

# **Configuring Localization Support**

#### Last Updated: March 15, 2013

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.

#### **Finding Feature Information in This Module**

Your Cisco Unified CME version may not support all of the features documented in this module. For a list of the versions in which each feature is supported, see the "Feature Information for Localization Support" section on page 448.

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# **Information About Localization**

To configure localization support, you should understand the following concepts:

- Localization Enhancements in Cisco Unified CME, page 410
- System-Defined Locales, page 410
- Localization Support for Cisco Unified SIP IP Phones, page 411
- User-Defined Locales, page 411
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## **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.

Table 32 shows the language codes used in the filenames of locale files.

Table 32	Language Codes for User-Defined Locales
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Language	Language Code	
Canadian French	fr_CA	

For configuration information, see the "Installing User-Defined Locales" section on page 418".

#### Restrictions

All the localization enhancements are supported in Cisco Unified CME only. They are not supported in Cisco Unified SRST.

## **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 the "Installing System-Defined Locales for Cisco Unified IP Phone 6921, 6945, 7906, 7911, 7921, 7931, 7941, 7961, 7970, 7971, and Cisco IP Communicator" section on page 414.
- 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.



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 the "Installing System-Defined Locales for Cisco Unified IP Phone 8961, 9951, and 9971" section on page 428.

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 the "User-Defined Locales" section on page 411.

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.



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

## **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 the "Installing User-Defined Locales" section on page 418.

## **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
- Soft keys (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 the "Configuring Multiple Locales" section on page 424.

## 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
Router(config-telephony)#
```



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 the "Using the Locale Installer in Cisco Unified CME 7.0(1) and Later Versions" section on page 421.

### 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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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.

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 the "Using the Locale Installer in Cisco Unified CME 9.0 and Later Versions" section on page 431.

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# **SCCP: How to Configure Localization Support**

This section contains the following tasks:

- Installing System-Defined Locales for Cisco Unified IP Phone 6921, 6945, 7906, 7911, 7921, 7931, 7941, 7961, 7970, 7971, and Cisco IP Communicator, page 414 (required)
- Installing User-Defined Locales, page 418 (optional)
- Using the Locale Installer in Cisco Unified CME 7.0(1) and Later Versions, page 421 (optional)
- Verifying User-Defined Locales, page 424 (optional)
- Configuring Multiple Locales, page 424 (optional)
- Verifying Multiple Locales, page 427 (optional)

# Installing 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.



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 the "Using the Locale Installer in Cisco Unified CME 7.0(1) and Later Versions" section on page 421.

#### **Prerequisites**

- Cisco Unified CME 4.0(2) or a later version.
- You must create per-phone configuration files as described in the "SCCP: Defining Per-Phone Configuration Files and Alternate Location" section on page 152.
- You must have an account on Cisco.com to download locale files.

#### Restrictions

- 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.
- 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** 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

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.

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

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 33 and Table 34 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

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.

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 33 Phone-Type Codes for Locale JAR Files

#### Table 34 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

Language	Language Code	User-Locale Directory Name	Country Code	Network-Locale Directory Name
French	fr	French_France	FR	France
			CA	Canada
German	de	German_Germany	DE	Germany
			AT	Austria
			СН	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
Russian	ru	Russian_Russia	RU	Russian_Federation
Spanish	es	Spanish_Spain	ES	Spain
Swedish	se	Swedish_Sweden	SE	Sweden

1. 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.

2. 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:

Router(config)# tftp-server flash:/jar\_file alias directory\_name/td-sccp.jar Router(config)# tftp-server flash:/g3-tones.xml alias directory\_name/g3-tones.xml

Use the appropriate directory name shown in Table 34 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

# <u>Note</u>

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 34 and remove the two-letter language code from the JAR file name.

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 the "Configuring Multiple Locales" section on page 424.
- **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.

## **Installing 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.

#### Prerequisites

- Cisco Unified CME 4.0(3) or a later version.
- You must create per-phone configuration files as described in the "SCCP: Defining Per-Phone Configuration Files and Alternate Location" section on page 152.
- You must have an account on Cisco.com to download locale files.

#### Restrictions

- 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.
- 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** 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

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.

Router# archive tar /xtract source-url flash:/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. For Cisco Unified IP Phone 7911, 7941, 7961, 7970, or 7971, go to Step 7. **Step 7** Each phone type has a JAR file that uses the following naming convention:

language-type-sccp.jar

For example, zh-td-sccp.jar is Traditional Chinese for the Cisco Unified IP Phone 7970. See Table 35 and Table 36 for a description of the codes used in the filenames.

 Table 35
 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 36	Language Codes for User-Defined Locales
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lable 50 Language Coues for		
Language	Language Code	
Bulgarian	bg	
Chinese	$zh^1$	
Croation	hr	
Czech Republic	cs	
Finnish	fi	
Greek	el	
Hungarian	hu	
Korean	ko	
Polish	pl	
Portugese (Brazi	l) pt	
Romanian	ro	
Serbian	sr	
Slovakian	sk	
Slovenian	sl	
Turkish	tr	

 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:

Router(config)# tftp-server flash:/jar\_file alias 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

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**.
- **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.

```
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. 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-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 the "Configuring Multiple Locales" section on page 424.
- **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.

## Using 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.

<u>}</u> 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 the "Installing System-Defined Locales for Cisco Unified IP Phone 6921, 6945, 7906, 7911, 7921, 7931, 7941, 7961, 7970, 7971, and Cisco IP Communicator" section on page 414.

#### **Prerequisites**

- Cisco Unified CME 7.0(1) or a later version.
- You must configure Cisco Unified CME for per-phone configuration files. See the "SCCP: Defining Per-Phone Configuration Files and Alternate Location" section on page 152.
- 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.

#### Restrictions

- 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.
```

#### 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** 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

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

For system-defined locales, use the locale folder name as shown in Table 37. 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 37. 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



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

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
		СН
Italian	Italian_Italy	IT
Japanese <sup>1</sup>	Japanese_Japan	JP
Norwegian	Norwegian_Norway	NO
Portuguese	Portuguese_Portugal	PT
Russian	Russian_Russia	RU
Spanish	Spanish_Spain	ES
Swedish	Swedish_Sweden	SE
$Un^2$	User_Define_ $n^2$	$Un^2$

Table 37	System-Defined and User-Defined Locales
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1. 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.

Router (telephony-service) # user-locale U1 load CME-locale-zh\_CN-7.0.1.0.tar

- **Step 6** Assign the locales to phones. See the "Configuring Multiple Locales" section on page 424.
- **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.

<sup>2.</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 37. 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:

## **Verifying User-Defined Locales**

See the "Verifying Multiple Locales" section on page 427.

## **Configuring Multiple Locales**

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

#### **Prerequisites**

- 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 the "SCCP: Defining Per-Phone Configuration Files and Alternate Location" section on page 152.
- You can also use user-defined locale codes as alternative locales after you download the appropriate XML files. See the "Installing User-Defined Locales" section on page 418.

#### **Restrictions**

- 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.

#### **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
	enable	Enables privileged EXEC mode.
	<b>Example:</b> Router> enable	• Enter your password if prompted.
	configure terminal	Enters global configuration mode.
	<b>Example:</b> Router# configure terminal	
	telephony-service	Enters telephony-service configuration mode.
	<b>Example:</b> Router(config)# telephony-service	
	<b>user-locale</b> [user-locale-tag]	Specifies a language for phone displays.
<pre>{[user-defined-code] countr Example: Router(config-telephony)# u</pre>		• <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).
		• <i>user-defined-code</i> —(Optional) Assigns one of the user-defined codes to the specified country code. Vali codes are <b>U1</b> , <b>U2</b> , <b>U3</b> , <b>U4</b> , and <b>U5</b> .
		• <i>country-code</i> —Type ? to display a list of system-defined codes. Default: US (United States). Yo can assign any valid ISO 639 code to a user-defined code (U1 to U5).
	network-locale network-locale-tag	Specifies a country for tones and cadences.
	<pre>[user-defined-code] country-code Example: Router(config-telephony)# network-locale 1 FR</pre>	• <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).
		• <i>user-defined-code</i> —(Optional) Assigns one of the user-defined codes to the specified country code. Vali codes are <b>U1</b> , <b>U2</b> , <b>U3</b> , <b>U4</b> , and <b>U5</b> .
		• <i>country-code</i> —Type ? to display a list of system-defined codes. Default: US (United States). Yo can assign any valid ISO 3166 code to a user-defined code (U1 to U5).
	create cnf-files	Builds the required XML configuration files for IP phones Use this command after you update configuration file
	Example:	parameters such as the user locale or network locale.
	Router(config-telephony)# create cnf-files	

	Command or Action	Purpose
Step 7	exit	Exits telephony-service configuration mode.
	<b>Example:</b> Router(config-telephony)# exit	
Step 8	ephone-template template-tag	Enters ephone-template configuration mode.
	<b>Example:</b> Router(config)# ephone template 1	• <i>template-tag</i> —Unique sequence number that identifies this template during configuration tasks.
Step 9	user-locale user-locale-tag	Assigns a user locale to this ephone template.
	<b>Example:</b> Router(config-ephone-template)# user-locale 2	• <i>user-locale-tag</i> —A locale tag that was created in Step 4. Range is 0 to 4.
Step 10	network-locale network-locale-tag	Assigns a network locale to this ephone template.
	<b>Example:</b> Router(config-ephone-template)# network-locale 2	<ul> <li>network-locale-tag—A locale tag that was created in Step 5. Range is 0 to 4.</li> </ul>
Step 11	exit	Exits ephone-template configuration mode.
	<b>Example:</b> Router(config-ephone-template)# exit	
Step 12	ephone phone-tag	Enters ephone configuration mode.
	<b>Example:</b> Router(config)# ephone 36	• <i>phone-tag</i> —Unique sequence number that identifies this ephone during configuration tasks.
tep 13	ephone-template template-tag	Applies an ephone template to an ephone.
	<b>Example:</b> Router(config-ephone)# ephone-template 1	• <i>template-tag</i> —Number of the template to apply to this ephone.
Step 14	exit	Exits ephone configuration mode.
	<b>Example:</b> Router(config-ephone)# exit	
Step 15	telephony-service	Enters telephony-service configuration mode.
	<b>Example:</b> Router(config)# telephony-service	

	Command or Action	Purpose		
Step 16	<pre>reset {all [time-interval]   cancel   mac-address mac-address   sequence-all}</pre>	Performs a complete reboot of all phones or the specified phone, including contacting the DHCP and TFTP servers for the latest configuration information.		
	Example:	• <b>all</b> —All phones in the Cisco Unified CME system.		
	Router(config-telephony)# reset all	• <i>time-interval</i> —(Optional) Time interval, in seconds, between each phone reset. Range is 0 to 60. Default is 15.		
		• <i>cancel</i> —Interrupts a sequential reset cycle that was started with a <b>reset sequence-all</b> command.		
Step 17		• mac-address mac-address—A specific phone.		
		• <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.		
	end	Returns to privileged EXEC mode.		
	<b>Example:</b> Router(config-telephony)# end			

## **Verifying Multiple Locales**

**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.

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.

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# **SIP: How to Configure Localization Support**

To configure localization support for SIP IP phones, follow these configuration steps:

- Installing System-Defined Locales for Cisco Unified IP Phone 8961, 9951, and 9971, page 428 (required)
- Using the Locale Installer in Cisco Unified CME 9.0 and Later Versions, page 431 (optional)
- Configuring Multiple Locales, page 435 (optional)
- Verifying Multiple Locales, page 438 (optional)

# Installing 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.

#### Prerequisites

- 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.

#### Restrictions

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

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** 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

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. Router# archive tar /xtract source-url flash:/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 38 and Table 39 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

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 38
 Phone-Type Codes for Locale JAR Files

Phone Type	Phone Code
3905	cin
6941	rtl
6945	rtl
8961	gh
9951	gd
9971	gd

Table 39	Syste	m-Defined U	ser 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
			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
			СН	Switzerland
Italian	it	Italian_Italy	IT	Italy
Japanese	јр	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

IADIE 39 System-Defined User and Network Locales (continued	Table 39	System-Defined User and Network Locales (continued)
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1. 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.

**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:

Router(config)# tftp-server flash:/jar\_file alias directory\_name/gh-sip.jar Router(config)# tftp-server flash:/g4-tones.xml alias directory\_name/g4-tones.xml

Use the appropriate directory name shown in Table 38 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 38 and remove the two-letter language code from the JAR file name.

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 the "Verifying Multiple Locales" section on page 438.
- **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.

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

To install and configure locale files for Cisco Unified SIP IP phones in Cisco Unified CME, perform the following steps.

#### **Prerequisites**

- 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.

#### Restrictions

- 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.
```

#### **SUMMARY STEPS**

- 1. Go to the Software Download site.
- **2**. Select your version of Cisco Unified CME.
- 3. Select the TAR file for the locale you want to install.
- 4. Download the TAR file to the location previously specified by the cnf-file location command.
- **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.
- 6. Assign the locales to the phones.
- 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.
- 8. Use the reset command to reset the phones and see the localized displays.

#### **DETAILED STEPS**

- Go to http://www.cisco.com/cgi-bin/tablebuild.pl/CME-Locale Step 1 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. Select your version of Cisco Unified CME. Step 2 Select the TAR file for the locale you want to install. Each TAR file contains locale files for a specific Step 3 language and country and uses the following naming convention: CME-locale-language country-CMEversion.tar For example, CME-locale-de\_DE-German-8.6.3.0.tar is German for Germany for Cisco Unified CME 9.0. Download the TAR file to the location previously specified by the **cnf-file location** command. Each file Step 4 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. 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
  - **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

For system-defined locales, use the locale folder name as shown in Table 40. 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 40. 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 the *Cisco Unified CME Localization Matrix*.

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
		СН
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
$Un^1$	User_Define_n <sup>1</sup>	$Un^1$

#### Table 40 System-Defined and User-Defined Locales

1. 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 40.

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.

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 the "Configuring Multiple Locales" section on page 435.
- **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.

## **Configuring Multiple Locales**

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

#### **Prerequisites**

- 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 the "Installing System-Defined Locales for Cisco Unified IP Phone 6921, 6945, 7906, 7911, 7921, 7931, 7941, 7961, 7970, 7971, and Cisco IP Communicator" section on page 414.

#### Restriction

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

#### **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
tep 1	enable	Enables privileged EXEC mode.
	<b>Example:</b> Router> enable	• Enter your password if prompted.
tep 2	configure terminal	Enters global configuration mode.
	<b>Example:</b> Router# configure terminal	
tep 3	<pre>voice register global Example: Router(config)#voice register global</pre>	Enters voice register global configuration mode to set parameters for all supported SIP phones in Cisco Unified CME.
tep 4	<pre>user-locale [user-locale-tag] {[user-defined-code]country-code} Example: Router(config-register-global)# user-locale 1</pre>	<ul> <li>Specifies a language for phone displays.</li> <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> </ul>
	DE	<ul> <li><i>country-code</i>—Type ? to display a list of system-defined codes. Default: US (United States).</li> </ul>
tep 5	<pre>network-locale network-locale-tag [user-defined-code] country-code Example: Router(config-register-global)# network-locale</pre>	<ul> <li>Specifies a country for tones and cadences.</li> <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> </ul>
	1 FR	• <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).
tep 6	<pre>create profile Example: Router(config-register-global)# create profile</pre>	Generates provisioning files required for SIP phones and writes the file to the location specified with the tftp-path command.
tep 7	exit	Exits voice register global configuration mode.
	<b>Example:</b> Router(config-telephony)# exit	
tep 8	<pre>voice register template template-tag Example:</pre>	Enters voice register template configuration mode to define a template of common parameters for SIP phones in Cisco Unified CME.

	Command or Action	Purpose
Step 9	user-locale user-locale-tag	Assigns a user locale to this ephone template.
	<b>Example:</b> Router(config-ephone-template)# user-locale 2	• <i>user-locale-tag</i> —A locale tag that was created in Step 4. Range is 0 to 4.
Step 10	<b>network-locale</b> network-locale-tag	Assigns a network locale to this ephone template.
	<b>Example:</b> Router(config-ephone-template)# network-locale 2	<ul> <li>network-locale-tag—A locale tag that was created in Step 5. Range is 0 to 4.</li> </ul>
Step 11	exit	Exits voice register template configuration mode.
	<b>Example:</b> Router(config-ephone-template)# exit	
Step 12	voice register pool pool-tag	Enters voice register pool configuration mode to set phone-specific parameters for a SIP phone.
	<b>Example:</b> Router(config)#voice register pool 5	
Step 13	voice register template template-tag	Enters voice register template configuration mode to define a template of common parameters for SIP phones in Cisco Unified CME.
	Router(config)voice register template 10	• Range: 1 to 10.
Step 14	exit	Exits voice register template configuration mode.
	<b>Example:</b> Router(config-ephone)# exit	
Step 15	voice register global Example:	Enters voice register global configuration mode to set parameters for all supported SIP phones in Cisco Unified CME.
	Router(config)#voice register global	
Step 16	reset	Performs a complete reboot of all phones or the specified phone, including contacting the DHCP and TFTP servers for the latest configuration information.
	<b>Example:</b> Router(config-register-global)# reset	-
Step 17	end	Returns to privileged EXEC mode.
	Example:	
	Router(config-register-global)# end	

## **Verifying Multiple Locales**

```
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.
```

```
Router#sh voice register tftp-bind

tftp-server syncinfo.xml url system:/cme/sipphone/SIPDefault.cnf

tftp-server SIPDefault.cnf url system:/cme/sipphone/SIPDefault.cnf

tftp-server softkeyDefault_kpml.xml url system:/cme/sipphone/softkeyDefault.xml

tftp-server softkey2_kpml.xml url system:/cme/sipphone/softkey2_kpml.xml

tftp-server softkey2_kpml.xml url system:/cme/sipphone/softkey2_kpml.xml

tftp-server featurePolicyDefault.xml url system:/cme/sipphone/softkey2.xml

tftp-server featurePolicyDefault.xml url system:/cme/sipphone/featurePolicyDefau

lt.xml

tftp-server featurePolicy2.xml url system:/cme/sipphone/featurePolicy2.xml

tftp-server SEPACA016FDC1BD.cnf.xml url system:/cme/sipphone/SEPACA016FDC1BD.cnf
```

- **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**

This section contains the following examples:

- Multiple User and Network Locales: Example, page 439
- User-Defined Locales: Example, page 440
- Chinese as the User-Defined Locale: Example, page 441
- Swedish as the System-Defined Locale: Example, page 441
- SCCP: Locale Installer: Examples, page 442
- SIP: Multiple User and Network Locales: Example, page 445
- SIP: Locale Installer: Example, page 446

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## **Multiple User and Network Locales: Example**

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
```

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```
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
```

## **User-Defined Locales: Example**

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
```

## **Chinese as the User-Defined Locale: Example**

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:

```
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
```

Router(config-register-global)# user-locale U1 load chinese.pkg

## Swedish as the System-Defined Locale: Example

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: Filename: td-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

## **SCCP: Locale Installer: Examples**

This section contains the following examples:

- System-Defined Locale is the Default Applied to All Phones, page 442
- User-Defined Locale is Default Language to be Applied to All Phones, page 443
- Configuring a Locale on a Nondefault Locale Index, page 444

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

Router(config-ephone) # reset

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: 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
```

#### 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
```

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#### **Configuring a Locale on a Nondefault 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
```

### SIP: Multiple User and Network Locales: Example

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: Alernative 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
```

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```
number 2 dn 2
template 2
voice register pool 6
number 3 dn 3
template 3
```

## **SIP: Locale Installer: Example**

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 the "Creating Templates" section on page 1525.

# **Additional References**

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

## **Related Documents**

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

## **Technical Assistance**

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

## **Feature Information for Localization Support**

Table 41 lists the features in this module and enhancements to the features by version.

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

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

Note

Table 41 lists the Cisco Unified CME version that introduced support for a given feature. Unless noted otherwise, subsequent versions of Cisco Unified CME software also support that feature.

Feature Name	Cisco Unified CME Version	Feature Information
Localization Enhancements for Cisco Unified SIP IP Phones	9.0	Provides the following enhanced localization support for Cisco Unified SIP IP phones:
		• Localization support for Cisco Unified 6941 and 6945 SIP IP Phones.
		• Locale installer that supports a single procedure for all Cisco Unified SIP IP phones.
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.
Cisco Unified CME Usability Enhancement	7.0(1)	• Locale installer that supports a single procedure for all SCCP IP phones.
		• Parses firmware-load text files and automatically creates the required TFTP aliases for localization.
		• Backward compatibility with the configuration method in Cisco Unified CME 7.0 and earlier versions.
Multiple Locales	4.0	Multiple user and network locales were introduced.
User-Defined Locales	4.0	User-defined locales were introduced.

#### Table 41 Feature Information for Localization Support