



CHAPTER 18c

Managing Voice-Recognition Features

Voice-recognition features allow subscribers to interact with Cisco Unity by speaking rather than by using the phone keypad. The features are licensed by number of concurrent sessions, and require installation and configuration of voice-recognition software on a separate and dedicated server. Voice recognition is not available to outside callers.

You configure voice recognition settings on the System > Voice Recognition page in the Cisco Unity Administrator.

For information on installing and configuring a separate voice-recognition server, see the applicable Cisco Unity installation guide, at http://www.cisco.com/en/US/products/sw/voicewsw/ps2237/prod_installation_guides_list.html.

See the following sections in this chapter for additional details about administering voice-recognition features:

- [Access to Voice Recognition Features, page 18-1](#)
- [Press-or-Say Phone Input Style, page 18-2](#)
- [Voice Addressing, page 18-2](#)
- [Voice-Recognition Considerations, page 18-5](#)

Access to Voice Recognition Features

You enable access to the voice-recognition features on the applicable Conversation page for a subscriber template or an individual subscriber in the Cisco Unity Administrator, or by using the Bulk Edit utility. When voice recognition access is enabled, subscribers can enable and disable the Press-or-Say input style by phone or by using the Cisco Unity Assistant.

Do the following “[To Enable Access to Voice-Recognition Features](#)” procedure to enable voice-recognition access for subscribers. When subscribers have voice-recognition access, they can enable and disable the Press-or-Say input style by phone or by using the Cisco Unity Assistant. (See also the “[Press-or-Say Phone Input Style](#)” section on page 18-2.)

To Enable Access to Voice-Recognition Features

Step 1 In the Cisco Unity Administrator, go to the applicable page:

- To modify the template that you will use to create subscriber accounts, go to any **Subscribers > Subscriber Template** page, and find the template that you want to modify. Then browse to the **Conversation** page.

- To modify an existing subscriber account, go to any **Subscribers > Subscribers** page and find the applicable subscriber. Then browse to the **Conversation** page.
- Step 2** Under Phone Menu Options, click **Allow Access to Voice-Recognition Features** so that it is selected.
- Step 3** Click the **Save** icon.
-

Press-or-Say Phone Input Style

The Press-or-Say phone input style gives subscribers the options of pressing the key or saying the number that corresponds to a menu option.

In addition, when addressing messages, adding names to private lists, and using the Message Locator feature, subscribers can say the names of recipients instead of spelling them by using the phone keypad. To improve the accuracy of name recognition, you can enter alternate spellings for the names of individual subscribers. Alternate spellings are entered on the Alternate Name page for individual subscribers in the Cisco Unity Administrator. See either the [“Voice Addressing” section on page 18-2](#) or the [“Managing the Alternate Names List” section on page 18-3](#) for more information.

You enable the Press-or-Say input style on the applicable Conversation page for a subscriber template or an individual subscriber in the Cisco Unity Administrator, or by using the Bulk Edit utility. Do the following [“To Enable the Press-or-Say Input Style”](#) procedure to enable the Press-or-Say input style for subscribers. If voice-recognition features are enabled for subscribers, then subscribers can enable or disable the Press-or-Say input style over the phone or by using the Cisco Unity Assistant.

The Press-or-Say feature requires an additional server running voice-recognition software. For more information, see the [“Access to Voice Recognition Features” section on page 18-1](#).

To Enable the Press-or-Say Input Style

- Step 1** In the Cisco Unity Administrator, go to the applicable page:
- To modify the template that you will use to create subscriber accounts, go to any **Subscribers > Subscriber Template** page, and find the template that you want to modify. Then browse to the **Conversation** page.
 - To modify an existing subscriber account, go to any **Subscribers > Subscribers** page and find the applicable subscriber. Then browse to the **Conversation** page.
- Step 2** Under Phone Menu Options, verify that the **Allow Access to Voice-Recognition Features** check box is selected.
- Step 3** Under Phone Menu Options, click the **Use Press-or-Say Phone Input Style (Includes Voice Addressing)** check box so that it is selected.
- Step 4** Click the **Save** icon.
-

Voice Addressing

Cisco Unity recognizes spoken subscriber names, so subscribers do not have to spell them by saying letters. They can say subscriber names while addressing messages, adding subscribers to private lists, using Message Locator, or addressing public distribution lists.

See the following sections:

- [Managing the Alternate Names List, page 18-3](#)
- [Updating the Name Grammar Files, page 18-4](#)
- [Setting the Search Scope for Improved Voice Name Recognition, page 18-5](#)

For additional information on improving name recognition, see the [“Voice-Recognition Considerations” section on page 18-5](#).

Managing the Alternate Names List

Alternate names are different versions of a subscriber name than what is listed in the corporate directory. Cisco Unity considers these names when a subscriber uses voice recognition to address messages, add subscribers to private lists, use Message Locator, or address public distribution lists.

You create alternate names for individual subscribers, and cannot add or edit alternate names from the subscriber template. Also, it is important to note that any alternate names you create are stored locally and are not propagated to other Cisco Unity servers. Any alternate names that you add or modify are not active until there has been a grammar rebuild. See the [“Updating the Name Grammar Files” section on page 18-4](#) for more information on rebuilding the name grammar files.

When creating alternate names, you might want to add common variants of a name that subscribers might use. For example, you might want to add Bill, Billy, and Will for the name William. Or, you could use this feature to add another version of an uncommon name, unusual nicknames, or maiden names. For example, if a subscriber asked Cisco Unity to address “Mary Jameson,” which was the maiden name of Mary Brown, Cisco Unity could reference this information and add the correct subscriber to the message. You could also use alternate names to add phonetic spellings of hard-to-pronounce names. For example, you could add “Goolay” as an alternate name for the last name “Goulet.”

Note that name recognition accuracy degrades as the number and variability of names increase. In addition, name recognition tends to be less accurate for non-English names. For this reason, we recommend that you include only the most commonly-known alternate names for subscribers.

See the following procedures:

- [To Add Alternate Names, page 18-3](#)
- [To Edit Alternate Names, page 18-4](#)

Note that you cannot add or edit alternate names on a subscriber template.

To Add Alternate Names

-
- Step 1** In the Cisco Unity Administrator, go to any **Subscribers > Subscribers** page and find the applicable subscriber. Then browse to the **Alternate Names** page.
 - Step 2** Under Add, in the Alternate Names fields, enter the alternate names.
 - Step 3** Click **Add**.
 - Step 4** Repeat [Step 2](#) and [Step 3](#) until all alternate names have been added.
-

To Edit Alternate Names

- Step 1** In the Cisco Unity Administrator, go to any **Subscribers > Subscribers** page and find the account that you want to change. Then browse to the **Alternate Names** page.
- Step 2** Do any of the following:
- In the Alternate Names fields, enter changes to the already-existing alternate names.
 - If you want to delete an alternate name, check the check box next to the name.
- Step 3** Click the **Save** icon.
-

Updating the Name Grammar Files

The name grammar files should be updated immediately after Cisco Unity installation and configuration, and updated routinely anytime Cisco Unity subscribers are created, added or imported to the Cisco Unity directory. The names of new Cisco Unity subscribers and their alternate names will not be immediately available to the voice-recognition system unless the grammar files are updated.

By default, the name grammar files are scheduled to update automatically at 1:00 a.m. daily. To make changes available immediately or at a different scheduled time, do one of the following procedures:

- [To Schedule When Cisco Unity Automatically Rebuilds the Name Grammar Files, page 18-4](#)
- [To Manually Rebuild the Name Grammar Files, page 18-4](#)



Note

Depending on the size of the directory, name grammars may take a long time to build and may affect system performance. We recommend that you schedule the automatic rebuild to occur at off-peak times. By default, the automatic rebuild starts at 1:00 a.m. Manual updates are recommended only when troubleshooting or during the initial Cisco Unity configuration.

To Schedule When Cisco Unity Automatically Rebuilds the Name Grammar Files

- Step 1** In the Cisco Unity Administrator, go to the **System > Voice Recognition > Settings** page.
- Step 2** Under Grammar Engine, in the **Automatic Rebuild Time** fields, enter the new time.
- By default, the automatic rebuild starts at 1:00 a.m. We recommend that you schedule the automatic rebuild to occur at off-peak times.
- Step 3** Click the **Save** icon.
-

To Manually Rebuild the Name Grammar Files

Depending on the size of the directory, name grammars may take a long time to build and may affect system performance. Manual updates are recommended only when troubleshooting or during the initial Cisco Unity configuration.

- Step 1** In the Cisco Unity Administrator, go to the **System > Voice Recognition > Settings** page.

Step 2 Under Grammar Engine, click **Start**.

Setting the Search Scope for Improved Voice Name Recognition

You can set the default search scope to be used for looking up names when subscribers are addressing messages using voice recognition. This setting is only used if the subscriber who is addressing the message does not have the addressing search scope limited to a directory handler on the Subscriber > Profile page.

Cisco Unity deployments can scale to very large systems with tens of thousands of users across networked servers. Name recognition accuracy degrades as the number and variability of names increase. In addition, name recognition tends to be less accurate for non-English names. Depending on the number of names in your Cisco Unity subscriber global directory, you may want to limit searches to reduce the number of names processed by the voice-recognition server.

Note that the number of names is not always equal to the number of subscribers and distribution lists in a scope. The number of names also includes alternate spellings of each name. For example, a 100 user company that has one alternate name for each subscriber would generate a global directory scope with 200 names. For this reason, it would be advisable to include only the most common alternate names when considering alternate names.

To Set the Search Scope for Improved Name Recognition

Step 1 In the Cisco Unity Administrator, go to the **System Settings > Voice Recognition > Settings** page.

Step 2 Under Voice Recognition Server, select one of the following options from the **Limit Searches to The** list:

- **Local Server**—All local subscribers and public distribution lists on the Cisco Unity server handling the call. This scope is expected to have better accuracy than global directory or dialing domain.
- **Dialing Domain**—All local and remote subscribers and public distribution lists that are in the local dialing domain. This scope is expected to be smaller than the global directory, but could still be fairly large. It should have better accuracy than the global directory.
- **Global Directory**—All local subscribers and public distribution lists, all named remote subscribers and remote public distribution lists. This will be the largest search scope and may have the worst accuracy of all the search scopes.

Step 3 Click the **Save** icon.

Voice-Recognition Considerations

See the following sections:

- [General Considerations, page 18-6](#)
- [Improving Voice Recognition Performance, page 18-6](#)

General Considerations

You may want to tell subscribers about the following general considerations when they use the Press-or-Say phone input style. See the *Cisco Unity User Guide* for additional voice-recognition usage considerations.

- When voice recognition is available on the system, you will hear “Voice recognition on” after logging on to Cisco Unity. If voice recognition is unavailable, you do not hear the prompt and cannot use the Press-or-Say input style for the duration of the call. You may be able to use the input style if you hang up and try again in a few moments.
- Do not say the names of menu options. Instead, you should say the key for the menu options you want. (For example, when Cisco Unity prompts you to press 1 to play new messages, do not say “Play new messages.” Instead, say “One.” (Or you can press the 1 key.) Where appropriate, you can also say “pound” and “star.”
- After you say your entry, you must pause to allow Cisco Unity to detect that you are done with the entry. Because of the pause, the system may seem slower when you say options than when you press keys for options.
- When entering multi-digit numbers, you must say each digit individually. For example, to enter extension 3200, say “Three-two-zero-zero.” Cisco Unity does not recognize “Thirty-two hundred” or “Three thousand, two hundred.” For long extensions or phone numbers, you can say the entire number before pausing, but you must say each digit in the number.
- You cannot say multi-digit shortcuts to jump ahead in the menus. For example, you cannot say “Four-one-two” to turn on the alternate greeting. Instead, you must say the single key number for the first menu option, then pause for the system to recognize your entry before you say the key number for the option in the next menu. (You can enter menu shortcuts by pressing keys.)
- It is possible to press keys and to say key numbers for any menu option. For example, you could choose an option from one menu by pressing a key, then choose an option from the next menu by saying the number. However, if you press the key and say the number for a single option, the key press takes precedence over the spoken information. For example, if you say “One-pound,” then press “4-#” while entering a month, Cisco Unity will recognize April as the month selected rather than January.

Improving Voice Recognition Performance

- Subscribers may find that voice recognition is less accurate when used in conditions where there is background noise—for example, if a subscriber is using a speaker phone or a mobile phone. In these situations, subscribers can either use key presses to enter commands or turn off the Press-or-Say feature for the duration of the call. For information on how to disable the Press-or-Say feature, see the [“Press-or-Say Phone Input Style” section on page 18-2](#).
- If a subscriber voice name is frequently not recognized, consider using alternate names to add phonetic spellings of hard-to-pronounce names. For example, you could add “Goolay” as an alternate name for the last name “Goulet.” For information on managing alternate names, see the [“Managing the Alternate Names List” section on page 18-3](#).
- Performance issues may be indicated by frequent time-outs, if the voice recognition system is slow to respond, or if there are consistent problems in understanding how a name is pronounced. Depending on the size of your global directory, you may want to limit searches to reduce the number of names processed by the voice-recognition server. See the [“Setting the Search Scope for Improved Voice Name Recognition” section on page 18-5](#).