



Directory Handler Settings

Overview: Directory Handler Settings

Directory handlers provide directory assistance in Cisco Unity that callers can use to reach subscribers. When a caller searches on a subscriber name or part of a name, a directory handler looks up the extension and routes the call to the appropriate subscriber. Subscribers must have recorded names to be accessed by using directory handlers.

Each directory handler contains settings that specify how it searches for names, what it does when it finds one or more matches, and what it does when it detects no caller input.

The multiple directory handler feature provides quick, effective, and secure directory searches for systems with hundreds or thousands of subscribers. Multiple directory handlers are also used for call routing in headquarters and branch office deployments where Cisco Unity provides centralized call processing. Administrators can create as many directory handlers as they need to manage caller searches for subscribers.

See the following sections in this chapter for more information:

- [Creating and Modifying Directory Handlers, page 20-1](#)—This section contains procedures for creating and modifying directory handlers.
- [Directory Handler Profile Settings, page 20-4](#)—This section provides information about the settings on the Profile page.
- [Directory Handler Search Options Settings, page 20-5](#)—This section provides information about the settings on the Search Options page.
- [Directory Handler Match List Options Settings, page 20-7](#)—This section provides information about the settings on the Match List Options page.
- [Directory Handler Caller Input Settings, page 20-7](#)—This section provides information about the settings on the Caller Input page.

Creating and Modifying Directory Handlers

You can use the default pre-defined Directory Handler or any other existing directory handler as a template to create additional directory handlers. Create as many different directory handlers as needed to route calls to subscribers by using available filters such as location, class of service, and public distribution list membership.

You can also modify or delete any directory handlers, except the Default Directory handler can only be modified and not deleted.

Subscribers can be listed in more than one directory handler.

Since directory handlers do not have greetings, use call handlers or one-key dialing to route callers to a directory handler, and use the call handler greeting to explain caller options for each directory handler.

To create a directory handler

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- Step 1** In the Cisco Unity Administrator, for direct calls, go to any **Call Management > Directory Handlers >** page.
- Step 2** Click the **Add** icon.
- Step 3** In the Add a Directory Handler dialog box, enter information as appropriate in the Name field.
- Step 4** Select **New Handler** or **Based on existing Handler**. If you select Based on Existing Handler, select the appropriate directory handler in the Based On field.

Note that if you base a new directory handler on an existing one, all of the settings are copied except extension and recorded name. If you select New Handler, the new directory handler is based on the default directory handler.

- Step 5** Click the **Add** button.

Specify the settings for your new directory handler, as appropriate, and then click the **Save** icon.

Note that there may be a delay in synchronizing and accessing new directory handlers by using the Cisco Unity phone conversation when directory handlers are based on Public Distribution Lists.

Depending on the complexity of the Cisco Unity system configuration, synchronization of the new directory handler can take several minutes to several hours to complete. Factors that can affect synchronization speed include

- System configuration, including multi-domain environments, organization unit structure, synchronization timer setting, and public distribution list complexity
- Unity digital networking configuration
- Number of subscribers and public distribution lists

When a directory handler is scoped by a distribution list, the membership is synchronized from the Active Directory or Exchange 5.5 Directory into the Cisco Unity SQL database. Changing the distribution list by which the directory handler is scoped requires a synchronization. This synchronization takes place when the Cisco Unity directory services (AvDSAD and AvDSGlobalCatalog) poll the directory for any changes to be applied to the SQL database, which usually occurs within 15 to 20 minutes after the directory handler scope change is made in the Cisco Unity Administrator.

If an outside caller calls into Cisco Unity, and navigates to a recently created or modified directory handler on which synchronization has not completed, the Cisco Unity conversation may not present the full list of the directory members and/or may fail to find some directory members. The conversation may say, “No names are found,” or some subscribers may be missing from the directory list. This can also occur if the system administrator calls into Cisco Unity to verify directory handler additions or changes immediately after the changes are made in the Cisco Unity Administrator.

To initiate an immediate synchronization, do the following procedure.

To manually synchronize the Cisco Unity database

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

- Step 2** In the Replicate Cisco Unity directory objects section, click **Changed Objects**.
The Settings page is refreshed and the database changes will be synchronized in the background.
- Step 3** Wait a few minutes, then call in to Cisco Unity and confirm that the subscriber(s) can be located in the directory handler.
- Step 4** If the subscriber(s) still can not be located, confirm that they have recorded names. Subscribers must have recorded names to be accessed by using directory handlers.
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To modify a directory handler

- Step 1** In the Cisco Unity Administrator, go to any **Call Management > Directory Handler** page.
- Step 2** Click the **Find** icon.
- Step 3** Double-click the call handler that you want to modify.
- Step 4** Change settings as appropriate, and then click the **Save** icon.
- Note that there may be a delay in synchronizing and accessing the changes by using the Cisco Unity phone conversation when the directory handler is based on a Public Distribution List.
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To delete a directory handler

- Step 1** In the Cisco Unity Administrator, go to any **Call Management > Directory Handler** page.
- Step 2** Click the **Find** icon.
- Step 3** Double-click the call handler that you want to delete.
- Step 4** Click the **Delete** icon.
- Step 5** On the Cisco Unity server desktop, double-click the **Cisco Unity Tools Depot** icon.
- Step 6** In the left pane, under Diagnostic Tools, double-click **DBWalker**. (Running DBWalker ensures that any links to the deleted directory handler from other objects, such as call handlers, are identified.)
- Step 7** In the Options pane, check the following check boxes
- Remove orphaned call handlers**
 - Delete empty private distribution lists**
 - Set broken user keys to ignore**
 - Remove references to missing greeting or voice name wav files**
- Step 8** In the Logging pane, enter the location for the output log file.
- Step 9** Click **Walk Database**.
- Step 10** Click **OK**, then click **OK** again to view the output log.
- Step 11** Click **Exit**.
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Directory Handler Profile Settings

The profile settings specify who owns a directory handler, the extension, if any, that callers dial to reach that directory handler, and the language in which callers hear system prompts.

Use the following table to learn more about profile settings.

Table 20-1 Call Management > Directory Handler > Profile Page

Field	Considerations
Name	<i>Display only.</i> This setting shows the name of the selected directory handler.
Created	<i>Display only.</i> This setting shows the date and time that the directory handler was created.
Owner	This setting shows the directory handler owner. The owner can be any subscriber that has the authority to request changes to the directory handler. To change the owner, click Change. Default: Example Administrator.
Recorded Voice	This setting shows the recorded name of the directory handler. To record the directory handler name, use the Media Master control bar. Use the Paste From File option on the Options menu of the Media Master control bar to use a prerecorded WAV file as the recording. Note that the Media Master is not available across a firewall.
Extension	Enter the extension, if any, that callers dial to reach the directory handler. When the directory handler is reached only from one-key caller input, do not enter an extension here. Default: 555 or blank, depending on how the directory handler was created.
Language	Select the language in which Cisco Unity plays the handler system prompts. If you choose Inherited, Cisco Unity determines the language to use for system prompts on a per-call basis, depending on the handler or routing rule that processed the call. If the language is set to Inherited for every rule and handler that processes a call, then the system prompts are played in the default phone language. The default phone language and the list of languages shown here are set on the System > Configuration > Phone Languages page Default: Inherited.
Play all names	Check the box to automatically play the names of subscribers for caller selection, rather than requiring the caller to search by spelled name. Cisco Unity plays the names of all subscribers in the directory when either of the following conditions are true: <ul style="list-style-type: none"> One to five subscriber names are listed in the directory. The caller chooses to play all names listed in the directory. When there are more than five (but less than 51) subscriber names listed in the directory, the Cisco Unity phone conversation allows callers the choice of either searching for a subscriber in the directory by spelled name or having Cisco Unity play all names listed in the directory. <p>Note that when the Play All Names check box is checked, and there are no subscriber names listed in the directory, Cisco Unity sends the caller to the call handler specified on the Caller Input page. However, when a directory handler includes more than 50 subscriber names, Cisco Unity requires the caller to search for a subscriber by spelled name.</p> <p>Default: check box not checked.</p>

Directory Handler Search Options Settings

The search options settings specify whether a directory handler searches for subscribers by using first name first, or last name first. Additionally, these settings allow you to restrict directory handler searches to the local Cisco Unity server, a public distribution list, a class of service, or if your organization uses Digital Networking to network Cisco Unity servers within a dialing domain, to expand searches to Cisco Unity servers at other locations. For more information on dialing domains, see the “[Dialing Domains](#)” section in the “[Digital Networking](#)” chapter of the *Networking in Cisco Unity Guide*. (The *Networking in Cisco Unity Guide* is available on Cisco.com at http://www.cisco.com/en/US/products/sw/voicesw/ps2237/products_installation_and_configuration_guide_books_list.html).

Even if you have Digital Networking set up, you may want to consider limiting directory handler searches to the local server if either of the following conditions is true:

- If there are a large number of subscribers with the same name in your organization. In this situation, if you enable directory handler searches for multiple locations, the list of matching names presented to callers may be too long to be useful.
- If it is important to retain the individual call transfer settings for subscribers associated with other networked locations. If you enable directory handler searches for multiple locations, any calls transferred from a directory handler to subscribers not associated with the local server are automatically handled by the phone system—rather than by Cisco Unity—even if these subscribers are set up for supervised transfers on their own local Cisco Unity servers. As a result, the call screening, call holding, and announce features would not be available on these calls. See the “[Subscriber Template Call Transfer Settings](#)” section on page 11-10 for more information on call transfer types.

Use the following table to learn more about search option settings.

Table 20-2 Call Management > Directory Handler > Search Options Page

Field	Considerations
Search In	<p>Select the scope for directory handler searches:</p> <ul style="list-style-type: none"> • Local Unity Server Only—Restricts directory handler searches to subscribers associated with the Cisco Unity server that the caller dialed. • Location—Restricts directory handler searches to subscribers associated with the primary and local delivery locations for the selected Cisco Unity server. <p>To assign a directory handler search scope to a remote location created on another Cisco Unity server in the dialing domain, complete the following steps:</p> <hr/> <p style="margin-left: 40px;">Step 1 Create a new public distribution list.</p> <p style="margin-left: 40px;">Step 2 Assign all Cisco Unity subscribers associated with the remote location to the new public distribution list.</p> <p style="margin-left: 40px;">Step 3 Set the directory handler scope search to the new public distribution list.</p> <hr/> <ul style="list-style-type: none"> • Class of Service—Restricts directory handler searches to subscribers associated with the selected Class of Service on the local Cisco Unity server. • Dialing Domain—Expands directory handler searches to include subscribers associated with other Cisco Unity servers within a dialing domain. Do not use this option if your organization has large numbers of subscribers with the same name at multiple locations or if it is important to retain call transfer settings for subscribers who are not associated with the local Cisco Unity server. Instead, choose Local Unity Server Only, a Public Distribution List, or a Class of Service. • Public Distribution List—Restricts directory handler searches to subscribers associated with the selected Public Distribution List. Note that all Public Distribution Lists are presented, including lists that may contain Cisco Unity subscribers who do not have recorded names (and thus will not be presented to callers), and/or lists that may contain members who are not Cisco Unity subscribers. <p>Provide information in the call handler greeting that routes callers to this directory handler, explaining how callers can contact other Cisco Unity locations.</p> <p>Default: Local Unity Server Only.</p>
Search By	<p>Select the method that callers use to spell a subscriber name:</p> <ul style="list-style-type: none"> • First Name, Last Name—For example, callers press 535 (KEL) to reach Kelly Bader. • Last Name, First Name—For example, callers press 223 (BAD) to reach Kelly Bader. <p>Include instructions that reflect the Search By selection in the call handler greeting that routes callers to this directory handler.</p> <p>Default: Last Name, First Name.</p>

Directory Handler Match List Options Settings

The match list options settings specify whether, on a unique match, Cisco Unity routes the caller to the extension automatically, or first asks the caller to confirm the match. This page also specifies how Cisco Unity presents directory matches to callers—either by stating the extensions or by offering a menu of choices (“for Pat Amos, press 1; for Gerry Anderson, press 2...”).

Use the following table to learn more about match list options settings.

Table 20-3 Call Management > Directory Handler > Match List Options Page

Field	Considerations
On a Unique Match	<p>Select one of the following settings:</p> <ul style="list-style-type: none"> Route Automatically—Cisco Unity routes the call to the extension assigned to the subscriber without prompting the caller to verify the match. Request Caller Input First—Cisco Unity prompts the caller to verify the match. <p>Default: Request Caller Input First.</p>
Announce Matched Names Using	<p>Select one of the following settings:</p> <ul style="list-style-type: none"> Extension Format—Cisco Unity announces the extensions of matching subscribers. Menu Format—Cisco Unity provides a menu of subscribers, keeping subscriber extensions private. (For example, “For Pat Amos, press 1. For Gerry Anderson, press 2.”) <p>Default: Menu Format.</p>
Announce Extension with Each Name	<p>Cisco Unity provides a menu of subscribers that includes subscriber extensions. Callers might take note of subscriber extensions and skip directory assistance the next time they call.</p> <p>Available only if Menu Format is selected in the Announce Matched Names Using field.</p> <p>Default: check box checked.</p>

Directory Handler Caller Input Settings

The caller input settings specify the number of seconds a directory handler waits for caller input, the number of times the caller is prompted to spell a name, and the action that Cisco Unity takes if the caller exits a directory handler.

Use the following table to learn more about caller input settings.

Table 20-4 Call Management > Directory Handler > Caller Input Page

Field	Considerations
Timeout if No Input in Seconds	<p>Enter the number of seconds that Cisco Unity waits for caller input. When the caller does not press any key, Cisco Unity asks for confirmation that the caller is still there. If there is no response, Cisco Unity performs the action selected in the If Caller Exits Send To field.</p> <p>Default: 5 seconds.</p>
Timeout After Last Input in Seconds	<p>Enter the number of seconds that Cisco Unity waits after caller input before performing the action indicated by the input.</p> <p>Default: 4 seconds.</p>

Table 20-4 Call Management > Directory Handler > Caller Input Page (continued)

Field	Considerations
Times to Repeat Name Entry Prompt	<p>Enter the number of times to reprompt the caller for input. When the caller does not press any key after being reprompted, Cisco Unity asks for confirmation that the caller is still there. If there is no response, Cisco Unity performs the action selected in the If Caller Exits Send To field.</p> <p>Default: one time.</p>
If Caller Exits Send To	<p>Select the destination to which calls are sent if the caller exits the directory handler by pressing * or by not responding to prompts:</p> <ul style="list-style-type: none"> • Call Handler—Sends the call to another call handler that you select. • Directory Handler—Sends the call to another directory handler that you specify. • Greetings Administrator—Sends the call to a conversation for changing call handler greetings over the phone. • Hang Up—Disconnects the call. Use carefully; unexpected hang-ups can appear rude to callers. • Interview Handler—Sends the call to the interview handler that you select. • Sign-In—Sends the call to the subscriber logon conversation. • Subscriber—Sends the call to the subscriber that you select. <p>Default: Call Handler.</p>