

Modify Cisco Unified IP Phone Options

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

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Information About Cisco Unified IP Phone Options

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 Clear Call-History Details from a SCCP Phone, on page 11.

Enable 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 Configure Button Layout on SCCP Phones, on page 16.

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 Configure Button Layout on SIP Phones, on page 18.

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 Configure Feature Button on a Cisco

Unified SCCP Line Key, on page 26 and Configure Feature Button on a Cisco Unified SIP Phone Line Key, on page 24.

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 Configure Service URL Button on a SCCP Phone Line Key, on page 22 and Configure Service URL Button on a SIP IP Phone Line Key, on page 20.

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 Configure Service URL Button on a SCCP Phone Line Key, on page 22.

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 Block Local Services on Phone User Interface, on page 28.

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 CME 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.

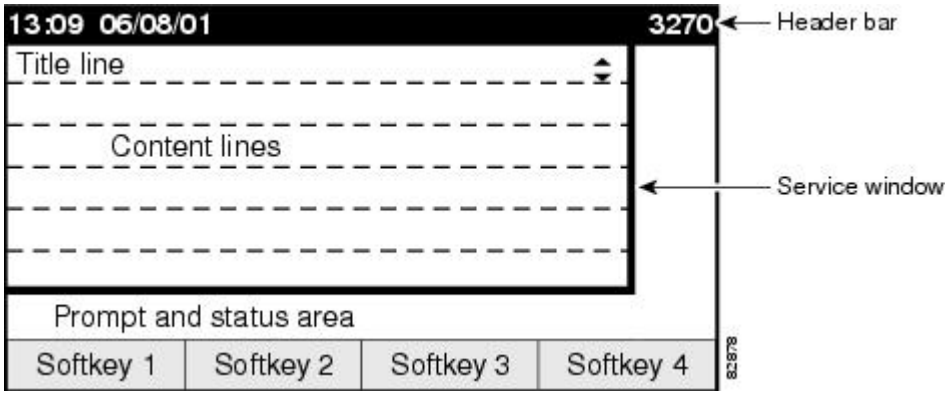
For configuration, see Select Button Layout for a Cisco Unified SCCP IP Phone 7931G, on page 15.

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 1: Cisco Unified IP Phone Display, on page 4. 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 1: 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 Create Labels for Directory Numbers on SCCP Phones, on page 32 or Create Labels for Directory Numbers on a SIP Phone, on page 33.

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 Modify Vendor Parameters for All SCCP Phones, on page 41.

For configuration information for individual phones, see Modify Vendor Parameters for a Specific SCCP Phone, on page 42.

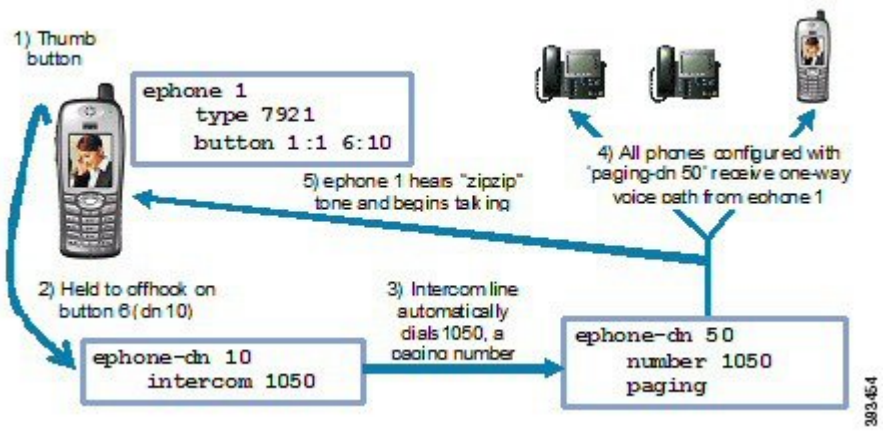
Push-to-Talk

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 2: PTT Call Flow



For configuration information, see Configure One-Way Push-to-Talk on Cisco Unified SCCP Wireless IP Phones, on page 44.

Support for Cisco Jabber

For Unified CME 12.5, Cisco Jabber was supported. In this version, the SIP softphone client supports VoIP over WLAN. Unified CME supports supplementary services such as Hold, Resume, Transfer, Call Park, and Call Pickup for the softphone SIP client.

Note Cisco Jabber versions supported on Unified CME are now End-of-Life. Hence, there is no active support for Cisco Jabber on Unified CME 14.1 or earlier releases.

Feature Support for Cisco Jabber

The following features are supported for Cisco Jabber with Unified CME:

- Hold or Resume
- Transfer
- Shared Line
- Mixed Shared Line
- Call forward—All, Busy, No Answer, Unregistered
- Directed Call Park Pickup
- Single Number Reach (SNR)
- Voice Hunt Group (Sequential, Parallel)
- Hardware Conference
- Music On Hold
- Video

Restrictions

The following features are not supported for Cisco Jabber with Unified CME:

- Barge
- cBarge
- Built-in Bridge (BIB) Conference
- Do Not Disturb
- KPML Dialing

Cisco Jabber Client Support on CME

Cisco Jabber Client 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 and mobile 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 client. The device discovery process uses HTTPS connection. Therefore, you should configure the secure HTTP on Cisco Unified CME.

A new phone type, Jabber-CSF-Client has been added to configure the Cisco Jabber client under voice register pool. This can be used to configure any CSF based Cisco Jabber client. In Unified CME 10.0, we used the type 'Jabber-Win' to configure Cisco Jabber client. In Unified CME 10.5, this type is deprecated and the new 'Jabber-CSF-Client' should be used to configure Cisco Jabber client as well.

Cisco Jabber CSF client can be provisioned in two modes: Full UC mode (with integrated IM and Presence services) and Phone only mode. The phone-only mode of Cisco Jabber CSF devices is also supported. This can be configured with the option 'phone-mode phone-only' under 'voice register global' or 'voice register pool' or 'voice register template' config.

If the Jabber client is installed in phone only mode then no extra configuration is required on CME. The normal Jabber configuration should be sufficient.

For more information on installing Jabber client in phone mode for Windows, see https://www.cisco.com/c/en/us/support/unified-communications/jabber-windows/products-installation-guides-list.html.

For more information on installing Jabber client in phone mode for Mac, see https://www.cisco.com/c/en/us/support/unified-communications/jabber-mac/products-installation-guides-list.html.

If the Jabber client is installed in Full UC mode and you want to enable the phone only mode from CME, then the 'phone-mode' configuration is required as mentioned in the configuration section.

Table 1: Cisco Jabber Client Support Versions, on page 8 lists the Cisco Jabber Client Support versions along with the corresponding CME and Jabber client versions:

For Unified CME Release 12.5 (On Cisco 4000 Series Integrated Services Router), Cisco Jabber CSF client (softphone mode) Version 12.1.0 for MAC (phone-only) and Windows (phone-only) was supported.

Note Cisco Jabber client versions supported on Unified CME are now End-of-Life (EOL). Hence, there is no active support on Unified CME for Cisco Jabber clients.

Table 1: Cisco Jabber Client Support Versions

Cisco CSF Device Type	Unified CME Supported Version	Jabber Client Version	
Cisco Jabber for MAC (phone-only) and Windows (phone-only)	10.0	9.1.0	
	10.5	9.2.1	
	12.5	12.1.0	

Restrictions

- The Cisco Jabber CSF client supports only the softphone mode with Cisco Unified CME.
- Desk phone mode is not supported.
- The following Cisco Jabber CSF type of devices are not supported:
  - Cisco Jabber for iPhone (both full UC mode and phone-only mode)
  - Cisco Jabber for Android (both full UC mode and phone-only mode)
  - Cisco Jabber for iPad (both full UC mode and phone-only mode)

For configuration information, see Configure Cisco Jabber for CSF Client in Unified CME, on page 46.

For configuration examples, see Example for Configuring Cisco Jabber CSF Client, on page 49.

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.

Note

- The **System Message** command is supported only for SCCP IP phones registered to CME. It is not supported for SIP IP phones in CME mode.

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 Provision URLs for Feature Buttons for SCCP Phones, on page 37.

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.

Configure Cisco Unified IP Phone Options

Enable Edit User Settings

Before you begin

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

Procedure

	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:**	Enables the edit user settings.

	Command or Action	Purpose
	`Router(config-telephony)# service phone paramEdibility 1`	
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.

Clear 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:

Before you begin

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. Enter one of the following commands:
   - **ephone** *phone-tag*
   - **ephone template** *template tag*
4. **exclude** [**em** | **myphoneapp** | **directory** | **call-history**]
5. **end**

DETAILED STEPS

Procedure

	Command or Action	Purpose
Step 1	**enable** **Example:** `Router> enable`	Enables privileged EXEC mode. • Enter your password if prompted.

	Command or Action	Purpose
Step 2	**configure terminal** **Example:** `Router# configure terminal`	Enters global configuration mode.
Step 3	Enter one of the following commands: • **ephone** *phone-tag* • **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** | **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 for Clearing Call-History Details from a SCCP Phone

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.

Configure Dial Rules for Cisco Softphone SIP Client

Before you begin

Cisco Unified CME 8.6 or a later version.

Support for **idle** *url* is available only on Unified CME 12.0 and later versions.

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **voice register template** *template tag*
4. **url** {**AppDialRule** *string* | **DirLookupRule** *string* | **ldapServer** *string* | **idle** *url* | **service** *url*}
5. **voice register pool** *pool tag*
6. **end**

DETAILED STEPS

Procedure

	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	**voice register template** *template tag* **Example:** `Router(config)#voice register template 8`	Enters voice register template configuration mode to define a template of common parameters for SIP phones in Cisco Unified CME.

Step 4	**url** {**AppDialRule** *string* | **DirLookupRule** *string* | **ldapServer** *string* | **idle** *url* | **service** *url*}
	Example:
	`Router(config-register-temp)# url ldapServer ldap.abcd.com`
	`Router(config-register-temp)# url AppDialRule tftp://10.1.1.1/AppDialRules.xml`
	`Router(config-register-temp)# url DirLookupRule tftp://10.1.1.1/DirLookupRules.xml`
	`Router(config-register-temp)# url idle http://www.mycompany.com/files/logo.xml idle-timeout 12`
	`Router(config-register-temp)# url service http://10.0.0.4/CCMUser/123456/urltest.html`
		Allows to define SIP phone URLs to configure Application Dial Rule, Directory Lookup Dial Rule, LDAP server, idle url, and service url in voice register template configuration mode.
		• **ldapserver** *string* —LDAP server URL.
		• **AppDialRule** *string* —Application dial rule URL.
		• **DirLookupRule** *string*—Directory lookup rule URL.
		• **idle** *url* —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.
		• **service** *url* —Uses the information at the specified URL for invoking phone services.

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.

Examples

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>
```

Select Button Layout for a Cisco Unified SCCP IP Phone 7931G

Before you begin

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** *phone-type* {**1** | **2**}
5. **exit**
6. **ephone** *phone-tag*
7. **ephone-template** *template-tag*
8. **end**

DETAILED STEPS

Procedure

	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.

	Command or Action	Purpose
		• **2**—Includes four predefined feature buttons: button 24 is Menu; button 23 is Headset; button 22 is Directories; and button 21 is Messages.
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 Generate Configuration Files for Phones.

Configure Button Layout on SCCP Phones

Before you begin

- 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

Procedure

	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.

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.

	Command or Action	Purpose
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.

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
```

What to do next

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

Configure Button Layout on SIP Phones

Note 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).

Before you begin

- 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.

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

Procedure

	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.

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:**	Applies a SIP phone template to the phone you are configuring.

	Command or Action	Purpose
	`Router(config-register-pool)# template 5`	• *template-tag*— Template tag that was created with the voice register template command in Step 3, on page 19.
Step 8	**end** **Example:** `Router(config-register-pool)# end`	Exits to privileged EXEC mode.

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
!
```

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 Generate Configuration Profiles for SIP Phones.

Configure Service URL Button on a SIP IP Phone Line Key

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

Procedure

	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.
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, on page 21.
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 Generate Configuration Profiles for SIP Phones.

Configure Service URL Button on a SCCP Phone Line Key

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

Procedure

	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.

	Command or Action	Purpose

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.

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.

Configure Feature Button on a Cisco Unified SIP Phone Line Key

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

Procedure

	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`	Configures a feature button on line key. • *index*—One of the 12 index numbers for a specific feature type.

	Command or Action	Purpose
	`Router(config-voice-register-template)feature-button 2 EndCall` `Router(config-voice-register-template)feature-button 3 Cfwdall`	• *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, NewCall, EndCall, Dnd, ConfList, NewCall, HLog, Trnsfer.
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, on page 24
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 Generate Configuration Profiles for SIP Phones.

Configure Feature Button on a Cisco Unified SCCP Line Key

Note

- 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

Procedure

	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 identifier*—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.

Block 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.

Before you begin

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

Procedure

	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.

	Command or Action	Purpose
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
```

Modify Header Bar Display on SCCP Phones

Before you begin

Directory number to be modified is already configured. For configuration information, see Create Directory Numbers for SCCP Phones.

SUMMARY STEPS

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

DETAILED STEPS

Procedure

	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 55`	Enters ephone-dn configuration mode.
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 Generate Configuration Files for Phones.

Modify Header Bar Display Supported SIP Phones

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

Before you begin

Cisco CME 3.4 or a a later version.

SUMMARY STEPS

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

DETAILED STEPS

Procedure

	Command or Action	Purpose
Step 1	**enable** **Example:**	Enables privileged EXEC mode. • Enter your password if prompted.

	Command or Action	Purpose
	`Router> enable`	
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 Generate Configuration Profiles for SIP Phones.

Verify Header Bar Display

Procedure

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.

Example:

```
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

Procedure

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
```

Create Labels for Directory Numbers on SCCP Phones

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

Before you begin

Directory number for which the label is to be created is already configured. For configuration information, see Create Directory Numbers for SCCP Phones.

SUMMARY STEPS

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

DETAILED STEPS

Procedure

	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 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 Generate Configuration Files for Phones.

Create Labels for Directory Numbers on a SIP Phone

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.



Restriction Only one label is permitted per directory number.

Before you begin

- 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 Create Directory Numbers for SIP Phones.

SUMMARY STEPS

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

DETAILED STEPS

Procedure

	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 Generate Configuration Profiles for SIP Phones.

Verify Labels

Procedure

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
```

Modify System Message Display on SCCP Phone Screen

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

Procedure

	Command or Action	Purpose
Step 1	**enable** **Example:** `Router> enable`	Enables privileged EXEC mode. • Enter your password if prompted.

	Command or Action	Purpose
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	**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 Use the reset Command on SCCP Phones.

Verify System Message Display

Procedure

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

Procedure

Ensure that the HTTP server is enabled.

Provision URLs for Feature Buttons for SCCP Phones

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



Restriction

- 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

Procedure

	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	**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.

	Command or Action	Purpose
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 Templates.

If you are done modifying parameters for phones in Cisco Unified CME, generate a new configuration file and restart the phones. See Generate Configuration Files for Phones.

Provision URLs for Feature Buttons on SIP Phones

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

Restriction

- Operation of these services is determined by the Cisco Unified IP phone capabilities and the content of the specified URL.
- Provisioning the directory URL to select an external directory resource disables the Cisco Unified CME local directory service.

Before you begin

Cisco CME 3.4 or a later version.

Support for **idle** *url* is available only on Unified CME 12.0 and later versions.

SUMMARY STEPS

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

DETAILED STEPS

Procedure

	Command or Action	Purpose
Step 1	**enable** **Example:**	Enables privileged EXEC mode. • Enter your password if prompted.

	Command or Action	Purpose
	`Router> enable`	
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.

Step 4	**url** {**authentication** | **directory** | **service** | **idle**} *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`
	`Router(config-register-global)# url idle http://www.mycompany.com/files/logo.xml idle-timeout 12`
		Associates a URL with the programmable feature buttons on SIP phones.
		• **url authentication** *url* — Uses the information at the specified URL to validate requests made to the phone web server.
		• **url directory** *url* — Uses the information at the specified URL for the Directories button display.
		• **url service** *url* [**root**] — Uses the information at the specified URL for the Services button display.
		• **url idle** *url* — 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.

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 Generate Configuration Profiles for SIP Phones.

Troubleshooting URL Provisioning for Feature Buttons

Procedure

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

Modify Vendor Parameters for All SCCP 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.

Restriction

- 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

Procedure

	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 daysDisplayNotActive 1,2,3,4,5,6,7`
	`Router(config-telephony)# service phone displayOnTime 07:30`
	`Router(config-telephony)# service phone`
		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 Cisco Unified CME Command Reference for a list of parameters.

	Command or Action	Purpose
	`displayOnDuration 10:00` `Router(config-telephony)# service phone displayIdleTimeout 00.01`	• 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 Generate Configuration Files for Phones.

Modify Vendor Parameters for a Specific SCCP Phone

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

Restriction

- Cisco Unified CME 4.0 or a later version.
- System must be configured to for per-phone configuration files. For configuration information, see Define Per-Phone Configuration Files and Alternate Location for SCCP Phones.
- 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

Procedure

	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	**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 Generate Configuration Files for Phones.

Troubleshooting Vendor Parameter Configuration

Procedure

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

Example:

```
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.

Configure One-Way Push-to-Talk on Cisco Unified SCCP 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.

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

Before you begin

- 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 Define Per-Phone Configuration Files and Alternate Location for SCCP Phones.

- 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 Intercom Lines.
- 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 Paging.

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

Procedure

	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.

	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 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.

Configure Cisco Jabber for CSF Client in Unified CME

Before you begin

Cisco Jabber versions supported on Unified CME are now End-of-Life (EOL). Hence, there is no active support on Unified CME for Cisco Jabber clients.

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** *name*
9. **type** *type*
10. **number** *number*
11. **username** *username* **password** *password*
12. **description** *string*
13. **exit**
14. **end**

DETAILED STEPS

Procedure

	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** *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-CSF-Client`	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-CSF-Client`	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 Generate Configuration Files for Phones.

Configuration Examples for Cisco Unified IP Phone Options

Example for Configuring Cisco Jabber

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 for Configuring Cisco Jabber CSF Client

The following example shows how to configure the Cisco Jabber CSF client installed in full UC mode:

```
!
voice register dn 1
number 991001
name Jabber-CSF-Client-1
label   Jabber-CSF-Client-1
!
voice register pool 1
id device-id-name jabber_csf_1
type Jabber-CSF-Client
number 1 dn 1
username john password john123
codec g711ulaw
camera
video
!
ip http secure-server
ip http secure-port 8443
```

The following example shows how to configure the Cisco Jabber CSF client in phone-only mode from CME under voice register global:

```
voice register global
 phone-mode phone-only
!
voice register pool  1
 id device-id-name winJabber
 number 1 dn 1
 type Jabber-CSF-Client
 username 1111022 password 1111022
!
```

The following example shows how to configure the Cisco Jabber CSF client in phone-only mode from CME under voice register pool:

```
 voice register pool  1
 id device-id-name winJabber
 number 1 dn 1
 type Jabber-CSF-Client
 username 1111022 password 1111022
 phone-mode phone-only
!
```

The following example shows how to configure the Cisco Jabber CSF client in phone-only mode from CME under voice register template:

```
voice register template  1
 phone-mode phone-only
!
voice register pool  2
 id device-id-name winJabber
 type Jabber-CSF-Client
 number 1 dn 2
 username 1111023 password 1111023
 template 1
!
```

For Cisco Jabber CSF client (version 12.1.0 and onwards) support, Unified CME 12.5 is configured as the DNS Server. The host machine of the Jabber client is configured to point to Unified CME that is configured as the DNS server. The following example shows how to configure Unified CME 12.5 as DNS Server to support the Cisco Jabber CSF client, Version 12.1.0 for Mac and Windows (Phone-only Mode):

```
enable
configure terminal
ip dns server
ip host _sip_tcp.cisco.com srv 0 1 5060 cme.cisco.com
ip host _sip_udp.cisco.com srv 0 1 5060 cme.cisco.com
ip host _sips_tcp.cisco.com srv 0 1 5060 cme.cisco.com
ip host _cisco-uds._tcp.cisco.com srv 0 1 8443 cme.cisco.com
ip host uds._tcp.cisco.com srv 0 1 8443 cme.cisco.com
ip host _collab-edge._tls.cisco.com srv 0 1 8443 cme.cisco.com
ip host cme.cisco.com 10.64.86.106 (Note: IP Address of Unified CME 12.5)
ip host _cisco-phone-http.tcp.cisco.com srv 0 1 8443 cme.cisco.com
```

Example for Configuring Dial Rules for Cisco Softphone SIP Client

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>
```

Example for Excluding Local Services from Cisco Unified SIP IP Phones

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
```

Example to Create Text Labels for Ephone-dns

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

```
ephone-dn 1
 number 2001
 label Sales
ephone-dn 2
 number 2002
 label Engineering
```

Example for Phone Header Bar Display

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
```

Example for System Text Message Display

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

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

Example for System File Display

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
```

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

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
```

Example for Programmable VendorConfig Parameters

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
```

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

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
```

Feature Information for Cisco Unified IP Phone Options

The following table provides release information about the feature or features described in this module. This table lists only the software release that introduced support for a given feature in a given software release train. Unless noted otherwise, subsequent releases of that software release train also support that feature.

Use Cisco Feature Navigator to find information about platform support and Cisco software image support. To access Cisco Feature Navigator, go to www.cisco.com/go/cfn. An account on Cisco.com is not required.

Table 2: Feature Information for Cisco Unified IP Phone Options

Feature Name	Unified CME Version	Feature Information
Support for Cisco Jabber	12.5	Added Support for Cisco Jabber CSF Client MAC and Windows (Phone-only), Version 12.1(0).
Support for Cisco Jabber	8.6	Added support for Cisco Jabber.
My Phone Apps for Cisco Unified SIP IP Phones	9.0	Adds support for My Phone Apps feature on Cisco Unified SIP IP phones.
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.

Feature Name	Unified CME Version	Feature Information
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.

Feature Name	Unified CME Version	Feature Information
URL Provisioning for Feature Buttons	12.0	Added support for Idle URL functionality on SIP phones.
	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.