C H A P T E R **5**

External Services (External Message Store, Calendar Integrations, Calendar Information for PCTRs)

See the following sections:

Access to Emails in an External Message Store

See the following sections for information on troubleshooting problems with accessing emails in an external message store:

User on the Phone Hears "Invalid Selection" After Pressing 7

When a user has logged in by phone, presses 7 on the main menu, and is told that the selection is invalid, the external service account for the user is not enabled for access to email in the external message store. Do the following procedure.

To Enable User Access to Email in an External Message Store

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

Step 2 On the Search Users page, click the alias of the user.

> ✎
> **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 click **Find**.

Step 3 On the Edit User Basics page, on the Edit menu, click **External Service Accounts**.

Step 4 On the External Service Accounts page, click the name of the external service that connects to the external message store.

Step 5 On the Edit External Service Account page, check the **User Access to Email in Third-Party Message Store** check box and click **Save**.

User on the Phone Hears "Your Messages Are Not Available" After Pressing 7

When a user has logged in by phone, presses 7 on the main menu, and is told that messages are not available, 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 a "Your Messages Are Not Available" Message

1. Test the external service that enables access to email in the external message store, and correct any errors that are reported. See the "Testing the External Service That Enables Access to Email in an External Message Store" section on page 5-3.

2. Test the external service account of the user who is enabled to access email in the external message store, and correct any errors that are reported. See the "Testing the External Service Account for Users Enabled to Access Email in an External Message Store" section on page 5-4.

3. In Cisco Unity Connection Administration, on the Class of Service > Edit Class of Service page for the class of service to which the user is assigned, confirm that the Allow Access to Email in Third-Party Message Stores check box is checked.

4. In Connection Administration, on the Users > Edit External Service Accounts page for the user, confirm that the Access to Email in Third-Party Store check box is checked. See the "Enabling User Access to Email in an External Message Store" section on page 5-4.

5. In Connection Administration, on the Users > Edit External Service Accounts page for the user, confirm that the User ID field entry matches the Exchange login alias of the user. If the Login Type field is set to Use Connection Alias, the user Exchange login alias must match the Connection user alias.

6. On the Exchange server, confirm that the Microsoft Exchange IMAP4 service is running.

7. Ping the server to which the external service connects by using the value in the Server field on the System Settings > External Services > Edit External Services page in Connection Administration. If the ping fails, the network connection is not functional. You must restore the net work connection.

8. Confirm that the Exchange server is set up to support basic authentication for IMAP4.

9. If Exchange requires SSL, Connection may be configured for an open connection. In Connection Administration, on the System Settings > External Services > Edit External Services page, confirm that Security Transport Type field is set to SSL.

You can manually check whether the Exchange server accepts open IMAP connections by entering the following commands at the command prompt:

telnet <Exchange server IP address> 143

01 login <NT domain>/<Connection service account>/<Exchange user> <password>
02 select inbox

10. If Exchange is not enabled for SSL, Connection may be configured for a secure connection, and you must install a server certificate on the Exchange server to enable SSL. Otherwise, in Connection Administration, on the System Settings > External Services > Edit External Services page, set the Security Transport Type field to None.

11. If the external service is configured for SSL and the Validate Server Certificate check box is checked, determine whether certificate validation is causing the problem. Do the following sub-tasks:

   a. In Connection Administration, on the System Settings > External Services > Edit External Services page, uncheck the **Validate Server Certificate** check box and click **Save**.

   b. On a phone, log on as the user who experiences the problem and press **7** at the main menu.

   c. If the user is able to access email on the external message store, confirm that the CN field of the Exchange certificate subject line matches the value of the Server field on the System Settings > External Services > Edit External Services page in Connection Administration.

   d. Confirm that the public root certificate of the Certificate Authority (CA) that issued the Exchange server certificate is installed on Connection as a trusted certificate, that it is self-signed, and that it has not expired.

   e. In Connection Administration, on the System Settings > External Services > Edit External Services page, check the **Validate Server Certificate** check box and click **Save**.

12. In Connection Administration, on the System Settings > External Services > Edit External Services page, confirm that the values of the Alias and Password fields are correct.

> **Note** You must enter the value in the Alias field in the NT domain qualified format (for example, companydomain\jdoe).

13. Confirm that the service account on Exchange that the external service uses has the Administer Information Store, Receive As, and Send As permissions allowed.

14. If the Exchange server is slow to respond to IMAP requests so that Connection times out, in Connection Administration, on the System Settings > Advanced > External Services page, set the Maximum External Service Response Time field to a value greater than 4.

> **Note** Increasing the value of the Maximum External Service Response Time may result in delays when accessing email in an external message store.

Testing the External Service That Enables Access to Email in an External Message Store

Do the following procedure.

To Test the External Service That Enables Access to Email in an External Message Store

Step 1   In Cisco Unity Connection Administration, expand **System Settings**, then click **External Services**.

Step 2   On the Search External Services page, click the name of the applicable external service.

Step 3   On the Edit External Service page, click **Test**.

Step 4   In the Task Execution Results window, refer to the list of issues and recommendations and do the applicable troubleshooting steps.

Step 5   Repeat Step 3 and Step 4 until the test succeeds.

Testing the External Service Account for Users Enabled to Access Email in an External Message Store

Do the following procedure.

To Test the External Service Account for Users Enabled to Access Email in an External Message Store

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

Step 2   On the Search Users page, click the alias of the user.

> **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 click **Find**.

Step 3   On the Edit User Basics page, on the Edit menu, click **External Service Accounts**.

Step 4   On the External Service Accounts page, click the name of the applicable external service account.

Step 5   Click **Test**.

Step 6   In the Task Execution Results window, refer to the list of issues and recommendations and do the applicable troubleshooting steps.

Step 7   Repeat Step 5 and Step 6 until the test succeeds.

Enabling User Access to Email in an External Message Store

Do the following procedure.

To Enable User Access to EMail in an External Message Store

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

Step 2   On the Search Users page, click the alias of the user.

> **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 click **Find**.

Step 3   On the Edit User Basics page, on the Edit menu, click **External Service Accounts**.

Step 4   On the External Service Accounts page, click the name of the external service that connects to the external message store.

Step 5   On the Edit External Service Account page, check the **User Access to Email in Third-Party Message Store** check box and click **Save**.

Users Cannot Access All Options While Listening to Email

Revised May 2009

While listening to email on the phone, users have the same options that are allowed with voice messages, except for the following, which are not allowed for email:

- Reply (includes live reply and reply to all)

- Forward

- Permanently delete individual emails

  Users can permanently delete all soft-deleted email at once through the same conversation that they would use to permanently delete all soft-deleted voice messages.

Users Hear Gibberish at the End or Beginning of an Email

When users hear gibberish at the end or beginning of an email, the gibberish is part of the email formatting that Text to Speech (TTS) plays back. Although the TTS engine is able to clean up some of the gibberish that can be found in various email formats, there are formats that cause some gibberish to be played.

Email Deleted by Phone Is Still in the Inbox Folder

When accessing an email account with a MAPI client (such as Microsoft Outlook), email that was deleted by phone may still appear in the Inbox and not in the Deleted Items folder.

Cisco Unity Connection uses the IMAP protocol to interact with Microsoft Exchange. Microsoft Exchange handles messages that are soft-deleted via IMAP differently than those that are soft-deleted by using the MAPI protocol. When a message is soft-deleted through IMAP, it is marked as deleted and is left in the Inbox folder. When a message is soft-deleted through MAPI, it is moved to the Deleted Items folder.

Short Delays or No Access While Listening to Email

While listening to email (external messages) on the phone, a user may experience up to a four-second delay, or a user may be told that email could not be read. This behavior may be intermittent.

Cisco Unity Connection allows itself four seconds to contact the Microsoft Exchange server and respond to any given IMAP request. If there are network or Exchange issues, Connection aborts the task to avoid any long delays in the conversation. If network problems happen at logon, email is not available for the duration of the call. If network problems happen during message access, further email may not be read for the duration of the call, or the caller may hear the failsafe prompt.

Microsoft Exchange can respond slowly for a number of reasons, but the most common reason is that the user has a large number of messages in his or her Inbox folder (for example, more than 1,000 messages). One solution may be to have the user delete messages or reorganize the email folders to reduce the number of messages in the Inbox.

Another solution is to increase the amount of time Connection waits to access the external message store before timing out. In Cisco Unity Connection Administration, expand System Settings > Advanced > External Services and change the setting for Maximum External Service Response Time from the default setting of 4 seconds to 6 or 10 seconds. Increasing the timeout value gives Exchange more time to respond to IMAP requests and successfully retrieve messages, but callers may experience long pauses while waiting for the system to respond.

Using Traces to Troubleshoot Access to Emails in an External Message Store (All Versions of Exchange)

You can use traces to troubleshoot access to emails in an external message store. For detailed instructions, see the "Using Cisco Unity Connection Serviceability Traces to Troubleshoot Problems" section on page 1-9.

Calendar Integrations

See the following sections for information on troubleshooting problems with calendar integrations:

How External User Accounts Are Used for Calendar Integrations

The following configuration principles apply to external service accounts that are used for calendar integrations:

- A user can have only one external service account for which the User Access to Calendar and Personal Contacts check box is checked.
- A user can have multiple external service accounts for which the MeetingPlace Scheduling and Joining check box is checked.
- If there are multiple external service accounts for which the MeetingPlace Scheduling and Joining check box is checked, a user must have only one external service account for which the Primary Meeting Service check box is checked.

Each user can access calendar information from only one external service account. If the calendar-enabled external service account connects to an Exchange server, the user has access to events only from the Exchange calendar. Similarly, if the calendar-enabled external service account connects to a Cisco Unified MeetingPlace or Cisco Unified MeetingPlace Express server, the user has access to events only from the Cisco Unified MeetingPlace or Cisco Unified MeetingPlace Express calendar.

The Cisco Unified MeetingPlace or Cisco Unified MeetingPlace Express server that is used to schedule reservationless meetings is designated by the external service account for which the Primary Meeting Service check box is checked.

For information on configuring a calendar integration between Cisco Unity Connection and Exchange 2003, see the "Creating Calendar Integrations" chapter of the *System Administration Guide for Cisco Unity Connection Release 7.x*.

Testing the Calendar Integration

Do the following procedure to test the calendar integration.

To Test the Calendar Integration

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

Step 2   On the Search Users page, click the alias of a user.

> ✎
>
> **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 click **Find**.

Step 3   On the Edit User Basics page, on the Edit menu, click **External Service Accounts**.

Step 4   On the External Service Accounts page, click the name of the applicable external service account.

Step 5   Click **Test**.

Step 6   In the Task Execution Results window, refer to the list of issues and recommendations and do the applicable troubleshooting steps.

Step 7   Repeat Step 5 and Step 6 until the test succeeds.

Test Fails the Last Check (Exchange 2003 Only)

When you click Test on the Edit External Service Account page to troubleshoot a calendar integration and all checks succeed except for the last check (which fails with the message "The system failed to perform a typical calendaring operation"), 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 When the Test Fails the Last Check

1. On the Exchange server, confirm that SP1 or later is installed.

2. On the Exchange server, confirm that the user is enabled for Outlook Web Access (OWA).

3. In Cisco Unity Connection Administration, on the Users > Edit External Service Accounts page for the user, confirm that the entry in the Email Address field matches the primary SMTP address for the user.

4. On the Exchange server, confirm that the Microsoft Exchange Outlook Web Access service is available.

You can manually check whether the Microsoft Exchange Outlook Web Access service is available by entering the following URL in a web browser:

http://<servername>/exchange/<emailaddress>

Note that the URL must begin with "https:" if SSL is selected in the Security Transport Type field on the System Settings > External Services > Edit External Service page. For <servername>, enter the value of the Server field on the System Settings > External Services > Edit External Service page to which the user external service account refers. For <emailaddress>, enter the value of the Email Address field on the Users > Edit External Service Account page for the user. When prompted to authenticate, enter the values of the Alias and Password fields on the System Settings > External Services > Edit External Service page.

5. In Cisco Unified Operating System Administration, on the Services > Ping Configuration page, confirm that Connection can ping the IP address or hostname of the Exchange server.

6. If the external service is configured for SSL and the Validate Server Certificate check box is checked, determine whether certificate validation is causing the problem by doing the following sub-tasks.

   a. In Connection Administration, on the System Settings > External Services > Edit External Services page, uncheck the **Validate Server Certificate** check box and click **Save**.

   b. On a phone, log on as the user who experiences the problem and access calendar information.

   c. If the user is able to access calendar information, confirm that the public root certificate of the Certificate Authority (CA) that issued the Exchange server certificate is installed on Connection as a trusted certificate, that it is self-signed, and that it has not expired.

   d. In Connection Administration, on the System Settings > External Services > Edit External Services page, check the **Validate Server Certificate** check box and click **Save**.

7. In Connection Administration, on the System Settings > External Services > Edit External Services page, confirm that the values of the Alias and Password fields are correct.

> **Note** You must enter the value in the Alias field in the NT domain qualified format (for example, companydomain\jdoe).

8. Confirm that the service account on Exchange that the external service uses has the Administer Information Store, Receive As, and Send As permissions allowed.

9. If the Exchange server is slow to respond to calendar information requests so that Connection times out, in Connection Administration, on the System Settings > Advanced > External Services page, set the Maximum External Service Response Time field to a value greater than 4.

> **Note** Increasing the value of the Maximum External Service Response Time may result in delays when accessing calendar information.

Test Succeeds, but the Calendar Integration Still Does Not Work (Exchange 2003 Only)

When you click Test on the Edit External Service Account page to troubleshoot a calendar integration and all checks succeed but the calendar integration still does not work, 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 a Calender Integration When the Test Succeeds

1. In Cisco Unity Connection Administration, on the Users > Edit External Service Accounts page for the user, confirm that the fully qualified DNS name (FQDN) of the Exchange server is resolvable via DNS.

   Even if the Users > Edit External Service Accounts page for the user is configured with the IP address of the Exchange server, calendar information from the Exchange server is provided with URLs that contain the FQDN of the server. Connection uses these URLs, which must be resolved by a DNS server so that the user can access calendar information.

2. If the Exchange server is slow to respond to calendar information requests so that Connection times out, in Connection Administration, on the System Settings > Advanced > External Services page, set the Maximum External Service Response Time field to a value greater than 4.

   > **Note**   Increasing the value of the Maximum External Service Response Time may result in delays when accessing calendar information.

3. Confirm that the system clocks on the Connection and Exchange servers are both correct.

4. Confirm that the meetings appear on the Outlook calendar of the user.

   If Cisco Unified MeetingPlace and Cisco Unified MeetingPlace Express meetings are scheduled through the user web interface for these applications, the scheduled meetings do not appear on the Outlook calendar of the user. If you configure the profile for Cisco Unified MeetingPlace or Cisco Unified MeetingPlace Express with an email type of "Exchange," meeting requests appear on the Outlook calendar of the user.

Non-Published Meetings Do Not Appear in List of Meetings (Cisco Unified MeetingPlace and Cisco Unified MeetingPlace Express Only)

When Cisco Unity Connection has an calendar integration with Cisco Unified MeetingPlace or Cisco Unified MeetingPlace Express, all applicable published and non-published meetings are listed when the user accesses meeting information.

If non-published meetings are not listed in the list of meetings, the service account that Connection uses to access calendar information is not correctly configured. Do the applicable procedure to configure the service that Connection uses.

To Configure the Connection Service Account (Cisco Unified MeetingPlace Only)

Step 1   Log on to the Cisco Unified MeetingPlace Administration Server as an administrator.

Step 2   Click **User Configuration > User Profiles**.

Step 3   Click the Connection service account.

Step 4   In the Type of User field, click **System Administrator**.

Step 5   Click **Save**.

Step 6   Log off of Cisco Unified MeetingPlace.

To Configure the Connection Service Account (Cisco Unified MeetingPlace Express Only)

Step 1   Log on to Cisco Unified MeetingPlace Express and click **Administration**.

Step 2   Click **User Configuration > User Profile Management**.

Step 3   Click the Connection service account.

Step 4   In the Type of User field, click **API User**.

Step 5   Click **Save**.

Step 6   Log off of Cisco Unified MeetingPlace Express.

Meetings Do Not Appear in List of Meetings

When meetings do not appear in the list of meetings, the cause may be the interval that Cisco Unity Connection waits to update calendar information. Do the following procedure.

To Change the Interval That Cisco Unity Connection Waits to Update Calendar Information

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Step 1   In Cisco Unity Connection Administration, expand **System Settings > Advanced**, then click **External Services**.

Step 2   On the External Services Configuration page, in the Normal Calendar Caching Poll Interval field, enter the length of time (in minutes) that Connection waits between polling cycles when it caches upcoming Outlook calendar data for users who are configured for a calendar integration.

A larger number reduces the impact on the Connection server while reducing the ability of the server to handle last-minute changes to the Outlook calendar data for users in a timely manner. A smaller number increases the impact on the Connection server while increasing the ability of the server to handle last-minute changes to the Outlook calendar data for users in a timely manner.

Step 3   In the Short Calendar Caching Poll Interval field, enter the length of time (in minutes) that Connection waits between polling cycles when it caches upcoming Outlook calendar data for calendar users who must have their calendar caches updated more frequently.

This setting applies to users who have the Use Short Calendar Caching Poll Interval check box checked on their Edit User Basics page.

Step 4   Click **Save**.

Users Cannot Save New External Service Account with Access to Calendar

When you cannot create a new external service account on which the User Access to Calendar and Personal Contacts check box is checked, 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 an External Service That Cannot Be Saved

1. In Cisco Unity Connection Administration, on the System Settings > External Services > Edit External Services page, confirm that on the external service that is referenced by the user external service account, the User Access to Calendar and Personal Contacts check box is checked.

2. In Connection Administration, on the Users > Edit External Service Accounts page for the user, confirm that the user does not have another external service account on which the User Access to Calendar and Personal Contacts check box is checked. A user can have only one external service account on which the User Access to Calendar and Personal Contacts check box is checked.

Using Traces to Troubleshoot a Calendar Integration

You can use traces to troubleshoot a calendar integration. For detailed instructions, see the "Using Cisco Unity Connection Serviceability Traces to Troubleshoot Problems" section on page 1-9.

Access to Calendar Information When Using Personal Call Transfer Rules

You can use traces to troubleshoot issues related to accessing calendar information when using personal call transfer rules. For detailed instructions, see the "Using Cisco Unity Connection Serviceability Traces to Troubleshoot Problems" section on page 1-9.

See also the "Personal Call Transfer Rules" chapter.

Test Button on Pages for External Services and External Service Accounts

You can use traces to troubleshoot problems with the Test button (the external service diagnostic tool). This button is available on the following pages in Cisco Unity Connection Administration:

- System Settings > External Services > Edit External Services page
- Users > Users > Edit External Service Account page

For information on using traces to troubleshoot problems with the Test button, see the "Using Cisco Unity Connection Serviceability Traces to Troubleshoot Problems" section on page 1-9.