Modifying Cisco Unified IP Phone Options

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This chapter describes the screen and button features available for Cisco Unified IP phones connected to Cisco Unified Communications Manager Express (Cisco Unified CME).

Finding Feature Information in This Module

Your Cisco Unified CME version may not support all of the features documented in this module. For a list of the versions in which each feature is supported, see the "Feature Information for Cisco Unified IP Phone Options" section on page 1522.

Contents

Information About Cisco Unified IP Phone Options

To enable IP phone options, you should understand the following concepts:

Clear Directory Entries

Cisco Unified CME 8.6 allows you to clear the display of call-history details such as missed, placed, and received call entries on your Cisco Unified SCCP IP phone's display screen. You can press the directory services button on most of the Cisco Unified IP phones or program a line button on 7931 phone to delete the display of phone number entries in the missed, placed, and received calls. The clear call directory feature is supported on Cisco Unified IP phones, 7960, 7961, 7970. 7971 and 8961.

To enable the clear directory entries feature, a call-history option is added to the **exclude** command. For more information on configuring phones to clear call-history details, see the "Clearing Call-History Details from a SCCP Phone" section on page 1472.

Customized Background Images for Cisco Unified IP Phone 7970

The Cisco Unified IP Phone 7970 and 7971 support customized background images on the phone screen. To enable your Cisco Unified IP Phone 7970 or 7971 to display a customized background image, follow the procedure in the technical note at http://www.cisco.com/en/US/products/sw/voicesw/ps4625/products_tech_note09186a008062495a.shtml.

Sample background images are available in the 7970-backgrounds.tar file at http://www.cisco.com/cgi-bin/tablebuild.pl/ip-iostsp.

Customized Button Layout

Cisco Unified CME 8.5 and later versions allow you to customize the display order of various button types on a phone using the button layout feature. The button layout feature allows you to customize the display of the following button types:

- Line buttons
- Speed Dial buttons
- BLF Speed Dial buttons
- Feature Buttons
- ServiceURL buttons

Cisco Unified CME 8.5 uses the **button layout** command is to populate buttons in any desired order. All buttons displayed on the phone follow the button-layout configuration. In the **button layout** command, the physical button number on the phone is specified under the *button-string* parameter of the **button layout** command. Buttons that are not defined under the button layout configuration are displayed as blank lines. Before configuring button layout on phones, line buttons, feature buttons (including privacy button), and url buttons must be configured through **line button, feature button** and **url button** commands, respectively.

Line Buttons

The button layout control feature allows you to populate buttons with corresponding physical line numbers or line number ranges. Line buttons that are not associated with a physical line are not displayed on the phone.You can customize any Cisco Unified SCCP IP phone button to function as a line button using the **button** command and specifying the position, button type, and directory number of the phone. For more information, see the "Configuring Button Layout on SCCP Phones" section on page 1478.

For Cisco Unified SIP phones, the first physical button must be a line button with a valid directory number. You can customize the other buttons using the **button** command and specifying the relative position (position index), button type, and directory number of the button. For more information, see the "Configuring Button Layout on SIP Phones" section on page 1480.

Speed Dial Buttons

You can customize the display of Speed Dial buttons to appear before, after, or between line buttons using the **speed-dial** command and specifying the position of the button. The button layout feature allows you to populate the buttons with corresponding physical line numbers or line number ranges. Buttons that do not have a physical line associated with them are not displayed on the phone.

BLF Speed Dial Buttons

The button layout feature allows you to display the BLF Speed-Dial buttons before, after or between the line buttons using the **blf-speed-dial** command with a specific position. Once the BLF speed-dial button is configured, the system populates the button with corresponding physical line number or range of line numbers. Buttons without a physical line association are not displayed on the phone.

Feature Buttons

Currently, privacy button is the only button available and is presented at the end of all the above mentioned buttons. With PLK feature you can enable most phone features on phone's physical buttons (line keys). This button layout feature requests all presented buttons to be configured via **button**, **speed-dial**, **blf-speed-dial**, **feature-button**, or **url-button** commands. The privacy-button is overridden by feature-button if there is one. For more information on configuring feature buttons on a line key, see the "SCCP: Configuring Feature Button on a Line Key" section on page 1489 and "SIP: Configuring Feature Button on a Line Key" section on page 1487.

Note If the button-layout feature is configured in both ephone-template and logout profile (extension mobility) mode, configuration in the latter takes precedence. Button-layout configuration under ephone mode takes precedence in phones that do not have extension mobility (EM).

Note Privacy button is counted as a feature button on phones that support privacy button and do not have any feature button configured through the **feature-button** command.

URL Buttons

The button layout feature allows you to display the url button before, after, or even between the line buttons, speed dial buttons, BLF speed dial buttons, or feature buttons. For more information on configuring the URL button on a line key, see the "SCCP: Configuring Service URL Button on a Line Key" section on page 1485 and "SIP: Configuring Service URL Button on a Line Key" section on page 1483.

Customized Phone User Interface Services

In Cisco Unified CME 8.5 and later, you can customize the availability of individual service items such as Extension Mobility, My Phone Apps, and Single Number Reach (SNR) on a phone's user interface by assigning individual service item to a button using the Programmable Line Key (PLK) url-button configuration. For more information, see the "SCCP: Configuring Service URL Button on a Line Key" section on page 1485.

You can limit the availability of an individual service item on a phone's user interface by disabling the configuration for services such as EM, My Phone Apps, and Local Directory and exclude the display of these services from the phone's user interface. You can use the **exclude** command under ephone-template mode to exclude the display of Extension Mobility (EM), My Phone Apps, and Local Directory. For more information, see the "Blocking Local Services on Phone User Interface" section on page 1491.

If a directory service is enabled through PLK configuration, the PLK configuration takes precedence over the exclusion of directory services under ephone or ephone template configuration modes. The service is available through the button directly regardless of the exclusion of services configured under ephone and ephone-template modes.

In Cisco Unified CME 8.5 and later versions, you use the **exclude** command in ephone or ephone-template configuration mode to exclude the availability of local services such as EM, My Phone Apps, and Local Directory from a Cisco Unified SCCP IP phone's user interface.

In Cisco Unified CME 9.0 and later versions, you use the **exclude** command in voice register pool or voice register template configuration mode to exclude any of these local services from a Cisco Unified SIP IP phone's user interface.

Note Before Cisco Unified 9.0, you must configure the Local Directory service with the internal URL address.

In Cisco Unified CME 9.0 and later versions, the internal URL address is the default when no external URL address is configured.

Fixed Line/Feature Buttons for Cisco Unified IP Phone 7931G

In Cisco Unified CME 4.0(2) and later versions, you can select from two fixed button-layout formats to assign functionality to certain line buttons on a Cisco Unified IP Phone 7931G to support key system phone behavior. If you do not select a button set, no fixed set of feature/line buttons are defined.

The line button layout for the Cisco Unified IP Phone 7931G is a bottom-up array. Button 1 is at the bottom right of the array and button 24 is at the top left of the array.

Button set 1 includes two predefined feature buttons: button 24 is Menu and button 23 is Headset.

Button set 2 includes four predefined feature buttons: button 24 is Menu; button 23 is Headset; button 22 is Directories; and button 21 is Messages.

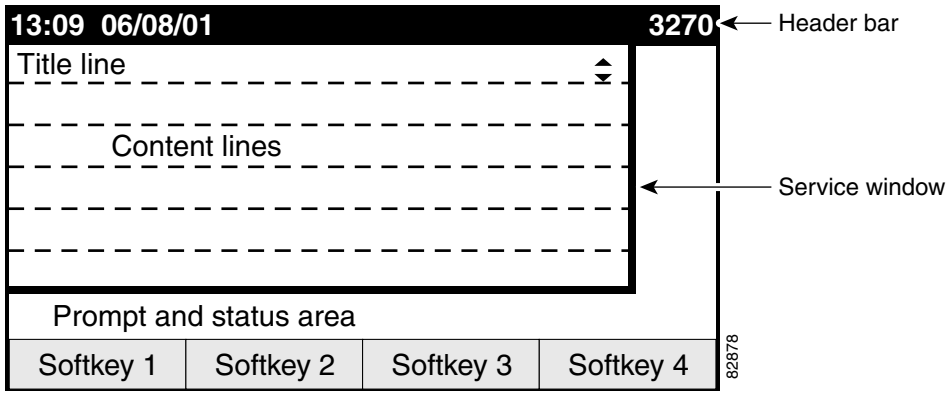
For configuration, see the "SCCP: Selecting Button Layout for a Cisco Unified IP Phone 7931G" section on page 1476.

Header Bar Display

You can customize the content of an IP phone header bar, which is the top line of the IP phone display.

The IP phone header bar, or top line, of a Cisco Unified IP Phone normally replicates the text that appears next to the first line button. The header bar is shown in Figure 52. The header bar can, however, contain a user-definable message instead of the extension number. For example, the header bar can be used to display a name or the full E.164 number of the phone. If no description is specified, the header bar replicates the extension number that appears next to the first button on the phone.

Figure 52 Cisco Unified IP Phone Display



Phone Labels

Phone labels are configurable text strings that can be displayed instead of extension numbers next to line buttons on a Cisco Unified IP phone. By default, the number that is associated to a directory number, and assigned to a phone, is displayed next to the applicable button. The label feature allows you to enter a meaningful text string for each directory number so that a phone user with multiple lines can select a line by label instead of by phone number, thus eliminating the need to consult in-house phone directories. For configuration information, see the "SCCP: Creating Labels for Directory Numbers" section on page 1496 or the "SIP: Creating Labels for Directory Numbers" section on page 1497.

Programmable Vendor Parameters for Phones

The vendorConfig section of the configuration file contains phone and display parameters that are read and implemented by a phone's firmware when that phone is booted. Only the parameters supported by the currently loaded firmware are available. The number and type of parameters may vary from one firmware version to the next.

The IP phone that downloads the configuration file will implement only those parameters that it can support and ignore configured parameters that it cannot implement. For example, a Cisco Unified IP Phone 7970G does not have a backlit display and cannot implement Backlight parameters regardless of whether they are configured. The following text shows the format of an entry in the configuration file:

```
<vendorConfig>
<parameter-name>parameter-value</parameter-name>
</vendorConfig>
```

For configuration information at the system level, see the "SCCP: Modifying Vendor Parameters for All Phones" section on page 1506.

For configuration information for individual phones, see the "SCCP: Modifying Vendor Parameters For a Specific Phone" section on page 1508.

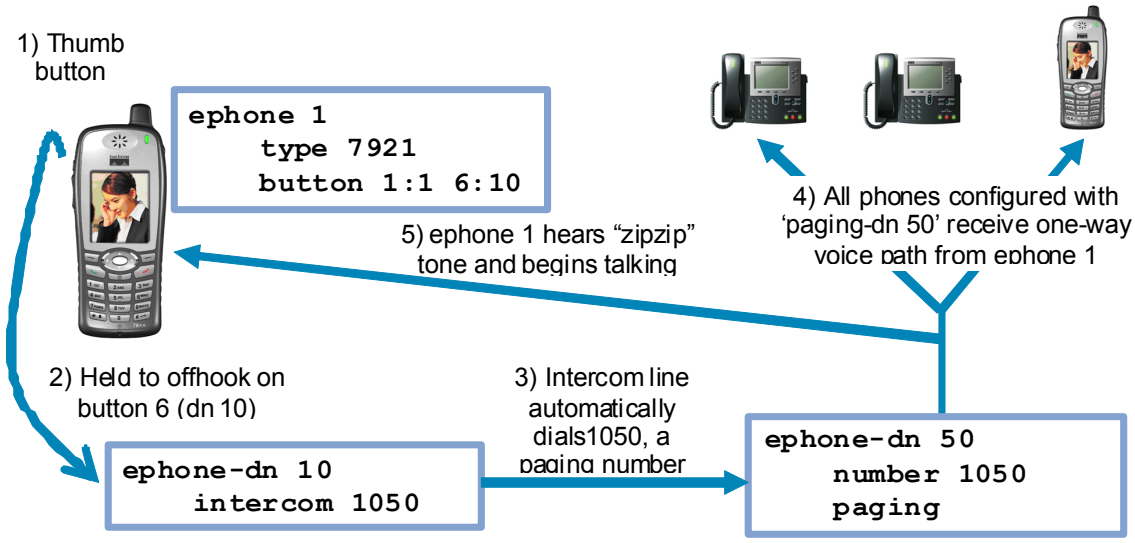
Push-to-Talk

This feature allows one-way Push-to-Talk (PTT) in Cisco Unified CME 7.0 and later versions without requiring an external server to support the functionality. PTT is supported in firmware version 1.0.4 and later versions on Cisco Unified Wireless IP Phone 7921 and 7925 with a thumb button.

In the following figure, button1/DN 1 is configured as the primary line for this phone. Button 6/ DN 10 is configured for PTT and is the line that is triggered by pushing the thumb button on this phone.

- Holding down on the thumb button causes the configured DN on the phone to go off-hook.
- The thumb button utilizes an intercom DN that targets a paging number (1050).
- The targeted paging group (DN 50) can be unicast or multicast or both.
- Users will hear a "zipzip" tone when call path is set up.
- All other keys on the phone are locked during this operation.
- Releasing the thumb button ends the call.

Figure 53 PTT Call Flow



For configuration information, see the "SCCP: Configuring One-Way Push-to-Talk on Cisco Unified Wireless IP Phones" section on page 1510.

Support for Cisco Jabber

Cisco Unified CME 8.6 and later versions support Cisco Jabber. The softphone SIP client is an iPhone application and works as a SIP softphone. The SIP softphone client is capable of supporting VoIP over WLAN. Cisco Unified CME 8.6 supports supplementary services such as Hold, Resume, Transfer, Call Park, and Call Pickup for the softphone SIP client.

To configure visual voicemail settings on Cisco Jabber, the ability to edit user settings should be enabled, see the "Enabling Edit User Settings" section on page 1468.

You can configure the softphone SIP client using the phone **type CiscoJabber-iOS** option. For more information on configuring Cisco Jabber, see the "Configuring Cisco Jabber" section on page 1470.

Note Shared line, conference, and hand-off call to GSM are not supported.

Note Cisco Jabber for iPhone is only supported with iOS 5.

Note Cisco Mobile was renamed to Cisco Jabber in the latest release.

Call Park and Pickup

In Cisco SIP client, when you press the Home action button, the call continues and the application runs in the background.

When a call is parked and the Cisco iPhone SIP client unregisters because of a power outage, out of range access point, or simply because you pressed the Home action button, the SIP client displays a pop-up with an option to pickup the call (the parked call). This only happens when the client re-registers (before the configured park timer expires or call gets dropped).

Dial Rules

Cisco softphone SIP client uses the dial rules to integrate with the Lightweight Directory Access Protocol (LDAP) directory server. The Cisco softphone SIP client also uses dial rules such as application dial rule and directory lookup rule to translate the outgoing phone numbers and display the incoming phone numbers with a rich caller ID. A rich caller ID displays a caller's name, caller's picture, or caller's phone number, or the information saved in the phone's directory.

You can create the application dial rule or directory lookup rule xml files and add these files to a tftp server. The Cisco softphone SIP client can download the dial rules using the **url [ldapserver** *string***], url[AppDialRule** *string***] url [DirLookupRule** *string***]** command under voice register template configuration mode. You must apply the voice registration configuration to the voice register pool configuration mode. For more information, see the "Configuring Dial Rules for Cisco Softphone SIP Client" section on page 1474.

Cisco Jabber for Windows

Cisco Jabber for Windows client is supported from Cisco Unified CME Release 10 onwards. Cisco Jabber for Windows supports the visual voice mail functionality integrated with the Cisco Unity connection. Cisco Jabber for Windows is a SIP-based soft client with integrated Instant Messaging and presence functionality, and uses the new Client Services Framework 2nd Generation (CSF2G) architecture.

CSF is a unified communications engine that is reused by multiple Cisco PC-based clients. The client is identified by a device ID name that can be configured under the voice register pool in Cisco Unified CME. You should configure the username and password under voice register pool to identify the user logging into Cisco Unified CME through Cisco Jabber for Windows client. The device discovery process uses HTTPS connection. Therefore, you should configure the secure HTTP on Cisco Unified CME. A new phone type, Jabber-Win has been added to configure the voice register pool for Cisco Jabber for Windows client.

Restrictions

- The Cisco Jabber for Windows client version should be version 9.1.0 and later version.
- The Cisco Jabber for Windows client should register with a presence server such as cloud-based Webex server, or a Cisco Unified Presence server to enable the telephony features on the Jabber client.
- The Cisco Jabber for Windows client supports only the visual voice mail functionality using Internet Message Access Protocol (IMAP) on the Cisco Unity Connection.
- The Cisco Jabber for Windows client does not support software-based conferencing and supports only the softphone mode with Cisco Unified CME.
- Desk phone models are not supported.

For configuration information, see the "Cisco Jabber for Windows" section on page 1512.

For configuration examples, see the "Example: Configuring Cisco Jabber Windows Client" section on page 1516.

System Message Display

The System Message Display feature allows you to specify a custom text or display message to appear in the lower part of the display window on display-capable IP phones. If you do not set a custom text or display message, the default message “Cisco Unified CME” is displayed.

When you specify a text message, the number of characters that can be displayed is not fixed because IP phones typically use a proportional (as opposed to fixed-width) font. There is room for approximately 30 alphanumeric characters.

The display message is refreshed with a new message after one of the following events occurs:

- Busy phone goes back on-hook.
- Idle phone receives a keepalive message.
- Phone is restarted.

The file-display feature allows you to specify a file to display on display-capable IP phones when they are not in use. You can use this feature to provide the phone display with a system message that is refreshed at configurable intervals, similar to the way that the text message feature provides a message. The difference between the two is that the system text message feature displays a single line of text at the bottom of the phone display, whereas the system display message feature can use the entire display area and contain graphic images.

URL Provisioning for Feature Buttons

URL provisioning for programmable feature buttons allows you to specify alternative XML files to access using the feature buttons on IP phones.

Certain phones, such as the Cisco Unified IP Phone 7940, 7940G, 7960, and 7960G, have programmable feature buttons that invoke noncall-related services. The four buttons—Services, Directories, Messages, and Information (the i button)—are linked to appropriate feature operations through URLs. The fifth button—Settings—is managed entirely by the phone.

The feature buttons are provisioned with specific URLs. The URLs link to XML web pages formatted with XML tags that the Cisco Unified IP phone understands and uses. When you press a feature button, the Cisco Unified IP phone uses the configured URL to access the appropriate XML web page for instructions. The web page sends instructions to the Cisco Unified IP phone to display information on the screen for users to navigate. Phone users can select options and enter information by using soft keys and the scroll button.

Operation of these feature buttons is determined by the capabilities of the Cisco Unified IP phone and the content of the specified URL.

In Cisco Unified CME 4.2 and later versions, up to eight URLs can be configured for the Services feature button by using an ephone template to apply the configuration to one or more supported SCCP phones. If you use an ephone template to configure services URLs for one or SCCP phones and you also configure a system-level services URL in telephony-service configuration mode, the value set in telephony-service configuration mode appears first in the list of services displayed when the phone user presses the Services feature button. Cisco Unified CME self-hosted services, such as Extension Mobility, always appears last in the list of options displayed for the Services feature button.

For configuration information, see the “URLs for Feature Buttons” section on page 1468.

My Phone Apps for Cisco Unified SIP IP Phones

Before Cisco Unified CME 9.0, the My Phone Apps features were only supported on Cisco Unified SCCP IP phones.

In Cisco Unified CME 9.0 and later versions, support is added for My Phone Apps feature on Cisco Unified SIP IP phones.

My Phone Apps is a user application that enables the following settings to be configured using the menu available with the phone's Services feature buttons:

- add, modify, or delete Speed Dial
- add, modify, or delete Fast Dial
- add, modify, or delete BLF Speed Dial
- change SNR DN
- perform after-hour login
- reset the phone

The My Phone Apps features are available on both Extension Mobility (EM) and non-EM phones. For EM phones, the user login service allows the user to temporarily access a physical phone other than their own and utilize their personal settings as if the phone is their own desk phone. Any change in settings follows the user to the next phone they access. For non-EM phones, any change in settings remains with the physical phone.

How to Configure Cisco Unified IP Phone Options

This section contains the following tasks:

Button Layout for Cisco Unified IP Phone 7931G

Clear Directory Entries

Customized Button Layout

Customized Phone User Interface Services

Header Bar Display

Labels for Directory Numbers

System Message Display

URLs for Feature Buttons

- SCCP: Provisioning URLs for Feature Buttons, page 1502 (required)
- SIP: Provisioning URLs for Feature Buttons, page 1504 (required)
- Troubleshooting URL Provisioning for Feature Buttons, page 1505 (optional)

Programmable VendorConfig Parameters

- SCCP: Modifying Vendor Parameters for All Phones, page 1506 (optional)
- SCCP: Modifying Vendor Parameters For a Specific Phone, page 1508 (optional)
- Troubleshooting Vendor Parameter Configuration, page 1510 (optional)

Push-To-Talk

- SCCP: Configuring One-Way Push-to-Talk on Cisco Unified Wireless IP Phones, page 1510

Cisco Jabber for Microsoft Windows

- Cisco Jabber for Windows, page 1512

Enabling Edit User Settings

To enable the edit user setting, perform the following steps.

Prerequisites

Cisco Unified CME 8.6 or a later version.

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **telephony-service**
4. **service phone** *parameter-name parameter-value*
5. **voice register global**
6. **create profile**
7. **end**

DETAILED STEPS

	Command or Action	Purpose
Step 1	**enable** **Example:** `Router> enable`	Enables privileged EXEC mode. • Enter your password if prompted
Step 2	**configure terminal** **Example:** `Router# configure terminal`	Enters global configuration mode
Step 3	**telephony-service** **Example:** `Router(config)# telephony-service`	Enters telephony-service configuration mode.
Step 4	**service phone** *parameter-name parameter-value* **Example:** `Router(config-telephony)# service phone paramEdibility 1`	Enables the edit user settings.
Step 5	**voice register global** **Example:** `Router(config-telephony)# voice register global`	Enters voice register global configuration mode.
Step 6	**create profile** **Example:** `Router(config-register-global)# create profile`	Generates provisioning files required for SIP phones and writes the file to the location specified with the **tftp-path** command.
Step 7	**end** **Example:** `Router(config-register-global)# end`	Exits configuration mode and enters privileged EXEC mode.

Configuring Cisco Jabber

To configure Cisco Jabber for Cisco Unified CME 8.6, follow these steps:

Prerequisites

Cisco Unified CME 8.6 or a later version.

Restrictions

- Conferencing feature through the Add Call action key is not supported.
- Call hand off to the mobile network is not supported.
- Shared line is not supported.

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **voice register pool** *pool-tag*
4. **id mac** *address*
5. **type** *phone-type*
6. **registration timer max** *seconds* **min** *seconds*
7. **number** *tag* **dn** *dn-tag*
8. **end**

DETAILED STEPS

	Command or Action	Purpose
Step 1	**enable** **Example:** `Router> enable`	Enables privileged EXEC mode. • Enter your password if prompted.
Step 2	**configure terminal** **Example:** `Router# configure terminal`	Enters global configuration mode.
Step 3	**voice register pool** *pool tag* **Example:** `Router(config)#voice register pool 8`	Enters voice register pool configuration mode to set phone-specific parameters for a SIP phone.
Step 4	**id mac** *address* **Example:** `Router((config-register-pool)# id mac 9084.0D0B.DF81`	Explicitly identifies a locally available individual SIP phone to support a degree of authentication.

	Command or Action	Purpose
Step 5	**type** *phone-type* **Example:** `Router(config-register-pool)# type CiscoMobile-iOS`	Defines a phone type for the SIP phone being configured. After configuring the type, Cisco Unified CME automatically changes the SIP session transport to TCP. Also the registration timer default changes to 720 seconds. **Note** CiscoMobile client only supports SIP TCP transport and requires the re-registration timer to be greater than 660 seconds to support multitasking on Apple's operating system (iOS).
Step 6	**registration timer max** *seconds* **min** *seconds* **Example:** `Router(config-register-pool)registration-timer max 770 min 660`	(Optional) Allows to set the value for the expiration of keepalive registration-time (in seconds). • **max** *seconds*— Maximum registration time in seconds. Default is 720 seconds. • **min** *seconds*—Minimum registration time in seconds. Default is 660 seconds. **Note** You must configure a minimum timer value of 660 seconds to allow the CiscoMobile client application to work in the background.
Step 7	**number** *tag* **dn** *dn-tag* **Example:** `Router(config-register-pool)# number 1 dn 10`	Associates a directory number with the SIP phone being configured. • dn *dn-tag*—Identifies the directory number for this SIP phone as defined by the voice register dn command.
Step 8	**end** **Example:** `Router(config-register-pool)# end`	Returns to privileged EXEC mode.

Clearing Call-History Details from a SCCP Phone

To clear the display of Call History details such as Missed Calls, Placed Calls, and Received Calls, from a SCCP IP phone user interface, follow these steps:

Prerequisites

To enable phones to send an HTTP GET request, url directories must be the default (not configured) or configured as http://<CME's ip address>/localdirectory.

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **ephone** *phone-tag* **or ephone template** *template tag*
4. **exclude [em | myphoneapp | directory | call-history]**
5. **end**

DETAILED STEPS

	Command or Action	Purpose
Step 1	**enable** **Example:** `Router> enable`	Enables privileged EXEC mode. • Enter your password if prompted.
Step 2	**configure terminal** **Example:** `Router# configure terminal`	Enters global configuration mode.
Step 3	**ephone** *phone-tag* or **ephone template** *template tag* **Example:** `Router(config)# ephone 10`	Enters ephone configuration mode. • *phone-tag*—Unique number of the phone for which you want to exclude local services such as Extension Mobility, My Phone Apps, and Local Directory.

	Command or Action	Purpose
Step 4	**exclude [em | myphoneapp | directory | call-history]** **Example:** `Router(config-ephone)#exclude call-history`	Excludes local services (EM, My Phone Apps, Local Directory, and Call History) from displaying on phone's user interface. • em—Excludes Extension Mobility (EM) from the phone's user interface. • myphoneapp —Excludes My Phone App service from the phone's user interface. • directory —Excludes Local Directory service from the phone's user interface. • call-history—Excludes entries from Call History on the phone's user interface.
Step 5	**end** **Example:** `Router(config-ephone)# end`	Returns to privileged EXEC mode.

Example

The following example shows call-history as excluded from ephone 10 and ephone-template 5:

```
!
telephony-service
 max-ephones 40
 max-dn 100
 max-conferences 8 gain -6
 transfer-system full-consult
!
!
ephone-template  5
 exclude call-history
!
!
ephone  10
 exclude call-history
 device-security-mode none
!
```

Troubleshooting Tips

The following is a list of troubleshooting tips for successful implementation of this feature:

- Make sure that the local directory XML tag is configured and provisioned correctly.
- Check the attribute for <directoryURL> tag in the xml file (it must be set up with http://<CME's ip address>/localdirectory) and the phone must be restarted with this XML cnf file.
- Make sure that the phone sends out an HTTP GET request.
- Make sure that the HTTP GET request in the Cisco Unified CME log with "deb ip http url" is enabled.
- Make sure that the Clear Directory Entries request is sent to the phone.
- Check the Missed Calls, Placed Calls, and Received Calls on your phone's local directory.

Configuring Dial Rules for Cisco Softphone SIP Client

To configure the dial rules for Cisco softphone SIP client, follow these steps:

Prerequisites

Cisco Unified CME 8.6 or a later version.

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **voice register template** ***template****-tag*
4. **url [AppDialRule** *string* **DirLookupRule** *string* **ldapServer** *string***]**
5. **voice register pool** *pool tag*
6. **end**

DETAILED STEPS

	Command or Action	Purpose
Step 1	**enable** **Example:** `Router> enable`	Enables privileged EXEC mode. • Enter your password if prompted.
Step 2	**configure terminal** **Example:** `Router# configure terminal`	Enters global configuration mode.
Step 3	**voice register template** *template tag* **Example:** `Router(config)#voice register template 8`	Enters voice register template configuration mode to efine a template of common parameters for SIP phones in Cisco Unified CME. .
Step 4	**url [AppDialRule** *string* **DirLookupRule** *string* **ldapServer** *string***]** **Example:** `Router(config-register-temp)#url[ldapServer ldap.abcd.com AppDialRule tftp://10.1.1.1/AppDialRules.xml DirLookupRule tftp://10.1.1.1/DirLookupRules.xml]`	Allows to define SIP phone urls to configure dial rules such as Application Dial Rule, Directory Lookup Dial Rule, and LDAP server in voice register template configuration mode. • **ldapserver** *string* —LDAP server url. • **AppDialRule** *string* —Application dial rule url. • **DirLookupRule** *string*—Directory lookup rule url.

	Command or Action	Purpose
Step 5	**voice register pool** *pool tag* **Example:** `Router(config)#voice register pool 8`	Enters voice register pool configuration mode to set phone-specific parameters for a SIP phone.
Step 6	**end** **Example:** `Router(config-register-pool)# end`	Returns to privileged EXEC mode.

Example

The following example shows dial rules configured under voice register template 2:

```
!
voice register template  2
 url ldapServer ldap.abcd.com
 url AppDialRule tftp://10.1.1.1/AppDialRules.xml
 url DirLookupRule tftp://10.1.1.1/DirLookupRules.xml
!
```

The following is a sample of Application Dial Rule content:

```
Router#more flash:AppDialRules.xml
<?xml version="1.0" encoding="UTF-8"?><DialRules>
        <DialRule BeginsWith="+1" NumDigits="12" DigitsToRemove="1" PrefixWith="9"/>
        <DialRule BeginsWith="+1" NumDigits="12" DigitsToRemove="1" PrefixWith="9"/>
        <DialRule BeginsWith="919" NumDigits="10" DigitsToRemove="3" PrefixWith="9"/>
        <DialRule BeginsWith="1" NumDigits="11" DigitsToRemove="0" PrefixWith="9"/>
        <DialRule BeginsWith="" NumDigits="10" DigitsToRemove="0" PrefixWith="91"/>
        <DialRule BeginsWith="" NumDigits="7" DigitsToRemove="0" PrefixWith="9"/>
        <DialRule BeginsWith="+" NumDigits="13" DigitsToRemove="1" PrefixWith="9011"/>
        <DialRule BeginsWith="+" NumDigits="14" DigitsToRemove="1" PrefixWith="9011"/>
        <DialRule BeginsWith="+" NumDigits="15" DigitsToRemove="1" PrefixWith="9011"/>

        <DialRule BeginsWith="+" NumDigits="12" DigitsToRemove="1" PrefixWith="9011"/>
        <DialRule BeginsWith="+" NumDigits="11" DigitsToRemove="1" PrefixWith="9011"/>
</DialRules>
```

SCCP: Selecting Button Layout for a Cisco Unified IP Phone 7931G

To select a fixed-button layout for a Cisco Unified IP Phone 7931G, perform the following steps.

Prerequisites

Cisco Unified CME 4.0(2) or a later version.

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **ephone template** *template-tag*
4. **button-layout set** *phone-type* [**1** | **2**]
5. **exit**
6. **ephone** *phone-tag*
7. **ephone-template** *template-tag*
8. **end**

DETAILED STEPS

	Command or Action	Purpose
Step 1	**enable** **Example:** `Router> enable`	Enables privileged EXEC mode. • Enter your password if prompted.
Step 2	**configure terminal** **Example:** `Router# configure terminal`	Enters global configuration mode.
Step 3	**ephone-template** *template-tag* **Example:** `Router(config)# ephone-template 15`	Enters ephone-template configuration mode to create an ephone template.
Step 4	**button-layout** *phone-type* {**1** | **2**} **Example:** `Router(config-ephone-template)# button-layout 7931 2`	Specifies which fixed set of feature buttons appears on a Cisco Unified IP Phone 7931G that uses a template in which this is configured. • **1**—Includes two predefined feature buttons: button 24 is Menu and button 23 is Headset. • **2**—Includes four predefined feature buttons: button 24 is Menu; button 23 is Headset; button 22 is Directories; and button 21 is Messages.

	Command or Action	Purpose
Step 5	**exit** **Example:** `Router(config-ephone-template)# exit`	Exits from this command mode to the next highest mode in the configuration mode hierarchy.
Step 6	**ephone** *phone-tag* **Example:** `Router(config)# ephone 1`	Enters ephone configuration mode.
Step 7	**ephone-template** *template-tag* **Example:** `Router(config-ephone)# ephone-template 15`	Applies an ephone template to the ephone that is being configured.
Step 8	**end** **Example:** `Router(config-ephone)# end`	Exits configuration mode and enters privileged EXEC mode.

What to Do Next

If you are done modifying parameters for phones in Cisco Unified CME, generate a new configuration file and restart the phones. See the "Generating Configuration Files for Phones" section on page 359.

Configuring Button Layout on SCCP Phones

To configure button layout on SCCP IP Phones, follows these steps:

Prerequisites

- Cisco Unified CME 8.5 or later versions.
- Button types such as, line, feature, url, speed-dial, and blf-speed-dial are configured using commands such as, **button**, **feature-button** or **privacy-button**, **url-button**, **speed-dial**, and **blf-speed-dial** respectively.
- First button must be configured as line button.

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **ephone template** *template-tag*
4. **button-layout** [*button-string*] [*button-type*]
5. **exit**
6. **ephone** *phone-tag*
7. **ephone-template** *template-tag*
8. **end**

DETAILED STEPS

	Command or Action	Purpose
Step 1	**enable** **Example:** `Router> enable`	Enables privileged EXEC mode. • Enter your password if prompted.
Step 2	**configure terminal** **Example:** `Router# configure terminal`	Enters global configuration mode.
Step 3	**ephone-template** *template tag* **Example:** `Router(config)# ephone 10`	Enters ephone template configuration mode to create an ephone template.

	Command or Action	Purpose

Step 4	**button-layout** [*button-string* | *button-type*]
	
	Example:
	`Router(config-ephone-template)#button-layout 1 line`
	`Router(config-ephone-template)#button-layout 2,5 speed-dial`
	`Router(config-ephone-template)#button-layout 3,6 blfspeed-dial`
	`Router(config-ephone-template)#button-layout 4,7,9 feature`
	`Router(config-ephone-template)# button-layout 8,11 url`
		Assigns physical button numbers or ranges of numbers with button types.
		• *button-string*—Specifies a coma separated list of physical button number or ranges of button numbers.
		• *button-type*—Specifies one of the following button types: Line, Speed-Dial, BLF-Speed-Dial, Feature, URL. Button number specifies the relative display order of the button within the button type (line button, speed-dial, blf-speed-dial, feature-button or url-button).
		Note To facilitate phone provisioning, the first line button should always be a line button.
		Note When no feature-buttons are configured, privacy button is counted as a feature button.

Step 5	**exit** **Example:** `Router(config-ephone-template)# exit`	Exits from this command mode to the next highest mode in the configuration mode hierarchy.
Step 6	**ephone** *phone-tag* **Example:** `Router(config)# ephone 1`	Enters ephone configuration mode.
Step 7	**ephone-template** *template-tag* **Example:** `Router(config-ephone)# ephone-template 10`	Applies an ephone template to the ephone that is being configured.
Step 8	**end** **Example:** `Router(config-ephone)# end`	Exits configuration mode and enters privileged EXEC mode.

What to Do Next

If you are done modifying parameters for SCCP phones in Cisco Unified CME, restart the phones.

Examples

```
Router# show telephony-service ephone-template
ephone-template  10
 button-layout 1 line
 button-layout 2,5 speed-dial
 button-layout 3,6 blf-speed-dial
 button-layout 4,7,9 feature
 button-layout 8,11 url
```

Configuring Button Layout on SIP Phones

To configure button layout on SIP phones, follow these steps:

Prerequisites

- Cisco Unified CME 8.5 or later versions.
- Button types (line button, feature button, url-button, speed dial button, and blf speed dial button) must be configured before configuring button layout.

Restrictions

You can not change the button number in the **line button** or **index** command through button layout configuration because the button number specifies the relative display order of the button within the button type (line button, speed-dial, blf-speed-dial, feature button, or url button).

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **voice register template** *template-tag*
4. **button-layout** [*button-string*] [*button-type*]
5. **exit**
6. **voice register pool** *pool-tag*
7. **template** *template-tag*
8. **end**

DETAILED STEPS

	Command or Action	Purpose
Step 1	**enable** **Example:** `Router> enable`	Enables privileged EXEC mode. • Enter your password if prompted.
Step 2	**configure terminal** **Example:** `Router# configure terminal`	Enters global configuration mode.
Step 3	**voice register template** *template-tag* **Example:** `Router(config)# voice register template 5`	Enters voice register template configuration mode to create a SIP phone template. • template-tag—Range: 1 to 10.

	Command or Action	Purpose

Step 4	**button-layout** [*button-string*] [*button-type*]
	
	Example:
	`Router(config-register-template)#button-layout 1 line`
	`Router(config-register-template)#button-layout 2, 5 speed-dial`
	`Router(config-register-template)#button-layout 3, 6 blfspeed-dial`
	`Router(config-register-template)#button-layout 4,7,9 feature-button`
	`Router(config-register-template)# button-layout 8,11 url-button`
		Assigns physical button numbers or ranges of numbers with button types.
		• *button-string*—Specifies a coma separated list of physical button number or ranges of button numbers.
		• *button-type*—Specifies one of the following button types: Line, Speed-Dial, BLF-Speed-Dial, Feature, URL.
		Note To facilitate phone provisioning, the first line button should always be a line button.
		Note Privacy-button is counted as a feature-button in this configuration if no feature-button is configured.

Step 5	**exit** **Example:** `Router(config-register-template)# exit`	Exits voice register template configuration mode.
Step 6	**voice register pool** *pool-tag* **Example:** `Router(config)# voice register pool 10`	Enters voice register pool configuration mode to set phone-specific parameters for a SIP phone.
Step 7	**template** *template-tag* **Example:** `Router(config-register-pool)# template 5`	Applies a SIP phone template to the phone you are configuring. • *template-tag*— Template tag that was created with the voice register template command in Step 3.
Step 8	**end** **Example:** `Router(config-register-pool)# end`	Exits to privileged EXEC mode.

What to Do Next

If you are done modifying parameters for phones in Cisco Unified CME, generate a new configuration file and restart the phones. See the "SIP: Generating Configuration Profiles for SIP Phones" section on page 363.

Examples

```
Router# show voice register template all
!
voice register dn  65
 number 3065
 name SIP-7965
 label SIP3065
!
voice register template  5
 button-layout 1 line
 button-layout 2,5 speed-dial
 button-layout 3,6 blf-speed-dial
 button-layout 4,7,9 feature-button
 button-layout 8,11 url-button
!
voice register template  2
 button-layout 1,5 line
 button-layout 4 speed-dial
 button-layout 3,6 blf-speed-dial
 button-layout 7,9 feature-button
 button-layout 8,10-11 url-button
!
```

SIP: Configuring Service URL Button on a Line Key

To implement service URL feature line key buttons on Cisco Unified IP Phones, perform the following steps.

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **voice register template** *template-tag*
4. **url-button** [**index** *number*] [**url** *location*] [**url** *name*]
5. **exit**
6. **voice register pool** *phone-tag*
7. **template** *template-tag*
8. **end**

DETAILED STEPS

	Command or Action	Purpose
Step 1	**enable** **Example:** `Router> enable`	Enables privileged EXEC mode. • Enter your password if prompted.
Step 2	**configure terminal** **Example:** `Router# configure terminal`	Enters global configuration mode.
Step 3	**voice register template** *template-tag* **Example:** `Router(config)# voice register template 5`	Enters ephone-template configuration mode to create an ephone template. • *template-tag*—Unique identifier for the ephone template that is being created. Range: 1 to 10.
Step 4	**url-button** [**index** *number*] [**url** *location*] [**url** *name*] **Example:** `Router(config-register-temp)url-button 1 http://www.cisco.com`	Configures a service url feature button on a line key. • Index *number*—Unique index number. Range: 1 to 8. • url *location*—Location of the url. • url *name*—Service url with maximum length of 31 characters.
Step 5	**exit** **Example:** `Router(config-register-temp)# exit`	Exits ephone-template configuration mode.

	Command or Action	Purpose
Step 6	**voice register pool** *phone-tag* **Example:** `Router(config)# voice register pool 12`	Enters ephone configuration mode. • *phone-tag*—Unique number that identifies this ephone during configuration tasks.
Step 7	**template** *template-tag* **Example:** `Router(config-register-pool)# template 5`	Applies the ephone template to the phone. • *template-tag*—Unique identifier of the template that you created in Step 3.
Step 8	**end** **Example:** `Router(config-register-pool)# end`	Returns to privileged EXEC mode.

Examples

The following example shows url buttons configured in voice register template 1:

```
Router# show run
!
voice register template  1
url-button 1 http://9.10.10.254:80/localdirectory/query My_Dir
url-button 5 http://www.yahoo.com Yahoo
!
voice register pool  50
!
```

What to Do Next

If you are done configuring the url buttons for phones in Cisco Unified CME, generate a new configuration file and restart the phones. See the "SIP: Generating Configuration Profiles for SIP Phones" section on page 363.

SCCP: Configuring Service URL Button on a Line Key

To implement service URL feature line key buttons on Cisco Unified SCCP Phones, perform the following steps.

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **ephone template** *template-tag*
4. **url-button** *index* **type** | *url [name]*
5. **exit**
6. **ephone** *phone-tag*
7. **ephone-template** *template-tag*
8. **end**

DETAILED STEPS

	Command or Action	Purpose
Step 1	**enable** **Example:** `Router> enable`	Enables privileged EXEC mode. • Enter your password if prompted.
Step 2	**configure terminal** **Example:** `Router# configure terminal`	Enters global configuration mode.
Step 3	**ephone template** *template-tag* **Example:** `Router(config)# ephone template 5`	Enters ephone-template configuration mode to create an ephone template. • *template-tag*—Unique identifier for the ephone template that is being created. Range: 1 to 10.

Step 4	**url-button** *index* **type**	*url [name]*
		
		Example:
		`Router#(config-ephone-template)#url-button 1 myphoneapp`
		`Router(config-ephone-template)#url-button 2 em`
		`Router(config-ephone-template)#url-button 3 snr`
		`Router (config-ephone-template)#url-button 4 http://www.cisco.com`
			Configures a service url feature button on a line key.
			• *Index*—Unique index number. Range: 1 to 8.
			• **type**—Type of service url button. Following types of url service buttons are available:
			– myphoneapp: My phone application configured under phone user interface.
			– em: Extension Mobility
			– snr: Single Number Reach
			• url *name*—Service url with maximum length of 31 characters.

	Command or Action	Purpose
Step 5	**exit** **Example:** `Router(config-ephone-template)# exit`	Exits ephone-template configuration mode.
Step 6	**ephone** *phone-tag* **Example:** `Router(config)#ephone 36`	Enters ephone configuration mode. • *phone-tag*—Unique sequence number that identifies this ephone during configuration tasks.
Step 7	**ephone-template** *template-tag* **Example:** `Router(config-ephone)# ephone-template 5`	Applies an ephone template to the ephone that is being configured.
Step 8	**end** **Example:** `Router(config-ephone)# end`	Returns to privileged EXEC mode.

Examples

The following example shows three url buttons configured for line keys:

```
!
!
!
ephone-template  5
 url-button 1 em
 url-button 2 mphoneapp mphoneapp
 url-button 3 snr
!
ephone  36
 ephone-template 5
```

What to Do Next

If you are done configuring the url buttons for phones in Cisco Unified CME, restart the phones.

SIP: Configuring Feature Button on a Line Key

To configure a feature button on a Cisco Unified SIP Phone's line key, perform the following steps.

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **voice register template** *template-tag*
4. **feature-button [***index] [feature identifier]*
5. **exit**
6. **voice register pool** *phone-tag*
7. **template** *template-tag*
8. **end**

DETAILED STEPS

	Command or Action	Purpose
Step 1	**enable** **Example:** `Router> enable`	Enables privileged EXEC mode. • Enter your password if prompted.
Step 2	**configure terminal** **Example:** `Router# configure terminal`	Enters global configuration mode.
Step 3	**voice register template** *template-tag* **Example:** `Router(config)# voice register template 5`	Enters ephone-template configuration mode to create an ephone template. • *template-tag*—Unique identifier for the ephone template that is being created. Range: 1 to 10. **Note** Feature button can be configured under **voice register pool** or **voice register template** configuration mode. If both configurations are applied to the **voice register pool**, the feature button configuration under **voice register pool** takes precedence.

Step 4	**feature-button** [*index*] [*feature identifier*]
	
	Example:
	`Router(config-voice-register-template)feature-button 1 DnD`
	`Router(config-voice-register-template)feature-button 2 EndCall`
	`Router(config-voice-register-template)feature-button 3 Cfwdall`
		Configures a feature button on line key.
		• *index*—One of the 12 index numbers for a specific feature type.
		• *feature identifier*—Unique identifier for a feature. One of the following feature or stimulus IDs: Redial, Hold, Trnsfer, Cfwdall, Privacy, MeetMe, Confrn, Park, Pickup. Gpickup, Mobility, Dnd, ConfList, RmLstC, CallBack, NewCall, EndCall, HLog, NiteSrv, Acct, Flash, Login, TrnsfVM, LiveRcd.

	Command or Action	Purpose
Step 5	**exit** **Example:** `Router(config-register-temp)# exit`	Exits ephone-template configuration mode.
Step 6	**voice register pool** *phone-tag* **Example:** `Router(config)# voice register pool 12`	Enters ephone configuration mode. • *phone-tag*—Unique number that identifies this ephone during configuration tasks.
Step 7	**template** *template-tag* **Example:** `Router(config-register-pool)# template 5`	Applies the ephone template to the phone. • *template-tag*—Unique identifier of the template that you created in Step 3
Step 8	**end** **Example:** `Router(config-register-pool)# end`	Returns to privileged EXEC mode.

Examples

The following example shows three feature buttons configured for line keys:

```
voice register template  5
 feature-button 1 DnD
 feature-button 2 EndCall
 feature-button 3 Cfwdall
!
!
voice register pool 12
template 5
```

What to Do Next

If you are done configuring the url buttons for phones in Cisco Unified CME, generate a new configuration file and restart the phones. See the "SIP: Generating Configuration Profiles for SIP Phones" section on page 363.

SCCP: Configuring Feature Button on a Line Key

To configure a feature button on a Cisco Unified SCCP Phone's line key, perform the following steps.

Restrictions

- Answer, Select, cBarge, Join, and Resume features are not supported as PLKs.
- Feature buttons are only supported on Cisco Unified IP Phones 6911, 7941, 7942, 7945, 7961, 7962, 7965. 7970, 7971, and 7975 with SCCP v12 or later versions.
- Any features available through hard button are not be provisioned. Use the **show ephone register detail** command to verify why the features buttons are not provisioned.
- Not all feature buttons are supported on Cisco Unified IP Phone 6911 phone. Call Forward, Pickup, Group Pickup, and MeetMe are the only feature buttons supported on the Cisco Unified IP Phone 6911.
- The privacy-button is available on Cisco Unified IP phones running a SCCP v8 or later. Privacy-buttton is overridden by any other feature-button available.
- Locales are not supported on Cisco Unified IP Phone 7914.
- Locales are not supported for Cancel Call Waiting or Live Recording feature-buttons.
- The feature state for DnD, Hlog, Privacy, Login, and Night Service feature-buttons are indicated by an LED.

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **ephone template** *template-tag*
4. **feature-button** *index feature identifier*
5. **exit**
6. **ephone** *phone-tag*
7. **ephone-template** *template-tag*
8. **end**

DETAILED STEPS

	Command or Action	Purpose
Step 1	**enable** **Example:** `Router> enable`	Enables privileged EXEC mode. • Enter your password if prompted.
Step 2	**configure terminal** **Example:** `Router# configure terminal`	Enters global configuration mode.

	Command or Action	Purpose
Step 3	**ephone template** *template-tag* **Example:** `Router(config)# ephone template 10`	Enters ephone-template configuration mode to create an ephone template. • *template-tag*—Unique identifier for the ephone template that is being created. Range: 1 to 10.
Step 4	**feature-button** *index feature identifier* **Example:** `Router(config-ephone-template)feature-button 1 hold`	Configures a feature button on line key • *index*—index number, one from 25 for a specific feature type. • *feature identifie*r—feature ID or stimulus ID.
Step 5	**exit** **Example:** `Router(config-ephone-template)# exit`	Exits ephone-template configuration mode.
Step 6	**ephone** phone-tag **Example:** `Router(config)# ephone 5`	Enters ephone configuration mode. • *phone-tag*—Unique sequence number that identifies this ephone during configuration tasks.
Step 7	**ephone-template** template-tag **Example:** `Router(config-ephone)# ephone-template 10`	Applies an ephone template to the ephone that is being configured.
Step 8	**end** **Example:** `Router(config-ephone)# end`	Returns to privileged EXEC mode.

Examples

The following example shows feature buttons configured for line keys:

```
!
!
!
ephone-template  10
 feature-button 1 Park
 feature-button 2 MeetMe
 feature-button 3 CallBack
!
!
ephone-template 10
```

What to Do Next

If you are done configuring the feature buttons for phones in Cisco Unified CME, restart the phones.

Blocking Local Services on Phone User Interface

To block the display and availability of local services such as Local Directory, Extension Mobility (EM), and My Phone Apps on a SCCP IP phone's user interface, perform the following steps.

Prerequisites

Cisco Unified CME 8.5 or later versions.

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **ephone** *phone-tag* **or ephone template** *template tag*
4. **exclude** [em | myphoneapp | directory]
5. **end**

DETAILED STEPS

	Command or Action	Purpose
Step 1	**enable** **Example:** `Router> enable`	Enables privileged EXEC mode. • Enter your password if prompted.
Step 2	**configure terminal** **Example:** `Router# configure terminal`	Enters global configuration mode.
Step 3	**ephone** *phone-tag* or **ephone template** *template tag* **Example:** `Router(config)# ephone 10`	Enters ephone configuration mode. • *phone-tag*—Unique number of the phone for which you want to exclude local services such as Extension Mobility, My Phone Apps, and Local Directory.
Step 4	**exclude [em | myphoneapp | directory]** **Example:** `Router(config-ephone)#exclude directory em`	Excludes local services (EM, My Phone Apps, and Local Directory) from displaying on phone's user interface. • em—Excludes Extension Mobility (EM) from the phone's user interface. • myphoneapp —Excludes My Phone App service from the phone's user interface. • directory —Excludes Local Directory service from the phone's user interface.
Step 5	**end** **Example:** `Router(config-ephone)# end`	Returns to privileged EXEC mode.

Examples

The following example shows the Local Directory and Extension Mobility services excluded from the phone user interface:

```
ephone  10
 exclude directory em
 device-security-mode none
 description sccp7961
 mac-address 0007.0E57.7561
```

SCCP: Modifying Header Bar Display

To modify the phone header bar display, perform the following steps.

Prerequisites

Directory number to be modified is already configured. For configuration information, see the "SCCP: Creating Directory Numbers" section on page 227.

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **ephone-dn** *dn-tag*
4. **description** *display-text*
5. **end**

DETAILED STEPS

	Command or Action	Purpose
Step 1	**enable** **Example:** `Router> enable`	Enables privileged EXEC mode. • Enter your password if prompted.
Step 2	**configure terminal** **Example:** `Router# configure terminal`	Enters global configuration mode.
Step 3	**ephone-dn** *dn-tag* **Example:** `Router(config)# ephone-dn 55`	Enters ephone-dn configuration mode.

	Command or Action	Purpose
Step 4	**description** *display-text* **Example:** `Router(config-ephone-dn)# description 408-555-0134`	Defines a description for the header bar of a display-capable IP phone on which this ephone-dn appears as the first line. • *display-text*—Alphanumeric character string, up to 40 characters. String is truncated to 14 characters in the display.
Step 5	**end** **Example:** `Router(config-ephone)# end`	Returns to privileged EXEC mode.

What to Do Next

If you are done modifying parameters for phones in Cisco Unified CME, generate a new configuration file and restart the phones. See the "Generating Configuration Files for Phones" section on page 359.

SIP: Modifying Header Bar Display

To modify the phone header bar display on supported SIP phones, perform the following steps.

Prerequisites

Cisco CME 3.4 or a a later version.

Restrictions

This feature is supported only on Cisco Unified IP Phone 7940, 7940G, 7960, and 7960G.

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **voice register pool** *pool-tag*
4. **description** *string*
5. **end**

DETAILED STEPS

	Command or Action	Purpose
Step 1	**enable** **Example:** `Router> enable`	Enables privileged EXEC mode. • Enter your password if prompted.
Step 2	**configure terminal** **Example:** `Router# configure terminal`	Enters global configuration mode.
Step 3	**voice register pool** *pool-tag* **Example:** `Router(config)# voice register pool 3`	Enters voice register pool configuration mode to set phone-specific parameters for a SIP phone in Cisco Unified CME.
Step 4	**description** *string* **Example:** `Router(config-register-pool)# description 408-555-0100`	Defines a customized description that appears in the header bar of supported Cisco Unified IP phones • Truncated to 14 characters in the display. • If string contains spaces, enclose the string in quotation marks.
Step 5	**end** **Example:** `Router(config-register-pool)# end`	Exits configuration mode and enters privileged EXEC mode.

What to Do Next

If you are done modifying parameters for phones in Cisco Unified CME, generate a new configuration file and restart the phones. See the "SIP: Generating Configuration Profiles for SIP Phones" section on page 363.

Verifying Header Bar Display

Step 1 Use the **show running-config** command to verify your configuration. Descriptions for directory numbers are listed in the ephone-dn and voice-register dn portions of the output.

```
Router# show running-config

ephone-dn  1  dual-line
 number 150 secondary 151
 description 555-0150
 call-forward busy 160
 call-forward noan 160 timeout 10
 huntstop channel
 no huntstop
!
!
!
voice-register dn 1
 number 1101
 description 555-0101
```

Troubleshooting Header Bar Display

Step 1 **show telephony-service ephone**

Use this command to ensure that the ephone-dn to which you applied the description appears on the first button on the ephone. In the example below, ephone-dn 22 has the description in the phone display header bar.

```
Router# show telephony-service ephone

ephone-dn 22
 number 2149
 description 408-555-0149

ephone 34
 mac-address 0030.94C3.F96A
 button  1:22 2:23 3:24
 speed-dial 1 5004
 speed-dial 2 5001
```

SCCP: Creating Labels for Directory Numbers

To create a label to display in place of the number next to a line button, perform the following steps.

Prerequisites

Directory number for which the label is to be created is already configured. For configuration information, see the "SCCP: Creating Directory Numbers" section on page 227.

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **ephone-dn** *dn-tag*
4. **label** *label-string*
5. **end**

DETAILED STEPS

	Command or Action	Purpose
Step 1	**enable** **Example:** `Router> enable`	Enables privileged EXEC mode. • Enter your password if prompted.
Step 2	**configure terminal** **Example:** `Router# configure terminal`	Enters global configuration mode.

	Command or Action	Purpose
Step 3	**ephone-dn** *dn-tag* **Example:** `Router(config)# ephone-dn 1`	Enters ephone-dn configuration mode. • *dn-tag*—Unique sequence number that identifies the ephone-dn to which the label is to be associated.
Step 4	**label** *label-string* **Example:** `Router(config-ephone-dn)# label user1`	Creates a custom label that is displayed on the phone next to the line button that is associated with this ephone-dn. The custom label replaces the default label, which is the number that was assigned to this ephone-dn. • *label-string*—String of up to 30 alphanumeric characters that provides the label text.
Step 5	**end** **Example:** `Router(config-ephone)# end`	Returns to privileged EXEC mode.

What to Do Next

If you are done modifying parameters for phones in Cisco Unified CME, generate a new configuration file and restart the phones. See the "Generating Configuration Files for Phones" section on page 359.

SIP: Creating Labels for Directory Numbers

To create label to be displayed in place of a directory number for a SIP phone, intercom line, voice port, or a message-waiting indicator (MWI), perform the following steps for each label to be created.

Prerequisites

- Cisco CME 3.4 or a later version.
- Directory number for which the label is to be created is already configured and must already have a number assigned by using the **number (voice register dn)** command. For configuration information, see the "SIP: Creating Directory Numbers" section on page 237.

Restrictions

Only one label is permitted per directory number.

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **voice register dn** *dn-tag*
4. **number** *number*
5. **label** *string*
6. **end**

DETAILED STEPS

	Command or Action	Purpose
Step 1	**enable** **Example:** `Router> enable`	Enables privileged EXEC mode. • Enter your password if prompted.
Step 2	**configure terminal** **Example:** `Router# configure terminal`	Enters global configuration mode.
Step 3	**voice register dn** *dn-tag* **Example:** `Router(config-register-global)# voice register dn 17`	Enters voice register dn configuration mode to define a directory number for a SIP phone, intercom line, voice port, or a message-waiting indicator (MWI).
Step 4	**number** *number* **Example:** `Router(config-register-dn)# number 7001`	Defines a valid number for a directory number.
Step 5	**label** *string* **Example:** `Router(config-register-dn)# label user01`	Creates a text identifier, instead of a phone-number display, for a directory number that appears on a SIP phone console.
Step 6	**end** **Example:** `Router(config-register-dn)# end`	Exits configuration mode and enters privileged EXEC mode.

What to Do Next

If you are done modifying parameters for phones in Cisco Unified CME, generate a new configuration file and restart the phones. See the "SIP: Generating Configuration Profiles for SIP Phones" section on page 363.

Verifying Labels

Step 1 Use the **show running-config** command to verify your configuration. Descriptions for directory numbers are listed in the ephone-dn and voice-register dn portions of the output.

```
Router# show running-config

ephone-dn  1  dual-line
 number 150 secondary 151
 label MyLine
 call-forward busy 160
 call-forward noan 160 timeout 10
 huntstop channel
 no huntstop
!
!
!
voice-register dn 1
 number 1101
 label MyLine
```

SCCP: Modifying System Message Display

To modify the system message display on phone screen, perform the following steps.

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **telephony-service**
4. **system message** *text-message*
5. **url idle** *url* **idle-timeout** *seconds*
6. **end**

DETAILED STEPS

	Command or Action	Purpose
Step 1	**enable** **Example:** `Router> enable`	Enables privileged EXEC mode. • Enter your password if prompted.
Step 2	**configure terminal** **Example:** `Router# configure terminal`	Enters global configuration mode.

	Command or Action	Purpose
Step 3	**telephony-service** **Example:** `Router(config)#`	Enters telephony-service configuration mode.
Step 4	**system message** *text-message* **Example:** `Router(config-telephony)# system message ABC Company`	Defines a text message to display when a phone is idle. • *text-message*—Alphanumeric string to display. Display uses proportional-width font, so the number of characters that are displayed varies based on the width of the characters that are used. The maximum number of displayed characters is approximately 30.
Step 5	**url idle** *url* **idle-timeout** *seconds* **Example:** `Router(config-telephony)# url idle http://www.abcwrecking.com/public/logo idle-timeout 35`	Defines the location of a file to display on phones that are not in use and specifies the interval between refreshes of the display, in seconds. • *url*—Any URL that conforms to RFC 2396. • *seconds*—Time interval between display refreshes, in seconds. Range is 0 to 300.
Step 6	**end** **Example:** `Router(config-telephony)# end`	Returns to privileged EXEC mode.

What to Do Next

After configuring the **url idle** command, you must reset phones. See the "SCCP: Using the reset Command" on page 371.

Verifying System Message Display

Step 1 Use the **show running-config** command to verify your configuration. System message display is listed in the telephony-service portion of the output.

```
Router# show running-config

telephony-service
 fxo hook-flash
 load 7960-7940 P00307020300
 load 7914 S00104000100
 max-ephones 100
 max-dn 500
 ip source-address 10.153.13.121 port 2000
 max-redirect 20
 timeouts ringing 100
 system message XYZ Company
 voicemail 7189
 max-conferences 8 gain -6
 call-forward pattern .T
 moh flash:music-on-hold.au
 multicast moh 239.10.10.1 port 2000
 web admin system name server1 password server1
 dn-webedit
 time-webedit
 transfer-system full-consult
 transfer-pattern 92......
 transfer-pattern 91..........
 transfer-pattern 93......
 transfer-pattern 94......
 transfer-pattern 95......
 transfer-pattern 96......
 transfer-pattern 97......
 transfer-pattern 98......
 transfer-pattern 99......
 transfer-pattern .T
 secondary-dialtone 9
 create cnf-files version-stamp Jan 01 2002 00:00:00
```

Troubleshooting System Message Display

Step 1 Ensure that the HTTP server is enabled.

SCCP: Provisioning URLs for Feature Buttons

To customize URLs for feature buttons in the Sep*.conf.xml configuration file for SCCP IP phones, perform the following steps.

Restrictions

- Operation of these services is determined by the Cisco Unified IP phone capabilities and the content of the specified URL.
- Provisioning a URL to access help screens using the i or ? buttons on a phone is not supported.
- Provisioning the directory URL to select an external directory resource disables the Cisco Unified CME local directory service.

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **telephony-service**
4. **url** {**directories** | **information** | **messages** | **services**} *url*
5. **end**

DETAILED STEPS

	Command or Action	Purpose
Step 1	**enable** **Example:** `Router> enable`	Enables privileged EXEC mode. • Enter your password if prompted.
Step 2	**configure terminal** **Example:** `Router# configure terminal`	Enters global configuration mode.
Step 3	**telephony-service** **Example:** `Router(config)#`	Enters telephony-service configuration mode.

	Command or Action	Purpose
Step 4	**url** {**directories** | **information** | **messages** | **services**} *url* **Example:** `Router(config-telephony)# url directories http://10.4.212.4/localdirectory`	Provisions URLs for the four programmable feature buttons (Directories, Information, Messages, and Services) on a supported Cisco Unified IP phone. • To use a Cisco Unified Communications Manager directory as an external directory source, you must list the MAC addresses of the phones in Cisco Unified Communications Manager and reset the phones from Cisco Unified Communications Manager. You do not need to assign ephone-dns to the phones for the phones to register with Cisco Unified Communications Manager. • The **url services** command is also available in ephone-template configuration mode. If you use an ephone template to provision the Services feature button on one or more SCCP phones and you configure the **url services** command in telephony-service configuration mode, the value set in telephony-service configuration mode appears first in the list of options displayed when the phone user presses the Services feature button.
Step 5	**end** **Example:** `Router(config-telephony)# end`	Returns to privileged EXEC mode.

What to Do Next

If you want to create an ephone template to provision multiple URLs for the Services feature button on supported individual SCCP phones, see the "Creating Templates" on page 1525.

If you are done modifying parameters for phones in Cisco Unified CME, generate a new configuration file and restart the phones. See the "Generating Configuration Files for Phones" section on page 359.

SIP: Provisioning URLs for Feature Buttons

To customize URLs for feature buttons in the SEPDEFAULT.cnf configuration profile for SIP IP phones, perform the following steps.

Prerequisites

Cisco CME 3.4 or a later version.

Restrictions

- Operation of these services is determined by the Cisco Unified IP phone capabilities and the content of the specified URL.
- Provisioning a URL is supported only for Services and Directories feature buttons on SIP phones.
- Programmable Directories and Services feature buttons are supported only on the Cisco Unified IP Phone 7960, 7960G, 7940, and 7940G.
- Provisioning the directory URL to select an external directory resource disables the Cisco Unified CME local directory service.

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **voice register global**
4. **url** {**directory** | **service**} *url*
5. **end**

DETAILED STEPS

	Command or Action	Purpose
Step 1	**enable** **Example:** `Router> enable`	Enables privileged EXEC mode. • Enter your password if prompted.
Step 2	**configure terminal** **Example:** `Router# configure terminal`	Enters global configuration mode.
Step 3	**voice register global** **Example:** `Router(config)#`	Enters telephony-service configuration mode.

	Command or Action	Purpose

Step 4	**url** {**directory** | **service**} *url*
	
	Example:
	`Router(config-register-global)# url directory http://10.0.0.11/localdirectory`
	`Router(config-register-global)# url service http://10.0.0.4/CCMUser/123456/urltest.html`
		Associates a URL with the programmable feature buttons on SIP phones.

Step 5	**end** **Example:** `Router(config-register-global)# end`	Returns to privileged EXEC mode.

What to Do Next

If you are done modifying parameters for phones in Cisco Unified CME, generate a new configuration file and restart the phones. See the "SIP: Generating Configuration Profiles for SIP Phones" section on page 363.

Troubleshooting URL Provisioning for Feature Buttons

Step 1 Ensure the HTTP server is enabled and that there is communication between the Cisco Unified CME router and the server.

SCCP: Modifying Vendor Parameters for All Phones

To configure programmable phone and display parameters in the vendorConfig section of the SepDefault.conf.xml configuration file for all phones, perform the following steps.

Restrictions

- Only the parameters supported by the currently loaded firmware are available.
- The number and type of parameters may vary from one firmware version to the next.
- Only those parameters that are supported by a Cisco Unified IP phone and firmware version are implemented. Parameters that are not supported are ignored.

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **telephony-service**
4. **service phone** *parameter-name parameter-value*
5. **end**

DETAILED STEPS

	Command or Action	Purpose
Step 1	**enable** **Example:** `Router> enable`	Enables privileged EXEC mode. • Enter your password if prompted.
Step 2	**configure terminal** **Example:** `Router# configure terminal`	Enters global configuration mode.
Step 3	**telephony-service** **Example:** `Router(config)# telephony-service`	Enters telephony-service configuration mode.

	Command or Action	Purpose

Step 4	**service phone** *parameter-name parameter-value*
	
	Example:
	`Router(config-telephony)# service phone daysDisplayNotActive 1,2,3,4,5,6,7`
	`Router(config-telephony)# service phone displayOnTime 07:30`
	`Router(config-telephony)# service phone displayOnDuration 10:00`
	`Router(config-telephony)# service phone displayIdleTimeout 00.01`
		Sets display and phone functionality for all IP phones that support the configured parameters and to which this template is applied.
		• The parameter name is word and case-sensitive. See the *Cisco Unified CME Command Reference* for a list of parameters.
		• This command can also be configured in ephone-template configuration mode and applied to one or more phones.

Step 5	**end** **Example:** `Router(config-telephony)# end`	Returns to privileged EXEC mode.

What to Do Next

If you are done modifying parameters for phones in Cisco Unified CME, generate a new configuration file and restart the phones. See the "Generating Configuration Files for Phones" section on page 359.

SCCP: Modifying Vendor Parameters For a Specific Phone

To configure parameters in the vendorConfig section of the Sep*.conf.xml configuration file for an individual SCCP phone, perform the following steps.

Restrictions

- Cisco Unified CME 4.0 or a later version.
- System must be configured to for per-phone configuration files. For configuration information, see the "SCCP: Defining Per-Phone Configuration Files and Alternate Location" section on page 152.
- Only the parameters supported by the currently loaded firmware are available.
- The number and type of parameters may vary from one firmware version to the next.
- Only those parameters that are supported by a Cisco Unified IP phone and firmware version are implemented. Parameters that are not supported are ignored.

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **ephone template** *template-tag*
4. **service phone** *parameter-name parameter-value*
5. **exit**
6. **ephone** *phone-tag*
7. **ephone-template** *template-tag*
8. **end**

DETAILED STEPS

	Command or Action	Purpose
Step 1	**enable** **Example:** `Router> enable`	Enables privileged EXEC mode. • Enter your password if prompted.
Step 2	**configure terminal** **Example:** `Router# configure terminal`	Enters global configuration mode.
Step 3	**ephone-template** *template-tag* **Example:** `Router (config)# ephone-template 15`	Enters ephone-template configuration mode to create an ephone template.

	Command or Action	Purpose

Step 4	**service phone** *parameter-name parameter-value*
	
	Example:
	`Router(config-telephony)# service phone daysDisplayNotActive 1,2,3,4,5,6,7`
	`Router(config-telephony)# service phone displayOnTime 07:30`
	`Router(config-telephony)# service phone displayOnDuration 10:00`
	`Router(config-telephony)# service phone displayIdleTimeout 00.01`
		Sets parameters for all IP phones that support the configured functionality and to which this template is applied.
		• The parameter name is word and case-sensitive. See the *Cisco Unified CME Command Reference* for a list of parameters.
		• This command can also be configured in telephony-service configuration mode. For individual phones, the template configuration for this command overrides the system-level configuration for this command.

Step 5	**exit** **Example:** `Router(config-ephone-template)# exit`	Exits from this command mode to the next highest mode in the configuration mode hierarchy.
Step 6	**ephone** *phone-tag* **Example:** `Router(config)# ephone 1`	Enters ephone configuration mode.
Step 7	**ephone-template** *template-tag* **Example:** `Router(config-ephone)# ephone-template 15`	Applies an ephone template to the ephone that is being configured.
Step 8	**end** **Example:** `Router(config-ephone)# end`	Exits configuration mode and enters privileged EXEC mode.

What to Do Next

If you are done modifying parameters for phones in Cisco Unified CME, generate a new configuration file and restart the phones. See the "Generating Configuration Files for Phones" section on page 359.

Troubleshooting Vendor Parameter Configuration

Step 1 Ensure that the templates have been properly applied to the phones.

Step 2 Ensure that you use the create cnf-files command to regenerate configuration files and reset the phones after you apply the templates.

Step 3 Use the **show telephony-service tftp-bindings** command to display the configuration files that are associated with individual phones

```
Router# show telephony-service tftp-binding

tftp-server system:/its/SEPDEFAULT.cnf
tftp-server system:/its/SEPDEFAULT.cnf alias SEPDefault.cnf
tftp-server system:/its/XMLDefault.cnf.xml alias XMLDefault.cnf.xml
tftp-server system:/its/ATADefault.cnf.xml
tftp-server system:/its/XMLDefault7960.cnf.xml alias SEP00036B54BB15.cnf.xml
tftp-server system:/its/germany/7960-font.xml alias German_Germany/7960-font.xml
tftp-server system:/its/germany/7960-dictionary.xml alias
German_Germany/7960-dictionary.xml
tftp-server system:/its/germany/7960-kate.xml alias German_Germany/7960-kate.xml
tftp-server system:/its/germany/SCCP-dictionary.xml alias
German_Germany/SCCP-dictionary.xml
tftp-server system:/its/germany/7960-tones.xml alias Germany/7960-tones.xml
```

Step 4 Use the **debug tftp events** command to verify that the phone is accessing the file when you reboot the phone.

SCCP: Configuring One-Way Push-to-Talk on Cisco Unified Wireless IP Phones

To associate a phone button with the thumb button on a wireless phone for one-way Push-to-Talk (PTT) functionality in Cisco Unified CME, perform the following steps.

Prerequisites

- Cisco Unified CME 7.0 or a later version.
- Cisco phone firmware version 1.0.4 or a later version.
- System must be configured to for per-phone configuration files. For configuration information, see the "SCCP: Defining Per-Phone Configuration Files and Alternate Location" section on page 152.
- Phone button to be associated with the thumb button must be configured with an intercom DN that targets a paging number. For configuration information, see the "Configuring Intercom Lines" on page 1177.
- Paging group to be dialed by the intercom line must be configured. Targeted paging group can be unicast or multicast or both. For configuration information, see the "Configuring Paging" section on page 1255.

Restrictions

Supported on Cisco Unified Wireless IP Phone 7921 and 7925 only.

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **ephone template** *template-tag*
4. **service phone thumbButton1 PTTH** *button_number*
5. **exit**
6. **ephone** *phone-tag*
7. **ephone-template** *template-tag*
8. **end**

DETAILED STEPS

	Command or Action	Purpose
Step 1	**enable** **Example:** `Router> enable`	Enables privileged EXEC mode. • Enter your password if prompted.
Step 2	**configure terminal** **Example:** `Router# configure terminal`	Enters global configuration mode.
Step 3	**ephone-template** *template-tag* **Example:** `Router (config)# ephone-template 12`	Enters ephone-template configuration mode to create an ephone template.
Step 4	**service phone thumbButton1 PTTH** *button_number* **Example:** `Router(config-ephone-template)# service phone thumbButton1 PTTH6`	Specifies which button is to go off hook when user presses the thumb button. • *button_number*—Button on phone that is configured with an intercom dn that targets a paging number. Range is 1 to 6. • There are no spaces in the **PTTH** and *button_number* keyword/argument combination. • This command can also be configured in telephony-service configuration mode. For individual phones, the template configuration for this command overrides the system-level configuration for this command.
Step 5	**exit** **Example:** `Router(config-ephone-template)# exit`	Exits from this command mode to the next highest mode in the configuration mode hierarchy.

	Command or Action	Purpose
Step 6	**ephone** *phone-tag* **Example:** `Router(config)# ephone 1`	Enters ephone configuration mode.
Step 7	**ephone-template** *template-tag* **Example:** `Router(config-ephone)# ephone-template 12`	Applies an ephone template to the ephone that is being configured.
Step 8	**end** **Example:** `Router(config-ephone)# end`	Exits configuration mode and enters privileged EXEC mode.

Cisco Jabber for Windows

To configure Cisco Jabber for Windows in Cisco Unified CME, perform the steps.

Prerequisites

You require Cisco Unified CME Release 10 or a later release.

Restrictions

The Cisco Jabber for Windows client does not support software-based conferencing on phones.

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **ip http secure-server**
4. **ip http secure-port** *port number*
5. **voice register dn** *dn-tag*
6. **number** *number*
7. **voice register pool** *phone-tag*
8. **id device-id-name**
9. **type** *type*
10. **number** *number*
11. **username** *username* **password** *password*
12. **description** *string*
13. **exit**
14. **end**

DETAILED STEPS

	Command or Action	Purpose
Step 1	**enable** **Example:** `Router> enable`	Enables the privileged EXEC mode. Enter your password if prompted.
Step 2	**configure terminal** **Example:** `Router# configure terminal`	Enters the global configuration mode.
Step 3	**ip http secure-server** **Example:** `Router(config)# ip http secure-server`	Enables a secure HTTP (HTTPS) server. The HTTPS server uses the Secure Sockets Layer (SSL) Version 3 protocol.
Step 4	**ip http secure-port** *port number* **Example:** `Router(config)# ip http secure-port 8443`	Sets the HTTPS server port number for listening.
Step 5	**voice register dn** *dn-tag* **Example:** `Router(config)# voice register dn 1`	Creates directory numbers for the SIP IP phones that are directly connected to Cisco Unified CME
Step 6	**number** *number* **Example:** `Router(config-register-dn)# number 991001`	Defines the numbers for the SIP IP phones.
Step 7	**voice register pool** *phone-tag* **Example:** `Router# voice register pool  1`	Sets the phone type for the SIP IP phones on a Cisco Unified CME system.
Step 8	**id device-id-name** **Example:** `Router(config-register-pool)# id device-id-name JabberWIN`	Specifies the device ID of a phone type. For a list of supported device IDs, see *Cisco Unified Communications Manager Express Command Reference*. Assigns a name to a phone type. • *name*—String that specifies the SIP soft client device ID name. Device ID name string can be up to 32 characters.
Step 9	**type** *type* **Example:** `Router(config-register-pool)# type Jabber-Win`	Defines the phone type.

	Command or Action	Purpose
Step 10	**number** *number* **Example:** `Router(config-register-pool)# number 1`	Defines the numbers for the SIP IP phones.
Step 11	**username** *username* **password** *password* **Example:** `Router(config-register-pool))# username jabber1 password jabber1`	Sets the username and password. • *Username*— Specifies the username of the phone type. • *Password*— Specifies the password of the phone type.
Step 12	**description** string **Example:** `Router(config-register-pool)# description Jabber WIN`	Associates a description with the Cisco Jabber client. Enter a string of up to 64 characters. A maximum of 128 characters, including spaces.
Step 13	**exit** **Example:** `Router(config-register-pool)# exit`	Exits the voice register-pool configuration mode.
Step 14	**end** **Example:** `Router(config)# end`	Exits the privileged EXEC configuration mode.

What to Do Next

If you are done modifying parameters for phones in Cisco Unified CME, generate a new configuration file and restart the phones. See the "Generating Configuration Files for Phones" section on page 359.

Configuration Examples for Cisco Unified IP Phone Options

This section contains the following examples:

- Push-to-Talk (PTT) on Cisco Unified Wireless IP Phones in Cisco Unified CME: Example, page 1520

Configuring Cisco Jabber: Example

The following example shows phone type Cisco Jabber configured under voice register pool 10:

```
!
voice register dn  10
 number 1089
 call-forward b2bua busy 1500
 call-forward b2bua mailbox 1500
 call-forward b2bua noan 1500 timeout 20
 pickup-call any-group
 pickup-group 1
 name CME SIP iPhone
 label CME SIP iPhone
!
!
voice register pool  8
registration-timer max 720 min 660
 park reservation-group 1
 session-transport tcp
 type CiscoMobile-iOS
 number 1 dn 10
 dtmf-relay rtp-nte
!
ephone-dn  61
 number 1061
 park-slot reservation-group 1 timeout 10 limit 2 recall retry 2 limit 2
!
```

Example: Configuring Cisco Jabber Windows Client

The following example shows how to configure the Cisco Jabber Windows client .

```
ip http secure-server
ip http secure-port 8443
!
voice register dn  1
 number 991001
!
voice register pool  1
 id device-id-name JabberWIN1
 type Jabber-Win   ? New Phone Type added in CME
 number 1 dn 1
 username jabber1 password jabber1
 description Jabber WIN
```

Configuring Dial Rules for Cisco Softphone SIP Client: Example

The following example shows dial rules configured under voice register template 2:

```
!
voice register template  2
 url ldapServer ldap.abcd.com
 url AppDialRule tftp://10.1.1.1/AppDialRules.xml
 url DirLookupRule tftp://10.1.1.1/DirLookupRules.xml
!
```

The following is a sample of Application Dial Rule content:

```
Router#more flash:AppDialRules.xml
<?xml version="1.0" encoding="UTF-8"?><DialRules>
        <DialRule BeginsWith="+1" NumDigits="12" DigitsToRemove="1" PrefixWith="9"/>
        <DialRule BeginsWith="+1" NumDigits="12" DigitsToRemove="1" PrefixWith="9"/>
        <DialRule BeginsWith="919" NumDigits="10" DigitsToRemove="3" PrefixWith="9"/>
        <DialRule BeginsWith="1" NumDigits="11" DigitsToRemove="0" PrefixWith="9"/>
        <DialRule BeginsWith="" NumDigits="10" DigitsToRemove="0" PrefixWith="91"/>
        <DialRule BeginsWith="" NumDigits="7" DigitsToRemove="0" PrefixWith="9"/>
        <DialRule BeginsWith="+" NumDigits="13" DigitsToRemove="1" PrefixWith="9011"/>
        <DialRule BeginsWith="+" NumDigits="14" DigitsToRemove="1" PrefixWith="9011"/>
        <DialRule BeginsWith="+" NumDigits="15" DigitsToRemove="1" PrefixWith="9011"/>

        <DialRule BeginsWith="+" NumDigits="12" DigitsToRemove="1" PrefixWith="9011"/>
        <DialRule BeginsWith="+" NumDigits="11" DigitsToRemove="1" PrefixWith="9011"/>
</DialRules>
```

Exclusion of Local Services from Cisco Unified SIP IP Phones: Example

The following example shows how the **exclude** command is used to exclude from the Cisco Unified SIP IP phone's user interface the availability of two local services. These services are Local Directory and My Phone Apps.

```
Router(config)# voice register pool 80
Router(config-register-pool)# exclude directory
Router(config-register-pool)# exclude myphoneapps
```

Text Labels for Ephone-dns: Example

The following example creates text labels for two ephone-dns:

```
ephone-dn 1
 number 2001
 label Sales

ephone-dn 2
 number 2002
 label Engineering
```

Phone Header Bar Display: Example

The following example provides the full E.164 number for a phone line in the phone header bar:

```
ephone-dn 55
 number 2149
 description 408-555-0149

ephone-dn 56
 number 2150

ephone 12
 button 1:55 2:56
```

System Text Message Display: Example

The following example specifies text that should display on IP phones when they are not in use:

```
telephony-service
 system message ABC Company
```

System File Display: Example

The following example specifies that a file called logo.htm should be displayed on IP phones when they are not in use:

```
telephony-service
 url idle http://www.abcwrecking.com/public/logo.htm idle-timeout 35
```

URL Provisioning for Directories, Services, and Messages Buttons: Example

The following example provisions the Directories, Services, and Messages buttons:

```
telephony-service
 url directories http://10.4.212.4/localdirectory
 url services http://10.4.212.4/CCMUser/123456/urltest.html
 url messages http://10.4.212.4/Voicemail/MessageSummary.asp
```

Programmable VendorConfig Parameters: Example

The following partial output shows a template in which programmable parameters for phone and display functionality have been configured by using the **service phone** command:

```
ephone-template 1
 button-layout 7931 1
 service phone daysDisplayNotActive 1,2,3,4,5,6,7
 service phone backlightOnTime 07:30
 service phone backlightOnDuration 10:00
 service phone backlightIdleTimeout 00.01
```

In the following example, the PC port is disabled on phones 26 and 27. All other phones have the PC port enabled.

```
ephone-template  8
 service phone pcPort 1
!
!
ephone  26
 mac-address 1111.1111.1001
 ephone-template 8
 type 7960
 button  1:26
!
!
ephone  27
 mac-address 1111.2222.2002
 ephone-template 8
 type 7960
 button  1:27
```

Push-to-Talk (PTT) on Cisco Unified Wireless IP Phones in Cisco Unified CME: Example

The following partial output shows a template in which one-way PTT is configured by using the **service phone thumbButton1** command:

```
ephone-template 12
 service phone thumbButton1 PTTH6
!
!
ephone-dn 10
    intercom 1050
ephone-dn 50
    number 1050
    paging
!
!
ephone 1
    type 7921
    button 1:1 6:10
!
!
ephone 2
 button 1:2
 paging-dn 50
ephone 3
 button 1:3
 paging-dn 50
ephone 4
 button 1:1
 paging-dn 50
```

Additional References

The following sections provide references related to Cisco Unified CME features.

Related Documents

Related Topic	Document Title
Cisco Unified CME configuration	• *Cisco Unified CME Command Reference* • Cisco Unified CME Documentation Roadmap
Cisco IOS commands	• *Cisco IOS Voice Command Reference* • Cisco IOS Software Releases 12.4T Command References
Cisco IOS configuration	• *Cisco IOS Voice Configuration Library* • Cisco IOS Software Releases 12.4T Configuration Guides
Phone documentation for Cisco Unified CME	• User Documentation for Cisco Unified IP Phones

Technical Assistance

Description	Link
The Cisco Support website provides extensive online resources, including documentation and tools for troubleshooting and resolving technical issues with Cisco products and technologies. To receive security and technical information about your products, you can subscribe to various services, such as the Product Alert Tool (accessed from Field Notices), the Cisco Technical Services Newsletter, and Really Simple Syndication (RSS) Feeds. Access to most tools on the Cisco Support website requires a Cisco.com user ID and password.	http://www.cisco.com/techsupport

Feature Information for Cisco Unified IP Phone Options

Table 90 lists the features in this module and enhancements to the features by version.

To determine the correct Cisco IOS release to support a specific Cisco Unified CME version, see the *Cisco Unified CME and Cisco IOS Software Version Compatibility Matrix* at http://www.cisco.com/en/US/docs/voice_ip_comm/cucme/requirements/guide/33matrix.htm.

Use Cisco Feature Navigator to find information about platform support and software image support. Cisco Feature Navigator enables you to determine which Cisco IOS software images support a specific software release, feature set, or platform. To access Cisco Feature Navigator, go to http://www.cisco.com/go/cfn. An account on Cisco.com is not required.

Note Table 90 lists the Cisco Unified CME version that introduced support for a given feature. Unless noted otherwise, subsequent versions of Cisco Unified CME software also support that feature.

Table 90 Feature Information for Cisco Unified IP Phone Options

Feature Name	Cisco Unified CME Version	Feature Information
My Phone Apps for Cisco Unified SIP IP Phones	9.0	Adds support for My Phone Apps feature on Cisco Unified SIP IP phones.
Support for Cisco Jabber	8.6	Added support for Cisco Jabber
Clear Directory Entries	8.6	Provides ability to clear the display of call-history details such as missed, placed, and received call entries on a Cisco Unified SCCP IP phone's display screen.
Fixed Line/Feature Buttons	4.0(2)	Provides two preconfigured fixed sets of feature buttons for provisioning a Cisco Unified IP Phone 7931G.
Header Bar Display	3.4	Added support for modifying header bar display on SIP phones.
	2.01	Phone header bar display is introduced.
Labels for Directory Numbers	3.4	Added support for label display on SIP phones.
	3.0	Ephone-dn labels were introduced.
Programmable Vendor Parameters	4.0	Added support for configuring programmable phone and display functionality at a phone level for SCCP phones.
	3.4	Added support for configuring programmable phone and display functionality for SIP phones.
	3.2.1	Added support for programmable phone and display functionality in vendorConfig portion of configuration file. Implementation of configuration is firmware version dependent.
System Message Display	3.0	System message display on idle phones using text messages was introduced.
	2.1	System message display on idle phones using HTML files was introduced.

Table 90 Feature Information for Cisco Unified IP Phone Options (continued)

Feature Name	Cisco Unified CME Version	Feature Information
URL Provisioning for Feature Buttons	4.2	Added support for configuring an ephone template to provision multiple URLs for the Services feature button phones.
	3.4	Added support for provisioning customized URLs for programmable feature buttons on supported SIP phones.
	2.0	Provisioning customized URLs for programmable feature buttons was introduced.