Configuring the Cisco TelePresence System

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First Time Setup Wizard for the CTS 500-32 and CTS 500-37

Because the CTS 500-32 and CTS 500-37 use a first-time setup wizard, the configuration process is somewhat different than other CTS models. See First Time Setup section of the following documentation for complete instructions:

• Cisco TelePresence System 500-32 Assembly, Use & Care, and Field-Replaceable Unit Guide
• Cisco TelePresence System 500-37 Assembly, Use & Care, and Field-Replaceable Unit Guide
First Time Setup for All Other CTS Models

To set up your Cisco TelePresence System (CTS) for the first time, you must first load the CTS Administration software and bootup the system.

This section contains the following information:

- Loading CTS Administration Software, page 1-2
- Logging In To the Cisco TelePresence System Administration Interface Directly, page 1-3
- Configuring a Static IP Address for Networks That Do Not Use DHCP, page 1-4
- Configuring an Alternate TFTP Server (Optional), page 1-7
- Configuring Your System After Initial Bootup, page 1-7

Loading CTS Administration Software

CTS Administration Software is factory-installed on each codec and loads during initial bootup. To boot up CTS Administration Software:

1. Power on the PDU that is on the bottom of the CTS cabinet by turning the switch to the On position.
2. Turn on the codecs that are associated with your CTS device. The displays associated with each codec become active. CTS displays green check marks on all displays to show bootup progress. Bootup is complete when the system displays six check marks, as shown in Figure 1-1.

Tip

Ignore any messages that indicate a communication error with the camera; this message indicates that the system has not yet downloaded the correct software or firmware.

Figure 1-1 Bootup Completed
Note

If the last check mark displayed is a red “X,” there has been a compact flash error. If you receive this error, contact Cisco Technical Support.

Step 3

After bootup completes, make a note of the IP and MAC address that displays on the center of the screen, as shown in Figure 1-2. Use this information to log in to the Cisco TelePresence System Administration interface. This IP address displays until you log in to Cisco TelePresence System Administration or use Secure Shell (SSH) to log in to your CTS device.

Figure 1-2 System IP Address

Note

If the IP address that displays is 192.168.100.2, the CTS device could not contact the DHCP server or your system does not use DHCP. Do one of the following:

1. If your network does not use DHCP, navigate to Configuration > IP Settings, change the DHCP Enabled setting to No, and specify a static IP address, subnet mask, gateway, and DNS server. Remember to reboot your codec after you configure a static IP address.

2. Set up a Cisco TelePresence system for a network that does not use DHCP by completing the procedure in the “Network Settings” section on page 1-11.

3. Log into the CTS Administration interface directly by following the steps in Logging In To the Cisco TelePresence System Administration Interface Directly.

Logging In To the Cisco TelePresence System Administration Interface Directly

If your CTS cannot contact the DHCP server, or if your network does not use DHCP, log in to the Cisco TelePresence System Administration directly by following these steps:
Step 1 Connect an Ethernet cable between your PC and the Camera Ethernet connection on the codec. For more information, see the First Time Setup Guide for your system on Cisco.com:

- Product Support > TelePresence > TelePresence Immersive Endpoints
  - Cisco TelePresence System 3200 Series
  - Cisco TelePresence System 3000 Series
  - Cisco TelePresence System 1300 Series
  - Cisco TelePresence System T Series
- Products > TelePresence > TelePresence Personal Endpoints > TelePresence Office
  - Cisco TelePresence System 1100
  - Cisco TelePresence System 1000
  - Cisco TelePresence System 500 Series

Step 2 Make a note of the IP address that was assigned to your Ethernet LAN adapter.

Step 3 Open a browser and type in the IP address and press Enter. The Cisco TelePresence System Administration login screen displays.

Step 4 In the Admin field, type admin.

Step 5 In the Password field, type cisco.

Step 6 Click Login.

Step 7 Make network and DHCP changes to the CTS configuration as required.

Tip If your network does not use DHCP, navigate to Configuration > IP Settings, change the DHCP Enabled setting to No, and specify a static IP address, subnet mask, gateway and DNS server. You must reboot your codec after you configure a static IP address.

**Configuring a Static IP Address for Networks That Do Not Use DHCP**

If your network does not use DHCP, complete one of the following procedures to configure a static IP address for your Cisco TelePresence system.

See the following sections to manage static IP addresses:

- Configuring a Static IP Address Using the Cisco TelePresence System GUI, page 1-4
- Configuring a Static IP Address Using Command-Line Interface Commands, page 1-6
- Command Example, page 1-6

**Configuring a Static IP Address Using the Cisco TelePresence System GUI**

To configure a static IP address using the Cisco TelePresence system GUI:

Step 1 Connect a DHCP-enabled PC to the secondary camera port of the primary codec. This connection is listed as the auxiliary network port in Figure 1-3.
Step 2 Determine the IP address that the Cisco TelePresence system provided for your session.

Tip
For Windows-based systems, you can see the IP address in the Support tab in the Local Area Connection Status window.

Step 3 Using Secure Shell SSH or another secure client program, start a CLI session with the Cisco TelePresence system using the IP address xxx.xxx.xxx.1.

Where: 
xxx.xxx.xxx is the IP address that Cisco TelePresence provided for your session.

For example, if you determine that the Cisco Telepresence system provided an IP address of 10.1.0.2, enter the address 10.1.0.1.

By default, the username is admin and the password is cisco.

Step 4 Network services are started automatically. If needed, enter the following command to start network services:

`utils service start Calling_Services`

Step 5 Using a supported Internet browser, log in to the Cisco TelePresence system GUI with the IP address that you used in Step 3.

Step 6 Enter the username and password when prompted. By default, the user is admin and the password is cisco.

Step 7 Navigate to Configuration > IP Settings.

Step 8 Change the DHCP Enabled setting to No.

Step 9 Enter a static IP address, subnet mask, and IP gateway for your system into the fields. Optionally, enter DNS server(s) and the network domain name. Your system saves the changes and automatically restarts.
Configuring a Static IP Address Using Command-Line Interface Commands

To configure a static IP address using command-line commands:

**Step 1**
Connect a DHCP-enabled PC to the secondary camera port of the primary codec. This connection is listed as the auxiliary network port in Figure 1-3.

**Step 2**
Determine the IP address that the Cisco TelePresence system provided for your session.

**Tip**
For Windows-based systems, you can see the IP address in the Support tab in the Local Area Connection Status window.

**Step 3**
Using Secure Shell SSH or another secure client program, start a CLI session with the TelePresence system using the IP address xxx.xxx.xxx.1,

Where:

- **xxx.xxx.xxx** is the IP address that Cisco TelePresence provided for your session.

For example, if your determine that the Cisco Telepresence system provided an IP address of 10.1.0.2, enter the address 10.1.0.1.

By default, the username is **admin** and the password is **cisco**.

**Step 4**
Enter the following command to configure a static network IP address:

```
set network IP static ip-address ip-subnet ip-gateway [dns-address1][dns-address2][domain-name]
```

Where:

- **ip-address** is the IP address of the system
- **ip-subnet** is the IP subnet mask of the system
- **ip-gateway** is the IP gateway of the system
- **dns-address1** is the IP address of DNS server 1 (Optional)
- **dns-address2** is the IP address of DNS server 2 (Optional)
- **domain-name** is the domain name for the network (Optional)

**Command Example**

The following example gives the Cisco TelePresence system with an IP address of 10.0.0.2, a subnet of 255.255.255.0, a gateway of 10.0.0.1, a DNS server of 172.16.1.5, and a domain name of cisco.com:

```
admin: set network IP static 10.0.0.2 255.255.255.0 10.0.0.1 172.16.1.5 cisco.com
```

```
ip address successfully set
system restarting...
```
## Configuring an Alternate TFTP Server (Optional)

If you need to use an alternative TFTP server, configure the parameters for the alternative TFTP server and related Cisco IP phone parameters in Unified CM on the Cisco Unified Communications Manager IP Phone Device page. See the *Cisco Unified Communications Manager Configuration Guide for the Cisco TelePresence System* for more information.

**Note**

If you are using the TFTP address that DHCP supplies for Cisco Unified Communications Manager, do not perform this action.

## Configuring Your System After Initial Bootup

After successful bootup, the CTS Administration Software loads. When the CTS Administration software completes loading, the Cisco Unified IP phone displays a welcome message that shows the system IP address. The welcome screen only appears the first time the system is booted up after initial installation or after a factory reset.

**Note**

The telephone displays a directory number of 7000, but the telephone is not yet registered and does not function.

**Before You Begin**

If you have not already done so, configure Cisco Unified Communications Manager. See the *Cisco Unified Communications Manager Configuration Guide for the Cisco TelePresence System*.

To continue your initial setup:

**Step 1**

From the CTS Cisco Unified IP phone welcome page, press **Next**. The system reboots.

**Note**

The system might reboot several times during the initial startup process.

**Step 2**

Open a browser on a computer that is connected to the network.

**Step 3**

In the URL field, type in your IP address and press **Enter**. The browser launches the Cisco TelePresence System Administration interface.

**Note**

If you need to obtain the IP address, complete the following steps:

a. On the CTS Cisco Unified IP phone, press the **Manual** softkey at the bottom of the screen.

b. Locate “Info” at the bottom of the screen and press the **Info** soft key.

c. Scroll down to the IP Address listing and copy the address.

**Step 4**

Log in to the system by entering the following information:

- Username: **admin** (case sensitive)
- Password: **cisco** (case sensitive)
You can change your password in Unified CM. See the *Cisco Unified Communications Manager Configuration Guide for the Cisco TelePresence System*.

**Step 5**  
Click **Login**. The Device Information window appears, as shown in **Figure 1-4**.

**Figure 1-4  Device Information Screen**

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**Note**
See the “Upgrading CTS Codec Firmware” section on page 1-24 for information about upgrading to new CTS firmware releases.

**Step 6**  
Navigate to the following to continue configuring your system:

- IP Settings, page 1-9
- Network Settings, page 1-11
- Cisco Unified Communications Manager Settings, page 1-12
- Address Book, page 1-14
- Telephony Settings, page 1-15
- SNMP Settings, page 1-17
- System Settings, page 1-19
IP Settings

This section contains the following topics:

- Viewing IP Settings, page 1-9

Viewing IP Settings

Use Unified CM to make changes in the IP Settings window. See the *Cisco Unified Communications Manager Configuration Guide for the Cisco TelePresence System*.

The IP Settings window displays the Cisco TelePresence System (CTS) MAC address and hostname and you can view and manage the following:

- DHCP—Select a static IP address, which allows the Cisco IP phone to be configured so that the system recognizes it as a device in the network, rather than a router.
- Domain name
- IP Address
- Default gateway
- DNS servers.

To view and manage IP settings:

**Step 1** Choose Configuration > IP Settings. The IP Settings window appears, as shown in Figure 1-5 (DHCP Enabled) and Figure 1-5 (DHCP Not Enabled).
Step 2 Configure settings for the Cisco TelePresence System uplink to your network using the information in Table 1-1 as a guide. The Cisco TelePresence System can be configured in the following ways:
- Pure dynamic—Uses DHCP for everything.
- Pure static—Uses static settings for everything.
- Hybrid—Uses static settings for the IP Address, Netmask and gateway, but uses DHCP for name servers and other options like Option 150 for the Unified CM TFTP servers.

**Tip** When you make a change in any of the Configuration > IP Settings fields, the Apply and Reset buttons are activated.

Step 3 Click **Apply** to register new or modified settings.

Step 4 Click **Reset** to restore the original settings.

**Note** All codecs on the system must be connected and enabled for the factory reset to complete. To register a device, see the “Optional Hardware” section of the Cisco Unified Communications Manager Configuration Guide for the Cisco TelePresence System.

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### Table 1-1 IP Settings

<table>
<thead>
<tr>
<th>Field or Button</th>
<th>Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAC Address:</td>
<td>MAC address of the CTS primary codec. For example, “00:0D:D1:23:45:A1”</td>
</tr>
<tr>
<td>Host Name:</td>
<td>Host name of the CTS primary codec. For example, “SEP000DD12345A1”</td>
</tr>
</tbody>
</table>
Operational VLAN ID

This field shows a display-only VLAN ID that is standard for networks with a Cisco Unified IP phone.
Administrative VLAN ID

The CTS must have a VLAN membership ID before it can proceed with a DHCP request for an IP address.

To view or configure the administrative VLAN ID:

**Step 1** Choose **Configuration > Network Settings**.

**Step 2** Enter an administrative VLAN ID for Cisco TelePresence in this field.

**Note** The **Apply** and **Reset** buttons become active when a value is entered in this field.

**Step 3** Click **Apply** to register a new or modified setting.

**Step 4** Click **Reset** to restore the administrative VLAN ID setting displayed when you opened this window.

Syslog Address

This field shows the display-only syslog address that is standard for networks with a Cisco Unified IP phone, as shown in **Figure 1-7**.

![Network Settings Syslog Address](image)

**Note** You must also configure the External Syslog Address in the Product Specific Configuration Layout field for your CTS. See the *Cisco Unified Communications Configuration Guide for the Cisco TelePresence System*.

Cisco Unified Communications Manager Settings

To specify TFTP server locations and view a list of available settings for this Cisco TelePresence system:

**Step 1** Choose **Configuration > Cisco Unified Communications Manager Settings**. The Cisco Unified Communications Manager Settings window appears, as shown in **Figure 1-8**.
Step 2  Configure Unified CM settings using the information in Table 1-2.

Note  The Apply and Reset buttons become active when a value is entered in this field.

Table 1-2  Cisco Unified Communications Manager Settings

<table>
<thead>
<tr>
<th>Field</th>
<th>Settings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use Configuration TFTP Server</td>
<td>• Click <strong>Automatic</strong> to set the default condition, which is that the TFTP server will reply to DHCP requests for option 150, or for a list of TFTP servers that indicate to endpoints in the network where to find Unified CM configuration files.</td>
</tr>
<tr>
<td></td>
<td>• Click <strong>Specify</strong> to manually supply IP addresses of TFTP servers in the interactive fields provided.</td>
</tr>
<tr>
<td>TFTP Server 1 through 5</td>
<td>Click <strong>Specify</strong> at Use Configuration TFTP Server to activate interactive fields that are provided for entering TFTP server IP addresses.</td>
</tr>
<tr>
<td>Cisco Unified Communications Manager 1 through 5</td>
<td>Display-only report that shows the names of up to five Cisco Unified Communications Managers.</td>
</tr>
<tr>
<td>CAPF Authentication String</td>
<td>Enter the Certificate Authority Proxy Function authentication string. The characters entered in this field must match the CAPF Authentication string entered in Unified CM.</td>
</tr>
<tr>
<td>Certificate Trust List (CTL)</td>
<td>The Delete CTL button becomes active when the CTS is provided with a CTL by a Unified CM configured in mixed authentication mode. Click <strong>Delete CTL</strong> to delete all entries on the CTL.</td>
</tr>
</tbody>
</table>

Step 3  Click **Apply** to register new or modified settings.

Step 4  Click **Reset** to restore the original settings.
Address Book

Note

All codecs on the system must be connected and enabled for the factory reset to complete. To register a device, see the “Optional Hardware” and “Troubleshooting the Cisco TelePresence Configuration” sections of the Cisco Unified Communications Manager Configuration Guide for the Cisco TelePresence System.

Related Information

See the following documentation for more information about Unified CM:

- Cisco Unified Communications Manager Configuration Guide for the Cisco TelePresence System
- Cisco Unified Communications Manager (CallManager) Documentation Roadmaps

Address Book

The Address Book window displays read-only entries that have been set during Cisco Unified Communications Manager (Unified CM) configuration. You can create listings for up to 40 meeting rooms.

To view the phone list of Cisco TelePresence system-enabled meeting rooms:

Step 1 Choose Configuration > Address Book. The Address Book window appears, as shown in Figure 1-9.

Figure 1-9 CTS Address Book

Configuration > Address Book

<table>
<thead>
<tr>
<th>Address Book</th>
<th>Label</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Sarva</td>
<td>27809</td>
<td></td>
</tr>
<tr>
<td>2. Hope</td>
<td>21069</td>
<td></td>
</tr>
<tr>
<td>3. Richard</td>
<td>27842</td>
<td></td>
</tr>
<tr>
<td>4. Chris</td>
<td>22304</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>27862</td>
<td></td>
</tr>
</tbody>
</table>

Step 2 Use Unified CM to make changes to the Address Book. See the Cisco Unified Communications Manager Configuration Guide for the Cisco TelePresence System.
Telephony Settings

The Telephony Settings window displays read-only information about the telephony settings for the Cisco TelePresence System that were set in the Unified CM.

To view entries in the Telephony Settings window:

**Step 1** Choose **Configuration > Telephony Settings**. The Telephony Settings window appears, as shown in Figure 1-10 "CTS Telephony Settings".

**Table 1-3 Telephony Settings**

<table>
<thead>
<tr>
<th>Field</th>
<th>Settings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto Answer</td>
<td>Displays the automatic answering capability on the phone.</td>
</tr>
<tr>
<td></td>
<td>• <strong>Yes</strong> indicates that automatic answering has been enabled.</td>
</tr>
<tr>
<td></td>
<td>• <strong>No</strong> indicates that automatic answering has been disabled.</td>
</tr>
<tr>
<td>Maximum Call Length (mins)</td>
<td>Displays the defined limit to the number of minutes allowed for a call.</td>
</tr>
</tbody>
</table>
|                            | The default setting is 0 minutes, which means no limit to call duration is set. The maximum number of minutes that can be set is 10080 (7 days).
|                            | The call will automatically end at the number of minutes set. When the default setting is used, the call is never ended automatically. |

Note: Use Unified CM to change these settings.
### DSCP For Audio
- 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)—Recommended value
- 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)

### Start Media Port
Must be in the range from 16384 to 32766, and must be lower than the End Media Port settings.

### End Media Port
Must be in the range from 16384 to 32766, and must be higher than the Start Media Port settings.

**Step 3**
Use Unified CM to make changes to Telephony Settings. See the *Cisco Unified Communications Manager Configuration Guide for the Cisco TelePresence System.*
SNMP Settings

The Simple Network Management Protocol (SNMP) Settings window displays read-only information about the SNMP settings for the Cisco TelePresence System that were set in Unified CM configuration.

To view SNMP settings:

**Step 1** Choose **Configuration > SNMP Settings**. The SNMP Settings window appears, as shown in **Figure 1-11**.

**Figure 1-11 Verify SNMP Settings**

<table>
<thead>
<tr>
<th>Configuration &gt; SNMP Settings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engine ID: 0x80001f880301da238c993</td>
</tr>
<tr>
<td><strong>SNMP Configuration</strong></td>
</tr>
<tr>
<td>SNMP Enabled: v3/v2c</td>
</tr>
<tr>
<td>User ID: admin</td>
</tr>
<tr>
<td>Security Level: priv</td>
</tr>
<tr>
<td>Authentication Algorithm: MD5</td>
</tr>
<tr>
<td>Encryption: DES</td>
</tr>
<tr>
<td>System Location: Location</td>
</tr>
<tr>
<td>System Contact: Contact</td>
</tr>
<tr>
<td>Read-Only Community String: readonly</td>
</tr>
<tr>
<td>Read-Write Community String: readwrite</td>
</tr>
<tr>
<td><strong>Trap Receiver Configuration</strong></td>
</tr>
<tr>
<td>Trap Receiver</td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>Trap Receiver 1</td>
</tr>
<tr>
<td>Trap Receiver 2</td>
</tr>
<tr>
<td>Trap Receiver 3</td>
</tr>
<tr>
<td>Trap Receiver 4</td>
</tr>
<tr>
<td>Trap Receiver 5</td>
</tr>
</tbody>
</table>

*Note: Use Unified CM to change these settings.*

**Step 2** View the SNMP settings fields described in **Table 1-4**.
## Chapter 1      Configuring the Cisco TelePresence System

### SNMP Settings

#### Table 1-4     SNMP Settings

<table>
<thead>
<tr>
<th>Field</th>
<th>Settings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engine ID</td>
<td>Identifies the local or remote SNMP engine. The remote agent SNMP engine ID and user password are used to compute authentication and privacy digests.</td>
</tr>
<tr>
<td>SNMP Configuration</td>
<td>Parameters that access the SNMP server associated with this Cisco TelePresence System. Unified CM for CTS supports SNMP Version 2c and Version 3. SNMP fields displayed in this window reflect the configured SNMP version. The following fields are included:</td>
</tr>
<tr>
<td></td>
<td>• SNMP Enabled</td>
</tr>
<tr>
<td></td>
<td>• User ID</td>
</tr>
<tr>
<td></td>
<td>• Security Level</td>
</tr>
<tr>
<td></td>
<td>• Authentication Algorithm</td>
</tr>
<tr>
<td></td>
<td>• Encryption</td>
</tr>
<tr>
<td></td>
<td>• System Location</td>
</tr>
<tr>
<td></td>
<td>• System Contact</td>
</tr>
<tr>
<td></td>
<td>• Read-Only Community String</td>
</tr>
<tr>
<td></td>
<td>• Read-Write Community String</td>
</tr>
<tr>
<td>Trap Receiver Configuration</td>
<td>SNMP settings for the receiver to which this Cisco TelePresence system will send traps. The following information is shown for Traps 1 through 5:</td>
</tr>
<tr>
<td></td>
<td>• Trap Receiver</td>
</tr>
<tr>
<td></td>
<td>• IP Address</td>
</tr>
<tr>
<td></td>
<td>• User ID</td>
</tr>
<tr>
<td></td>
<td>• Security Level</td>
</tr>
<tr>
<td></td>
<td>• Authentication Algorithm</td>
</tr>
<tr>
<td></td>
<td>• Encryption</td>
</tr>
<tr>
<td></td>
<td>• Community String</td>
</tr>
</tbody>
</table>

**Step 3**

Use Unified CM to make changes to the SNMP settings. See the *Cisco Unified Communications Manager Configuration Guide for the Cisco TelePresence System*.

### Related Information

For more information about SNMP, see the following information on Cisco.com:

- MIBs, RFCs, and SNMP Trap Messages for the Cisco TelePresence System
- Simple Network Management Protocol (SNMP) home page.
System Settings

The System Settings window displays read-only information about the system settings for the Cisco TelePresence System that were set in Unified CM configuration.

To view system settings:

**Step 1** Choose **Configuration > System Settings**. The System Settings window appears, as shown in **Figure 1-12**.

**Figure 1-12** CTS System Settings

<table>
<thead>
<tr>
<th>Configuration &gt; System Settings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>User ID/Password Configuration</strong></td>
</tr>
<tr>
<td>User ID: admin</td>
</tr>
<tr>
<td>New Password:</td>
</tr>
<tr>
<td>New Password (verify):</td>
</tr>
<tr>
<td><strong>Quality Configuration</strong></td>
</tr>
<tr>
<td>Overall System Quality: Highest Detail, Best Motion: 1080p</td>
</tr>
<tr>
<td><strong>Locale Configuration</strong></td>
</tr>
<tr>
<td>Time Zone: Pacific Standard/Daylight Time - (GMT-08:00) Pacific Time (US &amp; Canada)</td>
</tr>
<tr>
<td>Language: English [United States] [en-us]</td>
</tr>
<tr>
<td><strong>Cisco TelePresence System Configuration</strong></td>
</tr>
<tr>
<td>System Type: Cisco TelePresence 500</td>
</tr>
<tr>
<td>Days Display Not Active: Sunday, Saturday</td>
</tr>
<tr>
<td>Display On Time: 08:00</td>
</tr>
<tr>
<td>Display On Duration: 15:00</td>
</tr>
<tr>
<td><strong>NTP Servers</strong></td>
</tr>
<tr>
<td>NTP Server 1: 192.0.2.200</td>
</tr>
<tr>
<td>NTP Server 2: 192.0.2.200</td>
</tr>
<tr>
<td>NTP Server 3: Not Available</td>
</tr>
<tr>
<td>NTP Server 4: Not Available</td>
</tr>
<tr>
<td>NTP Server 5: Not Available</td>
</tr>
</tbody>
</table>

Note: Use Unified CM to change these settings.

**Step 2** View the system settings information described in **Table 1-5**.

**Table 1-5** System Settings

<table>
<thead>
<tr>
<th>Field</th>
<th>Description or Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Username/Password Configuration</strong></td>
<td>Displays username and password.</td>
</tr>
<tr>
<td>User ID</td>
<td></td>
</tr>
<tr>
<td>New Password</td>
<td></td>
</tr>
<tr>
<td>New Password (verify)</td>
<td></td>
</tr>
</tbody>
</table>

**Note** Usernames and passwords must be at least 4 characters, but not more than 64 characters in length, and can contain upper and lower case alphanumeric characters and the underscore and dash characters. The following usernames are not allowed: apache, daemon, nobody, operator, and shutdown.
# Chapter 1 Configuring the Cisco TelePresence System

## System Settings

### Quality Configuration

**Overall System Quality**

This field displays the system bandwidth and screen resolution. The bandwidth is the maximum negotiated video bandwidth for a CTS call. A higher bandwidth increases video quality.

Choose from the following:

- Highest Detail, Best Motion: 4Mbps, 1080p (default)
- Highest Detail, Better Motion: 3.5Mbps, 1080p
- Highest Detail, Good Motion: 3Mbps, 1080p
- High Detail, Best Motion: 3Mbps, 720p
- High Detail, Better Motion: 2Mbps, 720p
- High Detail, Good Motion: 1Mbps, 720p
- High Detail, Limited Motion: 720p (Lite)

### Locale Configuration

**Time Zone**

Displays the configured time zone for your area of the world from the drop-down menu.

**Language**

Displays the configured language for CTS.

### Cisco TelePresence System Configuration

**System Type**

Identifies the CTS model. Choose from the following:

- Cisco TelePresence 500 Series
- Cisco TelePresence 1000
- Cisco TelePresence 1100
- Cisco TelePresence 1300 Series
- Cisco TelePresence 3000
- Cisco TelePresence 3010
- Cisco TelePresence 3200
- Cisco TelePresence 3210

**Note**

You must select the CTS device type specifically to upgrade your CTS software.

**Days Display Not Active**

Specifies the days of the week that the Cisco TelePresence system display remains off by default. Choose Monday through Sunday. Default is Sunday and Saturday.

**Display On Time**

Specifies the time of day that the Cisco TelePresence system display(s) will remain on after being turned on, if CCM is configured. Times are displayed in a 24-hour format where 00:00 indicates 12:00 midnight and 23:59 indicates 11:59 pm. Default is 07:30.

If you clear the default value so that the field is blank, the display(s) will turn off after the completion of each call.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description or Setting</th>
</tr>
</thead>
</table>
| Overall System Quality | This field displays the system bandwidth and screen resolution. The bandwidth is the maximum negotiated video bandwidth for a CTS call. A higher bandwidth increases video quality. Choose from the following:  
  - Highest Detail, Best Motion: 4Mbps, 1080p (default)  
  - Highest Detail, Better Motion: 3.5Mbps, 1080p  
  - Highest Detail, Good Motion: 3Mbps, 1080p  
  - High Detail, Best Motion: 3Mbps, 720p  
  - High Detail, Better Motion: 2Mbps, 720p  
  - High Detail, Good Motion: 1Mbps, 720p  
  - High Detail, Limited Motion: 720p (Lite) |
| Time Zone | Displays the configured time zone for your area of the world from the drop-down menu. |
| Language | Displays the configured language for CTS. |
| System Type | Identifies the CTS model. Choose from the following:  
  - Cisco TelePresence 500 Series  
  - Cisco TelePresence 1000  
  - Cisco TelePresence 1100  
  - Cisco TelePresence 1300 Series  
  - Cisco TelePresence 3000  
  - Cisco TelePresence 3010  
  - Cisco TelePresence 3200  
  - Cisco TelePresence 3210 |
| Days Display Not Active | Specifies the days of the week that the Cisco TelePresence system display remains off by default. Choose Monday through Sunday. Default is Sunday and Saturday. |
| Display On Time | Specifies the time of day that the Cisco TelePresence system display(s) will remain on after being turned on, if CCM is configured. Times are displayed in a 24-hour format where 00:00 indicates 12:00 midnight and 23:59 indicates 11:59 pm. Default is 07:30.  
  If you clear the default value so that the field is blank, the display(s) will turn off after the completion of each call. |
Chapter 1  Configuring the Cisco TelePresence System

Step 3

Use Unified CM to make changes to the system settings. See the Cisco Unified Communications Manager Configuration Guide for the Cisco TelePresence System for more information.

Troubleshooting Your Configuration

Use the information in Table 1-6 to help you troubleshoot your configuration.

Before You Begin

First check that the following conditions have been met:

- Power has been applied.
- The Cisco TelePresence System has been installed and configured according to the instructions in Cisco TelePresence System Assembly Guides.
- Unified CM has been configured to support the Cisco TelePresence System as described in the Cisco Unified Communications Manager Configuration Guide for Cisco TelePresence System.

Table 1-5  System Settings (continued)

<table>
<thead>
<tr>
<th>Field</th>
<th>Description or Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display On Duration</td>
<td>Specifies the length of time the Cisco TelePresence system display(s) will remain on if a “Display On Time” value is defined. Times are displayed in a 24-hour format, where 1:30 indicates one hour and thirty minutes; the maximum value is 24:00 (24 hours). Default is 10:30. If you clear the default value so that the field is blank, then the display will turn off at 11:59 pm.</td>
</tr>
<tr>
<td>Note</td>
<td>If your version of Unified CM does not allow you to configure values for Days Display Not Active, Display On Time or Display On Duration, the system uses the default values for these features.</td>
</tr>
<tr>
<td>NTP Servers</td>
<td>Required. Network Time Protocol (NTP) is used to synchronize the clocks on Cisco IP telephony servers with an external network time server that uses NTP. You can have up to five IP addresses for Network Time Protocol servers. NTP must be configured properly to ensure that calendar events appear as expected.</td>
</tr>
</tbody>
</table>

Note

If your version of Unified CM does not allow you to configure values for Days Display Not Active, Display On Time or Display On Duration, the system uses the default values for these features.
### Table 1-6  Troubleshooting the Cisco TelePresence Configuration

<table>
<thead>
<tr>
<th>Problem</th>
<th>Possible Cause</th>
<th>Possible Solutions</th>
</tr>
</thead>
</table>
| Selecting the Test Connection function on the Unified CM web page results in an error. | Incorrect Cisco TelePresence Manager Application User credentials:  
• Cisco TelePresence Manager Application User is missing required roles. | 1. **Check User Credentials**—Correct the user credentials.  
2. **Check Cisco TelePresence Manager Application**—See the Cisco TelePresence Manager documentation home page for information about using the Cisco TelePresence Manager. |
| The Cisco TelePresence unit does not register. | Cisco TelePresence System could be unknown:  
• Unified CM does not know about the CTS.  
• CTS is not registered because it is unplugged.  
• CTS MAC address is entered incorrectly. | 1. **Test Codec Connection**—Test the network connection to the master codec by plugging the codec network cable directly into the IP phone. If the IP address displays, the problem is with the codec.  
2. **Verify Phone Registration**—Log in to the Unified CM administration interface. Click the IP address and verify phone registration. |
| The Cisco Unified IP Phone 7975 does not register. | Phone could be unknown:  
• Unified CM does not know about it.  
• CTS is not registered because it is unplugged.  
• CTS MAC address is entered incorrectly.  
• The incorrect device type was configured in Unified CM. | **Verify Phone Registration**—Log in to the Unified CM administration interface. Click the IP address and verify phone registration.  
• Confirm that a 7970 or 7975 respectively, device type has been configured in Unified CM. |
| The phone does not display the Cisco TelePresence idle screen. |  
• Phone could be unknown:  
  - Unified CM does not know about it  
  - CTS is not registered because it is unplugged.  
  - The phone did not receive an IP address.  
• There could be errors in the Cisco Unified Communications Manager Phone Configuration window:  
  - Incorrect IP address  
  - Typos in the external location URLs | 1. **Verify Phone Registration**—Log in to the Unified CM administration interface. Click the IP address and verify phone registration.  
2. **Verify Phone in the System**—Log in to the Cisco TelePresence System Administration interface verify that the system can detect the phone.  
3. **Correct Typos in URL**—See “Managing Cisco Unified IP Phones” in the Cisco Unified Communications Manager Configuration Guide for the Cisco TelePresence System for information about configuring external URLs. |
## Table 1-6 Troubleshooting the Cisco TelePresence Configuration

<table>
<thead>
<tr>
<th>Problem</th>
<th>Possible Cause</th>
<th>Possible Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTS does not auto answer</td>
<td>• An incoming conference call is ringing and the CTS does not auto answer immediately.</td>
<td>The CTS rings and auto-answers a call based on how these features were configured in Unified CM.</td>
</tr>
<tr>
<td></td>
<td>• The call is connected but there is no video</td>
<td>If the call is connected as audio only, check your IP phone configuration and make sure the “Disable Speaker/Headset” box is checked.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>To disable the IP phone speaker/headset:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1. Logon to the CUCM</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Search for your directory number (DN). Two devices are displayed: CTS and Cisco Unified IP Phone.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Click the IP_Phone device.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. Scroll down to the Product Specific Configuration Layout window.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5. Verify that the following check-boxes are checked in the Product Specific Configuration Layout window:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Disable Speakerphone</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Disable Speakerphone and Headset</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6. Apply and Save the configuration.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7. Reset the device.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>See the Cisco Unified Communications Manager Configuration Guide for Cisco TelePresence System for more information.</td>
</tr>
<tr>
<td>Call terminates prematurely</td>
<td>DSP failure due to incompatible CTS software version.</td>
<td>CTS devices are backward compatible up to two CTS Software Releases. You may want to upgrade your software.</td>
</tr>
<tr>
<td>• Conference room is deleted</td>
<td></td>
<td></td>
</tr>
<tr>
<td>from future meeting schedule</td>
<td></td>
<td></td>
</tr>
<tr>
<td>in CTS Manager.</td>
<td>The Cisco TelePresence Recording Server (CTRS) Studio Mode recording feature is not working and the room has been unsubscribed.</td>
<td>Check Room View on CTS-Man to verify whether a CTS device is capable of supporting the features in a specific room. Then check your Unified CM configuration settings to configure the device. See the Cisco Unified Communications Manager Configuration Guide for the Cisco TelePresence System for more information.</td>
</tr>
<tr>
<td>• Lost ability to invite</td>
<td></td>
<td></td>
</tr>
<tr>
<td>expected conference room into</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a call.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Studio Mode recording</td>
<td></td>
<td></td>
</tr>
<tr>
<td>is not working.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• SD InterOp feature is not</td>
<td></td>
<td></td>
</tr>
<tr>
<td>working.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• HD InterOp feature is not</td>
<td></td>
<td></td>
</tr>
<tr>
<td>working.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Upgrading CTS Codec Firmware

**Note**
Upgrades should only be performed at night or during minimal Cisco TelePresence usage times. An upgrade takes up to 30 minutes to complete.

The procedure to upgrade CTS firmware is the same as the firmware upgrade procedure for the Cisco Unified CM IP phones. See the Uploading Files to the Cisco Unified CM TFTP Directory section of the *Cisco Unified Communications Manager Configuration Guide for the Cisco TelePresence System* for complete instructions.

To download CTS firmware:

**Step 1** Log into the Download Software Select a Product page on Cisco.com:

http://www.cisco.com/cisco/software/navigator.html

The Tools & Resources Download Software appears.

**Step 2** Expand the **Cisco TelePresence System** folder and open the **Cisco TelePresence System** sub folder. A list of CTS devices appears.

**Step 3** Select your CTS device

**Step 4** Upload the firmware file to the TFTP directory of your Unified CM TFTP server.

**Step 5** Restart the TFTP server.

**Step 6** Change the firmware filename for the system(s) that you want to upgrade (either via the Device Defaults page, or on a per system basis) in the Cisco Unified CM Administration interface.

**Step 7** Click the **Restart** button in Unified CM for the device(s) that you want to upgrade.

Upgrading Software for Cisco TelePresence Touch 12

See the following important software upgrade information in the Upgrading From a Cisco Unified IP Phone to a Cisco TelePresence Touch 12 document at the following URL:

Managing Passwords

This section contains the following information about managing and troubleshooting password issues on the Cisco TelePresence System (CTS):

- Resetting Your CTS Codec Password, page 1-25
- Restoring Connectivity to the Codec, page 1-26

Resetting Your CTS Codec Password

You must be in the Cisco TelePresence room to read the newly requested passcode that shows on the main display.

At each point where the pwrecovery account requires input, the program will wait up to 60 seconds. If nothing is entered, the system will inform you that the entry took too long and will exit.

If you encounter any difficulty, open a case with Technical Assistance Center (TAC) via the Internet at http://tools.cisco.com/ServiceRequestTool/create/, or contact your Cisco technical support representative and provide the representative with the information you have gathered about the problem.

Before You Begin

Make sure that the CTS is not in a call, and that there is only one instance of someone trying to reset the password, otherwise the session will abort.

Procedure

To reset your CTS codec password:

1. SSH into the codec from your laptop.

2. Login with the following:
   - Username: pwrecovery
   - Password: pwreset

The following message appears in the SSH client window:

```
Example 1-1 Welcome to Password Reset

dhcp-249:- $ ssh pwrecovery@10.00.00.100
pwrecovery@10.00.00.100's password:
 ***********************************************
** **
** Welcome to password reset **
**
 ***********************************************

Do you want to continue ? (y/n):y
Preparing the system...
Please enter the passcode:
```
Chapter 1  Configuring the Cisco TelePresence System

Managing Passwords

Step 3  The system will ask whether you want to continue. Type Y then return to continue

Note  If desired, type any other key then return to exit.

This system will now prepare for password reset and prompt you for a passcode. The new passcode is displayed on the CTS main display, as shown in the following example:

Password reset is now being run
Passcode: 919175

Note  The passcode is a randomly generated number and will be different for each login attempt. If you enter the wrong passcode, the system will inform you that the passcode was incorrect and will exit, as shown in the following example. If this happens, repeat Step 1 and Step 2.

Example 1-2  Invalid Password Reset Request

Do you want to continue? (y/n): y
Preparing the system...
Please enter the passcode: 12345
Sorry that was an invalid passcode...
Logging off
Connection to 10.00.00.100 closed.
dhcp-249:-- $

When you enter the correct passcode, the CTS will then reset the administration account name and password to the system defaults. The following example shows successful password reset information:

Example 1-3  Successful Password Reset Request

Please enter the passcode: 507530
resetting admin name and password
stopping any existing admin session
admin account and password reset to default
success in applying security rules
Logging off
Connection to 10.00.00.100 closed.
dhcp-249:-- $

Note  If you are using the CTS with a Cisco Unified Communications Manager, the next time you perform a “Refresh” or “Reset” from the Unified CM, the administration account name and password will be reconfigured to the values specified in the Unified CM device page.

Restoring Connectivity to the Codec

If you lose connectivity to the codec, refer to the Cisco TelePresence System Assembly, Use & Care, and Field-Replaceable Unit Guide for your system on Cisco.com:

- Product Support > TelePresence > TelePresence Immersive Endpoints
  - Cisco TelePresence System 3200 Series
- Cisco TelePresence System 3000 Series
- Cisco TelePresence System 1300 Series
- Cisco TelePresence System T Series

Where to Go Next

Proceed to the following chapters to troubleshoot your CTS:

- Chapter 1, “Troubleshooting the CTS 500”
- Chapter 1, “Troubleshooting the CTS 500-32”
- Chapter 1, “Troubleshooting the CTS 1000”
- Chapter 1, “Troubleshooting the CTS 1100”
- Chapter 1, “Troubleshooting the CTS 1300”
- Chapter 1, “Troubleshooting the CTS 3000 and CTS 3200”
- Chapter 1, “Troubleshooting the CTS 3010 and CTS 3210”