



# Localization Support

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This chapter describes the localization support in Cisco Unified Communications Manager Express (Cisco Unified CME) for languages other than English and network tones and cadences not specific to the United States.

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## Information About Localization

### Localization Enhancements in Cisco Unified CME

Cisco Unified CME supports the French locale but some phrases in France French and Canadian French differ. In Cisco Unified CME 9.5, Canadian French is supported as a user-defined locale on Cisco Unified SIP IP phones and Cisco Unified SCCP IP phones when the correct locale package is installed.



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**Note** Some abbreviations such as BLF, SNR, and CME are not localized.

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#### Prerequisites

- Cisco Unified CME 9.5 or later version
- Locale package version 9.5.2.6 is required



**Restriction** All the localization enhancements are supported in Cisco Unified CME only. They are not supported in Cisco Unified SRST. [Table 1: Language Codes for User-Defined Locales, on page 2](#) shows the language codes used in the filenames of locale files.

**Table 1: Language Codes for User-Defined Locales**

Language	Language Code
Canadian French	fr_CA

For configuration information, see [Install User-Defined Locales, on page 9](#).

## System-Defined Locales

Cisco Unified CME provides built-in, system-defined localization support for 12 languages including English and 16 countries including the United States. Network locales specify country-specific tones and cadences; user locales specify the language to use for text displays.

Configuring system-defined locales depends on the type of IP phone:

- Cisco Unified IP Phone 7905, 7912, 7940, and 7960—System-defined network locales and user locales are preloaded into Cisco IOS software. No external files are required. Use the **network-locale** and **user-locale** commands to set the locales for these phones.
- Cisco Unified IP Phone 6921, 6945, 7906, 7911, 7921, 7931, 7941, 7961, 7970, 7971, 8941, 8945, and Cisco IP Communicator—You must download locale files to support the system-defined locales and store the files in flash memory, slot 0, or on an external TFTP server. See [Install System-Defined Locales for Cisco Unified IP Phone 6921, 6945, 7906, 7911, 7921, 7931, 7941, 7961, 7970, 7971, and Cisco IP Communicator, on page 5](#).
- Cisco Unified 3905, 6941, 6945, 8961, 9951, and 9971 SIP IP Phones—You must download locale files to support the system-defined locales and store the files in flash memory, slot 0, or on an external TFTP server.



**Note** TFTP aliases for localization are not automatically created for Cisco Unified SIP IP phones in a Cisco Unified CME system. For more information on how to manually create TFTP aliases, see [Install System-Defined Locales for Cisco Unified IP Phone 8961, 9951, and 9971, on page 19](#).



**Note** Cisco Unified CME 10.5 Release onwards, the System defined locales are deprecated and User-defined locales are recommended.

Cisco Unified 3905 SIP IP Phones and Cisco Unified 6945, 8941, and 8945 SCCP IP Phones have support for all locales up to Cisco Unified CME 8.8.

## Localization Support for Cisco Unified SIP IP Phones

Cisco Unified CME 8.6 provides localization support for 12 languages including English and 16 countries including the United States. Network locales specify country-specific tones and cadences; user locales specify the language to use for text displays. Create additional localization support with user-defined locales. For more information about user-defined locales, see [User-Defined Locales, on page 3](#).

In Cisco Unified CME 9.0 and later versions, localization is enhanced to support Cisco Unified 6941 and 6945 SIP IP Phones.

The **load** command supports both user-defined and system-defined locales.



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**Note** The locale files must be stored in the same location as the configuration files.

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## User-Defined Locales

The user-defined locale feature allows you to support network and user locales other than the system-defined locales that are predefined in Cisco IOS software. For example, if your site has phones that must use the language and tones for Traditional Chinese, which is not one of the system-defined choices, you must install the locale files for Traditional Chinese.

In Cisco Unified CME 4.0 and later versions, you can download files to support a particular user and network locale and store the files in flash memory, slot 0, or an external TFTP server. These files cannot be stored in the system location. User-defined locales can be assigned to all phones or to individual phones.

User-defined language codes for user locales are based on ISO 639 codes, which are available at the Library of Congress website at <http://www.loc.gov/standards/iso639-2/>. User-defined country codes for network locales are based on ISO 3166 codes.

For configuration information, see [Install User-Defined Locales, on page 9](#).

## Localization Support for Phone Displays

On the Cisco Unified IP Phone 8961, 9951, and 9971, menus and prompts that are managed by the locale file for the IP phone type (.jar) or the Cisco Unified CME dictionary file are localized. Display options configured through Cisco IOS commands are not localized.

The following display items are localized by the IP phone (.jar file):

- System menus accessed with feature buttons (for example, messages, directories, services, settings, and information)
- Call processing messages
- Softkeys (for example, Redial and CFwdALL)

The following display items are localized by the dictionary file for Cisco Unified CME:

- Directory Service (Local Directory, Local Speed Dial, and Personal Speed Dial)
- Status Line

Display options configured through Cisco IOS commands are not localized and can only be displayed in English. For example, this includes features such as:

- Caller ID
- Header Bar
- Phone Labels
- System Message

## Multiple Locales

In Cisco Unified CME 8.6 and later versions, you can specify up to five user and network locales and apply different locales to individual ephones or groups of ephones using ephone templates. For example, you can specify French for phones A, B, and C; German for phones D, E, and F; and English for phones G, H, and I. Only one user and network locale can be applied to each phone.

Each of the five user and network locales that you can define in a multilocale system is identified by a locale tag. The locale identified by tag 0 is always the default locale, although you can define this default to be any supported locale. For example, if you define user locale 0 to be JP (Japanese), the default user locale for all phones is JP. If you do not specify a locale for tag 0, the default is US (United States).

To apply alternative locales to different phones, you must use per-phone configuration files to build individual configuration files for each phone. The configuration files automatically use the default user-locale 0 and network-locale 0. You can override these defaults for individual phones by configuring alternative locale codes and then creating ephone-templates to assign the locales to individual ephones.

For configuration information, see [Configure Multiple Locales on SCCP Phones, on page 15](#).

## Locale Installer for Cisco Unified SCCP IP Phones

Before Cisco Unified CME 7.0(1), configuring localization required up to 16 steps, most of which were manual and some of which required filename changes. In Cisco Unified CME 7.0(1) and later versions, the following enhancements for installing locales are supported:

- Locale installer that supports a single procedure for all SCCP IP phones.
- Cisco Unified CME parses new firmware-load text files and automatically creates the TFTP aliases for localization, eliminating the requirement for you to manually create up to five aliases for files in the TAR file. To use this feature in Cisco Unified CME 7.0(1), you must use the complete filename, including the file suffix, when you configure the **load** command for phone firmware versions later than version 8-2-2 for all phone types. For example:

```
Router(config-telephony)# load 7941 SCCP41.8-3-3S.loads
```



**Note** In Cisco Unified CME 4.3 and earlier versions, you do not include the file suffix for any phone type except Cisco ATA and Cisco Unified IP Phone 7905 and 7912. For example:

```
Router(config-telephony)# load 7941 SCCP41.8-2-2SR2S
```

- Backward compatibility with the configuration method in Cisco Unified CME 7.0 and earlier versions.

For configuration information, see [Use the Locale Installer in Cisco Unified CME 7.0\(1\) and Later Versions, on page 12](#).

## Locale Installer for Cisco Unified SIP IP Phones

Cisco Unified CME 9.0 and later versions support the following enhancements for installing locales for Cisco Unified SIP IP phones:

- Locale installer that supports a single procedure for all Cisco Unified SIP IP phones.
- New **load** keyword that requires you to use the complete filename, including the file suffix (.tar), when you configure the **user-locale** command for all Cisco Unified SIP IP phone types. The command syntax is **user-locale** [*user-locale-tag*] {[*user-defined-code*] *country-code*} [**load** *TAR-filename*]. For example,

```
Router(config-register-global)#user-locale 2 DE load  
CME-locale-de_DE-German-8.6.3.0.tar
```

With the locale installer, you do not need to perform manual configuration. Instead, you copy the locale file using the **copy** command in privileged EXEC configuration mode.



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**Note** You must copy the locale file into the /its directory (flash:/its or slot0:/its) when you store the locale files on the Cisco Unified CME router.

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For example,

```
Router# copy tftp://12.1.1.100/CME-locale-de_DE-German-8.6.3.0.tar flash:/its
```

For configuration information, see [Use the Locale Installer in Cisco Unified CME 9.0 and Later Versions, on page 22](#).

## Configure Localization Support on SCCP Phones

### Install System-Defined Locales for Cisco Unified IP Phone 6921, 6945, 7906, 7911, 7921, 7931, 7941, 7961, 7970, 7971, and Cisco IP Communicator

Network locale files allow an IP phone to play the proper network tone for the specified country. You must download and install a tone file for the country you want to support.

User locale files allow an IP phone to display the menus and prompts in the specified language. You must download and install JAR files and dictionary files for each language you want to support.

To download and install locale files for system-defined locales, perform the following steps.



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**Tip** The locale installer simplifies the installation and configuration of system- and user-defined locales in Cisco Unified CME 7.0(1) and later versions. To use the locale installer in Cisco Unified CME 7.0(1) and later versions, see [Use the Locale Installer in Cisco Unified CME 7.0\(1\) and Later Versions, on page 12](#).

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**Restriction**

- Localization is not supported for SIP phones.
- Phone firmware, configuration files, and locale files must be in the same directory, except the directory file for Japanese and Russian, which must be in flash memory.

**Before you begin**

- Cisco Unified CME 4.0(2) or a later version.
- You must create per-phone configuration files as described in [Define Per-Phone Configuration Files and Alternate Location for SCCP Phones](#).
- You must have an account on Cisco.com to download locale files.

**Step 1** Go to <http://www.cisco.com/cgi-bin/tablebuild.pl/CME-Locale>.

You must have an account on Cisco.com to access the Software Download Center. If you do not have an account or if you have forgotten your username or password, click the appropriate button at the login dialog box and follow the instructions that appear.

**Step 2** Navigate to **Downloads Home > Products > Unified Communications > Call Control > Mid-Market Call Control > Cisco Unified Communications Manager Express > Unified Communications Manager Express Individual File Set** and select your version of Cisco Unified CME.

**Step 3** Select the TAR file for the locale you want to install. Each TAR file contains locale files for a specific language and country and uses the following naming convention: *CME-locale-language\_country-CMEversion*

**Example:**

For example, CME-locale-de\_DE-4.0.2-2.0 is German for Germany for Cisco Unified CME 4.0(2).

**Step 4** Download the TAR file to a TFTP server that is accessible to the Cisco Unified CME router. Each file contains all the firmware required for all phone types supported by that version of Cisco Unified CME.

**Step 5** Use the **archive tar** command to extract the files to flash memory, slot 0, or an external TFTP server.

**Example:**

```
Router# archive tar /xtract source-urlflash:/file-url
```

**Example:**

For example, to extract the contents of CME-locale-de\_DE-4.0.2-2.0.tar from TFTP server 192.168.1.1 to router flash memory, use this command:

```
Router# archive tar /xtract tftp://192.168.1.1/cme-locale-de_DE-4.0.2-2.0.tar
flash:
```

**Step 6** See [Table 2: Phone-Type Codes for Locale JAR Files, on page 7](#) and [Table 3: System-Defined User and Network Locales, on page 7](#) for a description of the codes used in the filenames and the list of supported directory names.

Each phone type has a JAR file that uses the following naming convention:

*language-phone-sccp.jar*

**Example:**

For example, de-td-sccp.jar is for German on the Cisco Unified IP Phone 7970.

Each TAR file also includes the file g3-tones.xml for country-specific network tones and cadences.

**Table 2: Phone-Type Codes for Locale JAR Files**

Phone Type	Phone Code
6921	rtl
6945	rtl
7906/7911	tc
7931	gp
7941/7961	mk
7970/7971	td
8941/8945	gh
CIPC	ipc

**Table 3: System-Defined User and Network Locales**

Language	Language Code	User-Locale Directory Name	Country Code	Network-Locale Directory Name
English	en	English_United_States <sup>1</sup>	US	United_States
		English_United_Kingdom	UK	United_Kingdom
			CA	Canada
Danish	dk	Danish_Denmark	DK	Denmark
Dutch	nl	Dutch_Netherlands	NL	Netherlands
French	fr	French_France	FR	France
			CA	Canada
German	de	German_Germany	DE	Germany
			AT	Austria
			CH	Switzerland
Italian	it	Italian_Italy	IT	Italy
Japanese <sup>2</sup>	jp	Japanese_Japan	JP	Japan
Norwegian	no	Norwegian_Norway	NO	Norway
Portuguese	pt	Portuguese_Portugal	PT	Portugal

Language	Language Code	User-Locale Directory Name	Country Code	Network-Locale Directory Name
Russian	ru	Russian_Russia	RU	Russian_Federation
Spanish	es	Spanish_Spain	ES	Spain
Swedish	se	Swedish_Sweden	SE	Sweden

<sup>1</sup> English for the United States is the default language. You do not need to install the JAR file for U.S. English unless you assign a different language to a phone and then want to reassign English.

<sup>2</sup> Katakana is supported by Cisco Unified IP Phone 7905, 7912, 7940, and 7960. Kanji is supported by Cisco Unified IP Phone 7911, 7941, 7961, 7970, and 7971.

**Step 7** If you store the locale files in flash memory or slot 0 on the Cisco Unified CME router, create a TFTP alias for the user locale (text displays) and network locale (tones) using this format:

**Example:**

```
Router(config)# tftp-server flash:/jar_filealias directory_name/td-sccp.jar
```

```
Router(config)# tftp-server flash:/g3-tones.xml aliasdirectory_name/g3-tones.xml
```

Use the appropriate directory name shown in [Table 3: System-Defined User and Network Locales, on page 7](#) and remove the two-letter language code from the JAR file name. For example, the TFTP aliases for German and Germany for the Cisco Unified IP Phone 7970 are:

```
Router(config)# tftp-server flash:/de-td-sccp.jar alias German_Germany/td-sccp.jar
```

```
Router(config)# tftp-server flash:/g3-tones.xml alias Germany/g3-tones.xml
```

**Note** On Cisco 3800 series routers, you must include /its in the directory name (flash:/its or slot0:/its). For example, the TFTP alias for German for the Cisco Unified IP Phone 7970 is: Router# **tftp-server flash:/its/de-td-sccp.jar alias German\_Germany/td-sccp.jar**

**Step 8** If you store the locale files on an external TFTP server, create a directory under the TFTP root directory for each user and network locale.

Use the appropriate directory name shown in [Table 3: System-Defined User and Network Locales, on page 7](#) and remove the two-letter language code from the JAR file name.

**Example:**

For example, the user-locale directory for German and the network-locale directory for Germany for the Cisco Unified IP Phone 7970 are:

TFTP-Root/German\_Germany/td-sccp.jar TFTP-Root/Germany/g3-tones.xml

**Step 9** For Russian and Japanese, you must copy the UTF8 dictionary file into flash memory to use special phrases.

- Only flash memory can be used for these locales. Copy `russian_tags_utf8_phrases` for Russian; `japanese_tags_utf8_phrases` for Japanese.
- Use the **user-locale jp** and **user-locale ru** command to load the UTF8 phrases into Cisco Unified CME.

**Step 10** Assign the locales to phones. To set a default locale for all phones, use the **user-locale** and **network-locale** commands in telephony-service configuration mode.

**Step 11** To support more than one user or network locale, see [Configure Multiple Locales on SCCP Phones, on page 15](#).



**Step 12** Use the **create cnf-files** command to rebuild the configuration files.

**Step 13** Use the **reset** command to reset the phones and see the localized displays.

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## Install User-Defined Locales

You must download XML files for locales that are not predefined in the system. To install up to five user-defined locale files to use with phones, perform the following steps.



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**Note** From Cisco Unified CME 10.5 Release onwards, the System defined locales are deprecated and User-defined locales are recommended. However, the older locale packages can be still used but some phrases may be displayed in English.

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**Restriction**

- User-defined locales are not supported on the Cisco Unified IP Phone 7920 or 7936.
- User-defined locales are not supported if the configuration file location is “system:”.
- When you use the setup tool from the **telephony-service setup** command to provision phones, you can only choose a default user locale and network locale and you are limited to selecting a locale code that is supported in the system. You cannot use multiple locales or user-defined locales with the setup tool.
- When using a user-defined locale, the phone normally displays text using the user-defined fonts, except for any strings that are interpreted by Cisco Unified CME, such as “Cisco/Personal Directory,” “Speed Dial/Fast Dial,” and so forth.

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### Before you begin

- Cisco Unified CME 4.0(3) or a later version.
- You must create per-phone configuration files as described in [Define Per-Phone Configuration Files and Alternate Location for SCCP Phones](#).
- You must have an account on Cisco.com to download locale files.

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**Step 1** Go to <http://www.cisco.com/cgi-bin/tablebuild.pl/CME-Locale>.

You must have an account on Cisco.com to access the Software Download Center. If you do not have an account or if you have forgotten your username or password, click the appropriate button at the login dialog box and follow the instructions that appear.

**Step 2** Navigate to **Downloads Home > Products > Unified Communications > Call Control > Mid-Market Call Control > Cisco Unified Communications Manager Express > Unified Communications Manager Express Individual File Set** and select your version of Cisco Unified CME.

**Step 3** Select the TAR file for the locale that you want to install. Each TAR file contains locale files for a specific language and country and uses the following naming convention: *CME-locale-language\_country-CMEversion-fileversion*.

**Example:**

For example, CME-locale-zh\_CN-4.0.3-2.0 is Traditional Chinese for China for Cisco Unified CME 4.0(3).

**Step 4** Download the TAR file to a TFTP server that is accessible to the Cisco Unified CME router. Each file contains all the firmware required for all phone types supported by that version of Cisco Unified CME.

**Step 5** Use the **archive tar** command to extract the files to slot 0, flash memory, or an external TFTP server.

**Example:**

```
Router# archive tar /xtract source-urlflash://file-url
```

For example, to extract the contents of CME-locale-zh\_CN-4.0.3-2.0.tar from TFTP server 192.168.1.1 to router flash memory, use this command:

```
Router# archive tar /xtract tftp://192.168.1.1/cme-locale-zh_CN-4.0.3-2.0.tar
flash:
```

**Step 6** For Cisco Unified IP Phone 7905, 7912, 7940, or 7960, go to [Step 11, on page 12](#). For Cisco Unified IP Phone 7911, 7941, 7961, 7970, or 7971, go to [Step 7, on page 10](#).

**Step 7** Each phone type has a JAR file that uses the following naming convention: *language-type-sccp.jar*

**Example:**

For example, zh-td-sccp.jar is Traditional Chinese for the Cisco Unified IP Phone 7970.

See [Table 4: Phone-Type Codes for Locale Files, on page 10](#) and [Table 5: Language Codes for User-Defined Locales, on page 10](#) for a description of the codes used in the filenames.

**Table 4: Phone-Type Codes for Locale Files**

Phone Type	Code
6921	rtl
6945	rtl
7906/7911	tc
7931	gp
7941/7961	mk
7970/7971	td
8941/8945	gh
CIPC	ipc

**Table 5: Language Codes for User-Defined Locales**

Language	Language Code
Bulgarian	bg
Chinese	zh <sup>3</sup>
Croatian	hr

Language	Language Code
Czech Republic	cs
Finnish	fi
Greek	el
Hungarian	hu
Korean	ko
Polish	pl
Portugese (Brazil)	pt
Romanian	ro
Serbian	sr
Slovakian	sk
Slovenian	sl
Turkish	tr

<sup>3</sup> For Cisco Unified IP Phone 7931, code for Chinese Simplified is chs; Chinese Traditional is cht.

### Step 8

If you store the locale files in flash memory or slot 0 on the Cisco Unified CME router, create a TFTP alias using this format:

#### Example:

```
Router(config)# tftp-server flash:/jar_filealias directory_name/td-sccp.jar
```

Remove the two-letter language code from the JAR filename and use one of five supported directory names with the following convention:

user\_define\_number, where *number* is 1 to 5

For example, the alias for Chinese on the Cisco Unified IP Phone 7970 is:

```
Router(config)# tftp-server flash:/zh-td-sccp.jar alias user_define_1/td-sccp.jar
```

**Note** On Cisco 3800 series routers, you must include /its in the directory name (flash:/its or slot0:/its). For example, the TFTP alias for Chinese for the Cisco Unified IP Phone 7970 is:

```
Router(config)# tftp-server flash:/its/zh-td-sccp.jar alias user_define_1/td-sccp.jar
```

### Step 9

If you store the locale files on an external TFTP server, create a directory under the TFTP root directory for each locale.

Remove the two-letter language code from the JAR filename and use one of five supported directory names with the following convention:

user\_define\_number, where *number* is 1 to 5

#### Example:

For example, for Chinese on the Cisco Unified IP Phone 7970, remove “zh” from the JAR filename and create the “user\_define\_1” directory under TFTP-Root on the TFTP server:

TFTP-Root/user\_define\_1/td-sccp.jar

**Step 10** Go to [Step 13, on page 12](#).

**Step 11** Download one or more of the following XML files depending on your selected locale and phone type. All required files are included in the JAR file.

**Example:**

```
7905-dictionary.xml
7905-font.xml
7905-kate.xml
7920-dictionary.xml
7960-dictionary.xml
7960-font.xml
7960-kate.xml
7960-tones.xml
SCCP-dictionary.utf-8.xml
SCCP-dictionary.xml
```

**Step 12** Rename these files and copy them to flash memory, slot 0, or an external TFTP server. Rename the files using the format `user_define_number_filename` where *number* is 1 to 5.

**Example:**

For example, use the following names if you are setting up the first user-locale:

```
user_define_1_7905-dictionary.xml
user_define_1_7905-font.xml
user_define_1_7905-kate.xml
user_define_1_7920-dictionary.xml
user_define_1_7960-dictionary.xml
user_define_1_7960-font.xml
user_define_1_7960-kate.xml
user_define_1_7960-tones.xml
user_define_1_SCCP-dictionary.utf-8.xml
user_define_1_SCCP-dictionary.xml
```

**Step 13** Copy the *language\_tags\_file* and *language\_utf8\_tags\_file* to the location of the other locale files (flash memory, slot 0, or TFTP server). Rename the files to `user_define_number_tags_file` and `user_define_number_utf8_tags_file` respectively, where *number* is 1 to 5 and matches the user-defined directory.

**Step 14** Assign the locales to phones. See [Configure Multiple Locales on SCCP Phones, on page 15](#).

**Step 15** Use the **create cnf-files** command to rebuild the configuration files.

**Step 16** Use the **reset** command to reset the phones and see the localized displays.

## Use the Locale Installer in Cisco Unified CME 7.0(1) and Later Versions

To install and configure locale files to use with SCCP phones in Cisco Unified CME, perform the following steps.



**Tip** Cisco Unified CME 7.0(1) provides backward compatibility with the configuration method in Cisco Unified CME 4.3/7.0 and earlier versions. To use the same procedures as you used with earlier versions of Cisco Unified CME, see [Install System-Defined Locales for Cisco Unified IP Phone 6921, 6945, 7906, 7911, 7921, 7931, 7941, 7961, 7970, 7971, and Cisco IP Communicator, on page 5](#).

**Restriction**

- When using an external TFTP server, you must manually create the user locale folders in the root directory. This is a limitation of the TFTP server.
- Locale support is limited to phone firmware versions that are supported by Cisco Unified CME.
- User-defined locales are not supported on the Cisco Unified IP Phone 7920 or 7936.
- User-defined locales are not supported if the configuration file location is system.
- When you use the setup tool from the **telephony-service setup** command to provision phones, you can only choose a default user locale and network locale, and you are limited to selecting a locale code that is supported in the system. You cannot use multiple locales or user-defined locales with the setup tool.
- When using a user-defined locale, the phone normally displays text using the user-defined fonts, except for any strings that are interpreted by Cisco Unified CME, such as “Cisco/Personal Directory,” and “Speed Dial/Fast Dial.”
- If you install and configure a user-defined locale using country codes U1-U5 and then you install a new locale using the same label, the phone retains the original language locale even after the phone is reset. This is a limitation of the IP phone. To work around this limitation, you must configure the new package using a different country code.
- Each user-defined country code (U1-U5) can be used for only one user-locale-tag at a time. For example:

```
Router(config-telephony) # user-locale 2 U2 load Finnish.pkg
Router(config-telephony) # user-locale 1 U2 load Chinese.pkg
LOCALE ERROR: User Defined Locale U2 already exists on locale index 2.
```

**Before you begin**

- Cisco Unified CME 7.0(1) or a later version.
- You must configure Cisco Unified CME for per-phone configuration files. See [Define Per-Phone Configuration Files and Alternate Location for SCCP Phones](#).
- When the storage location specified by the **cnf-file location** command is flash memory, sufficient space must be on the flash file system for extracting the contents of the locale TAR file.
- You must have an account on Cisco.com to download locale files.

**Step 1** Go to <http://www.cisco.com/cgi-bin/tablebuild.pl/CME-Locale>.

You must have an account on Cisco.com to access the Software Download Center. If you do not have an account or have forgotten your username or password, click the appropriate button at the login dialog box and follow the instructions that appear.

**Step 2** Navigate to **Downloads Home > Products > Unified Communications > Call Control > Mid-Market Call Control > Cisco Unified Communications Manager Express > Unified Communications Manager Express Individual File Set** and select your version of Cisco Unified CME.

**Step 3** Select the TAR file for the locale you want to install. Each TAR file contains locale files for a specific language and country and uses the following naming convention: *CME-locale-language\_country-CMEversion*

**Example:**

For example, CME-locale-de\_DE-7.0.1.0 is German for Germany for Cisco Unified CME 7.0(1).

**Step 4**

Download the TAR file to the location previously specified by the **cnf-file location** command. Each file contains all the firmware required for all phone types supported by that version of Cisco Unified CME.

- a) If the cnf-file location is flash memory: Copy the TAR file to the flash:/its directory.
- b) If the cnf-file location is slot0: Copy the TAR file to the slot0:/its directory.
- c) If the cnf-file location is tftp: Create a folder in the root directory of the TFTP server for each locale using the following format and then copy the TAR file to the TFTP-Root folder. **TFTP-Root**/*TAR-filename*

**Example:**

For system-defined locales, use the locale folder name as shown in [Table 6: System-Defined and User-Defined Locales, on page 14](#). For example, create the folder for system-defined German as follows:

**TFTP-Root/de\_DE-7.0.1.0.tar**

For up to five user-defined locales, use the User\_Define\_ *n* folder name as shown in [Table 6: System-Defined and User-Defined Locales, on page 14](#). A user-defined locale is a language other than the system-defined locales that are predefined in Cisco IOS software. For example, create the folder for user-defined locale Chinese (User\_Define\_1) as follows:

**TFTP-Root/CME-locale-zh\_CN-7.0.1.0.tar**

**Note** For a list of user-defined languages supported in Cisco Unified CME, see [Cisco Unified CME Localization Matrix](#).

**Table 6: System-Defined and User-Defined Locales**

Language	Locale Folder Name	Country Code
English	English_United_States	US
	English_United_Kingdom	UK
		CA
Danish	Danish_Denmark	DK
Dutch	Dutch_Netherlands	NL
French	French_France	FR
		CA
German	German_Germany	DE
		AT
		CH
Italian	Italian_Italy	IT
Japanese <sup>4</sup>	Japanese_Japan	JP
Norwegian	Norwegian_Norway	NO

Language	Locale Folder Name	Country Code
Portuguese	Portuguese_Portugal	PT
Russian	Russian_Russia	RU
Spanish	Spanish_Spain	ES
Swedish	Swedish_Sweden	SE
Un <sup>5</sup>	User_Define_n <sup>2</sup>	Un <sup>2</sup>

<sup>4</sup> Katakana is supported by Cisco Unified IP Phone 7905, 7912, 7940, and 7960. Kanji is supported by Cisco Unified IP Phone 7911, 7941, 7961, 7970, and 7971.

<sup>5</sup> Where “n” is a number from 1 to 5.

**Step 5** Use the **user-locale** [*user-locale-tag*] *country-code***load** *TAR-filename* command in telephony-service configuration mode to extract the contents of the TAR file. For country codes, see [Table 6: System-Defined and User-Defined Locales, on page 14](#).

**Example:**

For example, to extract the contents of the CME-locale-zh\_CN-7.0.1.0.tar file when U1 is the country code for user-defined locale Chinese (User\_Define\_1), use this command:

```
Router (telephony-service)# user-locale U1 load CME-locale-zh_CN-7.0.1.0.tar
```

**Step 6** Assign the locales to phones. See [Configure Multiple Locales on SCCP Phones, on page 15](#).

**Step 7** Use the **create cnf-files** command to rebuild the configuration files.

**Step 8** Use the **reset** command to reset the phones and see the localized displays.

## Verify User-Defined Locales

See [Verify Multiple Locales on SCCP Phones, on page 19](#).

## Configure Multiple Locales on SCCP Phones

To define one or more alternatives to the default user and network locales and apply them to individual phones, perform the following steps.



**Restriction**

- Multiple user and network locales are not supported on the Cisco Unified IP Phone 7902G, 7910, 7910G, or 7920, or the Cisco Unified IP Conference Stations 7935 and 7936.
- When you use the setup tool from the **telephony-service setup** command to provision phones, you can only choose a default user locale and network locale and you must select a locale code that is predefined in the system. You cannot use multiple or user-defined locales with the setup tool.

**Before you begin**

- Cisco Unified CME 4.0 or a later version.
- To specify alternative user and network locales for individual phones in a Cisco Unified CME system, you must use per-phone configuration files. For more information, see [Define Per-Phone Configuration Files and Alternate Location for SCCP Phones](#).
- You can also use user-defined locale codes as alternative locales after you download the appropriate XML files. See [Install User-Defined Locales, on page 9](#).

**SUMMARY STEPS**

1. **enable**
2. **configure terminal**
3. **telephony-service**
4. **user-locale** *[user-locale-tag]* { *[user-defined-code]* *country-code* }
5. **network-locale** *network-locale-tag* *[user-defined-code]* *country-code*
6. **create cnf-files**
7. **exit**
8. **ephone-template** *template-tag*
9. **user-locale** *user-locale-tag*
10. **network-locale** *network-locale-tag*
11. **exit**
12. **ephone** *phone-tag*
13. **ephone-template** *template-tag*
14. **exit**
15. **telephony-service**
16. **reset** { **all** *[time-interval]* | **cancel** | **mac-address** *mac-address* | **sequence-all** }
17. **end**

**DETAILED STEPS**

	Command or Action	Purpose
<b>Step 1</b>	<b>enable</b> <b>Example:</b> Router> enable	Enables privileged EXEC mode.  • Enter your password if prompted.
<b>Step 2</b>	<b>configure terminal</b> <b>Example:</b> Router# configure terminal	Enters global configuration mode.
<b>Step 3</b>	<b>telephony-service</b> <b>Example:</b> Router(config)# telephony-service	Enters telephony-service configuration mode.
<b>Step 4</b>	<b>user-locale</b> <i>[user-locale-tag]</i> { <i>[user-defined-code]</i> <i>country-code</i> }	Specifies a language for phone displays.



	Command or Action	Purpose
	<p><b>Example:</b></p> <pre>Router(config-telephony)# user-locale 1 U1 ZH</pre>	<ul style="list-style-type: none"> <li>• <i>user-locale-tag</i>—Assigns a locale identifier to the locale. Range is 0 to 4. Default: 0. This argument is required when defining some locale other than the default (0).</li> <li>• <i>user-defined-code</i>—(Optional) Assigns one of the user-defined codes to the specified country code. Valid codes are <b>U1, U2,U3, U4, and U5</b>.</li> <li>• <i>country-code</i>—Type <b>?</b> to display a list of system-defined codes. Default: US (United States). You can assign any valid ISO 639 code to a user-defined code (U1 to U5).</li> </ul>
<b>Step 5</b>	<p><b>network-locale</b> <i>network-locale-tag</i> [<i>user-defined-code</i>] <i>country-code</i></p> <p><b>Example:</b></p> <pre>Router(config-telephony)# network-locale 1 FR</pre>	<p>Specifies a country for tones and cadences.</p> <ul style="list-style-type: none"> <li>• <i>network-locale-tag</i>—Assigns a locale identifier to the country code. Range is 0 to 4. Default: 0. This argument is required when defining some locale other than the default (0).</li> <li>• <i>user-defined-code</i>—(Optional) Assigns one of the user-defined codes to the specified country code. Valid codes are <b>U1, U2,U3, U4, and U5</b>.</li> <li>• <i>country-code</i>—Type <b>?</b> to display a list of system-defined codes. Default: US (United States). You can assign any valid ISO 3166 code to a user-defined code (U1 to U5).</li> </ul>
<b>Step 6</b>	<p><b>create cnf-files</b></p> <p><b>Example:</b></p> <pre>Router(config-telephony)# create cnf-files</pre>	<p>Builds the required XML configuration files for IP phones. Use this command after you update configuration file parameters such as the user locale or network locale.</p>
<b>Step 7</b>	<p><b>exit</b></p> <p><b>Example:</b></p> <pre>Router(config-telephony)# exit</pre>	<p>Exits telephony-service configuration mode.</p>
<b>Step 8</b>	<p><b>ephone-template</b> <i>template-tag</i></p> <p><b>Example:</b></p> <pre>Router(config)# ephone template 1</pre>	<p>Enters ephone-template configuration mode.</p> <ul style="list-style-type: none"> <li>• <i>template-tag</i>—Unique sequence number that identifies this template during configuration tasks.</li> </ul>
<b>Step 9</b>	<p><b>user-locale</b> <i>user-locale-tag</i></p> <p><b>Example:</b></p> <pre>Router(config-ephone-template)# user-locale 2</pre>	<p>Assigns a user locale to this ephone template.</p> <ul style="list-style-type: none"> <li>• <i>user-locale-tag</i>—A locale tag that was created in <a href="#">Step 4, on page 16</a>. Range is 0 to 4.</li> </ul>
<b>Step 10</b>	<p><b>network-locale</b> <i>network-locale-tag</i></p> <p><b>Example:</b></p>	<p>Assigns a network locale to this ephone template.</p>

	Command or Action	Purpose
	Router(config-ephone-template)# network-locale 2	<ul style="list-style-type: none"> <li><i>network-locale-tag</i>—A locale tag that was created in <a href="#">Step 5, on page 17</a>. Range is 0 to 4.</li> </ul>
<b>Step 11</b>	<b>exit</b> <b>Example:</b> Router(config-ephone-template)# exit	Exits ephone-template configuration mode.
<b>Step 12</b>	<b>ephone <i>phone-tag</i></b> <b>Example:</b> Router(config)# ephone 36	Enters ephone configuration mode. <ul style="list-style-type: none"> <li><i>phone-tag</i>—Unique sequence number that identifies this ephone during configuration tasks.</li> </ul>
<b>Step 13</b>	<b>ephone-template <i>template-tag</i></b> <b>Example:</b> Router(config-ephone)# ephone-template 1	Applies an ephone template to an ephone. <ul style="list-style-type: none"> <li><i>template-tag</i>—Number of the template to apply to this ephone.</li> </ul>
<b>Step 14</b>	<b>exit</b> <b>Example:</b> Router(config-ephone)# exit	Exits ephone configuration mode.
<b>Step 15</b>	<b>telephony-service</b> <b>Example:</b> Router(config)# telephony-service	Enters telephony-service configuration mode.
<b>Step 16</b>	<b>reset {all [<i>time-interval</i>]   cancel   mac-address <i>mac-address</i>   sequence-all}</b> <b>Example:</b> Router(config-telephony)# reset all	Performs a complete reboot of all phones or the specified phone, including contacting the DHCP and TFTP servers for the latest configuration information. <ul style="list-style-type: none"> <li><b>all</b>—All phones in the Cisco Unified CME system.</li> <li><i>time-interval</i>—(Optional) Time interval, in seconds, between each phone reset. Range is 0 to 60. Default is 15.</li> <li><i>cancel</i>—Interrupts a sequential reset cycle that was started with a <b>reset sequence-all</b> command.</li> <li><b>mac-address <i>mac-address</i></b>—A specific phone.</li> <li><b>sequence-all</b>—Resets all phones in strict one-at-a-time order by waiting for one phone to reregister before starting the reset for the next phone.</li> </ul>
<b>Step 17</b>	<b>end</b> <b>Example:</b> Router(config-telephony)# end	Returns to privileged EXEC mode.

## Verify Multiple Locales on SCCP Phones

**Step 1** Use the **show telephony-service tftp-bindings** command to display a list of configuration files that are accessible to IP phones using TFTP, including the dictionary, language, and tone configuration files.

**Example:**

```
Router(config)# show telephony-service tftp-bindings

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 2** Ensure that per-phone configuration files are defined with the **cnf-file perphone** command.

**Step 3** Use the **show telephony-service ephone-template** command to check the user locale and network locale settings in each ephone template.

**Step 4** Use the **show telephony-service ephone** command to check that the correct templates are applied to phones.

**Step 5** If the configuration file location is not TFTP, use the **debug tftp events** command to see which files Cisco Unified CME is looking for and whether the files are found and opened correctly. There are usually three states (“looking for x file,” “opened x file,” and “finished x file”). The file is found when all three states are displayed. For an external TFTP server you can use the logs from the TFTP server.

## Configure Localization Support on SIP Phones

### Install System-Defined Locales for Cisco Unified IP Phone 8961, 9951, and 9971

Network locale files allow an IP phone to play the proper network tone for the specified country. You must download and install a tone file for the country you want to support.

User locale files allow an IP phone to display the menus and prompts in the specified language. You must download and install JAR files and dictionary files for each language you want to support.

To download and install locale files for system-defined locales, perform the following steps.



---

**Restriction** Phone firmware, configuration files, and locale files must be in the same directory.

---

#### Before you begin

- Cisco Unified CME 8.6 or a later version. For Cisco Unified IP Phone 9971, Cisco Unified CME 8.8 or a later version.

- You must have an account on Cisco.com to download locale files.

**Step 1** Go to <http://www.cisco.com/cgi-bin/tablebuild.pl/CME-Locale>.

You must have an account on Cisco.com to access the Software Download Center. If you do not have an account or if you have forgotten your username or password, click the appropriate button at the login dialog box and follow the instructions that appear.

**Step 2** Navigate to **Downloads Home > Products > Unified Communications > Call Control > Mid-Market Call Control > Cisco Unified Communications Manager Express > Unified Communications Manager Express Individual File Set** and select your version of Cisco Unified CME.

**Step 3** Select the TAR file for the locale you want to install. Each TAR file contains locale files for a specific language and country and uses the following naming convention: *CME-locale-language\_country-CMEversion*

**Example:**

For example, CME-locale-de\_DE-8.6 is German for Germany for Cisco Unified CME 8.6.

**Step 4** Download the TAR file to a TFTP server that is accessible to the Cisco Unified CME router. Each file contains all the firmware required for all phone types supported by that version of Cisco Unified CME.

**Step 5** Use the **archive tar** command to extract the files to flash memory, slot 0, or an external TFTP server.

**Example:**

```
Router# archive tar /xtract source-urlflash://file-url
```

For example, to extract the contents of CME-locale-de\_DE-8.6.tar from TFTP server 192.168.1.1 to router flash memory, use this command:

```
Router# archive tar /xtract tftp://192.168.1.1/cme-locale-de_DE-8.6.tar flash:
```

**Step 6** See [Table 7: Phone-Type Codes for Locale JAR Files, on page 20](#) and [Table 8: System-Defined User and Network Locales, on page 21](#) for a description of the codes used in the filenames and the list of supported directory names.

Each phone type has a JAR file that uses the following naming convention:

*language-phone-sip.jar*

**Example:**

For example, de-gh-sip.jar is for German on the Cisco Unified IP Phone 8961.

Each TAR file also includes the file g4-tones.xml for country-specific network tones and cadences.

**Table 7: Phone-Type Codes for Locale JAR Files**

Phone Type	Phone Code
3905	cin
6941	rtl
6945	rtl
8961	gh
9951	gd

Phone Type	Phone Code
9971	gd

Table 8: System-Defined User and Network Locales

Language	Language Code	User-Locale Directory Name	Country Code	Network-Locale Directory Name
English	en	English_United_States <sup>6</sup>	US	United_States
			UK	United_Kingdom
			GB	United_Kingdom
			CA	Canada
			AU	Australia
Danish	dk	Danish_Denmark	DK	Denmark
Dutch	nl	Dutch_Netherlands	NL	Netherlands
French	fr	French_France	FR	France
			CA	Canada
German	de	German_Germany	DE	Germany
			AT	Austria
			CH	Switzerland
Italian	it	Italian_Italy	IT	Italy
Japanese	jp	Japanese_Japan	JP	Japan
Norwegian	no	Norwegian_Norway	NO	Norway
Portuguese	pt	Portuguese_Portugal	PT	Portugal
Russian	ru	Russian_Russia	RU	Russian_Federation
Spanish	es	Spanish_Spain	ES	Spain
Swedish	se	Swedish_Sweden	SE	Sweden

<sup>6</sup> English for the United States is the default language. You do not need to install the JAR file for U.S. English unless you assign a different language to a phone and then want to reassigned English.

**Step 7**

If you store the locale files in flash memory or slot 0 on the Cisco Unified CME router, create a TFTP alias for the user locale (text displays) and network locale (tones) using this format:

**Example:**

```
Router(config)# tftp-server flash:/jar_filealias directory_name/gh-sip.jar
Router(config)# tftp-server flash:/g4-tones.xml aliasdirectory_name/g4-tones.xml
```

Use the appropriate directory name shown in [Table 7: Phone-Type Codes for Locale JAR Files, on page 20](#) and remove the two-letter language code from the JAR file name.

For example, the TFTP aliases for German and Germany for the Cisco Unified IP Phone 8961 are:

```
Router(config)# tftp-server flash:/de-gh-sip.jar alias German_Germany/
Router(config)# tftp-server flash:/g4-tones.xml alias Germany/g4-tones.xml
```

**Step 8** If you store the locale files on an external TFTP server, create a directory under the TFTP root directory for each user and network locale.

Use the appropriate directory name shown in [Table 7: Phone-Type Codes for Locale JAR Files, on page 20](#) and remove the two-letter language code from the JAR file name.

**Example:**

For example, the user-locale directory for German and the network-locale directory for Germany for the Cisco Unified IP Phone 8961 are:

TFTP-Root/German\_Germany/gh-sip.jar TFTP-Root/Germany/g4-tones.xml

**Step 9** Assign the locales to the phones. To set a default locale for all phones, use the **user-locale** and **network-locale** commands in voice register global configuration mode.

**Step 10** To support more than one user or network locale, see [Verify Multiple Locales on SIP Phones, on page 28](#).

**Step 11** Use the **create profile** command to rebuild the configuration files.

**Step 12** Use the **reset** command to reset the phones and see the localized displays.

## Use the Locale Installer in Cisco Unified CME 9.0 and Later Versions



**Restriction**

- When using an external TFTP server, you must manually create the user locale folders in the root directory. This is a limitation of the TFTP server.
- Locale support is limited to phone firmware versions that are supported by Cisco Unified CME.
- User-defined locales are not supported if the configuration file location is “system:”.
- If you install and configure a user-defined locale using country codes U1-U5 and then you install a new locale using the same label, the phone retains the original language locale even after the phone is reset. This is a limitation of the IP phone. To work around this limitation, you must configure the new package using a different country code.
- Each user-defined country code (U1-U5) can be used for only one user-locale-tag at a time. For example:

```
Router(config-register-global)# user-locale 2 U2 load Finnish.pkg
Router(config-register-global)# user-locale 1 U2 load Chinese.pkg
LOCALE ERROR: User Defined Locale U2 already exists on locale index 2.
```

### Before you begin

- Cisco Unified CME 9.0(1) or a later version.
- When the storage location specified by the **cnf-file location** command is flash memory, sufficient space must be on the flash file system for extracting the contents of the locale TAR file.
- You must have an account on Cisco.com to download locale files.

**Step 1** Go to <http://www.cisco.com/cgi-bin/tablebuild.pl/CME-Locale>

You must have an account on Cisco.com to access the Software Download Center. If you do not have an account or have forgotten your username or password, click the appropriate button at the login dialog box and follow the instructions that appear.

**Step 2** Navigate to **Downloads Home > Products > Unified Communications > Call Control > Mid-Market Call Control > Cisco Unified Communications Manager Express > Unified Communications Manager Express Individual File Set** and select your version of Cisco Unified CME.

**Step 3** Select the TAR file for the locale you want to install. Each TAR file contains locale files for a specific language and country and uses the following naming convention: *CME-locale-language\_country-CMEversion.tar*

**Example:**

For example, *CME-locale-de\_DE-German-8.6.3.0.tar* is German for Germany for Cisco Unified CME 9.0.

**Step 4** Download the TAR file to the location previously specified by the **cnf-file location** command. Each file contains all the firmware required for all phone types supported by that version of Cisco Unified CME.

With the locale installer, you do not need to perform manual configuration. Instead, you copy the locale file using the **copy** command in privileged EXEC configuration mode.

**Note** You must copy the locale file into the /its directory (flash:/its or slot0:/its) when you store the locale files on the Cisco Unified CME router.

a) If the **cnf-file location** is flash memory: Copy the TAR file to the flash:/its directory.

**Example:**

For example,

```
Router# copy tftp://12.1.1.100/CME-locale-de_DE-German-8.6.3.0.tar flash:/its
```

b) If the **cnf-file location** is slot0: Copy the TAR file to the slot0:/its directory.

c) If the **cnf-file location** is tftp: Create a folder in the root directory of the TFTP server for each locale using the following format and then copy the TAR file to the TFTP-Root folder.

**Example:**

```
TFTP-Root/TAR-filename
```

For system-defined locales, use the locale folder name as shown in [Table 9: System-Defined and User-Defined Locales](#), on page 24. For example, create the folder for system-defined German as follows:

```
TFTP-Root/de_DE-8.6.3.0.tar
```

For up to five user-defined locales, use the User\_Define\_ *n* folder name as shown in [Table 9: System-Defined and User-Defined Locales](#), on page 24. A user-defined locale is a language other than the system-defined locales that are predefined in Cisco IOS software. For example, create the folder for user-defined locale Chinese (User\_Define\_1) as follows:

**TFTP-Root/CME-locale-zh\_CN-Chinese-8.6.3.0.tar**

**Note** For a list of user-defined languages supported in Cisco Unified CME, see Cisco Unified CME Localization Matrix.

**Table 9: System-Defined and User-Defined Locales**

Language	Locale Folder Name	Country Code
English	English_United_States	US
	English_United_Kingdom	UK
		CA
Danish	Danish_Denmark	DK
Dutch	Dutch_Netherlands	NL
French	French_France	FR
		CA
German	German_Germany	DE
		AT
		CH
Italian	Italian_Italy	IT
Japanese	Japanese_Japan	JP
Norwegian	Norwegian_Norway	NO
Portuguese	Portuguese_Portugal	PT
Russian	Russian_Russia	RU
Spanish	Spanish_Spain	ES
Swedish	Swedish_Sweden	SE
Un <sup>7</sup>	User_Define_ <i>n</i> <sup>1</sup>	Un <sup>1</sup>

<sup>7</sup> Where “n” is a number from 1 to 5.

**Step 5** Use the **user-locale** [*user-locale-tag*] {[*user-defined-code*]*country-code*} [**load** *TAR-filename*] command in voice register global configuration mode to extract the contents of the TAR file. For country codes, see [Table 9: System-Defined and User-Defined Locales](#), on page 24.



**Note** Use the complete filename, including the file suffix (.tar), when you configure the **user-locale** command for all Cisco Unified SIP IP phone types.

**Example:**

For example, to extract the contents of the CME-locale-zh\_CN-Chinese-8.6.3.0.tar file when U1 is the country code for user-defined locale Chinese (User\_Define\_1), use this command:

```
Router(config-register-global)# user-locale U1 load CME-locale-zh_CN-Chinese-8.6.3.0.tar
```

- Step 6** Assign the locales to the phones. See [Configure Multiple Locales on SIP Phones, on page 25](#).
- Step 7** Use the **create profile** command in voice register global configuration mode to generate the configuration profile files required for Cisco Unified SIP IP phones.
- Step 8** Use the **reset** command to reset the phones and see the localized displays.

## Configure Multiple Locales on SIP Phones

To define one or more alternatives to the default user and network locales and apply them to individual phones, perform the following steps.



**Restriction**

- Multiple user and network locales are supported only on Cisco Unified IP Phone 8961, 9951, and 9971.

### Before you begin

- Cisco Unified CME 8.6 or a later version. For Cisco Unified IP Phone 9971, Cisco Unified CME 8.8 or a later version.
- To specify alternative user and network locales for individual phones in a Cisco Unified CME system, you must use per-phone configuration files. For more information, see [Install System-Defined Locales for Cisco Unified IP Phone 6921, 6945, 7906, 7911, 7921, 7931, 7941, 7961, 7970, 7971, and Cisco IP Communicator, on page 5](#).

### SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **voice register global**
4. **user-locale** *[user-locale-tag]* { *[user-defined-code]* *country-code* }
5. **network-locale** *network-locale-tag* *[user-defined-code]* *country-code*
6. **create profile**
7. **exit**
8. **voice register template** *template-tag*
9. **user-locale** *user-locale-tag*
10. **network-locale** *network-locale-tag*
11. **exit**

12. **voice register pool** *pool-tag*
13. **voice register template** *template-tag*
14. **exit**
15. **voice register global**
16. **reset**
17. **end**

## DETAILED STEPS

	Command or Action	Purpose
<b>Step 1</b>	<b>enable</b> <b>Example:</b> Router> enable	Enables privileged EXEC mode. <ul style="list-style-type: none"><li>• Enter your password if prompted.</li></ul>
<b>Step 2</b>	<b>configure terminal</b> <b>Example:</b> Router# configure terminal	Enters global configuration mode.
<b>Step 3</b>	<b>voice register global</b> <b>Example:</b> Router(config)#voice register global	Enters voice register global configuration mode to set parameters for all supported SIP phones in Cisco Unified CME.
<b>Step 4</b>	<b>user-locale</b> [ <i>user-locale-tag</i> ] { [ <i>user-defined-code</i> ] <i>country-code</i> } <b>Example:</b> Router(config-register-global)# user-locale 1 DE	Specifies a language for phone displays. <ul style="list-style-type: none"><li>• <i>user-locale-tag</i>—Assigns a locale identifier to the locale. Range is 0 to 4. Default: 0. This argument is required when defining some locale other than the default (0).</li><li>• <i>country-code</i>—Type ? to display a list of system-defined codes. Default: US (United States).</li></ul>
<b>Step 5</b>	<b>network-locale</b> <i>network-locale-tag</i> [ <i>user-defined-code</i> ] <i>country-code</i> <b>Example:</b> Router(config-register-global)# network-locale 1 FR	Specifies a country for tones and cadences. <ul style="list-style-type: none"><li>• <i>network-locale-tag</i>—Assigns a locale identifier to the country code. Range is 0 to 4. Default: 0. This argument is required when defining some locale other than the default (0).</li><li>• <i>country-code</i>—Type ? to display a list of system-defined codes. Default: US (United States). You can assign any valid ISO 3166 code to a user-defined code (U1 to U5).</li></ul>
<b>Step 6</b>	<b>create profile</b> <b>Example:</b> 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.

	Command or Action	Purpose
<b>Step 7</b>	<b>exit</b> <b>Example:</b> Router(config-telephony)# exit	Exits voice register global configuration mode.
<b>Step 8</b>	<b>voice register template <i>template-tag</i></b> <b>Example:</b> Router(config)voice register template 10	Enters voice register template configuration mode to define a template of common parameters for SIP phones in Cisco Unified CME. <ul style="list-style-type: none"> <li>• Range— 1 to 10.</li> </ul>
<b>Step 9</b>	<b>user-locale <i>user-locale-tag</i></b> <b>Example:</b> Router(config-ephone-template)# user-locale 2	Assigns a user locale to this ephone template. <ul style="list-style-type: none"> <li>• <i>user-locale-tag</i>—A locale tag that was created in <a href="#">Step 4, on page 26</a>. Range is 0 to 4.</li> </ul>
<b>Step 10</b>	<b>network-locale <i>network-locale-tag</i></b> <b>Example:</b> Router(config-ephone-template)# network-locale 2	Assigns a network locale to this ephone template. <ul style="list-style-type: none"> <li>• <i>network-locale-tag</i>—A locale tag that was created in <a href="#">Step 5, on page 26</a>. Range is 0 to 4.</li> </ul>
<b>Step 11</b>	<b>exit</b> <b>Example:</b> Router(config-ephone-template)# exit	Exits voice register template configuration mode.
<b>Step 12</b>	<b>voice register pool <i>pool-tag</i></b> <b>Example:</b> Router(config)#voice register pool 5	Enters voice register pool configuration mode to set phone-specific parameters for a SIP phone.
<b>Step 13</b>	<b>voice register template <i>template-tag</i></b> <b>Example:</b> Router(config)voice register template 10	Enters voice register template configuration mode to define a template of common parameters for SIP phones in Cisco Unified CME. <ul style="list-style-type: none"> <li>• Range— 1 to 10.</li> </ul>
<b>Step 14</b>	<b>exit</b> <b>Example:</b> Router(config-ephone)# exit	Exits voice register template configuration mode.
<b>Step 15</b>	<b>voice register global</b> <b>Example:</b> Router(config)#voice register global	Enters voice register global configuration mode to set parameters for all supported SIP phones in Cisco Unified CME.
<b>Step 16</b>	<b>reset</b> <b>Example:</b> Router(config-register-global)# reset	Performs a complete reboot of all phones or the specified phone, including contacting the DHCP and TFTP servers for the latest configuration information.

	Command or Action	Purpose
Step 17	<b>end</b>  <b>Example:</b> Router(config-register-global)# end	Returns to privileged EXEC mode.

## Verify Multiple Locales on SIP Phones

**Step 1** Use the **show voice register tftp-bind** command to display a list of configuration files that are accessible to IP phones using TFTP, including the dictionary, language, and tone configuration files.

**Example:**

```
Router#sh voice register tftp-bind
 tftp-server syncinfo.xml url system:/cme/sipphone/syncinfo.xml
 tftp-server SIPDefault.cnf url system:/cme/sipphone/SIPDefault.cnf
 tftp-server softkeyDefault_kpml.xml url system:/cme/sipphone/softkeyDefault_kpml
.xml
 tftp-server softkeyDefault.xml url system:/cme/sipphone/softkeyDefault.xml
 tftp-server softkey2_kpml.xml url system:/cme/sipphone/softkey2_kpml.xml
 tftp-server softkey2.xml url system:/cme/sipphone/softkey2.xml
 tftp-server featurePolicyDefault.xml url system:/cme/sipphone/featurePolicyDefault.xml
 tftp-server featurePolicy2.xml url system:/cme/sipphone/featurePolicy2.xml
 tftp-server SEPACA016FDC1BD.cnf.xml url system:/cme/sipphone/SEPACA016FDC1BD.cnf
.xml
```

**Step 2** Use the **show voice register template all** command to check the user locale and network locale settings in each ephone template.

**Step 3** Use the **show voice register pool all** command to check that the correct templates are applied to phones.

**Step 4** If the configuration file location is not TFTP, use the **debug tftp events** command to see which files Cisco Unified CME is looking for and whether the files are found and opened correctly. There are usually three states (“looking for x file,” “opened x file,” and “finished x file”). The file is found when all three states are displayed. For an external TFTP server, you can use the logs from the TFTP server.

## Configuration Examples for Localization

### Example for Configuring Multiple User and Network Locales

The following example sets the default locale of 0 to Germany, which defines Germany as the default user and network locale. Germany is used for all phones unless you apply a different locale to individual phones using ephone templates.

```
telephony service
 cnf-file location flash:
 cnf-file perphone
 user-locale 0 DE
 network-locale 0 DE
```

After using the previous commands to define Germany as the default user and network locale, use the following commands to return the default value of 0 to US:

```
telephony service
  no user-locale 0 DE
  no network-locale 0 DE
```

Another way to define Germany as the default user and network locale is to use the following commands:

```
telephony service
  cnf-file location flash:
  cnf-file perphone
  user-locale DE
  network-locale DE
```

After using the previous commands, use the following commands to return the default to US:

```
telephony service
  no user-locale DE
  no network-locale DE
```

The following example defines three alternative locales: JP (Japan), FR (France), and ES (Spain). The default is US for all phones that do not have an alternative applied using ephone templates. In this example, ephone 11 uses JP for its locales, ephone 12 uses FR, ephone 13 uses ES, and ephone 14 uses the default, US.

```
telephony-service
  cnf-file location flash:
  cnf-file perphone
  create cnf-files
  user-locale 1 JP
  user-locale 2 FR
  user-locale 3 ES
  network-locale 1 JP
  network-locale 2 FR
  network-locale 3 ES
  create cnf-files

  ephone-template 1
  user-locale 1
  network-locale 1

  ephone-template 2
  user-locale 2
  network-locale 2

  ephone-template 3
  user-locale 3
  network-locale 3

  ephone 11
  button 1:25
  ephone-template 1

  ephone 12
  button 1:26
  ephone-template 2

  ephone 13
  button 1:27
  ephone-template 3

  ephone 14
  button 1:28
```

## Example for Configuring User-Defined Locales

The following example shows user-locale tag 1 assigned to code U1, which is defined as ZH for Traditional Chinese. Traditional Chinese is not predefined in the system so you must download the appropriate XML files to support this language.

In this example, ephone 11 uses Traditional Chinese (ZH) and ephone 12 uses the default, US English. The default is US English for all phones that do not have an alternative applied using ephone templates.

```
telephony-service
  cnf-file location flash:
  cnf-file perphone
  user-locale 1 U1 ZH
  network-locale 1 U1 CN

ephone-template 2
  user-locale 1
  network-locale 1

ephone 11
  button 1:25
  ephone-template 2

ephone 12
  button 1:26
```

## Example for Configuring Chinese as the User-Defined Locale

The following is a sample output from the **user-locale** command when you configure the Chinese language as the user-defined locale in Cisco Unified CME:

```
Router(config-register-global)# user-locale U1 load chinese.pkg
Updating CNF files

LOCALE INSTALLER MESSAGE: VER:1
LOCALE INSTALLER MESSAGE: Langcode:zh
LOCALE INSTALLER MESSAGE: Language:Chinese
LOCALE INSTALLER MESSAGE: Filename: 7905-dictionary.xml
LOCALE INSTALLER MESSAGE: Filename: 7905-font.xml
LOCALE INSTALLER MESSAGE: Filename: 7905-kate.xml
LOCALE INSTALLER MESSAGE: Filename: 7960-tones.xml
LOCALE INSTALLER MESSAGE: Filename: mk-sccp.jar
LOCALE INSTALLER MESSAGE: Filename: td-sccp.jar
LOCALE INSTALLER MESSAGE: Filename: tc-sccp.jar
LOCALE INSTALLER MESSAGE: Filename: 7921-font.dat
LOCALE INSTALLER MESSAGE: Filename: 7921-kate.utf-8.xml
LOCALE INSTALLER MESSAGE: Filename: 7921-kate.xml
LOCALE INSTALLER MESSAGE: Filename: SCCP-dictionary.utf-8.xml
LOCALE INSTALLER MESSAGE: Filename: SCCP-dictionary.xml
LOCALE INSTALLER MESSAGE: Filename: SCCP-dictionary-ext.xml
LOCALE INSTALLER MESSAGE: Filename: 7921-dictionary.xml
LOCALE INSTALLER MESSAGE: Filename: g3-tones.xml
LOCALE INSTALLER MESSAGE: Filename: utf8_tags_file
LOCALE INSTALLER MESSAGE: Filename: tags_file
LOCALE INSTALLER MESSAGE: New Locale configured

Processing file:flash:/its/user_define_1_tags_file

Processing file:flash:/its/user_define_1_utf8_tags_file
```

```
CNF-FILES: Clock is not set or synchronized, retaining old versionStamps
CNF files updating complete
```

## Example for Configuring Swedish as the System-Defined Locale

The following is a sample output from the **user-locale** command when you configure the Swedish language as the system-defined locale in Cisco Unified CME:

```
Router(config-register-global)# user-locale SE load swedish.pkg
Updating CNF files

LOCALE INSTALLER MESSAGE: VER:1
LOCALE INSTALLER MESSAGE: Langcode:se
LOCALE INSTALLER MESSAGE: Language:swedish
LOCALE INSTALLER MESSAGE: Filename: g3-tones.xml
LOCALE INSTALLER MESSAGE: Filename: gp-sccp.jar
LOCALE INSTALLER MESSAGE: Filename: ipc-sccp.jar
LOCALE INSTALLER MESSAGE: Filename: mk-sccp.jar
LOCALE INSTALLER MESSAGE: Filename: tc-sccp.jar
LOCALE INSTALLER MESSAGE: Filename: td-sccp.jar
LOCALE INSTALLER MESSAGE: New Locale configured

CNF-FILES: Clock is not set or synchronized, retaining old versionStamps
CNF files updating complete
```

## Configuration Examples for Locale Installer on SCCP Phones

### System-Defined Locale is the Default Applied to All Phones

The following example is the output from the **user-locale** command when you configure a system-defined locale for Cisco Unified CME and the locale is on the default locale index (**user-locale-tag 0**). The *user-locale-tag* argument is required only when using multiple locales; otherwise, the specified language is the default applied to all SCCP phones.

```
Router(config-telephony)# user-locale SE load CME-locale-sv_SV-7.0.1.1a.tar
Updating CNF files

LOCALE INSTALLER MESSAGE: VER:1
LOCALE INSTALLER MESSAGE: Langcode:se
LOCALE INSTALLER MESSAGE: Language:swedish
LOCALE INSTALLER MESSAGE: Filename: g3-tones.xml
LOCALE INSTALLER MESSAGE: Filename: gp-sccp.jar
LOCALE INSTALLER MESSAGE: Filename: ipc-sccp.jar
LOCALE INSTALLER MESSAGE: Filename: mk-sccp.jar
LOCALE INSTALLER MESSAGE: Filename: tc-sccp.jar
LOCALE INSTALLER MESSAGE: Filename: td-sccp.jar
LOCALE INSTALLER MESSAGE: New Locale configured

CNF-FILES: Clock is not set or synchronized, retaining old versionStamps
CNF files updating complete
Router(config-telephony)# create cnf-files
Router(config-telephony)# ephone 3
Router(config-ephone)# reset
```

## User-Defined Locale is Default Language to be Applied to All Phones

The following example is the output from the **user-locale** command when you configure a user-defined locale for Cisco Unified CME and the locale is on the default locale index (user-locale-tag 0). The *user-locale-tag* argument is required when using multiple locales, otherwise the specified language is the default applied to all SCCP phones.

```
Router(config-telephone)# user-locale U1 load CME-locale-xh_CN-7.0.1.1.tar
Updating CNF files
LOCALE INSTALLER MESSAGE: VER:1
LOCALE INSTALLER MESSAGE: Langcode:fi
LOCALE INSTALLER MESSAGE: Language:Finnish
LOCALE INSTALLER MESSAGE: Filename: 7905-dictionary.xml
LOCALE INSTALLER MESSAGE: Filename: 7905-kate.xml
LOCALE INSTALLER MESSAGE: Filename: 7920-dictionary.xml
LOCALE INSTALLER MESSAGE: Filename: 7960-dictionary.xml
LOCALE INSTALLER MESSAGE: Filename: 7960-font.xml
LOCALE INSTALLER MESSAGE: Filename: 7960-kate.xml
LOCALE INSTALLER MESSAGE: Filename: 7960-tones.xml
LOCALE INSTALLER MESSAGE: Filename: mk-sccp.jar
LOCALE INSTALLER MESSAGE: Filename: tc-sccp.jar
LOCALE INSTALLER MESSAGE: Filename: td-sccp.jar
LOCALE INSTALLER MESSAGE: Filename: tags_file
LOCALE INSTALLER MESSAGE: Filename: utf8_tags_file
LOCALE INSTALLER MESSAGE: Filename: g3-tones.xml
LOCALE INSTALLER MESSAGE: Filename: SCCP-dictionary.utf-8.xml
LOCALE INSTALLER MESSAGE: Filename: SCCP-dictionary.xml
LOCALE INSTALLER MESSAGE: Filename: ipc-sccp.jar
LOCALE INSTALLER MESSAGE: Filename: gp-sccp.jar
LOCALE INSTALLER MESSAGE: New Locale configured

Processing file:flash:/its/user_define_2_tags_file

Processing file:flash:/its/user_define_2_utf8_tags_file

CNF-FILES: Clock is not set or synchronized, retaining old versionStamps
CNF files updating complete

Router(config-telephony)# create cnf-files
Router(config-telephony)# ephone 3
Router(config-ephone)# reset
```

## Locale on a Non-default Locale Index

The following example is the output from the **user-locale** command if you configure a user-defined locale as an alternate locale for a particular SCCP phone (ephone 1) in Cisco Unified CME. The *user-locale-tag* argument is required only when using multiple locales. In this configuration, the locale is user-defined Finnish (U2) on user-locale index 2.

```
Router(config-telephony)# user-locale 2 U2 load CME-locale-fi_FI-7.0.1.1.tar
Updating CNF files

LOCALE INSTALLER MESSAGE: VER:1
LOCALE INSTALLER MESSAGE: Langcode:fi
LOCALE INSTALLER MESSAGE: Language:Finnish
LOCALE INSTALLER MESSAGE: Filename: 7905-dictionary.xml
LOCALE INSTALLER MESSAGE: Filename: 7905-kate.xml
LOCALE INSTALLER MESSAGE: Filename: 7920-dictionary.xml
LOCALE INSTALLER MESSAGE: Filename: 7960-dictionary.xml
```



```

LOCALE INSTALLER MESSAGE: Filename: 7960-font.xml
LOCALE INSTALLER MESSAGE: Filename: 7960-kate.xml
LOCALE INSTALLER MESSAGE: Filename: 7960-tones.xml
LOCALE INSTALLER MESSAGE: Filename: mk-sccp.jar
LOCALE INSTALLER MESSAGE: Filename: tc-sccp.jar
LOCALE INSTALLER MESSAGE: Filename: td-sccp.jar
LOCALE INSTALLER MESSAGE: Filename: tags_file
LOCALE INSTALLER MESSAGE: Filename: utf8_tags_file
LOCALE INSTALLER MESSAGE: Filename: g3-tones.xml
LOCALE INSTALLER MESSAGE: Filename: SCCP-dictionary.utf-8.xml
LOCALE INSTALLER MESSAGE: Filename: SCCP-dictionary.xml
LOCALE INSTALLER MESSAGE: Filename: ipc-sccp.jar
LOCALE INSTALLER MESSAGE: Filename: gp-sccp.jar
LOCALE INSTALLER MESSAGE: New Locale configured

Processing file:flash:/its/user_define_2_tags_file

Processing file:flash:/its/user_define_2_utf8_tags_file

CNF-FILES: Clock is not set or synchronized, retaining old versionStamps
CNF files updating complete

Router(config-telephony)# ephone-template 1
Router(config-ephone-template)# user-locale 2
Router(config-ephone-template)# ephone 1
Router(config-ephone)# ephone-template 1
The ephone template tag has been changed under this ephone, please restart or reset ephone
to take effect.
Router(config-ephone)# telephony-service
Router(config-telephony)# create cnf-files
Router(config-telephony)# ephone 1
Router(config-ephone)# reset

```

## Examples for Configuring Multiple User and Network Locales on SIP Phones

The following example sets the default locale of 0 to Germany, which defines Germany as the default user and network locale. Germany is used for all phones unless you apply a different locale to individual phones using ephone templates.

```

voice register global
    user-locale 0 DE
    network-locale 0 DE

```

After using the previous commands to define Germany as the default user and network locale, use the following commands to return the default value of 0 to US:

```

voice register global
    no user-locale 0 DE
    no network-locale 0 DE

```

Another way to define Germany as the default user and network locale is to use the following commands:

```

voice register global
    user-locale DE
    network-locale DE

```

After using the previous commands, use the following commands to return the default to US:

```
voice register global
  no user-locale DE
  no network-locale DE
```

### SIP: Alternative Locales

The following example defines three alternative locales: JP (Japan), FR (France), and ES (Spain). The default is US for all phones that do not have an alternative applied using ephone templates. In this example, ephone 11 uses JP for its locales, ephone 12 uses FR, ephone 13 uses ES, and ephone 14 uses the default, US.

```
voice register global
  create profile
  user-locale 1 JP
  user-locale 2 FR
  user-locale 3 ES
  network-locale 1 JP
  network-locale 2 FR
  network-locale 3 ES
  create profile

voice register template 1
  user-locale 1
  network-locale 1

voice register template 2
  user-locale 2
  network-locale 2

voice register pool 1
  number 1 dn 1
  template 1
  user-locale 3
  network-locale 3

voice register pool 2
  number 2 dn 2
  template 2

voice register pool 6
  number 3 dn 3
  template 3
```

## Example for Configuring Locale Installer on SIP Phones

The following example shows how the locale installer only requires you to copy the locale file using the **copy** command in privileged EXEC configuration mode to configure a locale on a Cisco Unified SIP IP phone. The example also shows that the locale file has been copied in the /its directory.

```
Router# copy tftp://100.1.1.1/CME-locale-de_DE-German-8.6.3.0.tar flash:/its
Destination filename [/its/CME-locale-de_DE-German-8.6.3.0.tar]?
Router# configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)# voice register global
Router(config-register-global)# user-locale DE load
CME-locale-de_DE-German-8.6.3.0.tar
LOCALE INSTALLER MESSAGE (SIP):Loading Locale Package...
LOCALE INSTALLER MESSAGE: VER:3
LOCALE INSTALLER MESSAGE: Langcode:de_DE
LOCALE INSTALLER MESSAGE: Language:German
LOCALE INSTALLER MESSAGE: Filename: g3-tones.xml
```

```

LOCALE INSTALLER MESSAGE: Filename: tags_file
LOCALE INSTALLER MESSAGE: Filename: utf8_tags_file
LOCALE INSTALLER MESSAGE: Filename: gd-sip.jar
LOCALE INSTALLER MESSAGE: Filename: gh-sip.jar
LOCALE INSTALLER MESSAGE: Filename: g4-tones.xml
LOCALE INSTALLER MESSAGE: New Locale configured
Router(config-register-global)#

```

## Where to Go Next

### Ephone Templates

For more information about ephone templates, see [Templates](#).

## Feature Information for Localization Support

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](http://www.cisco.com/go/cfn). An account on Cisco.com is not required.

**Table 10: Feature Information for Localization Support**

Feature Name	Cisco Unified CME Version	Feature Information
Localization Enhancements for Cisco Unified SIP IP Phones	10.5	Cisco Unified CME 10.5 provides support for additional languages.
Localization Enhancements for Cisco Unified SIP IP Phones	9.0	Provides the following enhanced localization support for Cisco Unified SIP IP phones: <ul style="list-style-type: none"> <li>• Localization support for Cisco Unified 6941 and 6945 SIP IP Phones.</li> <li>• Locale installer that supports a single procedure for all Cisco Unified SIP IP phones.</li> </ul>
Localization Enhancement	8.8	Adds localization support for Cisco Unified 3905 SIP and Cisco Unified 6945, 8941, and 8945 SCCP IP Phones.
Usability Enhancement	8.6	Adds localization support for SIP IP Phones.

Feature Name	Cisco Unified CME Version	Feature Information
Cisco Unified CME Usability Enhancement	7.0(1)	<ul style="list-style-type: none"><li>• Locale installer that supports a single procedure for all SCCP IP phones.</li><li>• Parses firmware-load text files and automatically creates the required TFTP aliases for localization.</li><li>• Backward compatibility with the configuration method in Cisco Unified CME 7.0 and earlier versions.</li></ul>
Multiple Locales	4.0	Multiple user and network locales were introduced.
User-Defined Locales	4.0	User-defined locales were introduced.