CHAPTER 15

Troubleshooting Call Transfers and Call Forwarding in Cisco Unity Connection 9.x

See the following sections:

Note For call transfer problems that occur on newly installed systems, see the applicable Cisco Unity Connection integration guide, at http://www.cisco.com/en/US/products/ps6509/products_installation_and_configuration_guides_list.html.

If you encounter a call transfer problem that is not described in this chapter, contact the Cisco Technical Assistance Center (TAC).

Calls Are Not Transferred to the Correct Greeting in Cisco Unity Connection 9.x

When calls are not transferred to the correct greeting, use the following task list to determine the cause and to resolve the problem. Do the tasks in the order presented until the problem is resolved.

Task List for Troubleshooting Call Transfers to the Wrong Greeting

1. Confirm that the forward timer in the phone system is synchronized with the Rings to Wait For setting in Cisco Unity Connection. See the "Confirming That the Forward Timer in the Phone System Is in Synch with the Rings to Wait For Setting in Cisco Unity Connection" section on page 15-2.
2. Confirm that the phone system programming enables callers to hear the personal greeting of the user. See the "Confirming That the Phone System Integration Enables Playing the User Personal Greeting for Callers" section on page 15-3.
3. Confirm that the busy greeting is supported and enabled. See the "Confirming That the Busy Greeting Is Supported and Enabled" section on page 15-4.

4. Confirm that the caller reaches the intended destination based on the search scope. See the "Confirming That the Search Scope Configuration Sends the Call to the Intended Destination" section on page 15-4.

Confirming That the Forward Timer in the Phone System Is in Synch with the Rings to Wait For Setting in Cisco Unity Connection

For supervised transfers, the number of rings that Cisco Unity Connection waits before routing a call to a user personal greeting (or to another extension) can be reconfigured. If the phone system is programmed to forward calls, confirm that the phone system waits longer to forward a call than Connection waits before taking a message.

If the phone system is forwarding the call to another extension before Connection can take a message, the following may occur:

- The caller does not hear the beginning of the user personal greeting. (For example, the user greeting is "Hi, this is Maria Ramirez. Please leave a message after the tone." But the caller hears only "...message after the tone.")
- The call is forwarded to another phone (for example, the operator) rather than to the personal greeting of the user.
- The call is forwarded to the opening greeting.
- The caller hears only ringing.

To Synchronize the Forward Timer and the Rings to Wait For Setting

Step 1 In the phone system programming, find and note the setting of the forward timer.

Step 2 In Cisco Unity Connection Administration, expand **Users**, then select **Users**.

Step 3 On the Search Users page, select the alias of the user whose calls are not being routed to the correct greeting.

Note If the user does not appear in the search results table, set the applicable parameters in the search fields at the top of the page, and select **Find**.

Step 4 On the Edit User Basics page, on the Edit menu, select **Transfer Rules**.

Step 5 On the Transfer Rules page, select the name of the active transfer rule.

Step 6 On the Edit Transfer Rule page, under Transfer Action, confirm that the **Extension** option is selected for the Transfer Calls To field and that the extension number is correct.

Step 7 In the Transfer Type list, confirm that **Supervise Transfer** is selected.

Step 8 In the Rings to Wait For field, the setting should be two rings fewer than the setting of the forward timer of the phone system, which you noted in Step 1. This setting is typically not greater than four. It specifies the number of rings that Connection waits before routing the call to the personal greeting of the user.

If the settings do not meet the parameters, either reprogram the phone system so that it waits longer before forwarding unanswered calls, or change the Rings to Wait For field setting so that Connection routes the call before the phone system forwards it.

Step 9 Select **Save**.

Step 10 To change the default Rings to Wait For value for future users, expand **Templates** and select **User Templates**.

Note If you change settings in a user template, the settings are not changed for existing users whose accounts were created from that template. Changing the template settings affects only the users who are added after the template changes are made.

Step 11 On the Search User Templates page, select the alias of the user template that you want to change.

Note If the user template does not appear in the search results table, set the applicable parameters in the search fields at the top of the page, and select **Find**.

Step 12 On the Edit User Template Basics page, on the Edit menu, select **Transfer Rules**.

Step 13 On the Transfer Rules page, select the name of the active transfer rule.

Step 14 On the Edit Transfer Rule page, under Transfer Action, confirm that the **Extension** option is selected for the Transfer Calls To field.

Step 15 In the Transfer Type list, confirm that **Supervise Transfer** is selected.

Step 16 In the Rings to Wait For field, enter the same setting that you entered in Step 8.

Step 17 Select **Save**.

Confirming That the Phone System Integration Enables Playing the User Personal Greeting for Callers

When callers hear the opening greeting rather than the user personal greeting, confirm that the phone system integration is correctly set up. If the settings are not correct, call forward to personal greeting and easy message access are not enabled. Do the following procedure.

To Verify the Phone System Integration Settings

Step 1 In Cisco Unity Connection Administration, expand **Telephony Integrations**.

Step 2 Confirm that the settings for the phone system, port group, and ports match those indicated in the applicable Cisco Unity Connection integration guide, at http://www.cisco.com/en/US/products/ps6509/products_installation_and_configuration_guides_list.html.

Step 3 Correct any incorrect settings for the phone system integration.

Step 4 Confirm that the extension that the caller reached is the same as the primary or alternate extension of the user.

Step 5 If callers still hear the opening greeting after dialing the user extension, contact Cisco TAC.

Confirming That the Busy Greeting Is Supported and Enabled

When a call arrives at a busy extension and is forwarded to Cisco Unity Connection, phone systems typically send the reason for forwarding (the extension is busy) along with the call.

If Connection does not play the user busy greeting for the caller, the cause may be one of the following:

- The phone system does not provide the necessary call information to support the busy greeting. See the "Integration Functionality" section in the applicable Cisco Unity Connection integration guide, at http://www.cisco.com/en/US/products/ps6509/products_installation_and_configuration_guides_list.html.
- The user has not enabled the busy greeting. See the *User Guide for the Cisco Unity Connection Phone Interface (Release 9.x)* at http://www.cisco.com/en/US/docs/voice_ip_comm/connection/9x/user/guide/phone/b_9xcucugphone.html or the *User Guide for the Cisco Unity Connection Messaging Assistant Web Tool (Release 9.x)* at http://www.cisco.com/en/US/docs/voice_ip_comm/connection/9x/user/guide/assistant/b_9xcucugasst.html.
- The alternate greeting for the user is enabled and overrides the busy greeting. See the *User Guide for the Cisco Unity Connection Phone Interface (Release 9.x)* at http://www.cisco.com/en/US/docs/voice_ip_comm/connection/9x/user/guide/phone/b_9xcucugphone.html or the *User Guide for the Cisco Unity Connection Messaging Assistant Web Tool (Release 9.x)* at http://www.cisco.com/en/US/docs/voice_ip_comm/connection/9x/user/guide/assistant/b_9xcucugasst.html.

Confirming That the Search Scope Configuration Sends the Call to the Intended Destination

If a caller enters digits to transfer to an extension from the automated attendant or from a user greeting and reaches an unintended destination, check the search scope of the call at the point where the caller enters the digits. Cisco Unity Connection uses the search scope to match the extension that the caller dials to an object with this extension, such as a user, contact, or remote contact at a VPIM location. In particular, if your dial plan includes overlapping extensions, it is possible for the caller to enter an extension that matches multiple users or other Connection objects and be transferred to a different object than the caller expects to reach.

To make a match by extension, Connection checks the search space that is currently defined as the search scope for the call. Connection searches the partitions in this search space in the order that they appear in the Assigned Partitions list in Cisco Unity Connection Administration, and returns the first result found.

The search scope of the call when the caller reaches a system call handler is defined by the Search Scope setting on the Call Handler Basics page for the handler, and may either be explicitly set to a particular search space, or may be set to inherit the search space from the call, in which case it may have been set by a previous handler or by the last call routing rule that processed the call. When a user greeting is played, the search scope of the call is defined by the Search Scope setting on the User Basics page for the user in Cisco Unity Connection Administration.

You can trace the search scope of a call by enabling the CDE micro trace (level 4 Search Space). For detailed instructions on enabling the traces and viewing the trace logs, see the "Diagnostic Traces in Cisco Unity Connection 9.x" chapter.

Problems with Call Transfers in Cisco Unity Connection 9.x (Cisco Unified Communications Manager Express SCCP Integrations Only)

For Cisco Unified Communications Manager Express SCCP integrations only, call transfers may not work correctly (for example, the call may be dropped or the caller may be left on hold indefinitely). A possible cause for this problem is that the phone system integration is not correctly configured for Cisco Unified Communications Manager Express.

Do the following procedure.

To Configure the SCCP Integration for Cisco Unified Communications Manager Express

Step 1 In Cisco Unity Connection Administration, expand **Telephony Integrations**, then select **Port Group**.

Step 2 On the Search Port Groups page, select the port group name that is used by the Cisco Unified CM Express SCCP integration.

Step 3 On the Port Group Basics page, on the Edit menu, select **Servers**.

Step 4 Under Cisco Unified Communications Manager Servers, in the Server Type column, select **Cisco Unified Communications Manager Express** and select **Save**.

User Hears a Reorder Tone When Answering a Notification Call from Cisco Unity Connection 9.x

Cisco Unity Connection requires a minimum Rings to Wait For setting of three rings to properly transfer a call or to make a message notification call. If the number of rings to wait is set to fewer than three for notification devices or call handlers, a user may hear the reorder tone instead of the Connection conversation when called by Connection.

To Correct the Rings to Wait For Setting

Step 1 In Cisco Unity Connection Administration, expand **Users**, then select **Users**.

Step 2 On the Search Users page, select the alias of the user who is hearing a reorder tone when answering a call from Connection.

Note If the user does not appear in the search results table, set the applicable parameters in the search fields at the top of the page, and select **Find**.

Step 3 On the Edit User Basics page, on the Edit menu, select **Notification Devices**.

Step 4 On the Notification Devices page, select the display name of a notification device.

Step 5 On the Edit Notification Device page, under Phone Settings, set the Rings to Wait field to three or more rings.

Step 6 Select **Save**.

Step 7 On the User menu, select **Notification Devices**.

Step 8 Repeat Step 4 through Step 7 for each remaining notification device.

Step 9 To change the default Rings To Wait value for future users, expand **Templates** and select **User Templates**.

Note If you change settings in a user template, the settings are not changed for existing users whose accounts were created from that template. Changing the template settings affects only the users who are added after the template changes are made.

Step 10 On the Search User Templates page, select the alias of the user template that you want to change.

Step 11 On the Edit User Template Basics page, on the Edit menu, select **Notification Devices**.

Step 12 On the Notification Devices page, select the display name of a notification device.

Step 13 On the Edit Notification Device page, under Phone Settings, set the Rings to Wait field to three or more rings.

Step 14 Select **Save**.

Step 15 On the User menu, select **Notification Devices**.

Step 16 Repeat Step 12 through Step 15 for each remaining notification device.

Step 17 Expand **Call Management**, then select **System Call Handlers**.

Step 18 On the Search Call Handlers page, select the display name of a call handler.

Step 19 On the Edit Call Handler Basics page, on the Edit menu, select **Transfer Rules**.

Step 20 View the Standard, Alternate, and Closed rules. In the Transfer Type field, if Supervise Transfer is selected for any of the rules, confirm that the Rings to Wait For field is set to three or more rings.

If Rings to Wait For is set correctly, and the user still hears a reorder tone when answering a call from Connection, contact Cisco TAC.