



CHAPTER 5

Configuring Cisco Unified CM for Cisco TelePresence Manager

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Introduction

This section describes adding parameters to Cisco Unified Communications Manager and researching information from the current installation of Cisco Unified Communications Manager that will be used to initialize the Cisco TelePresence Manager installation. For more information refer to [*Cisco Unified Communications Manager Configuration Guide for Cisco TelePresence System*](#).

Important Considerations

Before you proceed with CTS Manager installation, the servers and applications within your network must be configured so that Cisco TelePresence Manager can find the resources and information needed to initialize the installation. This section cover the following applications:

- Cisco Unified Communications Manager (Version 6.1.3 or later) should already be installed and configured. For more information refer to section [Logging into the Cisco Unified CM Administrator, page 5-5](#) or refer to the [Cisco Unified Communications Manager Configuration Guide for Cisco TelePresence System](#).

**Note**

If you see the test connection failure message, you may need to specify IP addresses for your Cisco Unified Communications Manager server(s) if this is a non-DNS environment, as well as other network devices. You can change any server name values in Cisco Unified Communications Manager. Cisco recommends you configure the system using static IP addressing so it will be easy to manage

Pre-Configuration Procedure Guidelines for Cisco Unified CM Set-up

This table provides a guideline for the procedures you will need to reference in order to pre-configure the Cisco Unified Communications Manager **before** installing the Cisco TelePresence Manager.

**Note**

The system uses either Microsoft or IBM not both. So either Chapter 3 or Chapter 4 needs to be referenced when doing the pre-configuration.

Table 5-1 *Pre-Configuration Guideline for Setting Up CUCM for CTS-MAN*

Set-Up Procedure Guidelines before Installing CTS-MAN	Description	Location
Configuring Cisco Unified CM	Before CTS-MAN installation, you must verify that Cisco Unified Communications Manager is configured for the CTS-MAN system.	Current Chapter
Install and Configuring Pre-Qualification Assistant	Install and run the Pre-qualification Assistant to ensure that your pre-installation set-up is configured correctly. The data you enter into the Tool Test Configuration forms are used to verify connections to the servers and retrieve data from them to be used to configure CTS manager	Chapter 6, “Installing and Configuring Cisco PreQualification Assistant”

Configuring Cisco Unified CM for CTS-Manager

The procedures in the next section must be completed before installing and initializing Cisco TelePresence Manager.

If at any time you encounter problems, go to [Chapter 13, “Troubleshooting Cisco TelePresence Manager”](#) to see how to correct the problem.

For Deployments Using Microsoft Exchange 2003, 2007, and IBM Domino

- A Cisco Unified Communications Manager certificate must be accessible for CTS-Manager to communicate with Unified CM.



Note

Only one certificate can be used. Do not reuse it or give it a new name and then try to upload it to CTS-Manager. Also, if a certificate is expired, it cannot be uploaded.

- CUCM Certificate
 - To get a Cisco Unified Communications Manager certificate do the following:
 1. Log into the Cisco Unified CM Administration application
 2. From the Navigation menu, select **Cisco Unified OS Administration** and click **Go**.
 3. From the Security menu click **Certificate Management**.
 4. Click the link for **tomcat.der**.
 5. In the Certificate Configuration window, click the **Download** button.
 - This saves a copy of the certificate on your computer. Make sure this file is accessible to the computer that has browser access to the Cisco TelePresence Manager server.



Note

Deleting a CUCM won't delete the CTS-Trust certificate corresponding to that CUCM. If the administrator adds the deleted CUCM back, then he/she doesn't need to upload the trust certificate again as it is already there in the system. If the administrator tries to upload it again, an error will be detected.

- Step 1** Create an application user for CTS-Manager. Refer to section [Logging into the Cisco Unified CM Administrator, page 5-5](#) or to your [Cisco Unified Communications Manager Configuration Guide for Cisco TelePresence System](#) for the steps to perform this. Save these credentials for the CTS-Manager initialization procedure that follows.

Assign all TelePresence units/IP phone devices to this user profile. MAC Address of each unit and shared phone should be added to the user profile. Add TelePresence endpoints and IP phone devices in the Cisco Unified CM Admin UI, by going to “Device > Phone.”

- Step 2** For each TelePresence endpoint device, follow these steps:

- a. At the bottom of the “Device Information” section, check “**Allow Control of Device from CTI**” box.
- b. In the “Product Specific Configuration Layout” section, enter the room email id in the “**Room Name**” field.

- c. a. Assign the same DN as the IP phone that is associated to this TelePresence endpoint device.
 - d. In the “Directory Number Information” section of “Directory Number Configuration,” check “**Allow Control of Device from CTI**” box .
- Step 3** For each IP phone device that is associated to TelePresence endpoint device, check “**Allow Control of Device from CTI**” box at the bottom of the “**Device Information**” section.
- Step 4** Go to “User Management > Application User,” and create an application user in Cisco Unified CM for Cisco TelePresence Manager. Save these credentials for use during Cisco TelePresence Manager first time setup.
- Step 5** Assign all TelePresence endpoints and their associated IP phone devices to this application user. MAC Address of each unit and IP phone should be added to the user profile.
- Step 6** Create user group in the CiscoUnified CM for Cisco Telepresence Manager.
- a. Assign following roles to this user group:
 - Standard AXL API access
 - Standard CTI enabled
 - Standard serviceability
 - Standard CiscoUnified CM administrative users
 - b. Add the above application user to the newly created user group.
- Step 7** Verify all required services are activated and running on the Cisco Unified CM node. It is required to have “Cisco AXL Web Service” activated on the Cisco Unified CM Publisher node. Similarly, “Cisco RIS Data Collector” should be running on Cisco Unified CM Publisher node. “Cisco CTIManager” should be activated and running, but could be running on any node inside the same Cisco Unified CM Cluster. Please refer to the Cisco Unified CM Configuration Guide for details on service activation and start/stop.
- Step 8** Download the certificate for Cisco Unified CM using IE Browser. User is prompted with a certificate when browser is pointed to Cisco Unified CM server. You can save cert file on local machine. This would be used later while configuring the CTS Manager during first time setup. You cannot upload a certificate twice even if you change the name of the certificate.

**Note**

If a room’s display name is changed once CTS-Manager is up and running, CTS Manager reads new display name once every 24 hours, so the new name will display after this 24 hour period. In addition, when a new room is added to CUCM, a restart on CTS Manager is also not required.

Configuring Cisco Unified CM Server Names

- Step 1** Log into Cisco Unified Communications Manager as an Administrator.
- Step 2** Choose the **Server** option from the **System** menu.
- Step 3** Click **Find** to discover all the servers in your Cisco Unified Communications Manager cluster.
- Step 4** In the Cisco TelePresence Manager’s System Configuration -> Cisco UCM Host field, use only IP address in a non-DNS environment. If DNS is configured and accessible, use either hostname or IP address.

**Note**

In multiple Unified CM environments, IP address must be used as the identifier for each Unified CM server. Hostname cannot be used because CTS-Manager must also support non-DNS environments.

As you add a CUCM, do not set up the non-DNS and DNS in a mixed mode environment, i.e., where CUCM is configured with DNS and CTS-Manager is configured with non-DNS environment. CUCM is configured with DNS but has IP address in the Server Config. In a typical deployment, all applications are in either DNS or non-DNS. Identifying a CUCM node as publisher does not support mixed mode.

To display and modify settings that associate CTS-Manager with Cisco Unified CM, choose in **System Configuration** in the CTS-Manager.

The **System Configuration>Discovery** window opens. This window provides Service Status and the listings of the CUCM connections.

**Note**

If changing settings in the CUCM, it is necessary to perform a Discovery in CTS-Manager to get the new settings registered. Otherwise, CTS-Manager won't display or connect to the correct settings.

Logging into the Cisco Unified CM Administrator

To log into the Cisco Unified CM Administration application, follow these steps:

Step 1 Open a web browser.

**Note**

The Cisco Unified CM Administration program operates on the Microsoft Internet Explorer version 6 or a later version web browser.

Step 2 Access a web server that is supported by the Cisco Unified CM Administration application from any user PC in your network.

Step 3 In the address bar of the web browser, enter the following URL:

`https://CCM-server-name`

Where *CCM-server-name* is the name or IP address of the server.

**Note**

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 4 Log in with your assigned administrative privileges.

Step 5 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 CM Administration home page.

Configuring the Options File

Cisco Unified CM is customized with an options file to configure support for the CTS.

To configure the options file, follow these steps:

-
- Step 1** Log in to the Cisco Unified CM Administration application. See the [“Logging into the Cisco Unified CM Administrator” section on page 5-5](#).

**Note**

You must be running Cisco Unified CM version 6.1.3, or a later release.

- Step 2** Add the Cisco TelePresence device pack to Cisco Unified CM. The device pack adds functionality to Cisco Unified Communications Manager so that you can create a Cisco TelePresence device. See the [“Adding a Cisco TelePresence Device” section on page 5-6](#).

- Step 3** Create a Cisco TelePresence device to register the Cisco TelePresence device as a Cisco Unified IP Phone. See the [“Creating and Configuring a Cisco TelePresence Device” section on page 5-7](#).

- Step 4** Assign a directory number to the Cisco TelePresence device. See the [“Adding a Cisco TelePresence Device” section on page 5-6](#).

- Step 5** Create a Cisco Unified IP Phone 7975 device type.

**Note**

Auto registration cannot be used to create the device type.

Adding a Cisco TelePresence Device

Use the information in the following sections to add a CTS device:

- [Download Device Packs, page 5-6](#)
- [Install the Device, page 5-7](#)

Download Device Packs

If the Cisco TelePresence device is not listed on the Cisco Unified Communications Manager phone list, you must add the device. The Cisco TelePresence device is included in the latest device packs for Cisco Unified CM.

To download device packs, follow these steps:

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- Step 1** Go to the following path on Cisco.com:

Support > Voice and Unified Communications > IP Telephony > Call Control > Cisco Unified Communications Manager (CallManager) > Download Software

- Step 2** Enter your Cisco user name and password and click **Log In**.

The Tools & Resources Download Software page appears.

- Step 3** In the Cisco Unified Communications Manager (CallManager) section, click your version.
- Step 4** Click **Unified Communications Manager/CallManager Device Packages**.
- Step 5** Click the latest release.
The software download page for that release opens.
- Step 6** Click **Download Now** to begin the download process.
[Table 5-2](#) contains available software device packs:

Table 5-2

Cisco Unified CM Version	Device Package	Release Date
7.0	cmterm-devicepack7.0.2.21009-1.cop.sgn	May 15, 2009
6.1	cmterm-devicepack6.1.3.3102-1.cop.sgn	April 28, 2009
6.0	cmterm-devicepack6.0.1.3121-1.cop.sgn	May 15, 2009

Install the Device

To install the device, follow these steps:

- Step 1** Log in to the Cisco Unified CM Administration application.
- Step 2** At the Cisco IPT Platform Administration window, choose **Software Installation/Upgrade**.

**Note**

For an explanation of how to access the Cisco IPT Platform Administration window, see the [Cisco IP Telephony Platform Administration Guide for Cisco Unified Mobility Manager, Release 1.2](#).

- Step 3** From the **Source** drop-down list, choose the source for the device pack.
- Step 4** Click **Next**. The Options/Upgrades window appears.
- Step 5** Choose the appropriate file from the drop-down list and click **Next**. The system compiles a checksum value.
- Step 6** Click **Save** to accept the checksum value and start installation.

The installation process can take several minutes. An on-screen log reports status of the installation. Once the device pack is installed, you can begin configuring the Cisco TelePresence device.

Creating and Configuring a Cisco TelePresence Device

The following sections describe how to create and configure a Cisco TelePresence device so you can register it as a Cisco Unified IP phone:

- [Adding a New Phone as a Cisco TelePresence Device, page 5-8](#)
- [Finding a Phone, page 5-8](#)

- [Configuring Cisco TelePresence Devices, page 5-8](#)

Adding a New Phone as a Cisco TelePresence Device

**Note**

Before you begin this procedure, note the MAC address of the Cisco TelePresence device.

To add a new phone as a Cisco TelePresence device, follow these steps from the Cisco Unified Communications Manager Administration menu bar:

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- Step 1** Log in to the Cisco Unified CM Administration application.
- Step 2** From the Device drop-down menu, select **Phone**. The Find and List Phones Page appears.
- Step 3** Click the **Add New** button at the bottom of the window. The Add a New Phone window appears.
- Step 4** In the Add a New Phone window, click the **Phone Type** drop-down list and choose **Cisco TelePresence**.
- Step 5** Click **Next** to display the Phone Configuration window.
- Step 6** Proceed to [Configuring Cisco TelePresence Devices](#).
-

Finding a Phone

To find a phone, follow these steps:

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- Step 1** Log in to the Cisco Unified CM Administration application.
- Step 2** From the Device drop-down menu, select **Phone**. The Find and List Phones Page appears containing a list of configured phones.
- Step 3** If a list of configured phones is not displayed, click the plus sign (+) under **Find and List Phones**.
To find all phones that are registered in the database, follow these steps:
- Choose **Device Name** from the list of fields.
 - Choose **“is not empty”** from the list of patterns.
 - Click **Find**.
- Or
- Choose the appropriate search pattern for your text search (for example, “Begins with”).
 - Enter your search text in the **Find** field.
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Configuring Cisco TelePresence Devices

**Note**

You must restart your system after you have completed the configuration tasks in this section.

This section describes how to configure Cisco TelePresence devices and associated parameters.

To configure the Cisco TelePresence device, perform the tasks in this section. When you are finished configuring your settings, click **Save** and follow the prompts to restart the system.

Before You Begin

Verify that the Phone Type and Device Protocol lists contain the following information:

- Phone Type—**Cisco 7970** or **Cisco 7975**
- Device Protocol—**SIP**

:

Device Information

To configure device information, follow these steps:

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- Step 1** Enter device information using the information in [Table 5-3](#) as a guide.

Table 5-3 *Cisco TelePresence Device Information*

Field	Required?	Setting
MAC Address	Yes	MAC address for the Cisco TelePresence primary codec.
Description	—	Short description of the device.
Device Pool	Yes	Any
Common Device Configuration	—	Leave field as <None>.
Phone Button Template	Yes	Standard_Cisco_TelePresence
Common Phone Profile	Yes	Standard Common Phone Profile
Calling Search Space	—	Leave field as <Any>.
Media Resource Group List	—	Leave field as <None>.
Location	Yes	Hub_None
User Locale	—	Leave field as <None>.
Network Locale	—	Leave field as <None>.
Owner User ID	—	Leave field as <None>.
Phone Load Name	—	Specify required version of Cisco TelePresence System if no device default is set.
Use Trusted Relay Point	—	Chose from the following: • Default • On • Off
Calling Party Transformation CSS	—	Leave field as <None>.

Step 2 Make sure that the following check boxes at the bottom of the Device Information section are marked as indicated:

- **Use Device Pool Calling Party Transformation CSS**—Checked
- **Is Active**—Checked
- **Retry Video Call as Audio**—Checked
- **Ignore Presentation Indicators**—Unchecked
- **Allow Control of Device from CTI**—Checked
- **Logged Into Hunt Group**—Checked
- **Remote Device**—Unchecked

Step 3 Click **Save** to save your settings.
