



CHAPTER 2

Configuring the Cisco Unified IP Phone for MIDlets

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Contents

This chapter describes how to configure and manage the Cisco Unified IP Phone and the Enhanced Phone User Interface that uses Java [MIDlets](#) on the Cisco Unified IP phone.

This chapter contains the following information:

- [Important Notes](#), page 2-1
- [Configuring the Cisco Unified IP Phone](#), page 2-2
- [Uploading Files to the Unified CM TFTP Directory](#), page 2-15
- [Creating MIDlets IP Phone Service in Unified CM](#), page 2-16
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Important Notes

See the following advisories and important notes that may affect system behavior:

- [MIDlets Software Releases](#), page 2-1
- [Adding a New Phone with MIDlets Capability](#), page 2-2

MIDlets Software Releases

The supported [MIDlets](#) version is embedded in the software files that are available on the [Cisco Unified Communications Manager Support](#) page at the following URL:

http://www.cisco.com/en/US/products/sw/voicesw/ps556/tsd_products_support_series_home.html

Adding a New Phone with MIDlets Capability

If you are using Unified CM release 8.0 and wish to enable [MIDlets](#) features on new phone installations, you must first enable Web Access. Web Access is not enabled by default; it must be enabled manually in the Web Access field of the [Product Specific Configuration Layout](#) window.

Configuring the Cisco Unified IP Phone

Use the information in this section to perform the following tasks:

- [Adding a New Phone, page 2-2](#)
- [Managing Cisco Unified IP Phones, page 2-3](#)

**Note**

The Cisco Unified IP Phone is connected to the Cisco TelePresence device with an Ethernet cable. See the cabling chapters in the Cisco TelePresence Assembly guides for more detailed cabling instructions. Go to the Cisco Support Pages to find installation documentation for your Cisco TelePresence System: **Support > Cisco TelePresence > Cisco TelePresence System**

Adding a New Phone

To add a new phone:

-
- Step 1** Log in to the Cisco Unified CM Administration interface.
 - Step 2** From the Device drop-down menu, choose **Phone**. The Find and List Phones Page appears.
 - Step 3** Choose **Cisco 7970**, **Cisco 7971**, or **Cisco 7975** (recommended) from the Phone Type drop-down menu.
 - Step 4** Click **Next**. The Phone Configuration window appears.
 - Step 5** Choose **SIP** from the Select the Device Protocol drop-down menu.
 - Step 6** Click **Next**. The Phone Configuration window is updated with the following configuration fields:
 - [Device Information](#)
 - [Protocol Specific Information](#)
 - [Certification Authority Proxy Function \(CAPF\) Information](#)
 - [Expansion Module Information](#)
 - [External Data Locations Information](#)
 - [Extension Information](#)
 - [MLPP Information](#)
 - [Do Not Disturb](#)
 - [Secure Shell Information](#)
 - [Product Specific Configuration Layout](#)
 - Step 7** Proceed to “[Managing Cisco Unified IP Phones](#)” section on page 2-3 to configure the fields found in the Phone Configuration window.
-

Managing Cisco Unified IP Phones

Before You Begin

Before starting the following procedure, note the MAC address of the Cisco TelePresence phone device. See the [Before You Begin](#) section for information about determining the MAC address.



Note

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

Use the tasks in this section to configure the Cisco Unified IP Phone for MIDlets. When you are finished configuring your settings, click **Save** and follow the prompts to restart the system.

To configure the Cisco Unified IP phone:

- Step 1** Log in to the Cisco Unified CM Administration interface.
- Step 2** From the Device drop-down menu, choose **Phone**. The Find and List Phones Page appears.
- Step 3** Search for a phone using the fields provided or choose a phone from the drop-down menu.



Tip

Search for a device type that contains “7970” or “7975.”

- Step 4** Click **Find**. A list of devices appears.
- Step 5** Click on a device in the Device Name (Line) column. The Phone Configuration page for that device appears.
- Step 6** In the Phone Type box, verify the following requirements:
 - Phone Type—**Cisco 7970**, **Cisco 7971**, or **Cisco 7975**
 - Device Protocol—**SIP**
- Step 7** Enter information in the following sections found on the Phone Configuration page to configure the Cisco IP Phone 7970 Series:
 - [Device Information, page 2-3](#)
 - [Protocol Specific Information, page 2-7](#)
 - [Certification Authority Proxy Function \(CAPF\) Information, page 2-7](#)
 - [Expansion Module Information, page 2-8](#)
 - [External Data Locations Information, page 2-8](#)
 - [Extension Information, page 2-10](#)
 - [MLPP Information, page 2-11](#)
 - [Do Not Disturb, page 2-11](#)
 - [Secure Shell Information, page 2-11](#)
 - [Product Specific Configuration Layout, page 2-11](#)

Device Information

Enter the settings to configure the Cisco Unified IP Phone 7970 Series using the information in [Table 2-1](#) as a guide.

**Note**

Assign the same directory number that is assigned to the Cisco TelePresence device to the Cisco Unified IP Phone 7970 Series.

**Note**

The “Required” column in the table reflects fields marked with an asterisk (*) in the administration interface, which are required entries for basic configuration.

Table 2-1 Cisco Unified IP Phone 7970 Series Device Information

Field	Required?	Setting
Registration	—	Read-only. Indicates whether the system is Registered with Cisco Unified Communications Manager and lists the registered Unified CM address.
IP Address	—	Cisco Unified IP Phone IP address. Click on the IP address to log into the phone in a new Device Information window.
Active Load ID	—	View-only field showing the status of the active load. Note Available on the Cisco Unified IP Phone but not available on the CTS.
Device is active	—	A green check mark indicates that the device is active.
Device is trusted	—	A green check mark indicates that the device is trusted.
MAC Address	Yes	MAC address for the Cisco Unified IP Phone 7975.
Description	—	Short description of the device.
Device Pool	Yes	Your device pools. Leave field as Default. Click View Details to open the Device Details window, which includes the following system setting information: <ul style="list-style-type: none"> • Device Pool Settings • Roaming Sensitive Settings • Device Mobility Related Information • Incoming Calling Party Settings
Common Device Configuration	—	Your configured devices. Leave field as <None>. Click Details or View to see the following information in a new window: <ul style="list-style-type: none"> • Common Device Configuration Information • Multilevel Precedence and Preemption Information

Table 2-1 Cisco Unified IP Phone 7970 Series Device Information (continued)

Field	Required?	Setting
Phone Button Template	Yes	Standard_7975 SIP. Note Unless you have created extra button templates, you will see the default button template for your device.
Softkey Template	—	<None>
Common Phone Profile	Yes	Standard Common Phone Profile.
Calling Search Space	—	<None>
AAR Calling Search Space	—	<None>
Media Resource Group List	—	<None>
User Hold MOH Audio Source	—	<None>
Network Hold MOH Audio Source	—	<None>
Location	Yes	Hub_None.
AAR Group	—	<None>
User Locale	—	<None> Note This field supports user locales in the United States.
Network Locale	—	<None> Note This field supports user locales in the United States.
Built In Bridge	Yes	Default.
Privacy	Yes	Default.
Device Mobility Mode	Yes	Default. Note Click Current Device Mobility Settings or View to see Device Mobility Details for the current device in a new window:
Owner User ID	—	Saved User IDs. Leave field as <None>.
Phone Personalization	Yes	Default.
Services Provisioning	Yes	Default.
Phone Load Name	—	Leave default setting.
Single Button Barge	—	Default.
Join Across Lines	—	Default.
Use Trusted Relay Point	Yes	Default.
BLF Audible Alert Setting (Phone Idle)	Yes	Default.
BLF Audible Alert Setting (Phone Busy)	Yes	Default.
Always Use Prime Line	Yes	Default.

Table 2-1 Cisco Unified IP Phone 7970 Series Device Information (continued)

Field	Required?	Setting
Always Use Prime Line for Voice Message	Yes	Default.
Calling Party Transformation CSS	—	<None>
Geolocation	—	<None>
Check-Boxes		
Use Device Pool Calling Party Transformation CSS	—	Box is checked.
Ignore Presentation Indicators		Box is unchecked.
Retry Video Call as Audio		Box is checked.
Allow Control of Device from CTI		Box is checked.
Logged Into Hunt Group		Box is checked.
Remote Device		Box is unchecked
Protected Device	—	A new Softkey template without supplementary service Softkeys must be used for a protected phone.
Hot Line Device	—	A custom Softkey template without supplementary service Softkeys must be used for a Hot line Device.
Note When you are finished making changes, click Save to save your settings.		

Protocol Specific Information

Link the Cisco TelePresence device to Cisco Unified Communications Manager phone profiles for the presence group and security-related SIP phone settings using the information in [Table 2-2](#) as a guide.



Note

The “Required” column in the table reflects fields marked with an asterisk (*) in the administration interface, which are required entries for basic configuration.

Table 2-2 Cisco Unified IP Phone 7970 Series Protocol-Specific Information

Field	Required?	Setting
Packet Capture Mode	Yes	<None>
Packet Capture Duration	—	0
Presence Group	Yes	Standard Presence group.
SIP Dial Rules	—	<None>
MTP Preferred Originating Codec	Yes	711ulaw
Device Security Profile	Yes	Use the default setting. Note For more information about configuring Cisco Unified CM security features, refer to the <i>Cisco Unified Communications Manager Security Guide, Release 7.1(2)</i> .
Rerouting Calling Search Space	—	<None>
SUBSCRIBE Calling Search Space	—	<None>
SIP Profile	Yes	Choose from the following: <ul style="list-style-type: none"> Standard SIP Profile Standard BFCP SIP Profile Information in this field reflects SIP profiles that have been created on this Unified CM. See “BFCP over UDP Collaboration Support” in Chapter 6, “Configuring Cisco TelePresence Features.”
Digest User	—	<None>
Check-Boxes		
Media Termination point Required	—	Box is un-checked.
Unattended Port		
Require DTMF Reception		
Note When you are finished making changes, click Save to save your settings.		

Certification Authority Proxy Function (CAPF) Information

[Table 2-3](#) describes fields found in the Certification Authority Proxy Function (CAPF) Information section on the Phone Configuration page. Leave all fields unchanged.

Table 2-3 CAPF Settings

Field	Required?	Setting
Certificate Operation	Yes	No Pending Operation.
Authentication Mode	Yes	Leave this field unchanged.
Authentication String	—	
Key Size (Bits)	Yes	
Operation Completes By	Optional	
Certificate Operation Status	—	<None>

Note Security Profile Contains Additional CAPF Settings. See the [“Phone Security Profile CAPF Information”](#) section on page 1-30.

Expansion Module Information

Table 2-4 describes fields found in the Expansion Module Information section on the Phone Configuration page. Leave all fields unchanged.

Table 2-4 Expansion Module Information

Field	Required?	Setting
Module 1	—	<None>
Module 1 Load Name	—	Leave blank.
Module 2	—	<None>
Module 2 Load Name	—	Leave blank.

External Data Locations Information

Define the server locations for external data using the information in the following sections as a guide:

- [External Data Location Settings for CTS Release 1.6 and Earlier—Table 2-5](#)
- [External Data Location Settings for CTS Release 1.7 and Later—Table 2-6](#)



Note

Observe the Following—The server designation can be either the IP address or the hostname of the Cisco TelePresence device that is associated with this phone.

If a server hostname is used, it must be resolvable by the Cisco Unified IP Phone 7970 Series [DNS](#).

- The format for each required field is `http://server hostname: or IP address:` Followed by the 8080 port address, then a slash and one of the following, depending on the field:
 - `services.html`
 - `getservicesmenu.jsp`
 - `authenticate.html` - For CTS release 1.6 systems with MIDlets and earlier (only allowable option)
 - `idle.html`

- Leave fields in the External Data Locations Information table blank to use the default settings.

**Tip**

Be careful when typing URLs to avoid typos.

External Data Location Settings for CTS Release 1.6 and Earlier

Table 2-5 External Data Location Settings for CTS Release 1.6 and Earlier

Field	Required Non-MIDlets	Required for MIDlets	Setting
Information	—	Yes	Leave blank to use the default.
Directory			Note Default settings that were configured in the Enterprise Parameters Configuration.
Messages			
Services	Yes	No	Leave blank to use the default.
Authentication Server	Yes	No	http://server:8080/authenticate.html Note For CTS release 1.6 systems with MIDlets and earlier (only allowable option)
Proxy Server	—	—	Leave blank to use the default.
Idle	Yes	No	Leave blank to use the default.
Idle Timer (seconds)	Yes—1	—	For MIDlets, you do not have to supply a value in the Idle Timer field. Or you can enter 0 (zero).
Secure Authentication URL	—	Yes (CUCM Release 8.0 only)	Must match the URL in the Authentication Server field above. For example: http://server:8080/authenticate.html
Secure Directory URL	—	Yes (CUCM Release 8.0 only)	Enter the secure URL for the server from which the phone obtains directory information. This parameter specifies the URL that secured Cisco Unified IP Phones use when you press the Directory button. Note If you do not provide a Secure Directory URL, the device uses the nonsecure URL. If you provide both a secure URL and a nonsecure URL, the device chooses the appropriate URL, based on its capabilities. Leave this field blank to accept the default setting. Maximum length: 255
Secure Idle URL	—	Yes (CUCM Release 8.0 only)	Leave blank to use the default.
Secure Information URL	—	Yes (CUCM Release 8.0 only)	Leave blank to use the default.
Secure Message URL	—	Yes (CUCM Release 8.0 only)	Leave blank to use the default.
Secure Services URL	—	Yes (CUCM Release 8.0 only)	Leave blank to use the default.

External Data Location Settings for CTS Release 1.7 and Later



Note CTS Release 1.7 and later releases require that your system be running MIDlets.

Table 2-6 External Data Location Settings for CTS Release 1.7 and Later

Field	Setting
Information	Leave all fields blank to use the default.
Directory	Note Default settings that were configured in the Enterprise Parameters Configuration.
Messages	
Services	
Authentication Server	
Proxy Server	
Idle	
Idle Timer (seconds)	Set to 0 to use the default.
Secure Authentication URL	Leave all fields blank to use the default.
Secure Directory URL	Enter the secure URL for the server from which the phone obtains directory information. This parameter specifies the URL that secured Cisco Unified IP Phones use when you press the Directory button. Note If you do not provide a Secure Directory URL, the device uses the nonsecure URL. If you provide both a secure URL and a nonsecure URL, the device chooses the appropriate URL, based on its capabilities. Leave this field blank to accept the default setting. Maximum length: 255
Secure Idle URL	—
Secure Information URL	—
Secure Message URL	—
Secure Services URL	—

Extension Information

[Table 2-7](#) describes fields found in the Extension Information section on the Phone Configuration page.



Note Leave all fields unchanged.

Table 2-7 Cisco Unified IP Phone 7970 Series Extension Information

Field	Required?	Setting
Check-Box Enable Extension Mobility	—	Leave box unchecked.
Log Out Profile	—	Current Device Settings.
Log in Time	—	<None>
Log Out Time		

MLPP Information

Leave the multilevel precedence and preemption information (MLPP) Domain field as <None>.

Do Not Disturb

Table 2-8 describes fields found in the Do Not Disturb (DND) section on the Phone Configuration page.

Table 2-8 Cisco Unified IP Phone 7970 Series Do Not Disturb Fields

Field	Required?	Setting
Check-Box Do Not Disturb	—	Leave box unchecked.
DND Option	Yes	Common Phone Profile Setting.
DND Incoming Call Alert	—	<None>

Secure Shell Information

Table 2-9 describes fields found in the Secure Shell Information section on the Phone Configuration page. Leave all fields unchanged.

Table 2-9 Cisco Unified IP Phone 7970 Series Secure Shell Information Fields

Field	Required?	Setting
Secure Shell Admin User	—	Leave field blank.
Secure Shell Admin Password		

Product Specific Configuration Layout

Table 2-10 describes fields found in the Product Specific Configuration Layout section on the Phone Configuration page. Leave all fields unchanged.

Table 2-10 Product Specific Configuration Layout Fields

Field	Required?	Setting
Check-Box Disable Speakerphone	—	Leave the box checked (speakerphone disabled) unless you are using the One Phone Per Office feature. Note The speakerphone must be enabled (Disable Speakerphone box unchecked) to initiate the One Phone Per Office feature. See the “ One Phone Per Office ” section on page 6-5.
Check-Box Disable Speakerphone and Headset	—	Leave the box checked (speakerphone and headset disabled) unless you are using the One Phone Per Office feature. Note The Auto Answer feature does not work if the Disable Speakerphone and Headset box is unchecked.
Forwarding Delay	Yes	Disabled.
PC Port	Yes	Choose Disabled . Additional drop-down menu choice: <ul style="list-style-type: none"> • Enabled—Use only to enable the One Phone Per Office feature. Note You must enable the PC port on the Cisco Unified IP Phone for MIDlets and the One Phone Per Office feature to function.
Settings Access	Yes	Enabled.
Gratuitous ARP	Yes	Disabled.
PC Voice VLAN Access	Yes	Enabled.
Video Capabilities	Yes	Disabled.
Auto Line Select	Yes	Disabled.
Web Access	Yes	Choose Enabled. Note If you are using Cisco Unified CM firmware release 8.0 and wish to enable MIDlets features on new phone installations, you must first enable this field.
Days Display Not Active	—	Choose a day of the week.
Display On Time	—	Leave the default setting.
Display On Duration	—	Leave the default setting.
Display Idle Timeout	—	Leave the default setting.
Span to PC Port	Yes	Disabled.
Logging Display	Yes	PC Controlled.

Table 2-10 Product Specific Configuration Layout Fields

Field	Required?	Setting
Load Server	—	Leave field blank.
Recording Tone	Yes	Disabled.
Recording Tone Local Volume	Yes	Leave default setting.
Recording Tone Remote Volume	Yes	Leave default setting.
Recording Tone Duration	—	Leave field blank.
Display On When Incoming Call	Yes	Disabled.
RTCP	Yes	Disabled.
“more” Softkey Timer	—	Leave default setting.
Auto Call Select	Yes	Enabled.
Log Server	—	Leave field blank.
Advertise G.722 Codec	Yes	Use System Default.
Wideband Headset UI Control	Yes	Enabled.
Wideband Headset	Yes	Enabled.
Peer Firmware Sharing	Yes	Disabled.
Cisco Discovery Protocol (CDP): Switch Port	Yes	Enabled.
Cisco Discovery Protocol (CDP): PC Port	Yes	Enabled.
Link Layer Discovery Protocol - Media Endpoint Discover (LLDP-MED): Switch Port	Yes	Enabled.
Link Layer Discovery Protocol (LLDP): PC Port	Yes	Enabled.
LLDP Asset ID	—	Leave field blank.
LLDP Power Priority	Yes	Leave the default setting.
Wireless Headset Hookswitch Control	Yes	Disabled.
IPv6 Load Server	—	Leave blank.
IPv6 Log Server	—	Leave blank.
802.1x Authentication	—	User Controlled.
Detect Unified CM Connection Failure	Yes	Leave the default setting (Normal).
Minimum Ring Volume	Yes	0-Silent. Additional drop-down menu choices: <ul style="list-style-type: none"> • 2 through 15.
HTTPS Server	Yes	HTTP and HTTPS Enabled.
Handset/Headset Monitor	—	Disabled.
Enbloc Dialing	—	Enabled.

Table 2-10 Product Specific Configuration Layout Fields

Field	Required?	Setting
Switch Port Remote Configuration	Yes	Disabled.
PC Port Remote Configuration	Yes	Disabled.
Automatic Port Synchronization	Yes	Disabled.
SSH Access	Yes	Disabled.
80-bit SRTCP	Yes	Disabled.

Configuring MIDlets

To use the Enhanced Phone User Interface (MIDlets), your Cisco Unified IP Phone 7970 Series must be configured to run a new application service. This section explains how to implement the MIDlets interface, which is available in Cisco TelePresence System (CTS) Release 1.5 and later releases.

The Cisco Unified IP Phone auto-configures the IP address of the CTS. The CTS obtains the phone IP address using CDP data and CTS sends the command to the Cisco Unified IP Phone to start the MIDlet. The launch command specifies the IP address of the CTS.

Before You Begin



Note

If you are upgrading from an older XML specification identifier (XSI) user interface to MIDlets, you must reset the phone and reset the CTS to allow the Java MIDlets application to work with the Cisco Unified IP Phone. See the [“Managing Phone Reset and Codec Connectivity”](#) section on page 4-13 for reset information.

- Turn off [Auto Answer](#) for the Cisco Unified IP Phone.
- Enable the speakerphone.
- Enable the PC port.



Note

You must have MIDlets installed on the Unified CM to use the 720p (Lite) feature. For more information about 720p (Lite), see the [“Quality Per Display - 720p \(Lite\)”](#) section on page 6-8.

Procedure

This section contains the following configuration tasks:

- [Uploading Files to the Unified CM TFTP Directory](#), page 2-15
- [Creating MIDlets IP Phone Service in Unified CM](#), page 2-16
- [Configuring the MIDlets IP Phone Interface](#), page 2-18
- [Setting Phone URL Parameters for MIDlets](#), page 2-19

Uploading Files to the Unified CM TFTP Directory

Use the information in the following sections to upload files to the Unified CM TFTP Directory:

- [Downloading Cisco TelePresence MIDlet Phone Application .jad and .jar Files from Cisco.com, page 2-15](#)
- [Uploading Cisco TelePresence MIDlet Phone Application .jad and .jar files to Unified CM, page 2-15](#)

**Tip**

When downloading MIDlet .jad and .jar files, use caution to avoid typos. Some files use a hyphen in the file string (“ - ”) and some use a period (“ . ”). For example, TSPM.1-7-0-0S and TSPM-1.7.4-P1-2S.

Downloading Cisco TelePresence MIDlet Phone Application .jad and .jar Files from Cisco.com

To download Cisco TelePresence MIDlet Phone Application .jad and .jar files from Cisco.com:

Step 1

Go to the [Support Download Software](#) page on Cisco.com. The supported MIDlet version with the .jad and .jar files for the Cisco TelePresence MIDlet Phone Application is embedded in these software files.

**Note**

You can also download software from the [Cisco Unified Communications Manager Support](#) page at the following URL:

http://www.cisco.com/en/US/products/sw/voicesw/ps556/tsd_products_support_series_home.html

TelePresence > Cisco TelePresence Device > TelePresence Software > Latest Releases > Software Release

**Tip**

Do not change the name of the downloaded files or add any extensions to the file name. The .jad and .jar extensions are appended automatically.

Step 2

Proceed to [Uploading Cisco TelePresence MIDlet Phone Application .jad and .jar files to Unified CM](#).

Uploading Cisco TelePresence MIDlet Phone Application .jad and .jar files to Unified CM

To upload Cisco TelePresence MIDlet Phone Application .jad and .jar files to the Unified CM TFTP Directory:

Step 1

Log in to the Cisco Unified CM Administration interface.

Step 2

From the Bulk Administration drop-down menu, choose **Upload/Download Files**. The Find and List Files window appears.

Step 3

Locate the files to upload using the search fields provided in the Find and List Files window.

Or

- Step 4** Click **Add New** to enter new file information using the fields provided. See the “[Adding a New Phone](#)” section on page 2-2.
- Step 5** Upload the Cisco TelePresence MIDlet Phone Application .jad and .jar files to the Unified CM TFTP directory by following these steps:
- From the Navigation drop-down menu in the upper right corner, choose **Cisco Unified OS Administration** and click **Go**.
 - Log in to **Cisco Unified OS Administration**.
 - Choose **Software Upgrades** then **TFTP File Management** from the drop-down menu.
 - Search for the TFTP Files using the fields provided and click the **Upload File** button. The Upload File dialog box appears.
 - Specify a valid filename and path or click **Browse** in the Upload File dialog box to find the file and click **Upload File**.
- Step 6** Restart the Unified CM TFTP service by following these steps:
- From the Navigation drop-down menu in the upper right corner, choose **Cisco Unified Serviceability** and click **Go**.
 - Log in to Cisco Unified Serviceability.
 - From the Tools drop-down menu, choose **Control Center - Feature Services**.
 - From the Select Server drop-down menu, choose the TFTP server and click **Go**.
 - From the CM Services menu, click the **Cisco TFTP** radio button.
 - Click the **Restart** button.
- Step 7** Repeat Step c through Step e for all TFTP servers.
-

Creating MIDlets IP Phone Service in Unified CM

To create IP Phone Service in Unified CM:

- Step 1** Log in to the Cisco Unified CM Administration interface.
- Step 2** From the Navigation drop-down menu in the upper right corner, choose **Cisco Unified CM Administration** and click **Go**.
- Step 3** From the Device drop-down menu, go to **Device Settings** and click on **Phone Services**. The Find and List IP Phone Services window appears.
- Step 4** Click the **Add New** button. The IP Phone Services Configuration screen appears.
- Step 5** Fill in the following fields:
- Service Name**—Required. The Service Name must match the filename of the .jad file.



Note

Your filename must not contain the .jad extension. The .jad extension is appended automatically when you name the file.

- ASCII Service Name**—Required. The ASCII service name must match the configured service name.

- c. **Service Description**—MIDlet UI.
- d. **Service URL**—Required. IP address of the Service URL must be that of the Unified CM and in the following format:

http://xx.xx.xx.xx:6970/TSPM-y-y-y-YY.jad

The following describes the necessary Service URL content:

- **xx.xx.xx.xx** is the IP address of the Unified CM server.
- **y-y-y-** is the version of the MIDlet application being added to Unified CM.
- **YY** is the build version of the MIDlet application being added to Unified CM.

- e. **Service Category**—Required. Choose **Java MIDlet** from the drop-down menu.
- f. **Service Type**—Required. Choose Standard IP Phone Service.
- g. **Service Vendor Name**—Must be exactly “Cisco” (case-sensitive).
- h. **Service Version**—Leave blank.

Step 6 Click the **Enable** check box.

Step 7 Click **Save** to save your changes.

Configuring the MIDlets IP Phone Interface

The Cisco Unified IP Phone auto-configures the IP address of the CTS; the CTS obtains the phone IP address using CDP data and the CTS sends the command to the Cisco Unified IP Phone to start the MIDlet. The system launch command specifies the IP address of the CTS.

To configure each Cisco Unified IP Phone 7970 Series to run the MIDlet IP phone interface:

- Step 1** Log in to the Cisco Unified CM Administration interface.
- Step 2** From the Navigation drop-down menu in the upper right corner, choose **Cisco Unified CM Administration** and click **Go**.
- Step 3** From the Device drop-down menu, choose **Phone**. The Find and List Phones Page appears.
- Step 4** Search for a phone using the fields provided or choose a phone from the drop-down menu and click **Find**. A list of devices appears.
- Step 5** Click on a device in the Device Name (Line) column. The Phone Configuration page for that device appears.
- Step 6** From the Related Links drop-down menu in the upper right corner, choose **Subscribe/Unsubscribe Services** and then click **Go**. The Subscribed Cisco IP Phone Services window for that device appears.
- Step 7** In the Service Information box, choose **MIDlet IP** phone service from the Select a Service drop-down list and click **Next**. The Subscribed Cisco IP Phone Services window is updated with configurable Service Name and ASCII Service Name fields.
- Step 8** Click **Subscribe** to save your settings or **Back** to return to the original Subscribed Cisco IP Phone Services window.

If the phone is already subscribed to an older MIDlet version:

- a. Unsubscribe the phone from the older service.
- b. Subscribe the phone to the new IP phone service that you created in the [“Creating MIDlets IP Phone Service in Unified CM”](#) section on page 2-16.

Step 9 Click **Save** to save your settings.

**Note**

If you are upgrading from an older XML specification identifier (XSI) user interface to MIDlets, you must reset the phone and reset the CTS to allow the Java MIDlets application to work with the Cisco Unified IP Phone. See the [“Managing Phone Reset and Codec Connectivity”](#) section on page 4-13 for reset information.

Setting Phone URL Parameters for MIDlets

Make sure the default services URL is set for MIDlets. To override default settings:

-
- Step 1** Log in to the Cisco Unified CM Administration interface.
- Step 2** Choose **System > Enterprise Parameters Configuration**.
- Step 3** In the Phone URL Parameters box, set the URL Services in the following format:
- http://xx.xx.xx.xx:8080/ccmcip/getservicesmenu.jsp**
- Where *xx.xx.xx.xx* is the IP address of the Unified CM server.

**Note**

You may use a hostname providing the CTS and the phone is provisioned with a DNS name server.

- Step 4** Click **Save** to save your settings.
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MIDlets Troubleshooting Tips

- If the MIDlet does not come up at all, verify that the Unified CM is subscribed. Reset the phone.
- Verify that the phone has the correct firmware for that MIDlet.
- Verify that the CTS has the correct image for that MIDlet.
- If the MIDlet comes up with a blank white screen, verify that the Service URL for the phone is blank.
- If the phone fails to register, verify that phone type is set correctly. For example, Cisco Unified IP Phone 7970 should not be set as 7975.
- If the phone is stuck in the initializing phase, restart TSPS on the CTS. If after the restart the phone shows “phoneui=xsi,” reboot the CTS.
- Check the Service URL. If it ends with “services.html,” make it blank and apply changes. Reboot the CTS.
- If no services appear on the phone, even though subscribed to a valid service, check the “Services Provisioning” field to make sure it is set to **Default**.
- If the MIDlet fails to start, make sure that the **Enable** box checked.
- Make sure the service that you are using to subscribe your phone is pointing to the correct JAD file.

Configuring a Remote Phone

To configure the system to use your CTS Cisco Unified IP phone remotely:

- Step 1** Log in to the Cisco Unified CM Administration interface.
- Step 2** Navigate to **Device > Phone** and use the search fields to find the phone you wish to use remotely.
- Step 3** Write down the IP Address of your phone and CTS, and click the link under Device Name (Line) of your phone, circled in red in [Figure 2-1](#).

Figure 2-1 Your Phone Device Line

The screenshot shows the Cisco Unified CM Administration interface. The 'Phone' configuration page is displayed, showing a table of phone lines. The 'Device Name(Line)' column is circled in red, highlighting the phone line 'SEP0022555D6F3F(1)'. The table has the following data:

Device Name(Line)	Description	Device Pool	Extension	Partition	Device Protocol	Status	IP Address	Copy	Super Copy
SEP001DA238F52B(1)	scotts CTS 1000	Default	11698		SIP	Registered with 10.22.148.205	10.22.77.217		
SEP0022555D6F3F(1)	SEP0022555D6F3F	Default	11698		SIP	Registered with 10.22.148.205	10.22.77.216		

- Step 4** Scroll down to External Data Locations and enter the following in the Authentication Server field:
http://<your Cisco Unified CM IP Address>:8080/authenticate.html
- Step 5** Scroll down a little bit more to Secure Shell Information and enter your administration username and password.
- Step 6** Click **Save** to save your settings.
- Step 7** Go to the top right of the screen to Related Links, choose **Subscribe/Unsubscribe Services** and click **GO**.
- Step 8** Choose the appropriate MIDlet to download onto the phone. If you are unsure which one you should use, see the [Release Notes for Cisco TelePresence System](#) for your release on Cisco.com.
If MIDlets are already installed and you need to make any changes, do the following:
 - a. Click the link under **Subscribed Services** and click the **Unsubscribe**.
 - b. Choose the appropriate MIDlet in the Select a Service field.
 - c. Click **Next** and then **Subscribe**.
- Step 9** Click **Reset** to reset the phone and save your settings. See the “[Managing Phone Reset and Codec Connectivity](#)” section on page 4-13 for reset information.
- Step 10** Open an SSH client in a browser window and SSH into your phone.
- Step 11** When the **login:** prompt appears, enter the following:
debug.##

Step 12 When the **password:** prompt appears, enter **debug.##** again. A prompt with your MAC address should appear (example: 002255D8F3FF>).

Step 13 Enter the following:

```
test open 123
```

The following should appear: TEST: Opening Session. You can now remotely use your phone. Enter the test key to see all the possible commands you can use (for example, if you enter **test key soft5**, the 5th soft key on the phone is activated).

Where to Go Next

See the following chapters:

- [Chapter 4, “Verifying and Troubleshooting the Cisco TelePresence System Configuration.”](#)
- [Chapter 5, “Managing Cisco Unified IP Phone Features”](#)
- [Chapter 6, “Configuring Cisco TelePresence Features”](#)

