C H A P T E R **9**

Installing or Upgrading Cisco TelePresence Manager

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Contents

Introduction

This chapter explains how to install the Cisco TelePresence Manager software in your network. After completing this installation, you will be able to schedule Cisco TelePresence meetings through existing Microsoft Outlook or Lotus Notes software, receive reminders, and connect to a remote meeting with the touch of a button.

To enable these features, you must provide Cisco TelePresence Manager with the contact and access information it requires to connect to and communicate with your network. The purpose of this chapter is to walk you through each step using the Cisco TelePresence Manager installation DVD.

The installation requires information about your network and the rules for finding and exchanging information. Once this pre-installation data is set up, then you can install Cisco TelePresence Manager from DVD. In addition, you can use the Configure > Software Upgrade window to upgrade the system software.

Installation Guidelines

The purpose of this section is to provide the information you need in order to install the CTS-Manager software.

The tasks required to install and configure CTS-Manager are provided in the following table.

Table 9-1   Installation Overview for CTS-Manager

Setup Procedures	Description	Location
Installing or Upgrading Cisco TelePresence Manager		Current Chapter.
Initializing CTS-Manager	After installing the CTS-Manager software, the next process is to initialize Cisco TelePresence Manager to enable access to information sources such as Microsoft Exchange Server for meeting requests from Microsoft Outlook, Active Directory for accessing user and conference room (endpoint) information, and Cisco Unified Communications Manager for conference room (endpoint) availability and telephone support	Chapter 10, "Initializing Cisco TelePresence Manager"
Additional Installation Procedures for CTS-Manager	The administrator makes use of the Configure section to perform system configuration tasks such as synchronizing system databases, managing security, and reconfiguring system settings	Chapter 11, "Additional Installation Configurations for Cisco TelePresence Manager"
Configuring Cisco TelePresence WebEx OneTouch for CTS-Manager	Describes how to set up Cisco TelePresence WebEx OneTouch in CTS-Manager, which allows WebEx participants to join TelePresence meetings.	Chapter 13, "Configuring Cisco WebEx OneTouch for Cisco TelePresence Manager"
Next Step after Pre-Configuration		
Monitoring CTS-Manager	Monitoring and updating meeting schedules and monitoring the status of rooms (endpoints) and system services	Chapter 14, "Monitoring and Supporting Cisco TelePresence Manager"

Installing Cisco TelePresence Manager from DVD

The following section provides installation procedures for CTS-Manager.

Required Information and Equipment

To install Cisco TelePresence Manager, the following equipment and information are needed:

- The Model 7845 Cisco Media Convergence Server or UCS C-210 M2 server included with Cisco TelePresence Manager, installed and connected to a Domain Name System (DNS) server and your network.

- DNS configuration for both forward and reverse name resolution is required for all servers configured in CTS-Manager, so that all server names can be resolved bidirectionally by DNS. This includes the server name for CTS-Manager itself.

- The information listed in Table 9-2 "Installation Window and Field Definitions" that includes your system-specific values and parameters.

- A management console to access the Model 7845 Cisco Media Convergence Server.

- The DVD included in your Cisco TelePresence Manager documentation and installation packet. Use the Installation Wizard included on this disk.

- Endpoint license. If you do not have this license, you will not be able to add TelePresence endpoints to CTS-Manager. After installation and initialization, the SysAdmin must go to the Configure > Licenses window and click the License Files tab to upload the license.

Installation Procedure for Cisco TelePresence Manager

Step 1 Insert the CTS-Manager installation DVD into the DVD drive of the server and boot up the server.

There may be a short delay while the installer validates the integrity of the files on the DVD and configures the server for the operating system and the CTS-Manager software.

Note Cisco recommends using the default selections (which are highlighted by a grey box). For example, on the DVD Found screen that appears after inserting the DVD, "Yes" is the default selection.

Caution Remove the DVD after the installation/upgrade is complete. Leaving the DVD in the drive can prevent CTS-Manager from restarting properly after rebooting the server.

Step 2 When the DVD Found screen appears, select **Yes** to perform a media check of the DVD, or **No** to abort the installation.

Step 3 Once the media check passes, click **OK** to proceed.

The Product Deployment Selection screen appears, indicating Cisco TelePresence Manager suite will be installed.

Step 4 Click **OK** to proceed.

The installer checks for a prior installation of CTS-Manager software.

Step 5 If you choose **Yes** to continue the installation, the Platform Installation Wizard opens in the next window. Read and become familiar with the wizard conventions.

Step 6 Select **Proceed**.

Step 7 Fill in each window with the information defined in Table 9-2, "Installation Window and Field Definitions".

Step 8 When you are satisfied that the information is correct, click **OK** in the Platform Configuration Confirmation window to begin the installation process. Be patient while the process takes place.

When the installation is complete, the server reboots. The installer then checks for network connectivity and access to a DNS server. If it cannot find these connections, an error message is displayed. If the installation process completes successfully, the message "The Installation of the Cisco TelePresence Manager Has Completed Successfully" is displayed.

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Caution Remove the DVD from the DVD drive after the installation/upgrade is complete. Leaving the DVD in the drive can prevent Cisco TelePresence Manager from restarting properly after rebooting the server.

Step 9 Proceed to Chapter 10, "Initializing Cisco TelePresence Manager," to initialize Cisco TelePresence Manager.

Installation Page Values Defined

Table 9-2 explains in detail the window and field definitions of the Cisco TelePresence Manager installation process in detail.

Table 9-2　　　　*Installation Window and Field Definitions*

Installation Windows and Fields	Description and Usage
Installation Wizard	
Proceed:	The installation wizard requests necessary configuration information before installing CTS-Manager files.
Skip:	Skip this wizard and install CTS-Manager files without configuration information. After the files are installed and the system reboots, the installation program will request configuration information.
Cancel:	Cancel this installation.
Apply Patch	
Yes:	Applies upgrade patch from the DVD as part of the installation.
No:	Proceeds with install without installing upgrade patch.
Back:	Goes back to previous screen.
Basic Install	
Continue	Proceeds with installation without importing any data.
Time zone Configuration	
OK	Proceeds with installation using the selected time zone.
Back	Goes back to the previous screen.

Table 9-2   Installation Window and Field Definitions (continued)

Installation Windows and Fields	Description and Usage
Help	Provides additional information about selecting time zones.
Autonegotiation Window Configuration	
NIC Speed	The speed of the server network interface card (NIC), in megabits per second. • The possible speeds are 10, 100, and 1000 mbps. **Default is 100 mbps**. **Note** Cisco recommends a NIC speed of at least 100 mbps for best performance.
Duplex Configuration	The duplex setting of the server NIC. • The possible settings are Half and Full. **Default is Full**. **Note** Cisco recommends full duplex for best performance.
MTU Configuration	
	This screen gives you the option to change the Maximum Transmission Unit (MTU). This is the size of the largest packet that a network protocol can send. It is recommended to use the default of 'No.'
DHCP Configuration	
	This screen gives you the option to choose DHCP to run on CTS-Manager. It is recommended to select the default of 'No.'
Status Network Configuration	
Host Name	A hostname is an alias that is assigned to an IP address to help identify it. • Enter a hostname that is unique to your network. • The hostname can consist of up to 64 characters and can contain alphanumeric characters and hyphens.
IP Address	The IP address uniquely identifies a server on your network. • Enter the IP address in the form *ddd.ddd.ddd.ddd*, where *ddd* can have a value from 0 to 255 (except 0.0.0.0).
IP Mask	The IP subnet mask of this machine. The subnet mask together with the IP address defines the network address and the host address. • Enter the IP mask in the form *ddd.ddd.ddd.ddd,* where *ddd* can have a value from 0 to 255 (except 0.0.0.0). Valid example: 255.255.240.0. Invalid example: 255.255.240.240.
GW Address	GW Address are for static configurations. A network point that acts as an entrance to another network. Outbound packets are sent to the gateway that will forward them to their final destination. • Enter the IP address of the gateway in the format *ddd.ddd.ddd.ddd,* where *ddd* can have a value from 0 to 255 (except 0.0.0.0). **Note** If you do not have a gateway, you must still fill in this field by setting it to 255.255.255.255. Not having a gateway may limit you to communicating only with devices on your subnet.
DNS Client Configuration	

Table 9-2   Installation Window and Field Definitions (continued)

Installation Windows and Fields	Description and Usage
	This screen gives you the option to enable DNS for CTS-Manager. It is recommended to select the default of 'Yes.'
DNS Client Configuration	You will be prompted to enter DNS server information. A DNS server is a device that resolves a hostname into an IP address or an IP address into a hostname. **Note** If you have a DNS server, Cisco requires choosing **Yes** to enable DNS. Disabling DNS limits the system's ability to resolve some domain names.
Primary DNS	CTS-Manager contacts this DNS server first when attempting to resolve hostnames. This field is mandatory.
Secondary DNS (optional)	When a primary DNS server fails, CTS-Manager will attempt to connect to the secondary DNS server. • Enter the IP address in dotted decimal format as *ddd.ddd.ddd.ddd,* where *ddd* can have a value from 0 to 255 (except 0.0.0.0).
Domain	A sequence of case-insensitive ASCII labels separated by dots (for example, "cisco.com")—defined for subtrees in the Internet Domain Name System and used in other Internet identifiers, such as hostnames, mailbox names, and URLs.
Administrative Login Configuration	
Admin ID	The username for the CTS-Manager Administrator. This is the administrator login that includes SysAdmin permissions. • Ensure that the name is unique. It is recommended to start with a lowercase alphanumeric character and can contain alphanumeric characters (uppercase and lowercase), hyphens, and underscores. ⚠ **Caution** The admin ID cannot be changed after installation without reinstalling CTS-Manager. Record it for safekeeping.
Password / Confirm	A password that allows the administrator to log into CTS-Manager. • The password must be at least six characters long and maximum of 31 characters. It is recommended to start with a lowercase alphanumeric character, using English characters only. International characters are not supported in this version. This field can be changed at Cisco TelePresence Manager web interface. Record it for safekeeping. ✎ **Note** The password cannot be changed until at least 24 hours after it was created, unless you reinstall CTS-Manager. **Recovering Administrator and Security Passwords** If you lose the administrator password or security password, two different procedures can be followed to reset these passwords. These procedures are in the section following this table.

Table 9-2 *Installation Window and Field Definitions (continued)*

Installation Windows and Fields	Description and Usage
Certificate Information	A certificate signing request (CSR) is a message sent from an applicant to a certificate authority in order to apply for a digital identity certificate. • These values create a CSR for the server where the certificate will be installed.
Organization	Your company or organization name.
Unit	Your business unit, group, or organizational unit name.
Location	The physical location of the organization, most often a city.
State	The region, state, province, or other region where the organization resides.
Country	Your company or organization country of record.
Network Time Protocol Client Configuration	NTP is used to synchronize the clocks on Cisco IP telephony servers with an external network time server that uses NTP.
NTP Server 1	Enter the IP address of one or more NTP server.
NTP Servers 2–5	• NTP Servers 1 and 2 values are mandatory; NTP Servers 3–5 are optional. **Note** Cisco strongly recommends that you enter the NTP server by which Cisco Unified CM synchronizes its clock as the primary NTP server. If these servers are out of synchronization, CTS-Manager will not operate properly.
Security Configuration	Cisco TelePresence Manager uses the security password to communicate with its database.
Security Password / Confirm	• The password must be at least six characters long and a maximum of 31 characters. It is recommended to start with a lowercase alphanumeric character., using English characters only.
SMTP Host Configuration	Selecting **Yes** enables Simple Mail Transfer Protocol so CTS-Manager can send emails to meeting organizers or the SysAdmin.
Application User Configuration	Create an Application User name and password for logging in to the CTS-Manager administrative web pages.

Recovering Administrator and Security Passwords

If you lose the administrator password or security password, two different procedures can be followed to reset these passwords.

Note During this procedure, you must remove and then insert a valid DVD in the disk drive to prove that you have physical access to the system.

Note The password cannot be changed until at least 24 hours after it was created, unless you reinstall CTS-Manager.

Recovery Procedure 1:

Step 1 Log in to the system with the following username and password:

Username: **pwrecovery**

Password: **pwreset**

Step 2   The Welcome to platform password reset window displays.

Step 3   Press any key to continue.

Step 4   If you have a DVD in the disk drive, remove it now.

Step 5   Press any key to continue. The system tests to ensure that you have removed the DVD from the disk drive.

Step 6   Insert a valid DVD into the disk drive. The system tests to ensure that you have inserted the disk.

Step 7   After the system verifies that you have inserted the disk, you see a prompt to enter one of the following options:

a. Enter **a** to reset the administrator password.

b. Enter **s** to reset the security password.

c. Enter **q** to quit.

Step 8   Enter a new password of the type that you chose.

Step 9   Reenter the new password.

Step 10   After the system verifies the strength of the new password, the password gets reset, and you're prompted to press any key to exit the password reset utility.

Recovery Procedure 2:

If your password is lost, reinstall Cisco TelePresence Manager to regain access.

System Log Error Detection

When a problem is detected, you must collect system errors and logs files so they can be analyzed for prompt resolution

System Messages

Go to Troubleshoot > System Messages to see a list of system messages. You can filter the list by starting and ending dates and message type All, Emergency, Alert, Critical, Error, Warning, Notice, Info and Debug as follows:

* Use the Calendar icon to choose dates, or enter the dates in the **Start On** and **End On** fields using the MM/DD/YYYY date format.

* Click **Filter** to generate the list.

Figure 9-1   System Messages Window

Table 9-3 lists the messages provided by the system.

Table 9-3   System Messages

Field	Description
Time(+)	Date and time the message was logged. You can sort the messages in ascending or descending order by the time stamp.
Severity	Message type.
Summary	Explanation of problem detected. Message identification number. You can sort the reports in ascending or descending order by ID.
Recommendation	Recommended course of action

To view the details of a system message, click its corresponding radio button and then click the **Details** button.

Figure 9-2   System Messages > Details Window

System Error - AXL Error or Invalid Credential

If the System Messages > Details message in the Syslog appears or the Invalid Credentials message appears when testing connections, the user should make sure that all the required services are running. Also, the user may need to refer to Chapter 6, "Configuring Cisco Unified Communications Manager for Cisco TelePresence Manager" to review what services need to be running on the Cisco UCM for CTS-Manager.

If it is necessary to drill down further into error data, go to the Log files. For further information about Log details, go to Chapter 17, "Troubleshooting Cisco TelePresence Manager"

Software Upgrade

If you are the system administrator and know the SysAdmin password, you can access the Software Upgrade window to monitor and maintain system software by going to Configure > Software Upgrade. This window displays the version number of the system software. There are also two buttons to assist you in version maintenance between primary (active) and backup (inactive) and upgrading the system software, as follows:

Figure 9-3   *Configure > Software Upgrade Window*

- • Switch Versions—The hard drive on the server on which this CTS-Manager is installed is partitioned into two areas. Each area can contain a system image. The **Switch Version** button allows you to switch between the Active and Inactive versions of the system software.

- • Upgrade Software—This button loads 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.
  In addition to SFTP, FTP is also supported on a best-effort basis due to variations of behavior between different FTP servers. Only username/password-based login is supported. Anonymous login is not supported.

Note   After successfully upgrading from CTS-Manager 1.6 or 1.7 to 1.8, the status message in the Most Recent Upgrade Attempt section, will display "Software versions switched" instead of "Upgrade completed sucessfully".

Note   Secure FTP (SFTP) is the recommended mode for downloading the upgrade software over the network.

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Caution   For the upgrade to be successful, the NTP server(s) specified in the Configure > System Settings > NTP tab must be an IP address.

Upgrading to Cisco TelePresence Manager 1.8

Important notes about upgrading to CTS-Manager 1.8:

- Switching calendar application type, e.g. changing from Exchange to Domino, during upgrade is not supported. A fresh install is required to install Cisco TelePresence Manager to switch to Domino deployment.

- Software upgrade is only supported from CTS-Manager 1.6.x, and 1.7x.

- Data is automatically migrated during software upgrade, with the following exceptions:
  - custom email templates
  - log files

- Perform a backup before performing a CTS-Manager upgrade and another backup after upgrade is completed and verified.

- If for any reason you must revert to a previous release after the upgrade is completed, you can switch to the old partition from CTS-Manager.

- Make sure you have an endpoint license before you upgrade to CTS-Manager 1.8. If you do not have this license, you will not be able to add TelePresence rooms (endpoints) to CTS-Manager. After upgrade, the SysAdmin must go to the Configure > Licenses window and click the License Files tab to upload the license.

- After successfuly upgrading from CTS-Manager 1.7 to 1.8, the upgrade status displays "Software versions switched" instead of "Upgrade completed succesfully."

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Note   In rare instances, upgrades could take up to 5 hours or more. Please allow ample time and do not assume that the system has frozen during upgrades. Do not reboot.

Switch Versions

The hard drive on the CTS-Manager server is divided into two partitions. CTS-Manager is always using the software on the Active partition, while the other partition always contains the previous software version. The software image versions are identified in the Configure > Software Upgrade window.

You may find it necessary to switch the version of the CTS-Manager software.

- To switch between the software versions stored on the two partitions, click the **Switch Version** button.

The system will swap the software versions and reboot. Screens will describe activity.

Upgrade Software

This task upgrades the CTS-Manager software by loading and applying a patch file from either a CD-ROM or an SFTP/FTP network host. Before starting this task, determine the source of the patch file.

To upgrade the CTS-Manager software:

Step 1   Click the **Upgrade Software** button.

The Source Selection dialog box appears.

> ✎
>
> **Note**   Once you have launched the Upgrade Wizard the upgrade process cannot be started by any other user logged into the same Cisco TelePresence Manager server.

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 following information, and then click **Next** to go to the File Selection window.

- **Host**—The hostname of the network server.

- **Port**—The port. By default, port 22 is used to access the server; supply the correct port number, if required.

  > ✎
  >
  > **Note**   If you choose to perform the software upgrade using FTP, you do not need to supply a port number.

  - **Username and Password**—The user account and password are required to log into the server.

  - **Storage Path**—The file path to the patch file, e.g. */localview/ctm_patch*

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Caution   Performing FTP for Upgrade, Backup and Restore is provided on a best-effort basis, due to potential variations in the responses sent by the FTP server. Only username/password-based login is supported. Anonymous login is not supported.
Secure FTP (SFTP) is the recommended mode of transferring files over the network.

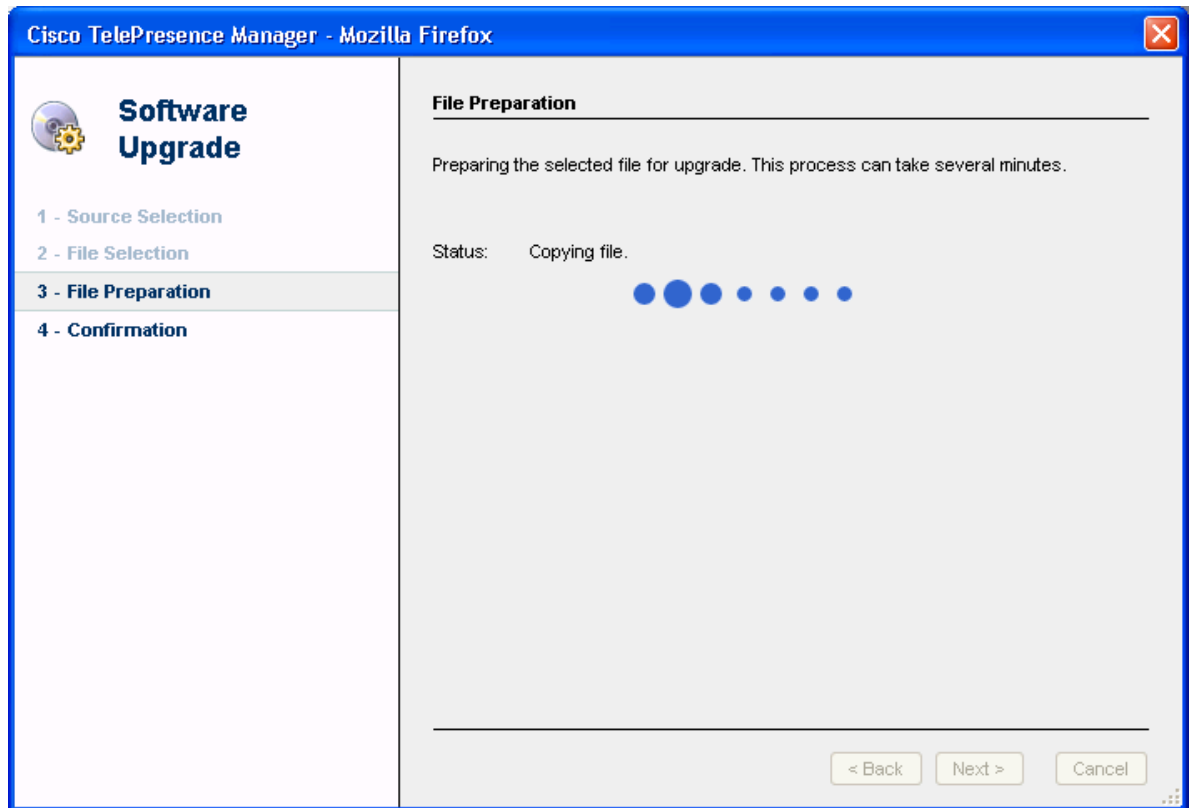*Figure 9-4*   *Software Upgrade - Source Selection Window*

Figure 9-5   *Software Upgrade - File Selection window*
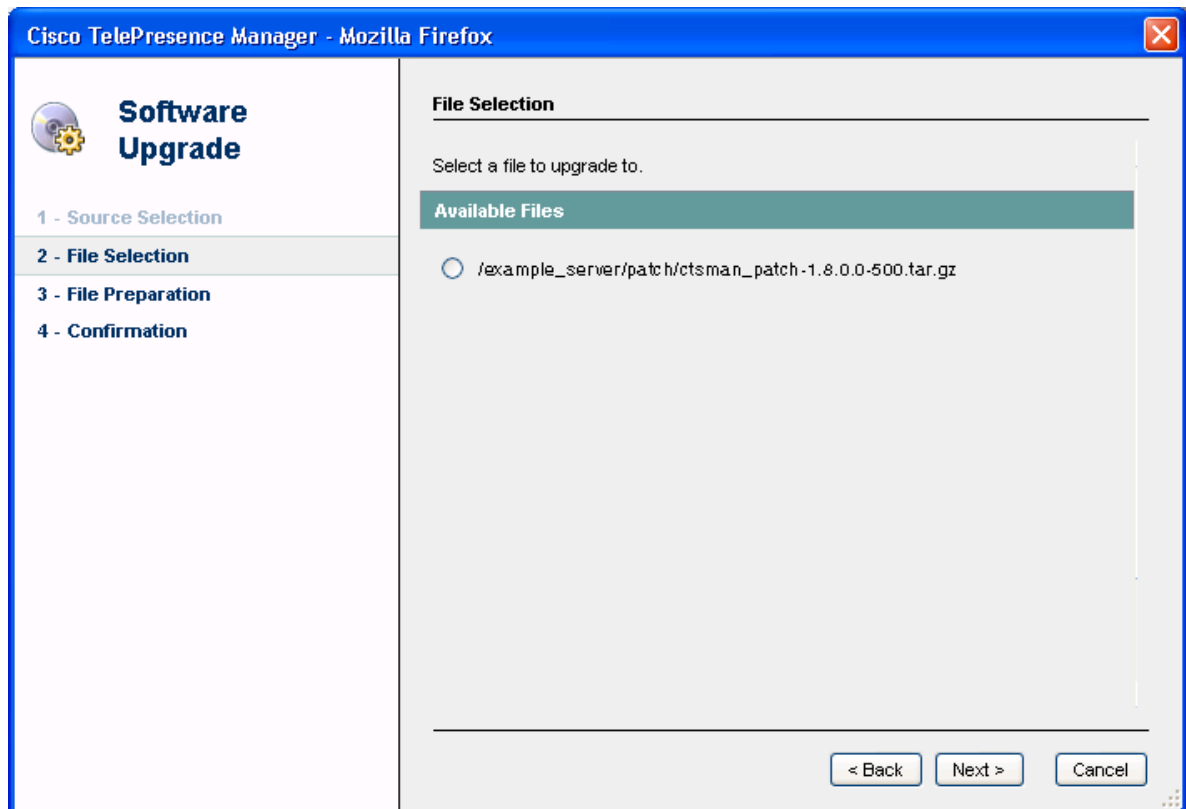
Step 3   In the File Selection page, choose the file to load by clicking its radio button. Then click **Next**.

Figure 9-6   *Software Upgrade - Patch File Preparation Window*

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.

Figure 9-7   *Software Upgrade - Confirmation Window*
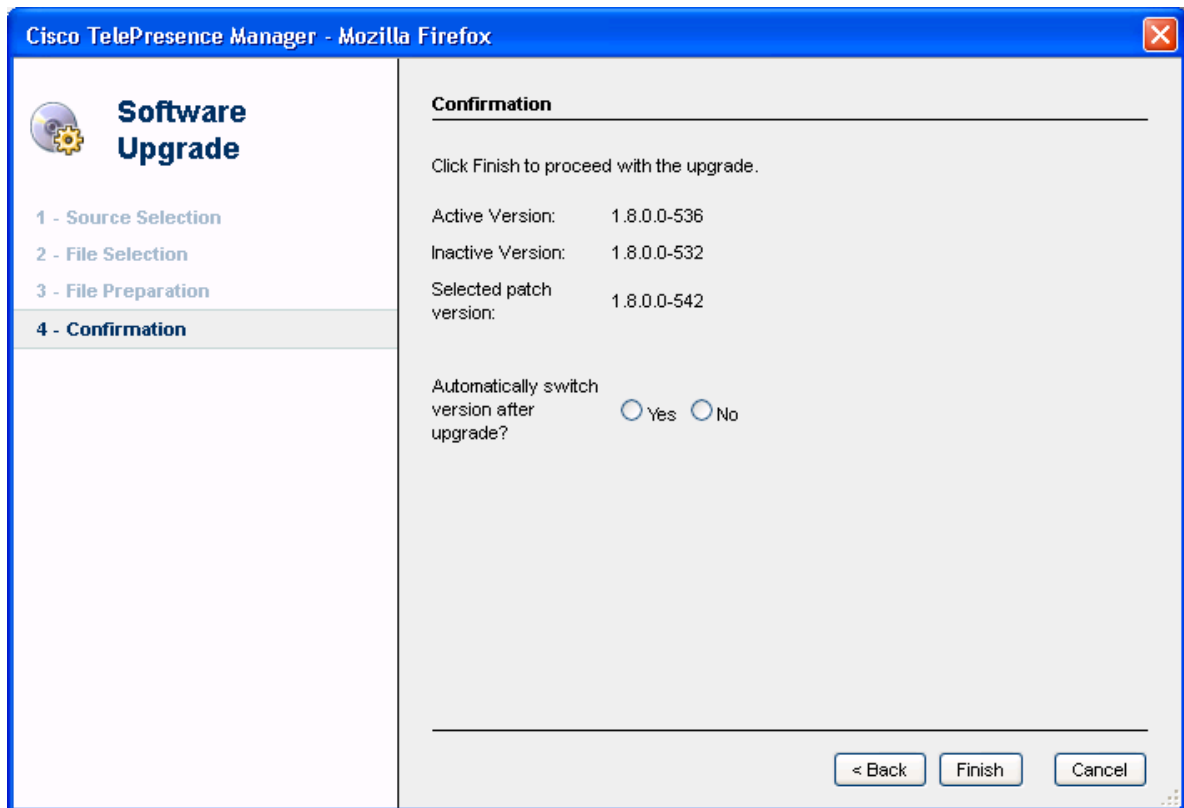
The software upgrade wizard displays the software versions that are installed and provides active Yes and No radio buttons so you can choose to switch the newly loaded software to the active partition.

Step 4   Click **Yes** or **No** to make your choice and then click **Next** to finish the software upgrade task.
A confirmation dialog box appears.

> **Note**   If you select Yes, the current active version will become the inactive version after upgrade is complete.

**Step 5**   Click **Finish** to proceed with the upgrade.

> **Caution**   Once you click **OK** to confirm, you cannot cancel the upgrade.

The software upgrade wizard closes revealing the Software Upgrade window in CTS-Manager. A progress indicator is displayed on the screen to show the upgrade is in progress. The Status field displays the current step being completed. When the final step is completed, CTS-Manager restarts.

Figure 9-8   Software Upgrade - CTS-Manager Restarting
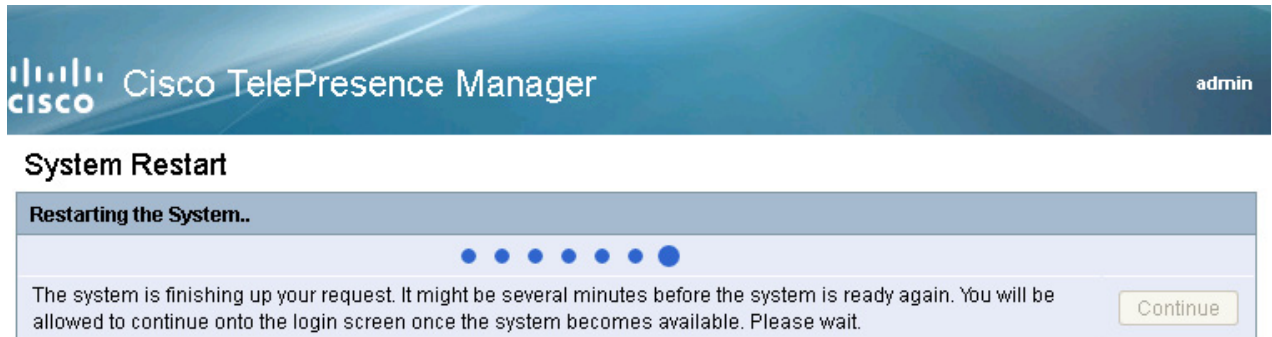
While CTS-Manager is restarting, the Continue button is greyed out.

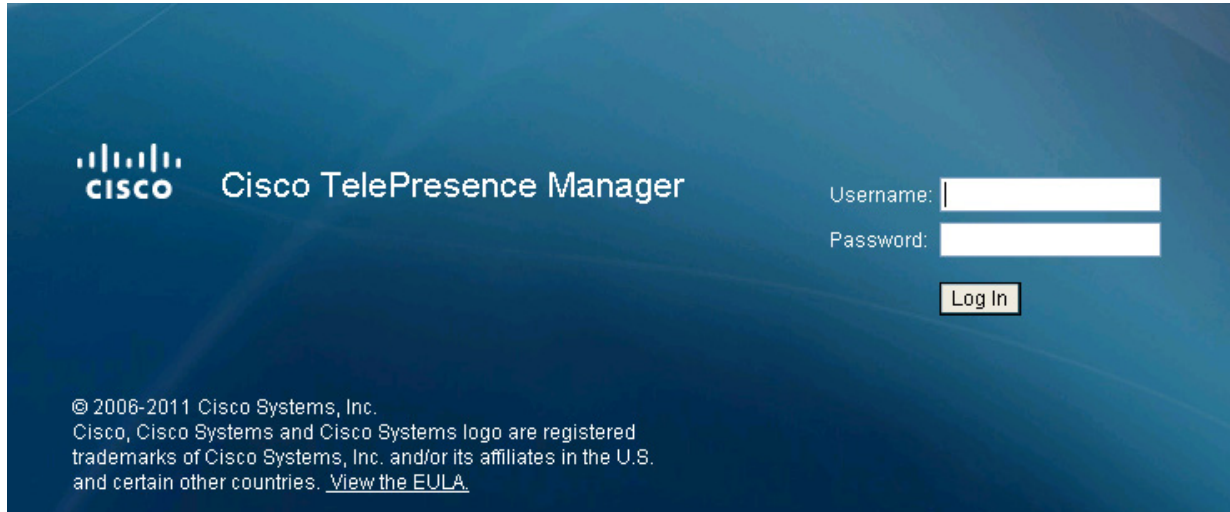*Figure 9-9   Software Upgrade - CTS-Manager Upgrade Completed Window*
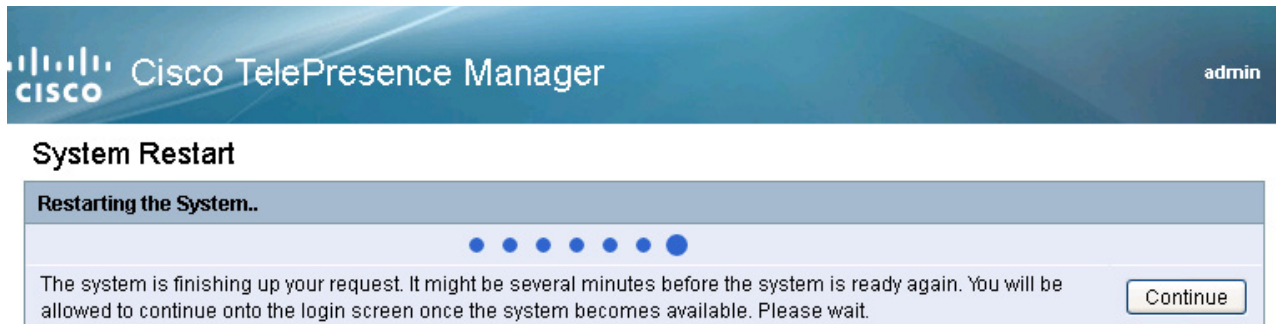
When CTS-Manager is restarted, the Continue will no longer be greyed out.

Step 6   Click **Continue** to go to the CTS-Manager login screen and log in to CTS-Manager.

If you are upgrading from release 1.6 of CTS-Manager, the SysAdmin must upload licenses to enable the license-based features. The Endpoint (Room) license is required in order to schedule TelePresence meetings.

Go to Licensing for CTS-Manager, page 11-6 for more information.

Figure 9-10   *Software Upgrade - CTS-Manager Login Window*

Cisco TelePresence Manager Window

The Cisco TelePresence Manager window is divided into several panes with different functionality.

Header Pane

*Figure 9-11   Cisco TelePresence Manager Header Pane*

A header at the top of all CTS-Manager windows shows either "admin" or the login name of the Live Desk currently logged in and provides four links:

- **Preferences**—Display the Browser's location information.
- **Log Out**—Log out of the system.
- **About**—Display licensing information.
- **Help**—Display online help for CTS-Manager.

System Status Pane

Figure 9-12   System Status Pane
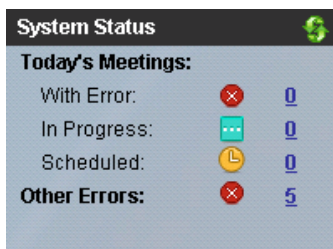
System Status is always in view in the lower left corner of the CTS-Manager window. Both the Live Desk and the administrator must closely monitor this area for notification of system errors and changes in the status of today's meetings.

The icons and numbers are links. They will take you to a window in the CTS-Manager that helps you identify problems for the With Error state or see more information about meetings in the In Progress and Scheduled states.

The following meeting states are displayed for Today's Meetings:

- With Error
- In Progress
- Scheduled

The Other Errors area displays a cumulative number of errors listed in the Dashboard.

Navigation Pane

The navigation pane contains the list of commands you can run within Cisco TelePresence Manager. The commands are divided into three drop-down lists:

- **Monitor**— This drop-down list contains commands available to a Live Desk, Administrator, or SysAdmin.

- **Support** — This drop-down list contains commands available to a Live Desk, Administrator, or SysAdmin.

- **Configure** — This drop-down list contains commands available to an Administrator or SysAdmin. If you log in as a SysAdmin the System Settings and Software Upgrade commands are included in the list.

- **Troubleshoot**— This drop-down list contains commands available to an Administrator or SysAdmin.

Figure 9-13   Navigation Pane
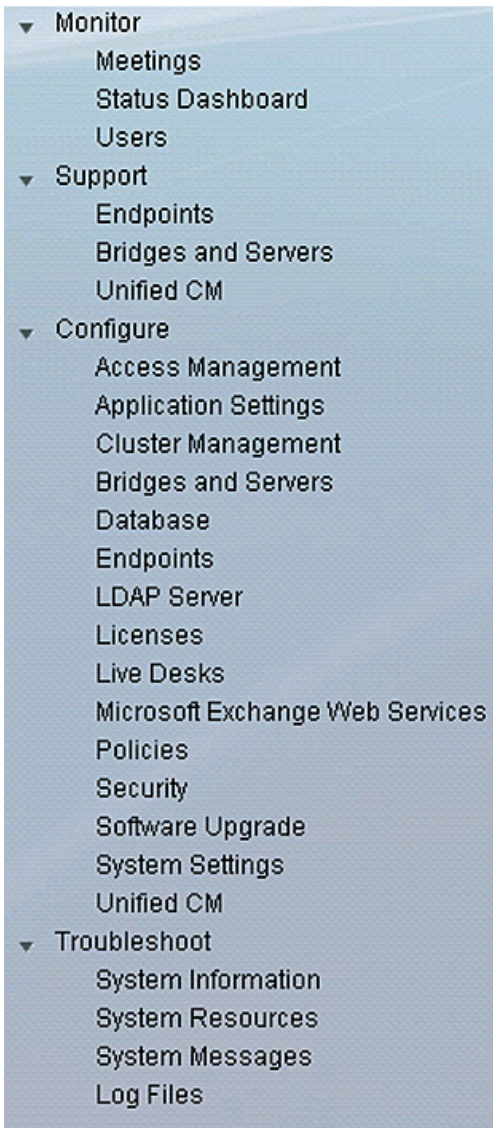
Work Pane

Figure 9-14   Work Pane
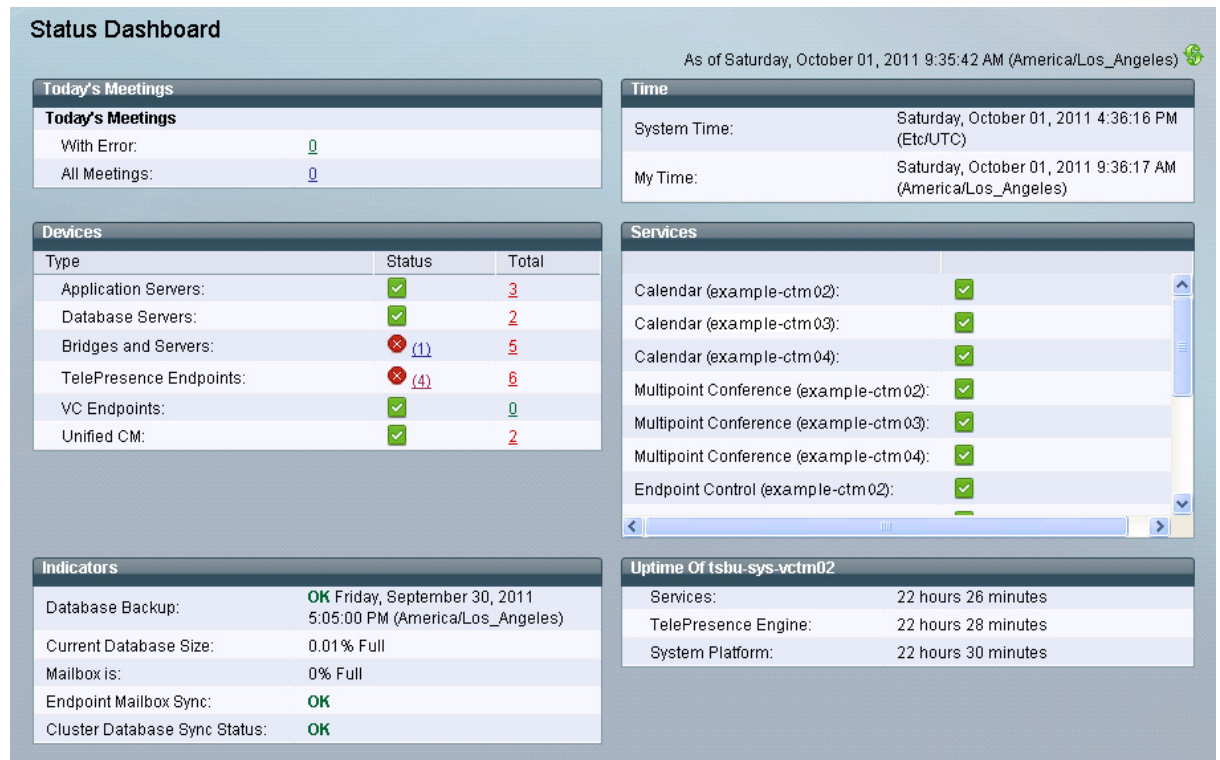
The frame to the right of the Navigation pane is the work area. The gray bar above the content area shows the navigational path so you can see where you are at any time.

The following sections describe objects, functions, and information displayed in the Work pane associated with a specific command.

Tabs

Some windows have tabs that you click to display additional functionality related to a command.

Filtering Information

Some windows provide fields where you can enter criteria to filter the information contained is a report. Click the Filter button to display the reports using the criteria you specify. The settings are temporary; when you exit the page, the criteria are removed.

Obtaining Additional Information and Help

To access additional information or relevant windows, click a highlighted link.

Navigating Long Lists

When there is a long list of data in a window, you can navigate through it using Next, Last, First, and Previous buttons at the bottom of the window. The Rows Per Page drop-down list also found at the bottom of the window can be used to change the number of rows displayed. Choose 10, 20, 50, or 100 rows per page. The setting is temporary, and when you exit the page the default setting is restored.

Copying and Pasting Information

You can place information displayed by the CTS-Manager in a file using standard copy-and-paste functions.

Entering Information in Fields

For information provided in fields, use the mouse to highlight and delete existing information. Enter new information.

New or modified information is applied using the Apply button.

To back out of changes and return to original settings, use the Reset button.

Entering Telephone Numbers

Telephone numbers must be entered into CTS-Manager fields exactly as they will be dialed by the IP phone. For example, if you need to dial 9 to get an outside telephone line and you are calling a different area code or international dialing code, you must provide all the required numbers to the CTS-Manager in the exact sequence in which they should be dialed. The following is an example: `915105550100`.

Entering Meeting Room (Endpoint) Names

The names of meeting rooms (endpoints) must be entered into CTS-Manager fields exactly as they are stored in your Microsoft Exchange, or IBM Domino database. If an endpoint is listed as `M-Room 1/3 at Main` in the Microsoft Outlook or Lotus Notes list of resources, that name must be entered exactly the same way in the CTS-Manager. Otherwise, the system will not be able to match records and an error occurs.

Viewing All Information

Sometimes only a portion of text is visible and is completed by ellipses. You can see the full text in a tooltip by slowly passing the mouse pointer over the partial text. You can do this in any field in the user interface where text is cut off.

Preferences

Clicking Preferences in the header pane displays the Preferences window.

Figure 9-15   Preferences Link in the Header Pane

The first time you log in, you need to specify the time zone you are in. This localizes Cisco TelePresence Manager's meeting times to your location. You can use the Preferences window to change the time zone later.

Note   The time zone setting in the Preferences window is for the user only and does not affect the time zone setting of the CTS-Manager server, which is configured during installation.

Figure 9-16   Preferences window