the recording.
	• For event recordings, the CTRS User ID with which the CTMS administrator logged into the CTRS to create the recording.
Recording Date	Date on which recording was produced.
Quality	Image quality of the recording.
Recording Type	Whether the recording is a Studio Mode recording, or an Event Recording.
Make recording viewable by everyone	Select this checkbox to make this recording available to all CTRS users.

 Table 5-3
 Recording Detail Table Field Descriptions

Exporting Recordings from the Completed Recordings List

You can export recordings to a specified archive server. To export recordings, do the following:

Step 1 Check the box for the recording(s) that you want to export.

Step 2 Click Export. CTRS displays a table listing all of the recordings you selected for export.

Step 3 Choose the appropriate export destination server from the **Export to:** drop-down list.

Step 4 Click Export.



For more information about configuring export destination servers, see the "Archive Servers" section on page 4-12 of this guide.

Note

When you export recording files, they remain on the CTRS. To delete recordings, check the boxes next to the recordings. Then click **Delete**.

Downloading a Recording to Your Computer

You can download the standard definition (SD) or high definition (HD) version of a recording to your computer. For a recording made using Event Recording, you can also download the presentation materials displayed during the meeting.

Because of video resolution changes, recordings made using Event Recording could be stored in multiple files. Before downloading multiple files to your computer, the CTRS transcodes the files into one file, which can be a lengthy process.

To download, do the following:

Step 1 Check the box for the recording that you want to download.

Step 2 Click Download.

The Download Recording dialog box appears as shown in Figure 5-3.

Figure 5-3 Download Recording Dialog Box

Download Recording

Title:	1 131	
Standard-Definition Video:	Download	
High-Definition Video:	Download	
Presentation Video:	Download Presentation	
Close		A3061

Step 3 Decide which version of the recording you want to download, and click the corresponding button.If the Process File for Download button appears, the recording was written to multiple files, which must be transcoded into one file then downloaded. The transcoding process can be lengthy; therefore, a

percentage complete counter provides an update of the progress.

Step 4 After the download is complete, click **Save** in the dialog box that appears, and specify where you want to save the file on your computer.



CHAPTER 6

Troubleshooting CTRS

October 2011

The following sections describe the Troubleshooting tools for the Cisco TelePresence Recording Server (CTRS):

- Dashboard, page 6-1
- Process Status, page 6-4
- Hardware Status, page 6-5
- System Information, page 6-6
- System Status, page 6-7
- CTRS Alarms and System Errors Messages, page 6-8
- Log Files, page 6-10

Dashboard

After you log into the CTRS Administrative UI, the Troubleshoot > Dashboard page appears. You can also access this page by clicking **Dashboard** in the left navigation.

As shown in Figure 6-1, the Troubleshoot > Dashboard page enables you to view high-level reports on the following aspects of the CTRS:

- Disk usage for media storage
- Users
- Recordings
- Time
- Services

Figure 6-1 Troubleshoot > Dashboard

Disk Usage for Media Storage		Time		
Total Size	5360	Bystem Time.	Monday, September 12, 2011 8 47.55 PM (GMT +0)	
Disk Utilization:	2190 (42% Full)	Local Time:	Monday, September 12, 2011 1:48:30 PM (GMT-07:00)	
Users		Services		
EndUsers	71	LCAP	OK	
Total Online Sessions:	0	liber and libers	OK	
Total Registered Users:	8	Anthra Danera:	OK	
Administrative Users		CTS Manager	NA	
Total Online Sessions:	2			
Total Registered Users:	1			
Recordings				
Active Recordings and Playbacks	0			
Completed Recordings	1200			

Table 6-1 describes each Dashboard field. Each field name or entry is a link, which you can click to get more detailed information.

You can refresh the data in the Dashboard at any time by clicking the refresh icon in the upper right corner of the page.

Field	Description	
Disk Usage for Media Storage		
Total Size	Displays the total amount of disk space, in gigabytes, available to store videos.	
	For more information on disk status, click the link to access the Troubleshoot > Hardware Status page.	
Disk Utilization	Displays the amount of disk space, in gigabytes and as a percentage of the total disk size, currently used for video storage.	
	For more information on disk status, click the link to access the Troubleshoot > Hardware Status page.	
Users		
End Users		
Total Online Sessions	Displays the number of end users who are currently logged into the web-based Cisco TelePresence Video Portal.	
	For information on recordings currently being made or played back by a CTS endpoint, see the Active Recordings and Playbacks field, which is described later in this table.	
	For more information on end users who can access the Cisco TelePresence Video Portal, click the link to access the Configure > Access Management page, then click the End-user Portal tab.	
Total Registered Users	Displays the number of end users who have accounts to access to the Cisco TelePresence Video Portal.	
	For more information on end users who can access the Cisco TelePresence Video Portal, click the link to access the Configure > Access Management page, then click the End-user Portal tab.	

 Table 6-1
 Dashboard Field Descriptions

Field	Description	
Administrative Users		
Total Online Sessions	Displays the number of administrative users who are currently logged into the CTRS Administrative UI.	
	For more information on administrative users who can access the CTRS Administrative UI, click the link to access the Configure > Access Management page, Administrative Portal tab.	
Total Registered Users	Displays the number of administrative users who have accounts to access to the CTRS Administrative UI.	
	For more information on administrative users who can access the CTRS Administrative UI, click the link to access the Configure > Access Management page, Administrative Portal tab.	
Recordings		
Active Recordings and Playbacks	Displays the number of recordings with the following status:	
	• Currently being made in Studio Mode or using Event Recording.	
	• Currently being played back by a CTS endpoint.	
	For more information on the active recordings, click the link to access the Manage > Active Recordings page.	
Completed Recordings	Displays the number of completed recordings that are archived on the CTRS.	
	For more information on the completed recordings, click the link to access the Manage > Completed Recordings page.	
Time		
System Time	Displays the time determined by the value of the set timezone command in the CTRS command-line interface (CLI). (The default value of this command is Greenwich Mean Time (GMT)/Coordinated Universal Time (UTC)). This time typically corresponds to the location of the server running the CTRS application.	
Local Time	Displays the time determined by the value of the Time Zone field, which you can access by clicking Preferences in the upper right corner of the CTRS Administrative UI. This time typically corresponds to the location of the CTRS administrator.	

Table 6-1 Dashboard Field Descriptions (continued)

Field	Description		
Services			
LDAP, Show and Share, Archive Servers, and CTS-Manager	Displays the status of the LDAP, Show and Share, and archive servers, with which the CTRS could be registered. The status can be one of the following:		
	• OK—The CTRS is registered with a particular server, and the connection to the server is operational.		
	• Error—The CTRS is registered with a particular server, but the connection to the server is not operational.		
	• NA—You cannot register this version of CTRS with CTS-Manager. Only the Commercial Express version of CTRS can be registered with CTS-Manager.		
	For more information on a particular server, click the link to access the respective server page in the CTRS Administrative UI.		

	Table 6-1	Dashboard	Field Descri	iptions	(continued)
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Process Status

Click **Process Status** in the left navigation to display processes that are currently running (see Figure 6-2).

Figure 6-2	Troubleshoot > Process Status
------------	-------------------------------

Monitor > Process Status		
Process Status		
Process Name	Process Status	
ccs	RUNNING	
post_process	RUNNING	
keyExchange	RUNNING	
xcs	RUNNING	
Restart	8000	

The Process Status page displays a table that provides the following information:

Table 6-2 Process Status Table Field Desc	criptions
---	-----------

Field	Description
Process Name	Process name
Process Status	Status of this particular process.

- Click **Restart** to restart all of the processes.
- The information in the Process Status page automatically refreshes every 10 seconds.

<u>A</u> Caution

When you restart CTRS system processes, all active meetings are dropped. Check for active meetings before using this command.

Hardware Status

Click Hardware Status in the left menu to display hardware-related information (see Figure 6-3).

Figure 6-3 Troubleshoot > Hardware Status			
Troubleshoot > Hardwa	re Status		
Disk Status for System OS			
Logical Drive:			
ID	Size	Status	
1 (RAID 1)	135GB	✓	
Physical Drives:			
Bay	Size	Status	
Bay_0	136GB	✓	
Bay_1	136GB	✓	
Disk Status for Media Storage			
Logical Drive:			
ID	Utilization	Status	
2 (RAID 5)	412G of 536G (81%)	✓	
Physical Drives:			
Bay	Size	Status	
Bay_2	136GB	✓	
Bay_3	136GB	✓	
Bay_4	136GB	* * *	
Bay_5	136GB	✓	
Bay_6	136GB	★368 ¥308	

The Hardware Status page lists the status of CTRS hardware. The information in this page automatically refreshes every 10 seconds.

Field	Description	
Disk Status for System OS		
Logical Drive		
ID	Identification number	
Size	Size of the partition	
Status	Current status of that area of the hard drive.	
Physical Drives		

Field	Description	
Bay	Bay number	
Size	Size of the partition	
Status	Current status of that area of the hard drive.	
Disk Status for Media Storage	<u> </u>	
Logical Drive		
ID	Identification number	
Utilization	Current utilization of the drive	
Status	Current status of that area of the hard drive.	
Physical Drives	<u> </u>	
Bay	Bay number	
Size	Size of the partition	
Status	Current status of that area of the hard drive.	

Table 6-3 Hardware Status Field Descriptions (continued)

System Information

Click **System Information** in the left navigation to view information about the CTRS (see Figure 6-4). The information displayed under System Information is configured during CTRS software installation.

Figure 6-4 Troubleshoot > System Information

System Info	rmation
SKU:	CTS-CTRS-1.7
Hostname:	ctrs6
IP Address:	209.165.202.129
Subnet Mask:	255.255.255.224
MAC Address:	00:23:7D:62:B1:B1
Hardware Mode	l: 784512
Software Versio	n: 1.7.0.
OS Version:	UCOS 4.0.0.0-31
Kernel Version:	2.6.9-78.ELsmp #1 SMP

- SKU
- Hostname: Hostname of the CTRS.
- IP Address and subnet mask: IP address and corresponding subnet mask of the Cisco TelePresence Recording Server.
- MAC Address: MAC address of the Cisco MCS 7800 Series Media Convergence Server on which the Cisco TelePresence Recording Server is running
- Hardware Model: Model number of the Cisco MCS 7800 Series Media Convergence Server on which the Cisco TelePresence Recording server is running.
- Software Version: Version of CTRS Administration software currently installed.

- Operating System (OS) Version
- Kernel Version

System Status

Click **System Status** in the left navigation to display statistics that are related to system status (see Figure 6-5).





The System Status page provides snapshots of the following:

- Active CPU Load Percentage
- Active CPU Load Average Value
- Traffic Analysis for <interface>
- Packet Discards for <interface>
- Free Memory
- Free Swap + Real Memory
- Root Disk / Usage %
- Open TCP Connections

Click each snapshot to reveal daily, weekly, monthly and yearly averages.

CTRS Alarms and System Errors Messages

You can view CTRS system messages in one of two ways:

• Click **System Messages** in the left navigation (see Figure 6-6). The System Messages page displays a list of messages.

Figure 6-6 Troubleshoot > System Messages

Troubleshoot >System Messages					
Syste	System Messages				
Star	ton: 10/10/2011 🧰 B	End on: 10/11/2	2011 🧱 Severity: All 💌 Filter		
	Time ¹	Severity	Summary	Recommendation	
	10/11/2011 01:24 PM	warning	Above Threshold. Please Reduce Disk Usage.	Contact administrator	
	10/11/2011 12:12 PM	warning	Above Threshold. Please Reduce Disk Usage.	Contact administrator	
	10/11/2011 11:00 AM	warning	Above Threshold. Please Reduce Disk Usage.	Contact administrator	
	10/11/2011 09:48 AM	warning	Above Threshold. Please Reduce Disk Usage.	Contact administrator	
	10/11/2011 08:36 AM	warning	Above Threshold. Please Reduce Disk Usage.	Contact administrator	
	10/11/2011 07:24 AM	warning	Above Threshold. Please Reduce Disk Usage.	Contact administrator	
	10/11/2011 06:12 AM	warning	Above Threshold. Please Reduce Disk Usage.	Contact administrator	
	10/11/2011 05:00 AM	warning	Above Threshold. Please Reduce Disk Usage.	Contact administrator	
	10/11/2011 03:48 AM	warning	Above Threshold. Please Reduce Disk Usage.	Contact administrator	
	10/11/2011 02:36 AM	warning	Above Threshold. Please Reduce Disk Usage.	Contact administrator	

• From System Status at the bottom of the left navigation, click the icon for Warnings or Errors.



If you click the icon for **Warnings**, you will see endpoint alert information. Warnings are issued every 20 seconds when an endpoint crosses its packet loss threshold. If congestion continues for more than 40 seconds, the endpoint will be dropped.

 \bigcirc

If you click the icon for **Errors**, you will see endpoint drop information. Whenever an endpoint drops from high packet loss, an error is issued with the error code "CONGESTION."

The following table provides field descriptions for all system error and warning displays:

Field	Description Displays the time at which the condition occurred.	
Time		
Severity	Indicates the severity level of the error. There are eight severity levels as follows:	
	• Emergency	
	• Alert	
	• Critical	
	• Error	
	• Warning	
	• Notice	
	• Info	
	• Debug	
Summary	Message describing the error.	
Recommendation	Recommended action to deal with the condition.	

 Table 6-4
 System Error Field Descriptions

- To delete one of the system error messages, click the radio button to the left of the table entry, and then click **Clear**.
- To delete all error messages displayed, click Clear All.

I

Log Files

Click Log Files in the left menu to display or modify log information (see Figure 6-7).

Figure 6-7 Troubleshoot > Log Files

Troubleshoot > Log Files			
CCS: Post Process: Execution Manager: Media Processor: Key Exchange: Transcode Processor: Apply Reset	INFO V INFO V INFO V INFO V INFO V		
Log Files			
Process: All	Filter		
	Filter Process	Last Modified'	Size (KB)
Process: All		Last Modified1 09/11/2011 03:59 PM	Size (KB) 399.9
Process: All Filename	Process		
Process: All Filename rma00014.log	Process Media-Processor	09/11/2011 03:59 PM	399.9
Process: All Filename rma00014.log sip00001.log	Process Media-Processor SIP	09/11/2011 03:59 PM 09/09/2011 05:41 PM	399.9 0.04
Process: All Filename rma00014.log sip00001.log .transcode_status	Process Media-Processor SIP N.A	09/11/2011 03:59 PM 09/09/2011 05:41 PM 09/09/2011 11:31 PM	399.9 0.04 16.0
Process: All Filename rma00014.log sip00001.log .transcode_status rma00013.log	Process Media-Processor SIP N.A Media-Processor	09/11/2011 03:59 PM 09/09/2011 05:41 PM 09/09/2011 11:31 PM 09/11/2011 03:01 PM	399.9 0.04 16.0 400.0
Process: All Filename rma00014.log sip00001.log .transcode_status rma00013.log rma00009.log	Process Media-Processor SIP N.A Media-Processor Media-Processor	09/11/2011 03:59 PM 09/09/2011 05:41 PM 09/09/2011 11:31 PM 09/11/2011 03:01 PM 09/11/2011 11:11 AM	399.9 0.04 16.0 400.0 399.95
Process: All Filename rma00014.log sip00001.log .transcode_status rma00013.log rma00009.log kevexchange.log	Process Media-Processor SIP N.A Media-Processor Media-Processor Key-Exchange	09/11/2011 03:59 PM 09/09/2011 05:41 PM 09/09/2011 11:31 PM 09/11/2011 03:01 PM 09/11/2011 11:11 AM 09/11/2011 07:44 PM	399.9 0.04 16.0 400.0 399.95 2.95
Process: All Filename rma00014.log sip00001.log .transcode_status rma00013.log rma00009.log keyexchange.log rma00012.log	Process Media-Processor SIP N.A Media-Processor Media-Processor Key-Exchange Media-Processor	09/11/2011 03:59 PM 09/09/2011 05:41 PM 09/09/2011 11:31 PM 09/11/2011 03:01 PM 09/11/2011 11:11 AM 09/11/2011 07:44 PM 09/11/2011 02:04 PM	399.9 0.04 16.0 400.0 399.95 2.95 400.0

Use the Log File page to set severity levels for alarms associated with specific system processes, to filter log files displayed, and to download log files.

Configuring the Severity Level of System Error Messages

To configure the severity level of system level error messages and alarms for specific process areas:

Step 1 Click Log Files under Troubleshooting in the left menu to access the Log Files page.

Step 2 At the top of the Log Files page, there is a table listing the following CTRS system processes:

- CCS
- Post Processor
- Execution Manager
- Media Processor
- Key Exchange
- Transcode Processor

To the right of each process is a drop-down menu with these severity levels:

- CRIT
- DEBUG
- ERROR
- INFO
- OFF
- WARN

Click the down arrow to display the defined levels of severity. Choose the level at which logs are captured.



Log levels create varying amounts of data; for example, DEBUG creates more log entries than CRIT. Because verbose logs can impact system performance, use verbose logs only to track a problem.

Filtering the Log File Table Listings

To filter the log files displayed in the Log File Table:

- **Step 1** Click Log Files under Troubleshooting in the left menu to access the Log Files page.
- **Step 2** Click the down arrow to the right of **Processes** to display a list of CTRS processes. Click a specific process on which to filter log files. Choices are the following:
 - All
 - Alarm-Logs
 - CCS
 - CDR-Logs
 - Core
 - CTRS-Sysop
 - Exe-Exchange
 - Media-Processor
 - Post-Process
 - SIP
 - Web-UI
 - Transcode-Processor
- **Step 3** Click the **Filter** button to display the logs files associated with the chosen process.

Downloading Log Files

To download log files from the Log File table:

- **Step 1** Click Log Files under **Troubleshooting** in the left navigation.
- Step 2At the bottom of the Log Files page is the Log File list. The table is organized as described in Table 6-5.Table 6-5Log Table Field Descriptions

Field	Description	
Filename	Filename of the log file. Click the arrow to change the order (descending, ascending based on alphabetical order of the filenames) in which the log files are displayed.	
Process	CTRS system process area. Click the arrow to change the order (descending, ascending based on alphabetical order of the processes) in which the log files are displayed.	
Last Modified	Time (Greenwich Mean Time, Pacific Standard Time) at which the log file was collected. Click the arrow to change the order (descending, ascending based on time) in which the log files are displayed.	
Size	Size (in kilobytes) of the compressed log file.	

Step 3 Click the filename of a log file to download that file. Click the **Download All** button to download all log files listed.



APPENDIX A

System Messages

October 2011

- System Message Overview, page A-1
- System Messages By Source, page A-2

System Message Overview

When trying to find documentation for a particular system message, consider the following:

- The system messages in this appendix are grouped by the CTRS component that generated them. For example, all LDAP messages appear in the same section.
- Each system message condition has a severity level. From most severe to least severe, the severity levels are the following:
 - Alert
 - Critical
 - Error
 - Warning
 - Info
- Some system messages in this appendix include "%s," "%d," "\$1," "\$2," or "\$3," which are variables. When these variables appear in the CTRS administration interface or in the system log files, they are replaced by a text string that provides specific information about the condition or a numerical value, such as a dial number.
- You can resolve some conditions that are described in the system messages by correcting network configuration or connectivity issues. On occasion, you might not be able to resolve a condition by following the recommended action. In such cases, collect CTRS log files and contact your technical support representative. If the condition also involves other devices in your network, for example, a CTS endpoint, collect the log files for those devices whenever possible.

System Messages By Source

The following sections present information on these system messages:

- SVR Messages, page A-2—general server
- DISK Messages, page A-3—disk manager
- LDAP Messages, page A-5—Lightweight Directory Access Protocol
- RMGR Messages, page A-7—recording manager module
- SNS Messages, page A-10—Cisco Show and Share
- SOAP Messages, page A-12—web services Simple Object Access Protocol
- CERT Messages, page A-15—certificate management
- SMTP Messages, page A-16—email manager
- LCAL Messages, page A-18—messages about publishing or deleting locales
- CCS Messages, page A-18—call control system
- MEDIA Messages, page A-32-media
- POST Messages, page A-38—post-processing
- EXEMGR Messages, page A-38—execution manager

SVR Messages

INTERNAL_ERROR

Severity

Error

Message

The system has encountered an unexpected condition (\$1)

Recommendation

Contact your support team.

Application Name and Message Code SVR 1000

CONFIG_PARSER_ERROR

Severity Critical

Message

Unable to parse system configuration file '\$1' because \$2.

Recommendation

The system configuration file cannot be processed. Contact your support team.

Application Name and Message Code

SVR 1001

DISK Messages

CTRS_VIDEO_EXPORT_NO_SPACE

Severity

Critical

Message

There is no enough space for video export. Current available space on '\$1' is \$2 KB. The size of to-be exported video is \$3 KB"

Recommendation

There is not enough space on the remote server for video export. Contact your support team.

Application Name and Message Code DISK 1700

CTRS_VIDEO_EXPORT_START

Severity

Info

Message

The recordings exported to \$1 was started.

Recommendation

No action is required.

Application Name and Message Code DISK 1701

CTRS_VIDEO_EXPORT_END

Severity Info

Message

The recordings exported to '\$1' was finished. Detailed export report was emailed to administrator

Recommendation

No action is required.

Application Name and Message Code

DISK 1702

CTRS_VIDEO_IMPORT

Severity

Info

Message

%s

Recommendation

The character string indicates the status of recording import. No action is required.

Application Name and Message Code DISK 1703

CTRS_DISK_ALERT_NOTIFICATION

Severity

Critical

Message Disk Level Reached Above Threshold

Recommendation

The CTRS disk space has reached a threshold. Contact your support team.

Application Name and Message Code DISK 1704

CTRS_DISK_ALERT_ERROR

Severity Critical

Message Could Not Obtain Disk Usage Stats

Recommendation

The system is unable to obtain disk usage statistics. Contact your support team.

Application Name and Message Code DISK 1705
CTRS_DISK_ALERT_CRITICAL_LEVEL

Severity

Critical

Message

Disk Hit Critical Threshold. All Recording Sessions Dropped.

Recommendation

Contact your support team.

Application Name and Message Code

DISK 1706

CTRS_DISK_ALERT_EMAIL_ADDRESSES

Severity

Warning

Message

No Email Addresses Configured To Alert

Recommendation

No email addresses are configured in alerts management. Configure email addresses so that CTRS administrators receive notifications about disk space usage.

Application Name and Message Code

DISK 1707

LDAP Messages

CTRS_LDAP_CONFIGURATION_NO_HOST

Severity

Critical

Message

Ldap Hostname Not Configured

Recommendation

Include a valid LDAP hostname in the CTRS administrative interface.

Application Name and Message Code

LDAP 1400

CTRS_LDAP_AUTHENTICATION_NO_CONNECTION

Severity

Critical

Message

Unable to connect to '\$1'

Recommendation

CTRS is unable to connect to the LDAP server. Verify connectivity and whether or not the LDAP server is operating properly.

Application Name and Message Code

LDAP 1401

CTRS_LDAP_AUTHENTICATION_NO_LDAP_MANAGER

Severity

Critical

Message

Could Not Obtain LDAP Manager

Recommendation

Contact your support team.

Application Name and Message Code LDAP 1402

CTRS_LDAP_AUTHENTICATION_CONFIG

Severity Critical

Message No default email domain configured

Recommendation

Configure a default email domain.

Application Name and Message Code LDAP 1403

CTRS_LDAP_AUTHENTICATION_NO_AUTH

Severity Critical

Message

Could Not Obtain LDAP Authenticator

Recommendation Contact your support team.

Application Name and Message Code

LDAP 1404

RMGR Messages

CTRS_RECMGR_SESSION_PACKET_LOSS

Severity

Error

Message

Recording Session [\$1,%2] heavy packet loss, recording unrecoverable

Recommendation

No action is required.

Application Name and Message Code RMGR 1200

CTRS_RECMGR_SESSION_INIT

Severity Error

Message Recording Session [\$1,\$2] error while in init

Recommendation

Contact your support team.

Application Name and Message Code RMGR 1201

CTRS_RECMGR_SESSION_PROGRESS

Severity Error

Message

Recording Session [\$1,\$2] error while in progress

Recommendation

Contact your support team.

Application Name and Message Code

RMGR 1202

CTRS_RECMGR_SESSION_TEARDOWN

Severity

Error

Message

Recording Session [\$1,\$2] error while in teardown

Recommendation

Contact your support team.

Application Name and Message Code RMGR 1203

CTRS_RECMGR_SESSION_FINISHING

Severity

Error

Message Recording Session [\$1,\$2] error while in finishing

Recommendation

Contact your support team.

Application Name and Message Code RMGR 1204

CTRS_RECMGR_SESSION_CLEANUP

Severity

Info

Message

Cleaning up Active Sessions

Recommendation

No action is required.

Application Name and Message Code RMGR 1205

CTRS_RECMGR_CONFIGURATION

Severity

Critical

Message

HD and SD are both disabled. Recording aborted

Recommendation

Contact your support team.

Application Name and Message Code

RMGR 1206

CTRS_RECMGR_SESSION_TIMER

Severity

Info

Message

Recording Session [\$1,\$2] has exceeded maximum call duration. Stopping Session

Recommendation

Contact your support team.

Application Name and Message Code RMGR 1207

CTRS_DISK_ALERT_REMINDER

Severity Warning

Message Above Threshold. Please Reduce Disk Usage

Recommendation Contact your support team.

Application Name and Message Code RMGR 1208

SNS Messages

CTRS_SNS_INVALID_CREDENTIALS

Severity

Critical

Message

Invalid Show and Share Credentials.

Recommendation

Contact the Cisco Show and Share administrator for valid credentials.

Application Name and Message Code

SNS 1300

CTRS_SNS_INVALID_HOSTNAME

Severity Critical

Message Invalid Show and Share Host

Recommendation

Contact the Cisco Show and Share administrator for a valid host.

Application Name and Message Code SNS 1301

CTRS_SNS_NO_CONNECTIVITY

Severity Critical

Message

No Connectivity to Show and Share Server.

Recommendation

Contact Show and Share administrator to validate path to server.

Application Name and Message Code

SNS 1302

CTRS_SNS_API_ERROR

Severity

Critical

Message

\$1 API Request Error

Recommendation

An error occurred with a Cisco Show and Share API request. The API request error is specified in the message. Contact your support team.

Application Name and Message Code

SNS 1303

CTRS_SNS_INVALID_ENDUSER

Severity

Critical

Message

Invalid Show and Share User \$1

Recommendation

An invalid end user was set to Cisco Show and Share. Contact your support team.

Application Name and Message Code

SNS 1304

CTRS_SNS_UPLOAD_ERROR

Severity

Critical

Message

Show and Share Upload Error User \$1 Recording ID \$2

Recommendation

A condition prevented video upload to Cisco Show and Share. Contact your support team.

Application Name and Message Code

SNS 1305

CTRS_SNS_EMAIL_ERROR

Severity Critical

Message

Show and Share Email Error \$1 Recording ID \$2

Recommendation

An email to the end user was not sent. Contact your support team.

Application Name and Message Code

SNS 1306

SOAP Messages

CTRS_CTS_SOAP_REQUEST_PLAYBACK

Severity

Critical

Message

Stopped Playback Session for \$1. Problem starting playback

Recommendation

Contact your support team.

Application Name and Message Code SOAP 1800

CTRS_CTS_SOAP_REQUEST_PLAYBACK_INVALID_USER

Severity

Critical

Message

Aborted Replaying for \$1. Unauthorized User \$2 Attempting to Play \$3.

Recommendation

Contact your support team.

Application Name and Message Code SOAP 1801

CTRS_CTS_SOAP_REQUEST_PLAYBACK_NO_HD_FILE

Severity Critical

Message

Aborted Replaying for \$1. User \$2 Attempting to Play \$3, But no HD File Available.

Recommendation

No high-definition file is available for playback. Contact your support team.

Application Name and Message Code

SOAP 1802

CTRS_CTS_SOAP_REQUEST_RECORDING

Severity

Critical

Message

Aborted Recording Session for \$1. Error starting recording

Recommendation

Contact your support team.

Application Name and Message Code

SOAP 1803

CTRS_CTS_SOAP_REQUEST_RECORDING_NO_DISK

Severity

Critical

Message

Aborted Recording Session for \$1. No Disk Available

Recommendation

Contact your support team.

Application Name and Message Code

SOAP 1804

CTRS_CTS_SOAP_REQUEST_RECORDING_NO_PORTS

Severity

Warning

Message

Aborted Recording Session for \$1. No Ports Available

Recommendation

Contact your support team.

Application Name and Message Code SOAP 1805

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CTRS_CTS_SOAP_REQUEST_PLAYBACK_NO_PORTS

Severity

Warning

Message

Aborted Playback Session for \$1. No Ports Available

Recommendation

Contact your support team.

Application Name and Message Code SOAP 1806

CTRS_CTS_SOAP_REQUEST_RECORDING_REPEAT

Severity

Warning

Message

Aborted Recording Session for \$1. A repeat request to record from a remote participant

Recommendation

Contact your support team.

Application Name and Message Code

SOAP 1807

CTRS_CTS_SOAP_REQUEST_PLAYBACK_REPEAT

Severity Warning

Message

Aborted Playback Session for \$1. A repeat request to playback from a remote participant

Recommendation

Contact your support team.

Application Name and Message Code

SOAP 1808

CTRS_CTSMAN_WS_INVALID_RESPONSE

Severity Error

Message

The multiple CTRS web service request returns invalid response. \$1

Recommendation

No action is required. This issue is handled by the software.

Application Name and Message Code

SOAP 1820

CERT Messages

CERT_LOAD_ERROR

Severity

Error

Message

Unable to load certificate because \$1.

Recommendation

Follow the recommendation in the message, and try the operation again.

Application Name and Message Code CERT 1900

CERT_LOAD_EXTENSION_ERROR

Severity

Error

Message

Invalid certificate file name '\$1'. Valid certificate file extensions are .cer and .der.

Recommendation

Try to load a valid certificate file.

Application Name and Message Code

CERT 1901

SMTP Messages

CTRS_USER_DATABASE_ACCESS

Severity

Critical

Message

Failed to access user database

Recommendation

Contact your support team.

Application Name and Message Code SMTP 1600

CTRS_SMTP_SECURE_MAIL

Severity Critical

Message Smtp secure mail cannot be sent

Recommendation

Contact your support team.

Application Name and Message Code SMTP 1601

CTRS_SMTP_SEND_MAIL

Severity Critical

Message Failed to send mail to '\$1

Recommendation

Contact your support team.

Application Name and Message Code SMTP 1602

CTRS_SMTP_INVALID_HOSTNAME

Severity

Critical

Message Smtp hostname id invalid

Recommendation

Contact your support team.

Application Name and Message Code SMTP 1603

CTRS_SMTP_SECURE_CREDENTIALS

Severity

Critical

Message

Username or Password is not configured

Recommendation

Contact your support team.

Application Name and Message Code SMTP 1604

CTRS_SMTP_CONFIGURATION

Severity Critical

Message SMTP Hostname Not Configured

Recommendation Contact your support team.

Application Name and Message Code SMTP 1605

LCAL Messages

CTRS_LCAL_MODIFIED

Severity

Info

Message

\$1

Recommendation

Locales have been modified. No action is required.

Application Name and Message Code LCAL 2000

CCS Messages

DIAL_OUT

Severity Info

Message CTRS dialed out to URI=%s

Recommendation

No action is required.

Application Name and Message Code CCS 2000

DIAL_IN

Severity

Info

Message CTRS received dial in from URI=%s

Recommendation

No action is required.

Application Name and Message Code

CCS 2001

HANG_UP

Severity

Info

Message

CTRS sent hang up to remote participants

Recommendation

No action is required.

Application Name and Message Code CCS 2002

LOCAL_HOLD

Severity Info

Message CTRS sent hold to remote participants

Recommendation

No action is required.

Application Name and Message Code CCS 2003

REMOTE_HOLD

Severity

Info

Message

CTRS received hold from remote participant

Recommendation

No action is required.

Application Name and Message Code CCS 2004

LOCAL_RESUME

Severity

Info

Message

CTRS sent resume to remote participants

Recommendation

No action is required.

Application Name and Message Code CCS 2005

REMOTE_RESUME

Severity

Info

Message

CTRS received resume from remote participant

Recommendation

No action is required.

Application Name and Message Code CCS 2006

LOCAL_REINVITE

Severity Info

Message

CTRS sent reinvite to remote participants

Recommendation

No action is required.

Application Name and Message Code

CCS 2007

REMOTE_REINVITE

Severity

Info

Message CTRS received reinvite from remote participant

Recommendation

No action is required.

Application Name and Message Code CCS 2008

LOCAL_CANCEL

Severity

Info

Message CTRS sent cancel to remote participants

Recommendation

No action is required.

Application Name and Message Code CCS 2009

REMOTE_CANCEL

Severity Info

Message CTRS received cancel from remote participant

Recommendation

No action is required.

Application Name and Message Code CCS 2010

CREATE_MSG_QUEUE_FAIL

Severity Info

Message

System Error -- Could not create %s message queue

Recommendation

Contact your support team.

Application Name and Message Code

CCS 2011

FIND_MSG_QUEUE_FAIL

Severity

Info

Message System Error -- Could not find %s message queue

Recommendation

Contact your support team.

Application Name and Message Code

CCS 2012

MSG_RCV_ERROR

Severity

Info

Message

System Error -- Message receive error %s

Recommendation

Contact your support team.

Application Name and Message Code CCS 2013

MSG_SEND_ERROR

Severity Info

Message System Error -- Message send error %s

Recommendation

Contact your support team.

Application Name and Message Code

CCS 2014

UCM_CONFIG_INCOMPLETE

Severity

Info

Message

System Error -- Unified CM/Access Configuration is incomplete

Recommendation

Contact your support team.

Application Name and Message Code CCS 2015

TRANSACTION_ID_WRAP

Severity

Info

Message

System Error -- Transaction ID wrapped around

Recommendation

Contact your support team.

Application Name and Message Code

CCS 2016

BW_NEG_FAIL

Severity Info

Message

Bandwidth negotiation failed, cause = %d, calling number = %s

Recommendation

Check the bandwidth and video quality configuration on the endpoint.

Application Name and Message Code

CCS 2017

MAX_PARTICIPANTS

Severity

Info

Message

Call being terminated due to maximum participants exceeded

Recommendation

Contact your support team.

Application Name and Message Code

CCS 2018

QUALITY_MISMATCH

Severity

Info

Message Call being terminated due to quality mismatch

Recommendation

No action is required.

Application Name and Message Code CCS 2019

PROCESS_STARTED

Severity

Info

Message

System -- Process started

Recommendation

No action is required.

Application Name and Message Code CCS 2020

DIAL_NUM_NONEXISTENT

Severity

Info

Message

Call being terminated as dialed number does not exist

Recommendation

Verify that the dialed number is correct. Ensure that the Cisco Unified CM trunk settings are correct.

Application Name and Message Code

CCS 2021

XMLRPC_INIT_FAIL

Severity Info

Message System Error -- Failed to create XML/RPC interface

Recommendation

Contact your support team.

Application Name and Message Code CCS 2022

QUALITY_MISMATCH

Severity

Info

Message

Call being terminated due to quality mismatch

Recommendation

Contact your support team.

Application Name and Message Code

CCS 2023

INTEROP_FAIL

Severity

Info

Message

CTRS does not support interop. Cannot join interop meeting

Recommendation

No action is required.

Application Name and Message Code

CCS 2024

UCM_CONFIG_READ_ERROR

Severity

Info

Message

Configuration Error -- Cannot read UCM configuration file

Recommendation

Contact your support team.

Application Name and Message Code

CCS 2025

MAC_ADDRESS_READ_ERROR

Severity

Info

Message

Configuration Error -- Cannot get primary MAC address, CCS halting

Recommendation

Contact your support team.

Application Name and Message Code

CCS 2026

MAC_ADDRESS_WRITE_ERROR

Severity Info

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Message

Configuration Error -- Cannot set MAC address in configuration table, CCS halting

Recommendation

Contact your support team.

Application Name and Message Code

CCS 2027

IP_ADDRESS_READ_ERROR

Severity Critical

Message Cannot get primary IP address, CCS halting

Recommendation

Contact your support team.

Application Name and Message Code CCS 2028

UCM_CONFIG_ERROR

Severity

Error

Message

Error in Unified CM configuration file

Recommendation

Verify that the Cisco Unified CM configuration in the administrative UI is correct.

Application Name and Message Code CCS 2029

NO_UCM_CONFIG

Severity Warning

Message Unified CM IP address not in Unified CM configuration file

Recommendation

Verify that the Cisco Unified CM configuration in the administrative UI is correct.

Application Name and Message Code

CCS 2030

ACCESS_NOT_CONFIG

Severity

Warning

Message

Access name not in the Unified CM configuration file

Recommendation

Verify that the Cisco Unified CM configuration in the administrative UI is correct.

Application Name and Message Code

CCS 2031

RESUME_FAIL

Severity Error

Message Resume participant returned failure

Recommendation

Contact your support team.

Application Name and Message Code CCS 2032

DISCONNECT

Severity

Info

Message

Call from %s being disconnected

Recommendation

No action is required.

Application Name and Message Code CCS 2034

PLAY_FINISH

Severity

Info

Message Endpoint %s finished playback

Recommendation

No action is required.

Application Name and Message Code CCS 2035

CCS 203

RECV_NOT_ACCEPTABLE

Severity

Info

Message

Dialing %s received 488 Not Acceptable Here from Unified CM. Check SIP trunk config.

Recommendation

Contact your support team.

Application Name and Message Code

CCS 2037

RECV_FORBIDDEN

Severity

Info

Message

Dialing %s received 403 Forbidden from Unified CM. Check SIP trunk config.

Recommendation

Contact your support team.

Application Name and Message Code CCS 2039

NUM_NOT_FOUND

Severity Info

Message

Dialed Number %s does not exist, Number Not Found recv from Unified CM

Recommendation

Contact your support team.

Application Name and Message Code

CCS 2040

QUALITY_MISMATCH

Severity

Info

Message

Failed to replay video %s since remote participant %s has insufficient bandwidth

Recommendation

Contact your support team.

Application Name and Message Code

CCS 2041

SPAWN_MEDIA_FAIL

Severity

Critical

Message

Media Process (RMA) failed to spawn for call %s

Recommendation

Contact your support team.

Application Name and Message Code CCS 2042

XMLRPC_INIT_FAIL

Severity

Critical

Message

XmlRpc listen socket for server could not be opened

Recommendation

Contact your support team.

Application Name and Message Code

CCS 2043

NO_ACCESS_NAME

Severity

Critical

Message

Access name not defined in ccm config file

Recommendation

Contact your support team.

Application Name and Message Code CCS 2044

NEG_QUALITY

Severity

Info

Message Call dial=%s recid=%s negotiated quality=%d

Recommendation

No action is required.

Application Name and Message Code CCS 2045

SECURITY_MISMATCH

Severity

Info

Message

Failed to setup session due to security mismatch with remote participant %s

Recommendation

Check the security configuration of the CTRS and the remote participant.

Application Name and Message Code CSS 2046

SERVICE_UNAVAILABLE

Severity

Critical

Message

Service is unavailable. Call dial=%s failed.

Recommendation

Check security and the trunk configuration of the CTRS. Potential mismatch possible between CTRS configuration and the Cisco Unified CM configuration.

Application Name and Message Code

CSS 2047

MEDIA Messages

FILE_INIT_FAIL

Severity Alert

Aleri

Message File %s failed to initialize

Recommendation Check previous alarms to help determine the cause of this condition.

Application Name and Message Code

MEDIA 3000

FILE_CLOSE_FAIL

Severity

Alert

Message File %s failed to close

Recommendation

Check previous alarms to help determine the cause of this condition.

Application Name and Message Code MEDIA 3001

FILE_OPTIMIZE_FAIL

Severity

Alert

Message File %s failed to optimize

Recommendation

Play the recording without optimization to evaluate its quality.

Application Name and Message Code MEDIA 3002

FILE_OPEN_FAIL

Severity

Alert

Message File %s failed to open

Recommendation

Check previous alarms to help determine the cause of this condition.

Application Name and Message Code

MEDIA 3003

REMOTEHOST_RESOLVE_FAIL

Severity Alert

Message Failed to resolve remote hostname %s

Recommendation

Verify that the remote hostname is correct.

Application Name and Message Code MEDIA 3004

OVERRUN

Severity

Alert

Message

Received too many frames in jitter buffer, unable to recover

Recommendation

Monitor to see if the condition is temporary. It is possible that media processor could not handle the load, or a network burst occurred.

Application Name and Message Code

MEDIA 3005

UNDERRUN

Severity

Alert

Message

Lost too many frames, unable to recover

Recommendation

Monitor to see if the condition is temporary. It is possible that media processor could not handle the load, or a network condition occurred.

Application Name and Message Code MEDIA 3006

CONNECTION_LOSS

Severity

Alert

Message

Lost network connection with remote side

Recommendation

Check the network connection between endpoints.

Application Name and Message Code MEDIA 3007

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UNKNOWN_MEDIA_FORMAT

Severity

Alert

Message Unknown media format %s

Recommendation

Contact your support team.

Application Name and Message Code MEDIA 3008

PROCESS_INIT_FAIL

Severity

Alert

Message Failed to spawn media process

Recommendation

Contact your support team.

Application Name and Message Code MEDIA 3009

RECORDING_CLOSE

Severity Alert

Message Recording %s saved, duration %d seconds

Recommendation

No action is required.

Application Name and Message Code MEDIA 3010

RECORDING_CLOSE_FAIL

Severity Alert

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Message

Recording not saved, duration %d seconds too short

Recommendation

Contact your support team.

Application Name and Message Code

MEDIA 3011

NEG_TIMEOUT

Severity

Alert

Message Call being terminated due to media timeout

Recommendation

Try again. It is possible that media negotiation failed timed out because of a network condition.

Application Name and Message Code

MEDIA 3012

SSRC_COLLISION

Severity

Warning

Message

SSRC collision. More than one media source had the same source identifier.

Recommendation

Retry the call.

Application Name and Message Code MEDIA 3013

NO_MEDIA

Severity Warning

Message No media received for session calling number %s

Recommendation

Contact your support team.

Application Name and Message Code

MEDIA 3014

READ_ERROR

Severity Warning

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Message

Error reading mp4 file %s

Recommendation

Download the recording and play with any player.

Application Name and Message Code MEDIA 3015

SAMPLE_ERROR

Severity

Warning

Message Error reading mp4 sample in mp4 file %s

Recommendation Download the recording and play with any player.

Application Name and Message Code

MEDIA 3016

INVALID_DIR

Severity Warning

Message Invalid media direction %d

Recommendation

Contact your support team.

Application Name and Message Code MEDIA 3017

POST Messages

MSG_RCV_ERROR

Severity

Info

Message System Error -- Message receive error %s

Recommendation

Contact your support team.

Application Name and Message Code POST 5000

CREATE_MSG_QUEUE_FAIL

Severity Info

Message System Error -- Could not create %s message queue

Recommendation Contact your support team.

Application Name and Message Code POST 5001

EXEMGR Messages

ALARM_EXECMGMT_STARTED

Severity

Info

Message

Execution Manager have started all CTRS processes

Recommendation

No action is required.

Application Name and Message Code

EXEMGR 6000

ALARM_EXECMGMT_SHUTDOWN

Severity

Info

Message

Execution Manager received signal=%d, shutdowns all CTRS processes now

Recommendation

No action is required.

Application Name and Message Code EXEMGR 6001

ALARM_PROCESS_EXIT

Severity Critical

Message

Execution Manager detected a process(%s exit=%d) exit, will try restarting CTRS processes shortly

Recommendation No action is required.

Application Name and Message Code EXEMGR 6002

ALARM_PROCESS_DEAD

Severity

Critical

Message

Execution Manager detected a process(%s signal=%d) dead, will try restarting CTRS processes shortly

Recommendation

No action is required.

Application Name and Message Code

EXEMGR 6003

ALARM_PROCESS_ABORT

Severity

Critical

Message

Execution Manager detected a process(%s %s=%d) abort, will try shutdown CTRS processes shortly

Recommendation

No action is required.

Application Name and Message Code EXEMGR 6004

ALARM_EXECMGMT_ABORT

Severity

Critical

Message

Execution Manager is aborted because %s

Recommendation

No action is required.

Application Name and Message Code

EXEMGR 6005