

# CallXpress Unified Messaging for Microsoft Exchange 2003 Server

<b>Introduction .....</b>	<b>5</b>
<b>What Is CallXpress Unified Messaging for Microsoft Exchange? .....</b>	<b>7</b>
CallXpress Unified Messaging for Microsoft Exchange Features .....	8
<b>How CallXpress Unified Messaging Works .....</b>	<b>9</b>
Email Access and CallXpress Unified Messaging for Microsoft Exchange .....	10
Binary-to-Fax Email Attachment Rendering Support .....	20
Third-Party Fax Server Support .....	22
<b>Critical Application Issues for CallXpress Administrators .....</b>	<b>23</b>
Message Cache on the CallXpress Server .....	24
Activity When the Unified Message Store Is Unavailable .....	25
Time Synchronization Between Servers .....	26
<b>Installation Requirements for CallXpress Unified Messaging for Microsoft Exchange .....</b>	<b>27</b>
Server Installation Requirements .....	28
Workstation Installation Requirements .....	30
Documentation Requirements .....	30

<b>Installing Email Access .....</b>	<b>31</b>
Configuring Windows Server for Email Access .....	32
Enabling Lines for CallXpress Unified Messaging .....	50
<b>Configuring Microsoft Exchange Server for Email Access .....</b>	<b>52</b>
Enabling the Microsoft Exchange Server Interface .....	53
Configuring the Email Tab .....	69
<b>CallXpress Unified Messaging Components for Microsoft Exchange 2003 Server .....</b>	<b>70</b>
Preparing the Exchange Server for the MWI Components .....	71
Gathering Exchange Server Information .....	73
Installing CallXpress Message Waiting Indicator Components for Microsoft Exchange .....	76
Installing the CallXpress MWI Components on a Clustered Exchange Server .....	80
Configuring the CallXpress MWI Components for Use with Multiple Exchange Mail Stores .....	84
Backing Up and Restoring Data on the Exchange Server .....	88
<b>Integrating with a Third-Party Fax Server (Optional) .....</b>	<b>89</b>
<b>Configuring a Workstation for Use with CallXpress Unified Messaging for Microsoft Exchange .....</b>	<b>91</b>
Installing the CallXpress Unified Messaging Client on a LAN File Server .....	93
Installing the CallXpress Unified Messaging Client Software on a Workstation .....	98
Configuring CallXpress Unified Messaging Client Settings .....	106

<b>Appendix A: Testing the Communication Between the Email Access Interface and the Exchange Server .....</b>	<b>109</b>
Testing Communication with a Microsoft Exchange Server .....	110
MAPI Error Codes .....	120
<b>Appendix B: Subscriber QuickStart .....</b>	<b>126</b>
Getting Help for CallXpress Unified Messaging for Microsoft Exchange .....	126
Telephone User Interface Features .....	134
<b>Appendix C: Migrating from Desktop Message Manager for Microsoft Outlook to CallXpress Unified Messaging for Microsoft Exchange .....</b>	<b>142</b>
<b>Appendix D: Disabling Email Access During System Maintenance .....</b>	<b>143</b>
Using AT_EMA .....	147
<b>Appendix E: Troubleshooting Email Access After Setup .....</b>	<b>152</b>
<b>Appendix F: Client Installation Command Line and Switch Information .....</b>	<b>158</b>
"Push" Installation .....	159
"Pull" Installation .....	161
Command-Line Syntax .....	162
Using the Diagnostic Files .....	165

<b>Appendix G: Testing Messaging Server Route/Path References .....</b>	<b>167</b>
Verifying the Global Catalog Server's Domain .....	168
Configuring Other Domain Names for Use With CallXpress .....	169
<b>Index .....</b>	<b>170</b>
<b>Edition Information .....</b>	<b>174</b>

## Introduction

This online book describes how to implement CallXpress Unified Messaging for Microsoft Exchange in an organization. The book's instructions assume that CallXpress has been installed and is running successfully. They cover the following:

- An overview of CallXpress Unified Messaging for Microsoft Exchange
- Installation requirements for your CallXpress server, Exchange server, and client workstations
- Instructions for installing and configuring Email Access with an Exchange server
- Instructions for installing and configuring the server-based unified messaging software on the Exchange server
- CallXpress Unified Messaging client software installation on a workstation

To successfully implement CallXpress Unified Messaging for Microsoft Exchange in an organization, the assistance of the following individuals, who will constitute the implementation team, is required:

- CallXpress server administrator
- Microsoft Exchange Server administrator
- Windows Server domain administrator
- MIS/IT support staff



**IMPORTANT** Verify that each member of the implementation team is given a copy of this online book several days or weeks before the implementation of CallXpress Unified Messaging for Microsoft Exchange.

---

## What Is CallXpress Unified Messaging for Microsoft Exchange?

With CallXpress Unified Messaging for Microsoft Exchange, subscribers can manage voice, fax, and email messages using Microsoft Outlook. CallXpress Unified Messaging accomplishes this by enhancing the Microsoft Outlook email client so that it can support voice and fax messages in addition to email messages. The concept of managing voice, fax, and email messages within a single application program is known as *unified messaging*.

Unlike other Desktop Suite applications that store messages on the CallXpress server or in the email client, CallXpress Unified Messaging for Microsoft Exchange stores *all* voice and fax messages on the Exchange server along with email messages. As each voice and fax message is received, it is automatically moved from the CallXpress server to the Exchange server, where it is still accessible in its native form as a voice or fax message. Because the messages are stored on the Exchange server, CallXpress Unified Messaging for Microsoft Exchange is sometimes referred to as *server-based unified messaging*.



**IMPORTANT** CallXpress Unified Messaging for Microsoft Exchange functions with Microsoft Outlook 2000 or later *only*.

---

## **CallXpress Unified Messaging for Microsoft Exchange Features**

In addition to supporting standard CallXpress features over the telephone, CallXpress Unified Messaging offers a number of additional features:

- Lets subscribers manage voice and fax messages in ways that best suit their work styles, using the familiar interface of Microsoft Outlook.
- Allows subscribers to view fax messages and to forward them with voice or email message attachments.
- Enables subscribers to create, listen to, reply to, and forward voice messages over a computer multimedia sound system, thus allowing them to use CallXpress functions without requiring a telephone.
- Allows each subscriber to record a name and greetings over a computer multimedia sound system or telephone, using either the Desktop PhoneManager utility in the Windows Control Panel on the subscriber's computer or Web PhoneManager in the computer's internet browser.
- Allows subscribers to autodial the sender of a message using the Live Reply feature if supported by the telephone system.



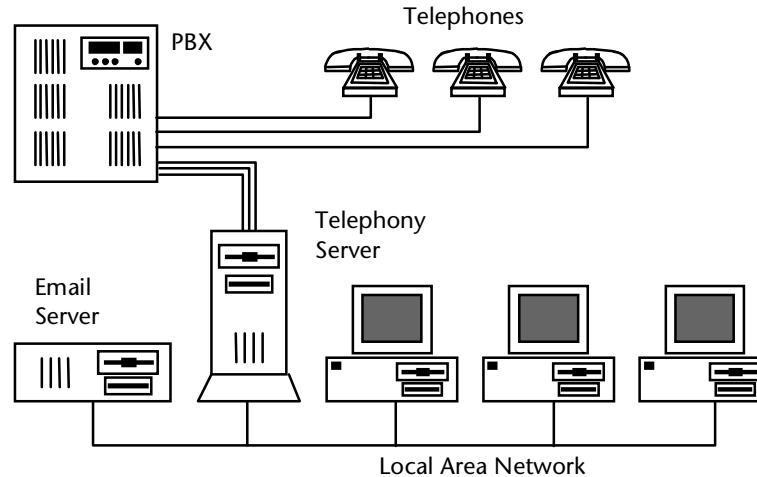
## How CallXpress Unified Messaging Works

With CallXpress Unified Messaging for Microsoft Exchange, subscribers have two options for accessing their messages from the Exchange server's unified message store. They can use either the telephone user interface (TUI) or the graphic user interface (GUI) by using the enhanced Microsoft Outlook email client.

CallXpress must be connected to the local area network (LAN) that supports the site's email system. The LAN allows CallXpress and the email system to communicate using the email system's application programming interface (API), a set of software tools that allows other programs to communicate with the email system. The relationship of the CallXpress server to the site's email system and LAN is illustrated on the next page.

The center of any email system is the email server, which tracks all the messages in the system. As messages are added and deleted, the email software updates its post office database.

Email Access, running on the CallXpress server, communicates with the email server. When a subscriber has message notification enabled, Email Access polls the email server each time the subscriber logs on and periodically thereafter. If email messages are present in the subscriber's mailbox, Email Access generates an appropriate message to notify the subscriber. However, when a subscriber receives a new email message, Email Access does not set the message waiting indicator on the subscriber's telephone.



## **Email Access and CallXpress Unified Messaging for Microsoft Exchange**

Email Access is an advanced feature of CallXpress. Because CallXpress Unified Messaging functions discussed in this book depend on the proper installation of Email Access on the CallXpress server and Exchange servers, all of the requirements for Email Access also apply to CallXpress Unified Messaging for Microsoft Exchange. Email Access must be functioning before you can begin configuring CallXpress Unified Messaging for Microsoft Exchange.

---

**NOTE** For Email Access to function properly, all email messages must be stored on the email server. Email Access cannot retrieve email messages that are stored on the subscriber's workstation.

---

Email Access, when used with CallXpress Unified Messaging, supports the North American versions of Microsoft Exchange Server version 5.5 with Service Pack 4, 2000 with Service Pack 3, and 2003. Please contact Microsoft for the latest Exchange Server version and available service packs.

### **TUI Message Access**

With TUI access, subscribers can manage their email messages by telephone using CallXpress telephone commands. They begin this process by logging into the CallXpress server, which then checks their accounts on the email server and enumerates their messages. CallXpress presents messages so that the subscribers can retrieve their information in the easiest way possible over the telephone:

- Voice messages are played back directly.
- Email messages are read aloud using text-to-speech capabilities, starting with information about the email messages' subjects and senders.
- Fax messages are announced as such with their delivery dates, delivery times, and page counts, as well as the sender's name if the sender was another subscriber. The subscriber must send the fax message to a fax machine for printing to view it.

To improve message handling, subscribers can set CallXpress to present messages by type, allowing them to access specific types of messages quickly. Message access through the TUI does not support the creation of text or fax messages; it only supports voice forwards and replies to email messages.

TUI access offers the following features:

- When subscribers log on, CallXpress notifies them if they have received email messages and tells them how many new messages there are. Also, depending on how the subscribers configure their mailboxes, CallXpress can inform them when new email messages arrive.

---

**NOTE** CallXpress email message notification does not set the message waiting indicators (MWIs) on subscriber telephones.

---

- Subscribers are informed of the time when each email message was sent. Depending on what envelope information is available, CallXpress can also report the message's subject and read or play the sender's name.
- Subscribers can listen to their email messages. The text-to-speech feature allows CallXpress to "read aloud" the content of an email message, speaking each message's subject, body, and any text-based attachments using synthesized speech.

- Subscribers can reply to email messages with voice messages, providing critical responses without waiting to get to their email programs. The response is attached to the email reply message as a .wav file. The message recipient can listen to the voice message on any computer capable of playing .wav files, provided that the recipient's email server supports .wav attachments.
- Subscribers can forward email messages to other server-based unified messaging users, enabling them to distribute information quickly with a few keypresses. Subscribers can also voice annotate a message before forwarding it.
- When Captaris RightFax Enterprise Fax Server is installed at the site, subscribers can forward email messages by fax and print email messages on any fax machine. In addition, text file attachments (with a .cmd, .bat, or .txt extension) can be printed on a fax machine as well, as can binary file attachments from such popular application programs as Microsoft Word and Microsoft Excel.

## **GUI Message Access**

During the installation of the CallXpress Unified Messaging software, Microsoft Outlook is modified to support voice and fax messages as follows:

- New icons are added to the GUI. In the Inbox, a voice message is signified by a telephone icon, whereas fax and voice-annotated fax messages are denoted by a fax sheet icon.
- CallXpress messages are identified as such in the subject line.
- New voice and fax message forms are included. The voice message form includes media player controls that support both the playback and recording of voice messages. The subscriber can select either the computer sound device or telephone for playback and recording.
- Allows subscribers to listen to, create, reply to, and forward voice messages over a computer sound device (typically a PC sound card or a motherboard-mounted multimedia audio chipset), allowing them to use CallXpress functions without a telephone.
- Allows subscribers to record their name and greetings over a computer sound device.
- Allows subscribers to set call blocking, call screening, and Extension Specific Processing (ESP), if those features are allowed for them.

- Subscribers can annotate messages, adding information about the subject or notes that summarize the response. When the message is forwarded, these notes are not forwarded, but remain only with the original message.

At the subscriber's discretion, any message can be forwarded or replied to using either CallXpress or email message forms.

### **Message Enumeration**

The user's Inbox and Saved folders can be enumerated and the content of the email messages read aloud. CallXpress enumerates and reads aloud any message found in the Microsoft Exchange user's Inbox or Saved folders. It considers all messages in the Inbox folder, both read and unread, to be new messages, presenting them in separate read and unread groups over the TUI. It presents all messages in the Saved folder as saved messages.

If a subscriber moves a message, regardless of type, to an Outlook folder other than Saved or Inbox, CallXpress is no longer able to access that message.

### **Forward**

All messages can be forwarded.

## Delete

Messages are marked for deletion on the telephony server, but are not deleted in the email mailbox until the subscriber logs off from CallXpress. Email Access logs off from the subscriber's email mailbox and the Exchange server moves the marked message to the Deleted Items folder. The deleted messages remain in the Deleted Items folder until the subscriber empties it.

## Save

If the subscriber reads any message (voice, fax, or email) and saves it through the TUI, CallXpress considers the message saved and moves it to the Saved folder. If no Saved folder exists, Email Access creates it while saving the first message.

CallXpress considers read and unread messages in the Inbox as new, but derives their read or unread status from message attributes on the Exchange server. It equates the Saved folder with its own saved message queue, and does not report over the TUI on whether the saved messages are read or unread.

## Text-to-Speech Rendering

The From line, Subject line, and body of all email messages in the Inbox and Saved folders can be read aloud using the text-to-speech feature. Email messages in other folders cannot be found by Email Access. Text file attachments (with a .cmd, .bat, or .txt extension) to email messages can also be read aloud.



## **Message Notification**

Subscribers are notified of normal- and urgent-priority email messages, provided that normal- and urgent-priority message notification is configured for the subscriber.

## **Replying to Messages**

When a subscriber replies by either voice or email to a voice or fax message, the original message is not included in the reply.

- If the subscriber selects the voice reply option while using the GUI, a new voice form appears with the original sender's email address on the To line. Using the media controls, the subscriber records a voice reply. The reply can be edited or re-recorded before being sent.
- If the subscriber selects the email reply option, the email client uses its regular reply function. This allows the creation of a standard email reply.

## **Voice Reply to Email Messages from Non-Subscribers**

In recorded voice replies to email messages, the audio format depends on whether the person who sent the original email message was a CallXpress subscriber. For other subscribers, CallXpress uses the format that its administrators have selected for voice messages. For non-subscribers, CallXpress users linear, monaural, 8-bit PCM.

On reply to an email message from a nonsubscriber, the voice message is attached to the reply message as a .wav file (linear PCM, 8 KHz, 8 bits per sample, mono). The recipient can then listen to this voice reply on a personal computer capable of playing .wav files. The email server used by the recipient must support .wav file attachments.

## Forwarding Messages

A voice or fax message may be forwarded as a CallXpress voice message, with or without a voice annotation.

- If the subscriber selects the voice forwarding option while using the GUI, a new forward form appears. The subscriber has the option of recording an introduction to the original message.
- If the subscriber chooses to forward the message with the email client's standard forwarding function, a new mail message appears with one or two file attachments (a .wav file for a voice message, a .tif file for a fax). The subscriber may type text in the message or attach other files.

---

**NOTE** When forwarding a voice message as an email message from Microsoft Outlook, any .wav attachment is formatted using a Pulse Code Modulation (PCM)-based compressor/decompressor (codec). This codec allows playback of the voice message on most computers running Windows-based operating systems, without requiring any special codecs to be installed on the computer.

---

## Modifying the Subject and Notes Boxes

Subscribers can type comments in the Subject or Notes box of any received message and save those changes with the message. Such notes are intended for the subscriber's personal use and are not included in any replies or forwards.

## Binary-to-Fax Email Attachment Rendering Support

CallXpress supports the Server-Side Application (SSA) conversion engine used by RightFax Enterprise Fax Server versions 8.7, 9.0, and 9.3. This support allows a subscriber using the TUI to forward an email message with a binary file attachment, such as a Microsoft Word document, to any fax machine and get printouts of the email message and binary attachments. Subscribers can print out binary file attachments in the file formats used by the following programs:

- Microsoft Word 2000–2003
- Microsoft Excel 2000–2003
- Microsoft PowerPoint 2000–2003
- Microsoft Visio 2000–2003



**IMPORTANT** The SSA feature is not supported on the same platform as CallXpress. SSA requires the installation of Microsoft Office products, such as Word and Excel, which are not allowed on the CallXpress platform.

---

The SSA conversion engine can also use the previously mentioned application programs to render binary file attachments from other application programs on any fax machine. For a complete list of file attachment formats that can be rendered using the SSA conversion engine and information about configuring the feature on the fax server, refer to the RightFax documentation.



**IMPORTANT** If RightFax is installed on the fax server platform, subscribers must use fax delivery mailboxes set up for callback delivery to retrieve email attachments. For more information about fax delivery mailboxes, see the *Fax Messaging* online book.

---

## Third-Party Fax Server Support

In addition to RightFax, which CallXpress uses as its native fax server, CallXpress Unified Messaging can support the following third-party fax servers:

- Esker Fax™ 3.5 or later
- Fenestrae® Faxination® 6.0 or later
- Interstar™ XMediusFAX® 4.1.0 or later

If CallXpress Unified Messaging is integrated with one of these fax servers, subscribers receive fax messages in their Outlook inboxes and can view, forward, or reply to them as they would with RightFax. They also have the same ability to review, forward, and print their fax messages over the telephone.

---

**NOTE** Ftext and standalone fax messaging support require RightFax. For more information about setting up these features, see the *Ftext* and *Fax Messaging* online books and the *RightFax Getting Started Guide*.

---

## **Critical Application Issues for CallXpress Administrators**

CallXpress administrators should be aware of the following critical application issues concerning CallXpress Unified Messaging for Microsoft Exchange:

- Message cache on the CallXpress server
- Activity when the unified message store is unavailable
- Time synchronization between servers

## Message Cache on the CallXpress Server

When configured with CallXpress Unified Messaging, the CallXpress server caches voice and fax messages to speed subscriber access to messages through the TUI. Voice and fax messages are stored in the cache as they are moved from the New folder on the telephony server system to the message store on the Exchange server. Because recent voice and fax messages are cached, subscribers experience no delay as the CallXpress server retrieves the messages from the Exchange server. In addition, because the messages do not need to be moved back and forth over the LAN between the two servers, traffic on the LAN is greatly reduced.

An administrator can change the size of the cache using the Cache Configuration box on the Email tab of the CallXpress Configuration utility. We recommend that the size of the cache be large enough that its automatic purge function is activated no more than once a day. An entry is recorded in the Windows Server Event Log each time the cache is purged.



## Activity When the Unified Message Store Is Unavailable

If the email server is unavailable to the CallXpress system, incoming voice or fax messages are saved to individual CallXpress subscriber mailboxes. During this period of interrupted communication between the servers, subscribers can use the TUI to log on to CallXpress and check for voice and fax messages that have been received **during** the period of broken communication. Any CallXpress messages already moved to the e-mail server's unified message store will be unavailable from the TUI until communication between the servers is restored. If the Exchange server is functioning during this period of broken communication, subscribers may access their voice and fax messages stored on the Exchange server using Outlook. Voice messages residing on the CallXpress server will be unavailable through Outlook. Once the two servers restore communication, the CallXpress server will move new messages still residing on it to the Exchange server and all messages will be available through the TUI or Microsoft Outlook.

## Time Synchronization Between Servers

It is critical that the time settings on the CallXpress server match the time and time zone settings on the Exchange server. You can match these time settings by using a time synchronization program that automatically updates the time on both servers or by manually updating them.

If the times on the two servers lose synchronization with each other, then a new message sent from the CallXpress server to the Exchange server may appear to be a future delivery message. If this occurs, then the message may fail either to appear in the email client program right away or to be presented through the TUI until the future delivery time has arrived. Time differences between the CallXpress server and the Exchange server can cause a disparity between the messages displayed in the email client and the messages available in the TUI.

AVST recommends that you use the Windows Time service in the operating system's Control Panel to synchronize the time between the CallXpress server and the Exchange server. Windows Time is a background service that can be configured to check the time on the Microsoft Exchange server, or on any other Windows server on the network, and reset the time on the CallXpress server to match it. For additional information about using Windows Time, refer to the appropriate Microsoft Windows 2000 or Windows Server 2003 documentation.

## **Installation Requirements for CallXpress Unified Messaging for Microsoft Exchange**

This section lists the installation requirements for successfully installing Email Access and CallXpress Unified Messaging for Microsoft Exchange. Be sure to review and meet these requirements before continuing with the other procedures discussed in this document.

Installation requires that a number of files be installed on the Microsoft Exchange Server and on each subscriber's workstation.

## **Server Installation Requirements**

Be sure to review the following installation requirements to ensure that the correct files, versions, and service packs are installed.

### **Microsoft Exchange Server Requirements**

- Microsoft Windows 2000 Server with Service Pack 4 or Microsoft Windows Server 2003 with Service Pack 1
- Microsoft Exchange Server 2003 with Service Pack 2

### **CallXpress Server Requirements**

- Version 7.80 of CallXpress
- Microsoft Windows 2000 Server with Service Pack 4 or Microsoft Windows Server 2003 with Service Pack 1
- Feature file update with Email Access and text-to-speech conversion channels enabled
- Connection to the LAN
- Installation of the correct network protocols to communicate with the Exchange server

## **Optional CallXpress Server Requirements**

- To print email messages on a fax machine (email text-to-fax service), the Captaris RightFax Enterprise Fax Server must be installed at the site. Refer to its documentation for requirements or contact Captaris.
- To print binary file attachments, such as Microsoft Word documents, RightFax Enterprise Fax Server Version 8.5 or later must be installed at the site, but not on the CallXpress server. Refer to its documentation describing the SSA conversion engine.
- To read the content of email messages and text-based attachments aloud using synthesized speech, text-to-speech channels must be purchased. Only one subscriber can use a text-to-speech channel at one time. To determine the number of text-to-speech resources the CallXpress server is currently licensed for, refer to the Features tab in CallXpress Configuration. To determine if additional text-to-speech channels need to be purchased based on the requirements of the site, contact AVST.
- Depending on the Email Access features you want to use, you may need additional memory in the platform. Contact AVST for help with determining memory requirements.

## **Workstation Installation Requirements**

Depending on their system configuration, client workstations can process messages using an email client or Web Browser Access.

### **Workstation Client with Email Access**

- Microsoft Windows XP Professional with Service Pack 2 or Windows 2000 Professional with Service Pack 4
- Microsoft Outlook 2000, XP, or 2003 with Service Pack 2
- Unified Messaging for Microsoft Exchange Client software

## **Documentation Requirements**

- This document
- *Installing CallXpress*
- *Administering CallXpress* (optional)
- *CallXpress Telephone Quick Reference* (optional)
- *RightFax Administrator's Guide* (optional)
- CallXpress Unified Messaging for Microsoft Exchange client online help

## Installing Email Access

This section discusses the tasks that must be accomplished to install Email Access on the CallXpress server. It assumes that both the LAN and CallXpress are functioning properly.

This section covers the following tasks in sequence:

- 1.** Configuring Windows Server for Email Access
- 2.** Enabling Lines for CallXpress Unified Messaging

## **Configuring Windows Server for Email Access**

For Email Access to function, the CallXpress server must maintain a continuous connection to the Exchange server. To ensure that this connectivity is preserved, perform the following tasks:

- 1.** Join the Windows Server domain.
- 2.** Create a CallXpress server account on the Windows Server domain and grant it Domain User privileges.
- 3.** Configure the CallXpress server account.
- 4.** Associate the CallXpress server account with the CallXpress service.
- 5.** Enable Email Access globally.

These tasks are described in greater detail on the following pages.



## Joining the Windows Server Domain

For Email Access to function properly, the CallXpress server must be a member of either the same Windows Server domain as the Exchange server or another Windows Server domain that is “trusted” by the Exchange server’s Windows Server domain. The Windows Server domain administrator will need to complete the following steps.

➤ **To add the CallXpress server to the Windows Server domain:**

1. From the Start menu, point to Settings, then click **Control Panel**.
2. Double-click **CallXpress Configuration**.
3. On the System tab, click **Shutdown**.
4. Wait for the word “Stopped” to appear in the Current Status box, then clear the **Automatic Startup** check box.
5. From the Start menu, point to Settings, then click **Control Panel**.
6. Double-click **System**.

7. Select one:

If you are using ...	Then ...
Windows 2000 Server	On the Network Identification tab, click <b>Properties</b> .
Windows Server 2003	On the Computer Name tab, click <b>Changes...</b>

8. Under Member of, select **Domain**.

9. Type the name of the Windows domain where you want the CallXpress server to be a member in the box and click **OK**. Do not change the computer name (usually CallXpr1) in the Computer Name box.

Windows may display a window requiring a logon to the Windows Server domain to allow rights to add machines to the domain; this will require the domain administrator to enter a user name and password. Once this task is complete, Windows displays a dialog box stating that the CallXpress server has joined the Windows 2000 or Windows Server 2003 domain.

10. Click **OK** to close the message dialog boxes.

11. Click **OK** to close the System Properties dialog box.

12. Click **Yes** to restart the computer.




---

**IMPORTANT** Do **not** manually start the CallXpress Service after the computer restarts. (Step 4 of the previous procedure disables automatic restart.) After CallXpress Unified Messaging for Microsoft Exchange is configured, you can set the CallXpress Service to start automatically.

---

## Creating the CallXpress Server Account

AVST recommends that you assign the account only the permission to send messages on behalf of its own subscribers instead of granting it domain administrator privileges. This lets the CallXpress server account complete its tasks without creating vulnerabilities within the domain.

### ➤ To create the CallXpress server account:

1. Log on to the Exchange server platform using an account with administrative permissions for both the Exchange server and the domains it serves.
2. From the Start menu, point to Programs, then to Microsoft Exchange, and click **Active Directory Users and Computers**.
3. In the left pane of the Active Directory Users and Computers window, expand the domain where you want to create the CallXpress account.
4. Select the organizational unit that contains service accounts and click the **New User** icon.
5. In the New Object-User wizard, create a new account named CallXpress.
6. After finishing the New Object-User wizard, locate the CallXpress account in the right-hand pane of the Active Directory Users and Computers window. Right-click the CallXpress account and select **Properties** from the shortcut menu.

- 7.** In the property sheet for the new user, click the **Member Of** tab. Verify that the CallXpress account is a member of the Domain Users group **only**.
- 8.** Configure the remainder of the settings for the new account. When you are finished, click **OK** to save your changes.



---

**IMPORTANT** The following procedure is not effective on user accounts that Windows classifies as protected, such as members of the Domain Admins group. The operating system blocks these accounts from inheriting the Send As permission from the CallXpress server account.

Microsoft advises strongly against using protected accounts to log on to Exchange mailboxes. However, if it is absolutely necessary to do so, Microsoft recommends that you assign the protected account Full Mailbox Access and Send As permissions on an Exchange mailbox assigned to a normal user account, then disable logons for the normal account. Refer to Microsoft knowledge base article 912918 for more information about this issue.

---

➤ **To authorize the CallXpress server account to send messages on behalf of its subscribers:**

1. From the Start menu, point to Programs, then to Administrative Tools, then click **Active Directory Users and Computers**.
2. In the main Active Directory Users and Computers window, click the **View** menu and select **Advanced Features** if it not selected already.
3. In the left pane of the window, expand the first organizational unit that contains accounts for CallXpress subscribers.
4. Right-click the organizational unit and select **Properties** from the shortcut menu.
5. On the property sheet, click the **Security** tab. Click **Advanced**, then click **Add....**

- 6.** In the Select User, Computer, or Group dialog box, type the fully qualified name of the CallXpress account (for example, *CallXpress@mydomain.com*) in the Enter the object names to select text box.
- 7.** Click **Check Names** to verify that the account name is typed correctly, then click **OK**.
- 8.** In the Permission Entry for Users property sheet, select **User Objects** from the Apply Onto list.
- 9.** In the Permissions list, select **Allow** for the Send As permission.
- 10.** Verify that the **Apply this permissions to the objects and/or containers within this container only** check box is cleared.
- 11.** Click **OK** to continue, then **OK** again to close Advanced Security Settings, then **OK** again to close the property sheet for the organizational unit.
- 12.** Repeat steps 3 through 11 for every organizational unit that contains accounts for CallXpress subscribers.

➤ **To grant Exchange permissions to the CallXpress server account:**

1. From the Start menu, point to Programs, then to Microsoft Exchange, and click **System Manager**.
2. In the left pane of the Exchange System Manager window, expand the tree to display a storage group that includes accounts for CallXpress subscribers and the mailbox store that contains those accounts.
3. Right-click the mailbox store and select **Properties** from the shortcut menu.
4. On the property sheet, click the **Security** tab, then click **Add...**
5. In the Select Users, Computers, or Groups dialog box, type the fully qualified name of the CallXpress account you created in the previous procedure (for example, *CallXpress@mydomain.com*) in the Enter the object names to select text box.
6. Click **Check Names** to verify that the account name is typed correctly, then click **OK** to add it to the Group or User Names box.
7. In the Group or User Names box, click the CallXpress account. In the Permissions list for the account, select the **Allow** box for Full Control and verify that the **Deny** box is cleared.
8. Click **Advanced**, then select the CallXpress account in the list of permission entries and click **Edit**.
9. Verify that the Apply Onto box is set to **This Object, Subcontainers, and Children**. Click **OK** to continue.

- 10.** Click **OK** again to save your changes.
- 11.** Repeat steps 2 through 10 for any other email stores that contain user accounts for CallXpress subscribers.

---

**NOTE** After you have completed this procedure, the changes may take time (between a few minutes and several hours, depending on your environment) to be applied throughout the system.

---



## Assigning the Server Account Administrative Access

The CallXpress server account must be able to create and modify search folders on the Exchange server platform to clear and set MWIs correctly. Assigning the account to the Administrators group gives it this ability.

This section contains two different versions of the procedure for assigning the CallXpress server account to the Administrators group:

- The first procedure discusses how to assign the account to the Administrators group on an Exchange server platform whose local user and group definitions are currently accessible.
- The second procedure discusses how to assign the account to the group on an Exchange server platform that is also an Active Directory domain controller, in which case its local user and group definitions are suppressed.



**IMPORTANT** Complete the following procedures **only** if you are installing the CallXpress MWI Components for Microsoft Exchange in this system.

---

➤ **To give the CallXpress server account administrative access to an Exchange server platform that is *not* an Active Directory domain controller:**

1. From the Start menu on the Exchange server platform, point to Settings and click **Control Panel**.
2. In the Control Panel, double-click **Administrative Tools**, then **Computer Management**.
3. In the left pane of the Computer Management window, expand System Tools and Local Users and Groups, then select **Groups**.
4. In the right-hand pane, double-click **Administrators**.
5. In the property sheet for the Administrators group, click **Add...**
6. In the Select Users dialog box, type the fully qualified name of the CallXpress account (for example, *CallXpress@mydomain.com*) in the Enter the object names to select text box.
7. Click **Check Names** to verify that the account name is typed correctly, then click **OK** to add it to the Administrators group.
8. Click **OK** again to save your changes.

➤ **To give the CallXpress server account administrative access to an Exchange server platform that is also an Active Directory domain controller:**

1. From the Start menu on the Exchange server platform, point to Programs, then to Administrative Tools, and click Active Directory Users and Computers.
2. In the left pane of the Active Directory Users and Computers window, expand the domain that contains the CallXpress server account and click the **Users** folder.
3. In the right pane of the window, right-click the CallXpress server account and select **Properties**.
4. On the property sheet for the account, click the **Member Of** tab, then click **Add...**
5. In the Select Groups dialog box, click **Advanced....**
6. Type **Administrators** into the Name text box and click **Find Now**.
7. In the list of found users and groups, select **Administrators** and click **OK**.
8. On the property sheet for the CallXpress server account, click **OK** or **Apply** to save the changes.

## Associating the CallXpress Server Account with the CallXpress Service

The user account `CallXpress@domain-name` must now be associated with the CallXpress service. This association enables the CallXpress server account to log on automatically to the CallXpress server and the Windows domain each time the CallXpress server starts up. During the logon process, the connection between the CallXpress server and the email server is automatically restored. After performing this procedure, CallXpress administrators must use the CallXpress server account to log on to Windows when maintaining the CallXpress server.

### ➤ To log off the server and log on with the CallXpress server account:

1. From the Start menu, click **Shut Down**.
2. Select **Log off *account name*** and click **OK**.
3. When the Logon Information dialog box appears after the platform restarts, type **CallXpress** in the User name box.
4. Type the password assigned to the CallXpress server account in the Password box.
5. Verify that the Windows Server domain name is correct in the Domain box, then click **OK**.

---

**NOTE** Perform the following procedure if CallXpress is installed on Windows 2000 Server.

---

➤ **To associate the CallXpress server account with the CallXpress service:**

1. From the Start menu, point to Programs, then to Administrative Tools, and click **Computer Management**.
2. In the Tree pane, double-click the **Services and Applications** node and select **Services**. The list of available services appears in the right pane.
3. Double-click the **CallXpress** service.
4. In the CallXpress Properties (Local Computer) dialog box, click the **Log On** tab.
5. Under Log On As, select **This Account**, then click the **Browse** button.  
The Select User dialog box appears.
6. In the Select User dialog box, verify that the Look In box displays the name of the Windows Server domain that contains the CallXpress server account.
7. Select CallXpress in the Names list, then click **OK**.
8. When the CallXpress Properties (Local Computer) dialog box reappears, type the password for the CallXpress server account in the Password box.

- 9.** Retype the password for the CallXpress server account in the Confirm Password box, then click **OK**.

The Services message box appears stating that the CallXpress server account has been granted the Log On As A Service right.

- 10.** Click **OK** to close the message box.
- 11.** Click **Close** to close the Computer Management program.

---

**NOTE** Perform the following procedure if CallXpress is installed on Windows Server 2003.

---

➤ **To associate the CallXpress server account with the CallXpress Service:**

1. From the Start menu, point to Programs, then to Administrative Tools and click **Computer Management**.
2. In the Tree pane, double-click the **Services and Applications** node and select **Services**. The list of available services appears in the right pane.
3. Double-click the **CallXpress** service.
4. In the CallXpress Properties (Local Computer) dialog box, click the **Log On** tab.
5. Under Log On As, select **This Account**, then click the **Browse** button.
6. In the Select User dialog box, click **Locations**.
7. In the Locations dialog box, select the name of the Windows Server domain that contains the CallXpress server account.
8. Click **OK**.
9. Click **Advanced**, then click **Find Now**.
10. From the Search Results list, double-click the CallXpress service.
11. Click **OK**.
12. Type the password for the CallXpress server account in the Password box.

- 13.** Retype the password for the CallXpress server account in the Confirm Password box, then click **OK**.

The Services message box appears stating that the CallXpress server account has been granted the Log On As A Service right.

- 14.** Click **OK** to close the message box.
- 15.** Click **Close** to close the Computer Management program.



## Enabling Email Access Globally

By enabling Email Access globally, you prepare the telephony server to link with the Exchange server.

➤ **To enable Email Access globally:**

1. With the CallXpress Service running, start CallXpress Administration.
2. From the Configuration menu, select **System**.
3. Click the **Messaging** tab.
4. Select the **Email Access Active** box.
5. Click **OK** to close the System Configuration dialog box.
6. Exit CallXpress Administration.

## Enabling Lines for CallXpress Unified Messaging

The CallXpress administrator must enable lines on the Lines tab so CallXpress Desktop applications, such as CallXpress Unified Messaging, can make callouts. This type of callout allows subscribers to use telephones to hear and record messages, and record personal greetings and names.

In addition, the administrator must verify that the values are appropriate for the Incoming Line Reserve and Maximum Callouts settings on the Switch Section Options dialog box from the Switch Sections tab.

### ➤ **To enable lines for Desktop applications:**

1. Start CallXpress Configuration.
2. Click the **Lines** tab.
3. click under Callouts for each line allowed for CallXpress Unified Messaging callouts, then click **Apply**.

If necessary, refer to the online help for information about the Lines tab.

4. Click the **Switch Sections** tab.
5. Select the switch section from the list and click **Edit**.

- 6.** From the Switch Section Options dialog box, select **All Parameters** from the View dropdown list.
- 7.** Verify that the values in the Incoming Line Reserve and Maximum Callouts settings are appropriate. Change the values as necessary.

---

**NOTE** Keep in mind that the total number in both settings cannot exceed the number of lines in your system. If necessary, refer to the online help for information about the Switch Section Options dialog box.

---

- 8.** Click **OK** to close the Switch Section Options dialog box.
- 9.** Click **OK** to close CallXpress Configuration.

## Configuring Microsoft Exchange Server for Email Access

Some of the steps in this section should be performed by, or with the assistance of, the Exchange server administrator. Further, the assistance of the Windows Server domain administrator may be required to enable this interface.

The CallXpress Exchange Server interface can support one or more Exchange servers. To provide Email Access features to subscribers using these servers, the organization must meet the following requirements:

- CallXpress must have access to the subscribers' Exchange mailboxes. For this purpose, it requires its own mailbox on each Exchange server and a corresponding Domain User account.
- The CallXpress Windows Server domain account must be granted access permission to all other Exchange mailboxes that will use Email Access.
- Microsoft Outlook software must be installed on the CallXpress server platform.
- A messaging server profile must be created within CallXpress for each Exchange server. These profiles must be properly configured for Email Access to function properly.

## **Enabling the Microsoft Exchange Server Interface**

The following steps must be performed to interface the Exchange server with the CallXpress server. The steps you perform depend on the number of Exchange servers in the organization, how they are configured, and the requirements of the Exchange administrator. These steps are:

- Create Exchange server user mailboxes for CallXpress.
- Install Microsoft Outlook on the CallXpress server.
- Create messaging server profiles on the CallXpress server.
- Configure the Microsoft Exchange interface for subscribers.

## Creating Exchange Server User Mailboxes for CallXpress

CallXpress must be able to open each subscriber's Exchange mailbox to provide Email Access features. To accomplish this, CallXpress must have a mailbox of its own and a corresponding Domain User account on each Exchange server that contains mailboxes for CallXpress subscribers.

### *Creating Exchange User Mailboxes for CallXpress*

The following procedure, which creates user mailboxes for the CallXpress server on each Exchange server, should be completed by the Exchange server administrator.



**IMPORTANT** If a mailbox was created during the User Account setup, ignore this section.

---

➤ **To create a user mailbox for CallXpress on each Exchange 2003 server:**

1. Open Active Directory Users and Computers Console.
2. From the Tree pane, select the **Users**.
3. From the list of names, select CallXpress.
4. From the Action menu, select **Exchange Tasks**.
5. Click **Next** at the welcome message in the Exchange Task Wizard.

- 6.** Select **Create Mailbox** and click **Next**.
- 7.** Verify the information in each box and correct it if needed, then click **Next**.
- 8.** Click **Finish**.

## Installing Microsoft Outlook Client Software on the CallXpress Server

CallXpress uses Microsoft Outlook client software to access the Exchange server and the subscriber mailboxes it serves. Instructions for installing Outlook 2000 and 2003 are provided in this section.

You must log on to the CallXpress server using the CallXpress server account created earlier. This account has been created specifically for the CallXpress service. From this point forward, you must use this account to perform all administration and maintenance of the CallXpress server.



**IMPORTANT** Unless otherwise instructed, accept all default settings while completing the following instructions.

---

**NOTE** Microsoft distributes Outlook 2000 and 2003 as components of the Microsoft Office program CD-ROM. The actual procedure for installing your copy of Outlook may differ from the procedure described here based on the other components contained on the program CD you are using for the installation.

---



➤ **To install Microsoft Outlook 2000 from the Microsoft Office 2000 program CD:**

1. Run the file **Setup.exe** from the Microsoft Office 2000 program CD.
2. At the Please enter your customer information dialog box, type **CallXpress** in the User name box.
3. Type the site name in the Organization box, then click **Next**.
4. Review the licensing terms presented in the License Agreement dialog box. To accept these terms, select **I accept the terms of the license agreement** and click **Next**.
5. At the Install Office 2000 at: box, verify the installation path is C:\Program Files\Microsoft Office\, then click **Next**.
6. At the Microsoft Office 2000:Selecting Features dialog box, click **Not Available** for the drive icons below:
  - Microsoft Word for Windows
  - Microsoft Excel for Windows
  - Microsoft PowerPoint for Windows
  - Microsoft Access for Windows
  - Microsoft FrontPage for Windows
  - Office Tools
  - Converters and Filters
7. Click **Run all from My Computer** for the drive icon to the left of Microsoft Outlook for Windows.

**8.** Click **Install Now**.

Outlook files are installed to the hard disk drive.

**9.** When installation of Outlook files is complete, double-click the **Microsoft Outlook** shortcut on the desktop or from the Start menu, point to Programs, then click **Microsoft Outlook**.

**10.** At the Welcome... dialog box, click **Next**.

**11.** At the Email Service Options dialog box, click **Corporate or Workgroup**, then click **Next**.

**12.** At the Select Information Services dialog box, verify that Use the information services is selected.

**13.** Select the **Microsoft Exchange Server** check box, then click **Next**.

**14.** Type the name of the Exchange server or the Exchange server site in the Microsoft Exchange Server box.

**15.** Type the mailbox name in the Mailbox box, then click **Next**.

**16.** At the Do you travel with this computer dialog box, verify that **No** is selected, then click **Next**.

**17.** At the Done dialog box, click **Finish**.

**18.** After the computer restarts, log back on with the CallXpress server account.

**19.** Start Microsoft Outlook and verify that it has access to the Exchange server.

➤ **To install Outlook 2003 from the Microsoft Office 2003 program CD:**

1. Insert the Microsoft Office 2003 CD into the platform's CD-ROM drive.
2. In the User name text box within the dialog box titled "User information", type **CallXpress**.
3. In the Organization box, type the site name. Leave the Initials box empty.
4. In the five Product Key boxes, type the 25-character product key sequence shown on the yellow sticker attached to your Office 2003 CD case. When you are finished typing the Product Key, click **Next**.
5. Review the agreement shown in the End-User License Agreement dialog box. To accept the legal terms presented in the agreement, select **I accept the terms in the License Agreement** and click **Next**.
6. In the dialog box titled "Choose the type of installation you need," select **Custom**. Verify that the installation path shown in the Install to box is appropriate; if not, click **Browse** and use the Select a Destination Folder dialog box to navigate to the correct installation path.
7. To continue the setup process, click **Next**.

- 8.** In the dialog box titled “Choose which applications for setup to install,” clear all check boxes *except* for **Microsoft Outlook**. Verify that the option Install applications with the typical options is selected, then click **Next**.
- 9.** In the dialog box titled “Begin installation”, verify that all applications are set to (Not Available) except for Microsoft Outlook, which should be set to (Run from My Computer). To begin copying the program to the telephony server’s disk drive, click **Install**.
- 10.** When the final dialog box advises you that installation has completed successfully, click **OK**.
- 11.** From the Start menu, point to Programs and click **Microsoft Outlook**.
- 12.** At the Choose Profile dialog box, click **OK**.
- 13.** At the E-mail Accounts dialog box, select **Add a new email account** and click **Next**.
- 14.** At the first E-mail Accounts dialog box, select **Microsoft Exchange Server** and click **Next**.
- 15.** In the Microsoft Exchange Server text box, type the name of the Exchange server or the Exchange server site.
- 16.** In the User Name text box, type **CallXpress**. When you are finished, click **Next**.

- 17.** When the final E-mail Accounts dialog box advises you that you have successfully entered all the information required to set up your account, click **Finish**.
- 18.** When the initialization process is complete, exit Microsoft Outlook.
- 19.** Start Microsoft Outlook and verify that it has access to the Exchange server.



**IMPORTANT** In the About box for Microsoft Outlook 2003, verify that the Microsoft Office service pack level is SP2 or higher. If it is not, refer to the Microsoft Office update page at **<http://office.microsoft.com/en-us/officeupdate/default.aspx>** to obtain the latest service pack.

---

## Creating Messaging Server Profiles to Communicate with the Microsoft Exchange Server

### ➤ To create a messaging server profile for the Microsoft Exchange 2003 server:

1. Verify that you are logged on to the CallXpress server using the CallXpress server account.
2. From the Start menu, point to Settings, then click **Control Panel**.
3. Double-click CallXpress **Configuration**.
4. On the System tab, check the Current Status indicator. If it reads “Running,” click **Shutdown** and wait for the Current Status indicator to change to “Stopped.”
5. Click the **Email** tab.
6. Click **Add**.
7. In the Server Type box within the Server Profile dialog box, select **Exchange 200x**.
8. Type a unique name, 30 characters or less, for the messaging server profile in the Display Name box.
9. Type the DNS domain name that applies to the Exchange 2003 Server in the **Route/Path** box.

---

**NOTE** This should be the DNS domain suffix for the fully-qualified domain name of the Exchange Server. For example, if the Exchange Server is *mail.domain.com*, then the route/path is *domain.com*. For more information, refer to Appendix G.

---

- 10.** Under Server Account, type CallXpress in the Login ID box. Leave the Password box empty.
- 11.** To verify the settings typed in the Server Profile dialog box up to this point, click **Test**.

---

**NOTE** You must be simultaneously logged on the CallXpress server using the CallXpress account for the test to function correctly.

---

- 12.** In the User Logon Account dialog box, type the user name of a known account on the Exchange server in the User Name box.

Email Access uses the messaging server profile in an attempt to enumerate the email mailbox of the account specified in the User Logon Account dialog box. It then displays a log file called Mcheck.log. The Mcheck.log file and its associated error codes are described in "Appendix A: Testing the Communication Between the Email Access Interface and the Email Server."

- 13.** Using the contents of the Mcheck.log file, verify that the messaging server profile settings are correct up to this point.

**If the Mcheck.log file indicates ...**

**Then ...**

Success (a normal enumeration of the email mailbox)

Proceed with step 14.

Failure (a MAPI error code)

Repeat steps 9 through 13 until Mcheck.log displays success in all areas.

14. Configure the messaging server profile to stop Email Access during Exchange server maintenance.

If you ...	Then ...
Want to stop Email Access during Exchange server maintenance	Continue to step 15.
Do not want to stop Email Access during Exchange server maintenance	Skip to step 18.

15. Under Maintenance, select the **Enabled** check box.
16. Select a time to disable the messaging server profile so that maintenance of the Exchange server can begin in the Start box.
17. Select a time to re-enable the messaging server profile when maintenance of the Exchange server is complete in the Stop box.
18. Select the **Enabled** check box to enable the messaging server profile.
19. Select the **Supports External Mail Store** check box.
20. Click **OK** to close the Server Profile dialog box.
21. Repeat steps 6 through 20 for each domain, as necessary.



- 22.** Click the **Apply** button, then the **System** tab.
- 23.** Click **Startup**.
- 24.** Wait for the word "Running" to appear in the Current Status box, then click **OK** to close CallXpress Configuration.

## Enabling the Microsoft Exchange Server Interface for Subscribers

The following steps must be performed on each CallXpress subscriber mailbox that will use CallXpress Unified Messaging.

### ➤ **To configure CallXpress subscriber mailboxes for use with CallXpress Unified Messaging:**

1. Verify that you are logged on to the CallXpress server using the CallXpress server account.
2. If needed, start CallXpress.
3. Start CallXpress Administration.
4. Log on to the telephony server using an administrator account that has permission to edit subscriber mailboxes and update their email configuration. If you are not certain that your account has such permissions, check with the administrator of the telephony server.
5. Locate, then edit the subscriber mailbox.
6. In the Subscriber Mailbox dialog box, click the **Email** tab.
7. Under Message Storage Location, select **External**.
8. Select the messaging server profile created in the previous procedure in the Server Profile list.

**9.** Configure the Display Name and Email Address boxes.

**If you are ...**

**Then ...**

Using LDAP

Continue with step 10.

Not using LDAP

Skip to step 14.

**10.** Click **Search**.

**11.** Verify or modify the information appearing in the Search String box to match the search type you intend to use, then click **Search**.

**12.** Select the email account from the Search Results box, then click **OK**.

**13.** If the Display Name and Email Address boxes now contain the information obtained from the search, skip to step 16.

**14.** Type the subscriber's name as it appears in the Exchange address book in the Display Name box. This name must be unique to each subscriber. The Exchange server administrator should be able to provide this information.

**15.** Type the subscriber's email address in the Email Address box.

---

**NOTE** The subscriber's address should be in SMTP format.

---

- 16.** Under Message Access by Telephone, select the **E-mail** box to enable TUI access for email messages.
- 17.** Click **OK** to close the Subscriber Mailbox dialog box.
- 18.** Repeat steps 5 through 17 for each subscriber you want to give Email Access features.

## Configuring the Email Tab

The Email tab allows you to set the cache for short-term storage of messages.



---

**IMPORTANT** This cache is used to speed up telephone access to messages stored on the Exchange server. Increase the cache size if the following message appears in the Event Viewer Application log more than once a day: “External Mail Cache purged.”

---

➤ **To configure the Email tab for Microsoft Exchange:**

1. Start CallXpress Configuration.
2. On the System tab, shut down CallXpress.
3. Click the **Email** tab.
4. Under Cache Configuration, set the Cache Size to a value between 100 and 500 megabytes (MB).
5. Click the **System** tab and restart CallXpress.
6. Close CallXpress Configuration.

## CallXpress Unified Messaging Components for Microsoft Exchange 2003 Server

CallXpress Message Waiting Indication (MWI) provides unified messaging users with familiar confirmation of new messages. MWI signals the subscriber that a new voice or fax message has been delivered to the subscriber mailbox. The signal may be visual or audible, depending on the type of telephone system the organization uses and how it is configured.

For the CallXpress MWI components to function properly, certain settings and accounts must be set up on the Exchange server before starting the installation of the components.



**IMPORTANT** The CallXpress MWI components for Microsoft Exchange do not track Exchange server failovers. If a failover occurs, subscribers' MWIs may not function until the next time the CallXpress server performs daily maintenance. To correct this problem before daily maintenance occurs, restart the CallXpress server.

---



**IMPORTANT** Data backup and restore software can interfere with the CallXpress MWI components for Microsoft Exchange if it attempts to modify the contents of the folder containing the Exchange data stores. For information about backing up the Exchange server safely, refer to "Backing Up and Restoring Data on the Exchange Server" on page 88.

---

## Preparing the Exchange Server for the MWI Components

To complete the following procedures successfully, make sure the Microsoft Exchange server is using either the Windows 2000 operating system with Service Pack 4 or the Windows Server 2003 operating system with Service Pack 1. Before beginning the procedure, log on to the Exchange server using an account that has Exchange Full Administrator and Domain Administrator privileges.



---

**IMPORTANT** In a system of clustered Exchange servers, you must perform the following procedure on each Exchange server in the cluster.

---

➤ **To prepare the Exchange 2003 server for CallXpress Unified Messaging Components installation:**

1. Start the Exchange System Manager.
2. In the Exchange System Manager Tree pane, locate the Servers node. Select the **Servers/(server name)/(storage group)/Mailbox Store (computer)/Mailboxes** entity that contains the mailboxes of the CallXpress subscribers.
3. Locate and select the **SystemMailbox{GUID}** mailbox. In the right-hand pane, expand the Mailbox column and make note of the globally unique identifier (or GUID) shown between the braces in the name of the mailbox.
4. Without closing Exchange System Manager, start Active Directory Users and Computers for the domain.

- 5.** In the View menu, select **Advanced Features** if it is not selected already.
- 6.** In the Active Directory Users and Computers tree pane, open the Microsoft Exchange System Objects container and locate the **SystemMailbox{GUID}** mailbox described in step 3. Verify that the GUID assigned to this mailbox matches the GUID of the system mailbox that you selected in step 3.
- 7.** If the **SystemMailbox{GUID}** mailbox is inactive, right-click it and select **Enable Account** from the shortcut menu.
- 8.** Close the Exchange System Manager and Active Directory Users and Computers.
- 9.** Verify that the Exchange services are running.



## Gathering Exchange Server Information

Before installing the MWI Components for Microsoft Exchange, you must determine how the components should communicate with the Exchange web site by performing the following procedure on each Exchange server that will support CallXpress Unified Messaging.

---

**NOTE** If you are not the administrator of the Exchange server, ask that administrator to perform this procedure.

---

➤ **To gather the necessary information from each Exchange server:**

1. From the Start menu on the Exchange server platform, point to Programs, then to Administrative Tools, and click **Internet Information Services (IIS) Manager**.
2. In the left pane of the IIS Manager window, navigate to the Exchange web site. You can typically reach this site by expanding Web Sites, then Default Web Site, and looking for a site named Exchange.
3. Right click the Exchange site and select **Properties** on the shortcut menu.
4. In the Exchange site property sheet, click the **Directory Security** tab.
5. Under Secure Communications, click **Edit**.

- 6.** Determine whether or not the site requires Secure Sockets Layer (SSL) by examining the Require secure channel (SSL) check box.

**If the box is ...    Then ...**

Cleared	The site does not require SSL. Close IIS Manager and skip to the following procedure.
Selected	The site requires SSL. Continue with step 7.

- 7.** Click **Cancel** to return to the Directory Security tab.

---

**IMPORTANT** In the following step, make note of the name in the Issued to field. You will need this name when you configure the MWI Components later.

---

- 8.** Under Secure Communications, click **View Certificate**. You should see a property sheet with a Certificate tab showing. Make note of the following information from this tab:
  - The domain, person, or organization to whom the certificate was issued, shown in the Issued to field
  - The range of dates over which the certificate is valid, shown in the Valid From and Valid To fields, which must include the current date
- 9.** Exit from the IIS Manager. From the Start menu, point to All Programs, then to Microsoft Exchange, and click **System Manager**.

- 10.** In the left pane of the Exchange System Manager window, locate and expand the Servers group, then the Exchange server you are updating, then Protocols, then HTTP. Right-click Exchange Virtual Server and select **Properties**.
- 11.** Click the **Settings** tab and examine the Enable Forms Based Authorization check box to determine the style of SSL used on the server.

**If the box is ...    Then the server uses ...**

Cleared	Basic SSL
Selected	Forms-based SSL

12. Exit Exchange System Manager and continue with the following procedure.

## Installing CallXpress Message Waiting Indicator Components for Microsoft Exchange



---

**IMPORTANT** Do not begin the instructions in this section until the steps starting on page 71 have been completed.

Note also that if you are installing the CallXpress MWI components on a clustered Exchange server, you will need to perform this installation on both physical nodes in the cluster. Refer to the section "Installing the CallXpress MWI Components on a Clustered Exchange Server" on page 80 for more information.

---

For CallXpress to send notification to subscriber telephones, you must complete the following tasks:

- Installation of components on the Microsoft Exchange server (or, in clustered Exchange systems, each Exchange server in the cluster)
- Activation of MWI on the Features tab of each CallXpress subscriber mailbox or class of service

➤ **To install CallXpress MWI components on Microsoft Exchange 2003:**

1. Use the CallXpress server account to log on to the Exchange server platform.
2. Insert the CallXpress DVD into the platform's DVD drive.
3. When the AVST CallXpress DVD dialog box appears, click **MWI for Exchange**.

---

**NOTE** If the AVST CallXpress DVD dialog box does not appear, navigate to the Server Installs\MWI for Exchange folder on the DVD and double-click **Setup.exe**.

---

4. Click **Next** at the Message Waiting Indicator Components v7.90 for Microsoft Exchange screen.
5. At the Choose Destination Location screen, accept the default destination directory or click **Browse** to select an alternate directory. Once the correct directory is selected, click **Next**.
6. At the Event Sink screen, verify that both check boxes are cleared and clear them if necessary. Click **Next** to continue.
7. At the Service Account screen, enter the account and password information for the CallXpress service account in the Account and Password boxes. Use domain\account syntax (for example, *mydomain\CallXpress*) for the account name.
8. Click **Next** to continue.
9. At the SSL Usage screen, select the style of SSL that is installed on the Exchange server platform (**None**, **Basic**, or **Forms-Based**), then click Next.

**10.** Verify all listed information and click **Next** to begin copying files.

**11.** In the Setup Complete dialog box, click **Finish**.

**12.** Proceed according to whether or not the Exchange server uses SSL.

**If the Exchange server... Then...**

Uses SSL

Continue with the following procedure, then configure subscriber mailboxes on the CallXpress server.

Does **not** use SSL

Proceed to configure subscriber mailboxes on the CallXpress server.

---

**NOTE** You must activate MWI in all subscriber mailboxes (or the classes of service to which they belong) to complete MWI implementation.

---

## Configuring the CallXpress MWI Components for SSL

The setup procedure for the CallXpress MWI Components also performs most of the configuration tasks necessary to prepare the components for use. However, if your Exchange server uses SSL, you will need to set the SSL security certificate name that you recorded under “Gathering Exchange Server Information,” earlier in this document, to complete configuration.

### ➤ To configure the CallXpress MWI Components for SSL:

1. From the Start menu, select **MWI for Exchange Configuration**.
2. In the MWI for Exchange Config dialog box, click the **MWI Server Settings** tab.
3. In the Server Name box, type the name that you located on the SSL security certificate.
4. Click **OK** to save your change and exit the MWI for Exchange Configuration utility.

## Installing the CallXpress MWI Components on a Clustered Exchange Server

This section describes the tasks required in installing the CallXpress MWI components on an Exchange server that incorporates a cluster of two physical server platforms (or nodes) and one common RAID array or hard disk drive. The Exchange server must have a cluster configuration of this kind, if it uses clustering, for the CallXpress MWI components to function correctly.



---

**IMPORTANT** Do not begin the instructions in this section until the steps starting on page 71 have been completed. If your system includes a cluster of Exchange servers, you must complete both the procedure on page 71 and the following two procedures for each Exchange server in the cluster. If you do not have a clustered Exchange server, disregard this section.

---

---

**NOTE** To avoid confusion, the following procedure refers to the node that is normally active in the cluster as **node 1**. The procedure refers to the node that is normally passive as **node 2**.

---



➤ **To install CallXpress MWI components on a clustered Exchange server:**

1. Install the CallXpress MWI components on node 1 of the server as described in the previous procedure.
2. From the Start menu on node 1, point to Programs, then Administrative Tools, then click **Services**. In the list of services, double-click **AT\_MWIExchServer**.
3. Select **Manual** from the Startup Type list, then click **Stop**. Once the service has stopped, click **OK**.
4. In the service list on node 1, right-click **Cluster Service** and select **Stop**. This simulates failure of node 1 and brings node 2 on line.

---

**NOTE** Depending on the number of user accounts on the Exchange server, the failover process may take a few minutes to complete. *Do not continue until Cluster Administrator shows node 2 as the owner of the service accounts in the cluster.*

---

5. Repeat steps 1 through 3 on node 2.
6. In the service list on node 1, right-click **Cluster Service** and select **Start**.
7. In the service list on node 2, right-click **Cluster Service** and select **Stop**. This simulates failure of node 2 and returns control to node 1.
8. From the Start menu on node 1, point to Programs, then Administrative Tools, and click **Cluster Administrator**.

9. In the tree pane in the Cluster Administrator, expand the clustered Exchange server, then Groups, then the group that contains the Exchange information store.

<b>If the clustered Exchange server ...</b>	<b>Then the Exchange Information store is usually contained in ...</b>
---	--

---

Has a virtual Exchange server entity defined

The group containing the virtual Exchange server entity

---

Has no virtual Exchange server entity defined

The main cluster group

10. Right-click any area of open space in the list of components in the group. When the context menu appears, point to **New** and select **Resource**.
11. In the New Resource dialog box, type CallXpress **MWI** in the Name box. If desired, type an appropriate label in the Description box.
12. From the Resource Type list, select **Generic Service**.
13. Verify that the Run this service in a separate Resource Monitor box is cleared, then click **Next**.
14. In the Possible Owners dialog box, verify that both nodes of the cluster appear in the Possible Owners list. If one of them does not appear in the Possible Owners list, select it in the Available Nodes list and click **Add**. Click **Next** to continue.
15. In the Dependencies dialog box, select **Exchange Information Store** in the list of available components and click **Add**. After completing this step, click **Next** to continue.

- 16.** In the Service name box within the Generic Service Parameters dialog box, type **AT\_MWIExchServer**. Leave the Start parameters box blank and select **Use Network name for computer name**. Click **Next** to continue.
- 17.** In the Registry Replication dialog box, click **Add**. Type **Software\AVST** in the Root registry key box, then click **OK**.
- 18.** Click **Finish**. When a dialog box appears indicating that you have successfully added the resource, click **OK**.
- 19.** In the component list, right-click the new CallXpress **MWI** resource and select **Properties** from the context menu. On the property sheet for the CallXpress MWI component, click the **Advanced** tab.
- 20.** Verify that the **Affect the group** box is cleared, or clear it if it is selected. Click **Apply** or **OK** to save the change.
- 21.** Right-click the CallXpress **MWI** resource and select **Bring Online**.

## Configuring the CallXpress MWI Components for Use with Multiple Exchange Mail Stores

If the Exchange server uses more than one mail store, you must deactivate a Windows registry setting for the CallXpress MWI components to allow them to function correctly. The following procedure describes how to find and deactivate this setting.



---

**IMPORTANT** If you use the Registry Editor incorrectly, you may cause serious problems that can be corrected only through reinstallation of the operating system. Neither AVST nor Microsoft can guarantee that you can solve problems that result from using the Registry Editor incorrectly. Perform a full backup of your hard disk drives before using the Registry Editor, and use the Registry Editor at your own risk.

---

---

**NOTE** If the Exchange server is clustered, you must complete this procedure on the active node of the cluster.

---

➤ **To configure the CallXpress MWI components for use on an Exchange server with multiple mail stores:**

1. From the Start menu, select **MWI for Exchange Configuration**.
2. In the MWI for Exchange Config dialog box, click the **MWI Sink Settings** tab.
3. Verify that the Enable Event Sink check box is cleared. If not, clear it.
4. Click **OK** to exit the MWI for Exchange Config utility.
5. Shut down and restart the CallXpress MWI component.

---

**If the Exchange server platform functions as ...**

**Then continue with ...**

---

A standalone server

“Restarting the CallXpress MWI Components on a Standalone Exchange Server”

---

A node in a clustered server

“Restarting the CallXpress MWI Components on a Clustered Exchange Server” (after you have updated the registries on both nodes)

## Restarting the CallXpress MWI Components on a Standalone Exchange Server

If the Exchange server is not clustered, use the Services utility to shut down and restart the MWI service.

➤ **To restart the CallXpress MWI components:**

1. From the Start menu, point to Programs, then Administrative Tools, then click **Services**.
2. In the list of services, right-click **AT\_MWIEchServer** and select **Stop** from the context menu.
3. When the service has stopped, right-click **AT\_MWIEchServer** again and select **Start** from the context menu. When the service has started, exit from the Services utility.
4. On the CallXpress server platform, shut down and restart CallXpress. If necessary, refer to *Administering CallXpress* for instructions.

## Restarting the CallXpress MWI Components on a Clustered Exchange Server

If the Exchange server incorporates a cluster of server platforms, use Cluster Administrator to change the status of the MWI service.

### ➤ To restart the CallXpress components:

1. From the Start menu, point to Programs, then Administrative Tools, and click **Cluster Administrator**.
2. In the tree pane in the Cluster Administrator, expand the clustered Exchange server, then Groups, then the group that contains the Exchange information store.

If the clustered Exchange server ...	Then the Exchange Information store is usually contained in ...
Has a virtual Exchange server entity defined	The virtual Exchange server entity
Has no virtual Exchange server entity defined	The main cluster group

3. In the list of resources for the group, right-click CallXpress **MWI** and select **Take Offline**.
4. Once the CallXpress MWI component is offline, right-click it again and select **Bring Online**.
5. On the CallXpress server platform, shut down and restart CallXpress. If necessary, refer to *Administering CallXpress* for instructions.

## Backing Up and Restoring Data on the Exchange Server

After the CallXpress MWI components have been installed on the Exchange server, they keep a constant watch on the server's message stores. As a result, any attempt to back up or restore the folder containing the message stores will prevent the MWI components from working correctly.

To back up or restore the message stores without interfering with the MWI components, we recommend using backup software that you can run as part of a command batch (.bat) file. After you install the backup software, write the .bat file so that it executes the following command just before the command that starts the backup process:

**net stop AT\_MWIExchServer**

This shuts down the MWI components and allows the backup to proceed without problems. After the backup command, the .bat file should execute the following command to restart the MWI components:

**net start AT\_MWIExchServer**



## Integrating with a Third-Party Fax Server (Optional)

To integrate CallXpress Unified Messaging for Microsoft Exchange with a third-party fax server such as Esker Fax, Fenestrae Faxination, or Interstar XMediusFAX, you will need to know the following items of information:

- The message class name or names used to represent fax messages on the Exchange server
- The filename extension that the fax server uses for the fax image files it attaches to email messages, if you want to exclude other attachment extensions for security reasons

This information is normally available in the documentation that accompanies the fax server software.

### ➤ **To integrate CallXpress Unified Messaging for Microsoft Exchange with a third-party fax server:**

1. Start the Configuration utility.
2. On the System tab, click **Shutdown**.
3. When the Current Status field reads “Stopped,” click the **Fax** tab.
4. Select **Third Party** as the Fax Type.
5. In the Message Store Type option group, select **Exchange**.

- 6.** In the Message Classes group, click **Add New**. In the Message Class box, type the primary class name used for fax messages on the Exchange server (for example, IPM.FAX). Click **OK** to add the class name to the Message Classes list.
- 7.** Repeat step 6 to add any additional class names that are needed.
- 8.** Proceed according to whether or not you want to restrict the filename extensions that are acceptable for fax attachment files.

<b>If you want to ...</b>	<b>Then...</b>	<b>And...</b>
Restrict fax attachments to one or more specific filename extensions	Clear <b>Allow All</b>	Continue with step 9.
Allow all filename extensions for fax attachments	Leave <b>Allow All</b> selected	Go to step 11.

- 9.** In the Allowed File Extensions group, click **Add New**. In the File Extension box, type a file extension (for example, .tif) that CallXpress should allow subscribers to receive as fax messages. Click **OK** to add the extension to the list of allowed extensions.
- 10.** Repeat step 9 to add any additional extensions that CallXpress should allow.
- 11.** Click the **System** tab, then click **Startup**.

## Configuring a Workstation for Use with CallXpress Unified Messaging for Microsoft Exchange

Installing the CallXpress Unified Messaging client creates a Desktop PhoneManager utility in the Windows Control Panel, adds new menus and toolbar buttons to Outlook, and places an online help file in the CallXpress Desktop program group.

Within Outlook or the Desktop PhoneManager utility, subscribers can configure their connections to the CallXpress server through the Desktop PhoneManager dialog box. These connections must be configured before subscribers can access the CallXpress server to generate voice messages, and retrieve voice and fax messages in Outlook. For specific information on using Desktop PhoneManager, see the *CallXpress Unified Messaging client* online help.

The following three methods are available for installing the client on subscriber desktops:

- **The “push” method** installs the client software on one or more workstations at the initiation of an administrator, through command-line prompts or third-party deployment software. While the workstations must be logged on to the server, no subscriber presence or action is required.
- **The “pull” method** distributes a link to one or more workstations so that the subscriber can initiate an installation of client software from a network source. This can be done from a command line or through third-party deployment software. The administrator needs only to create a default subscriber profile before distributing the link.

- **The direct method** involves installing the client software from the CallXpress DVD at each subscriber workstation. This method is useful for the addition of single subscribers or for remote subscribers who do not have LAN or Internet connections.

---

**NOTE** For more information on the command line prompts and switches that can be used with the “push” and “pull” methods, see page 158.

---

## Installing the CallXpress Unified Messaging Client on a LAN File Server



---

**IMPORTANT** If you plan to install the CallXpress Unified Messaging client using the push or pull methods, the client software must first be installed to a LAN file server prior to setting up each workstation.

---

Installing the CallXpress Unified Messaging client software on a LAN file server requires an Administration Setup. Performing an Administration Setup copies the necessary software components of the CallXpress DVD to a shared directory on the LAN file server and creates a default subscriber profile. This client and profile can then be pushed to client workstations, or subscribers can pull from this shared location and run Setup to install the CallXpress Unified Messaging client to their local hard disk drives.



---

**IMPORTANT** Do not perform an Administration Setup to the CallXpress server. Using the CallXpress server as a LAN file server can increase its vulnerability to viruses and negatively affect overall system performance.

---

➤ **To install CallXpress Unified Messaging client software on a LAN file server:**

1. Insert the CallXpress DVD into the DVD drive of the file server from which you want the client installed.
2. From the Start menu, click **Run**.
3. In the Open box, type one of the following command lines, depending on whether you want to install the U.S. edition or the international edition of the software:
  - **drive:\Client Installs\Desktop Suite for Exchange\SBUM Client\USA\Setup.exe -a**
  - **drive:\Client Installs\Desktop Suite for Exchange\SBUM Client\World\Setup.exe -a**

Replace *drive* with the drive letter appropriate for your installation. Once you have typed the desired command line, click **OK**.

If you are installing the U.S. edition of the software, skip to step 5. Otherwise, continue with the following step.

4. From the list box within the Choose Setup Language dialog box, select the language you want to use during the setup process, then click **OK** to continue.

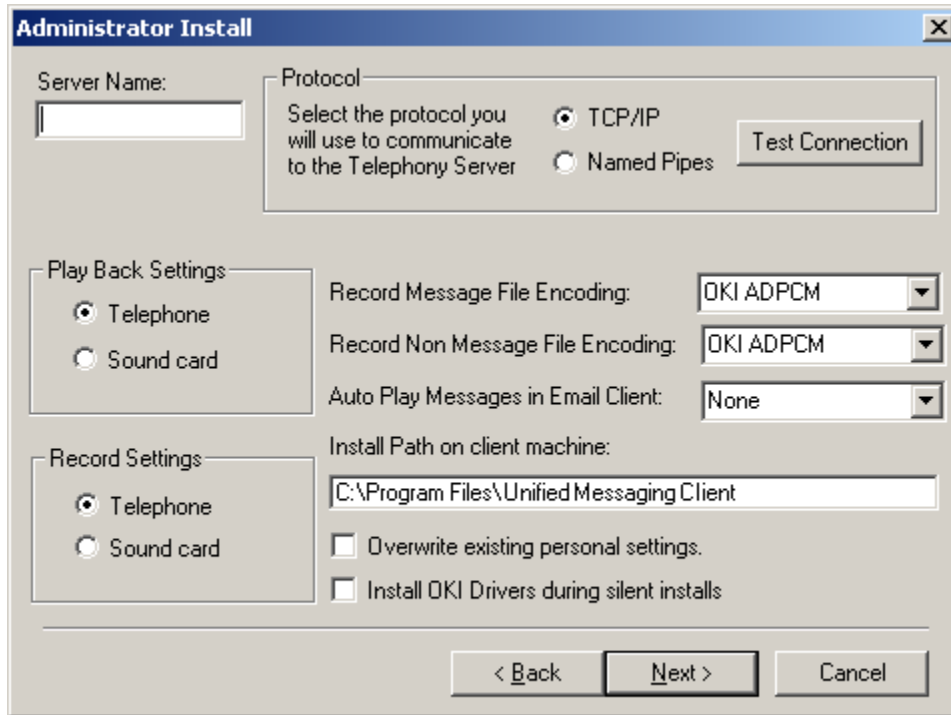
---

**NOTE** The language selection in this step affects only the setup program itself. The setup program copies support files for all available languages to the file server.

---

5. At the Welcome dialog box, click **Next**.

The Administrator Install dialog box appears. Properties set in this dialog box will be used as defaults for client installations.



6. Type the name of the CallXpress server in the Server Name field.
7. Select either the TCP/IP or Named Pipes protocol.

8. Click **Test Connection** to ensure your previous selections are accurate.

Connecting to the server will also set the Record Message File Encoding and Record Non Message File Encoding fields to the telephony server settings.

---

**NOTE** The client encoding settings can be set differently than those of the server. However, the client settings will be overwritten when connection to the telephony server is established.

---

9. Select the default device for message play back.
10. Select the default device with which messages are recorded.
11. From the Auto Play Messages in Email Client drop down list, choose **None**, **Unread**, or **All**.
12. Enter or confirm the path on the client workstation to which the client software will be installed. Make note of this path, because you will need it later in this procedure.
13. If any existing client defaults should be changed to the new defaults, select **Overwrite Existing Personal Settings**.
14. Select **Install OKI drivers during silent installs** if those drivers need to be installed on client workstations.

---

**NOTE** These drivers are likely to be needed only to support CallXpress servers still running software versions before 6.00, although subscribers on these servers will also need the drivers for a while after they have upgraded.

---



- 15.** Click **Next** to continue the installation with the settings you have specified.
- 16.** If the Administrative Setup Destination dialog box appears, either accept the path it displays or click **Browse** to provide a path. If you click Browse, use the Choose Folder dialog box to navigate to or specify the path you used in step 12 and click **OK**.
- 17.** Click **Next** to continue. Setup files and a client setup profile are copied to the file server.
- 18.** After completing Administration Setup, click **OK** to close the dialog box. Workstations can now run the Setup program from this network directory.

## **Installing the CallXpress Unified Messaging Client Software on a Workstation**

Before the CallXpress Unified Messaging client can be configured, confirm that the following items are available for each subscriber workstation:

- A subscriber mailbox on the CallXpress system
- Access to an external message store account on the Exchange server
- An Outlook email client installed on the workstation
- CallXpress and external message store servers attached to the same LAN
- Telephone access to and from the CallXpress system to support audio recording, audio playback, and Live Reply



---

**IMPORTANT** If you are installing the CallXpress Unified Messaging client software on a workstation that runs a multilingual user interface (MUI) edition of the Windows XP operating system and has Microsoft Office XP installed, verify that the installed copy of Microsoft Office XP is also the MUI edition. If it is not, the CallXpress Unified Messaging client software may not appear in the desired language.

Note also that if you are installing the client software on a Citrix<sup>®</sup> MetaFrame<sup>®</sup> server and the CallXpress server uses OKI ADPCM audio format for voice messages, you must install the CallXpress OKI ADPCM driver on the MetaFrame server. The setup program for the OKI ADPCM driver is located in the \Client Installs\Desktop Suite for Exchange\Acmdrv directory on the CallXpress DVD.

In addition, to ensure that the CallXpress Unified Messaging forms operate correctly on Citrix MetaFrame servers or servers for Microsoft Terminal Services, you must install Visual Basic Scripting Edition for Microsoft Outlook on those servers manually. For instructions and other information, refer to knowledge base article KB302003 at <http://support.microsoft.com>.

---

The CallXpress Unified Messaging client software can be installed either from the DVD or from a network drive.

---

**NOTE** If you want to install the client software onto a computer running a Windows Server operating system, log on to the computer with an account that has local administrator rights to the workstation so that all necessary program components, especially the audio compressor/decompressor, can be installed correctly.

---

➤ **To install the client software on a workstation from DVD:**

1. If you want to install the software from the CallXpress DVD, insert the DVD into the workstation's DVD drive.
2. When the AVST CallXpress DVD dialog box appears, click the appropriate link.

**If you want to install ...    Then click ...**

The U.S. edition

**Desktop Suite for Exchange (USA)**

The international edition

**Desktop Suite for Exchange (World)**

---

**NOTE** If the AVST CallXpress DVD dialog box does not appear, navigate to the Client Installs\Desktop Suite for Exchange\SBUM\_Client folder on the DVD. Then, depending on the edition of the software you want to install, move to either the USA folder or the World folder and double-click the **Setup.exe** file.

---

3. If the Choose Setup Language dialog box appears, select the language you want to use during the setup process and click **OK** to continue.

---

**NOTE** The language selection in this step affects only the setup program itself. The setup program copies support files for all available languages to the file server.

---

- 4.** After you have verified that no other programs are running, click **Next** on the Welcome dialog box.
- 5.** Under Destination Directory, accept the default destination directory, type the path of another destination directory, or click **Browse** to locate another destination directory.



**IMPORTANT** If you are installing the client software on a Citrix MetaFrame server for deployment to MetaFrame client workstations, do **not** complete the following step. Subscribers at the MetaFrame client workstations must be able to configure Desktop PhoneManager for their own mailboxes, and they will not be able to do that if Desktop PhoneManager is configured at the Citrix server.

6. At the Do you wish to configure the workstation? message, click **Yes** to access the Desktop PhoneManager utility or click **No** if you want to configure Desktop PhoneManager later.

If you...	Then...
-----------	---------

Click <b>Yes</b>	Configure the settings in the Desktop PhoneManager dialog box that appears, then click <b>OK</b> . For additional information, start with step 6 in "Configuring CallXpress Unified Messaging Client Settings."
------------------	---

Click **OK** at the "Setup is complete" message. This creates a program group and adds the Desktop PhoneManager icon in the Control Panel.

Click <b>No</b>	Click <b>OK</b> at the "Setup is complete" message. This creates a program group and adds the Desktop PhoneManager icon in the Control Panel. You will <i>not</i> be able to use CallXpress Unified Messaging or Desktop PhoneManager until you configure these settings. For more information, see "Configuring CallXpress Unified Messaging Client Settings."
-----------------	---

➤ **To install the client software on a workstation from a network file server:**

1. Locate the appropriate setup folder on the network file server. The location of this file was established during implementation and then communicated to the subscriber base.

---

**NOTE** A shortcut (.lnk file) to the setup file may appear on the subscriber desktop or be included in email or web communication.

---

2. Double-click **Setup** to begin the setup process.
3. If the Choose Setup Language dialog box appears, select the language you want to use during the setup process and click **OK** to continue.

---

**NOTE** The language selection in this step affects only the setup program itself. The setup program copies support files for all available languages to the file server.

---

4. After you have verified that no other programs are running, click **Next** on the Welcome dialog box.
5. Under Destination Directory, accept the default destination directory, type the path of another destination directory, or click **Browse** to locate another destination directory.





**IMPORTANT** If you are installing the client software on a Citrix MetaFrame server for deployment to MetaFrame client workstations, do **not** complete the following step. Subscribers at the MetaFrame client workstations must be able to configure Desktop PhoneManager for their own mailboxes, and they will not be able to do that if Desktop PhoneManager is configured at the Citrix server.

6. At the Do you wish to configure the workstation? message, click **Yes** to access the Desktop PhoneManager utility or click **No** if you want to configure Desktop PhoneManager later.

If you...	Then...
-----------	---------

Click <b>Yes</b>	Configure the settings in the Desktop PhoneManager utility that opens, then click <b>OK</b> . For additional information, start with step 6 in "Configuring CallXpress Unified Messaging Client Settings." Click <b>OK</b> at the "Setup is complete" message. This creates a program group and adds the Desktop PhoneManager icon in the Control Panel.
Click <b>No</b>	Click <b>OK</b> at the "Setup is complete" message. This creates a program group and adds the Desktop PhoneManager icon in the Control Panel. You will <i>not</i> be able to use CallXpress Unified Messaging or Desktop PhoneManager until you configure these settings. For more information, see "Configuring CallXpress Unified Messaging Client Settings."

## Configuring CallXpress Unified Messaging Client Settings

Prior to a subscriber's first use of the CallXpress Unified Messaging client, there are several unique settings that must be configured. Subscribers who are familiar with the necessary settings can perform this procedure themselves; for those subscribers who are not familiar with the settings, MIS support staff should perform the procedure.

➤ **To configure the CallXpress Unified Messaging client:**

1. Click the Start button, point to Settings, then click **Control Panel**.
2. Double-click **Desktop PhoneManager**.
3. At the Telephony Login dialog box, click **Work Offline**. Do not enter a password. No server is configured yet.
4. Within the Server Settings dialog box, type the name or IP address of the CallXpress server in the **Server Name** box.

---

**NOTE** If you are using TCP/IP as the connection protocol, use the IP address of the CallXpress server. Contact your CallXpress or LAN administrator for this IP address, if necessary. Typing an IP address in the Server Name box can avoid possible DNS or name resolution issues on a LAN.

---

5. Type the subscriber's mailbox number in the Mailbox box.

- 6.** Select the protocol used to connect to the CallXpress server.

<b>If CallXpress server and the workstation are configured to use ...</b>	<b>Then click ...</b>
---	-----------------------

Named Pipes protocol	<b>Named Pipes</b>
TCP/IP protocol	<b>TCP/IP</b>

- 7.** Click **OK** to close the Server Settings dialog box.
- 8.** Select how CallXpress Unified Messaging client plays back messages.

<b>If messages will be played back through ...</b>	<b>Then click ...</b>
--	-----------------------

The telephone	<b>Telephone</b>
A sound card and speakers	<b>Soundcard</b>

**9.** Select how CallXpress Unified Messaging client records messages.

**If messages will be recorded using ...**

**Then click ...**

---

The telephone

**Telephone**

A microphone connected to a sound card

**Soundcard**

**10.** In the Phone Extension box, type the subscriber's telephone extension.

**11.** Click **OK** to close the Desktop PhoneManager dialog box.

## **Appendix A: Testing the Communication Between the Email Access Interface and the Exchange Server**

The Test button on the Server Profile dialog box allows system administrators to quickly test the validity of the settings typed for the messaging server profile during configuration.

When an administrator clicks the Test button, the Email Access interface logs on to the email mailbox specified by the settings in the Server Profile dialog box. It then enumerates (counts and reports) the messages in the email mailbox and records the results of the logon and enumeration in a text file called Mcheck.log, which can usually be found in the \CX\Bin subdirectory. The results displayed in the Mcheck.log are principally meant to be used by Technical Support in troubleshooting the interaction between the CallXpress server and the email server; only a few of the lines that may appear in the Mcheck.log file are of direct concern to the administrator.

## Testing Communication with a Microsoft Exchange Server

Testing the interface between a CallXpress server and a Microsoft Exchange server analyzes two primary events:

- Logon to the message service
- Logon to an actual email account

The Message Transport Agent (MTA), or CallXpress message server, first logs on to the Exchange server using the CallXpress account specified in the Server Profile dialog box. Possible problems at the message service level include the following:

- Outlook client not being installed on the CallXpress server
- Incorrect server, domain, or Active Directory name for the Exchange server in the Server Profile dialog box
- Invalid Exchange account in the Server Profile dialog box

In the Mcheck.log file, significant information for troubleshooting these problems can be found just after the line that includes “Logon Start.” The example on the next page was taken from an Mcheck.log file of an unsuccessful test.

```
196 012500-154427 [10] Logon Start.
196 012500-154427 [1] Logon to Exchange(tm) as Mark Owens to
    postoffice Exchange.
196 012500-154427 [10] EX_PO Constructor.
196 012500-154427 [10] ExLogon.
196 012500-154427 [10] PROFILE_POOL::Acquire
196 012500-154442 [3] EX_PROFILE::Initialize - ConfigureMsgServiceError:80040115
196 012500-154442 [3] EX_PROFILE::Initialize - ConfigureMsgService Network error or
    server name: Exchange - invalid
196 012500-154442 [3] EX_PROFILE::~EX_PROFILE - Profile not found:
    Telephony Exchange
196 012500-154442 [10] PROFILE_POOL::Acquire - End
196 012500-154442 [10] ExLogon - End
196 012500-154442 [3] EX_PO Constructor - Error loggin on, logging off
196 012500-154442 [10] EX_PO Logoff
196 012500-154442 [10] EX_PO Logoff - End
196 012500-154442 [10] EX_PO Constructor - End
196 012500-154442 [10] EX_PO Open
196 012500-154442 [3] EX_PO Open - Invalid session parameter
196 012500-154442 [10] EX_PO Open - End
196 012500-154442 [10] Logon done. Return[1]
```

The three boldfaced lines in the example on the previous page are the ones of interest because they indicate that something went wrong during the initial logon to Exchange.

---

**NOTE** At this stage, CallXpress is attempting to log on using its own account. Later in the log file, another example shows an attempt to log on to a specific mailbox.

---

As in most cases with the Exchange integration, when an error is encountered, a MAPI error code is included in the log statement. This error can be cross-referenced with the list of error codes in this appendix. MAPI is a Microsoft supplied API that is commonly used by messaging applications, including Microsoft Outlook.

In the list of MAPI error codes, **MAPI\_E\_NETWORK\_ERROR** corresponds to error number **80040115**. This code represents a number of error conditions, including a lack of access between the CallXpress server and the network and the Exchange server being unavailable. Because the log shows *Exchange* as the name of the server, one possible troubleshooting step would be to test for a different server name such as *Exchange2*. The log excerpt below shows the results of such a test; in this case, the logon to the Exchange server has been successful.



```
215 012500-154045 [10] Logon Start.
215 012500-154045 [1] Logon to Exchange(tm) as Mark Owens to
    postoffice Exchange2.
215 012500-154045 [10] EX_PO Constructor.
215 012500-154045 [10] EXLogon.
215 012500-154045 [10] PROFILE_POOL::Acquire
215 012500-154049 [10] EX_PROFILE::RemoveSession
215 012500-154049 [10] LogonProfile
215 012500-154049 [100] LogonProfile - MAPILogonEx Profile:
    Telephony Exchange2
215 012500-154049 [100] LogonProfile - GetMsgStoresTable
215 012500-154049 [100] LogonProfile - OpenMsgStore
215 012500-154049 [100] LogonProfile - End
```

Once CallXpress can log on to the Exchange server correctly, it continues the test by attempting to log on to a mailbox and enumerate the messages there. The following sample shows the appearance of the Mcheck.log file after this second logon has failed.

```
215 012500-154252 [10] Logon Start.
215 012500-154252 [1] Logon to Exchange(tm) as Joe Smith to
    postoffice Exchange2.
215 012500-154252 [10] EX_PO Constructor
215 012500-154252 [10] PROFILE_POOL::Acquire
215 012500-154253 [10] EX_PROFILE::Remove Session
215 012500-154253 [10] LogonProfile
215 012500-154253 [100] LogonProfile - MAPILogonEx Profile:
    Telephony Exchange2
215 012500-154253 [100] LogonProfile - GetMsgStores Table
215 012500-154253 [100] LogonProfile - OpenMsgStore
215 012500-154253 [10] LogonProfile - End
215 012500-154253 [10] EX_PROFILE::RemoveSession - End
215 012500-154253 [10] LogonMailbox
215 012500-154253 [100] LogonMailbox - ResolveName: Joe Smith
215 012500-154253 [3] LogonMailbox - ResolveName - User name not
    found: 8004010f
215 012500-154253 [10] LogonMailbox - End
215 012500-154253 [10] ExLogoff
215 012500-154253 [10] PROFILE_POOL::Release
215 012500-154253 [10] EX_PROFILE::AddSession
215 012500-154253 [10] EX_PROFILE::AddSession - End
215 012500-154253 [10] PROFILE_POOL::Release - End
215 012500-154253 [10] ExLogoff -End
215 012500-154253 [10] PROFILE_POOL::Acquire - End
215 012500-154253 [10] ExLogon - End
215 012500-154253 [3] EX_PO Constructor - Error loggin on, logging off
```

```
215 012500-154253 [10] EX_PO Logoff
215 012500-154253 [10] EX_PO Logoff - End
215 012500-154253 [10] EX_PO Constructor - End
215 012500-154253 [10] EX_PO Open
215 012500-154253 [3] EX_PO Open - Invalid session parameter
215 012500-154253 [3] EX_PO Open - End
215 012500-154253 [10] Logon done. Return [1]
```

The two boldfaced lines show that the logon failed because no user was found under the specified name. To resolve this problem, verify that the user name exists in the Exchange address book.

The following example shows the appearance of Mcheck.log after a completely successful test. At the end of the file is a section headed by the word "ENUMERATING." The trace statements in this section describe actions in the user inbox used for the test after both logons are complete. First, CallXpress retrieves the message count, which is 2 in this case. Second, the system retrieves certain types of information, such as the sender's identity, for all messages for which such information exists.

```

215 012500-154045 [10] //////////////////////////////////////
215 012500-154045 [10] ////////// LOGGING ON //////////////////////////////////
215 012500-154045 [10] //////////////////////////////////////
215 012500-154045 [10] Logon Start.
215 012500-154045 [1] Logon to Exchange(tm) as Mark Owens to
    postoffice Exchange2.
215 012500-154045 [10] EX_PO Constructor
215 012500-154045 [10] ExLogon
215 012500-154045 [10] PROFILE_POOL::Acquire
215 012500-154049 [10] EX_PROFILE::RemoveSession
215 012500-154049 [10] LogonProfile
215 012500-154049 [100] LogonProfile - MAPILogonEx Profile:
    Telephony Exchange2
215 012500-154049 [100] LogonProfile - GetMsgStoresTable
215 012500-154049 [100] LogonProfile - OpenMsgStore
215 012500-154050 [10] LogonProfile - End
215 012500-154050 [10] EX_PROFILE::RemoveSession - End
215 012500-154050 [10] LogonMailbox
215 012500-154050 [100] LogonMailbox - ResolveName: Mark Owens
215 012500-154050 [100] LogonMailbox - HrMailboxLogon as /o=XYZ Labs/ou=FILER1/
    cn=Recipients/cn=meo
215 012500-154050 [10] LogonMailbox - End
215 012500-154050 [10] PROFILE_POOL::Acquire - End

```

```
215 012500-154050 [10] ExLogon - End
215 012500-154050 [10] EX_PO Constructor - End
215 012500-154050 [10] EX_PO Open
215 012500-154050 [10] ExFolderFind
215 012500-154050 [10] ExFolderFind - End
215 012500-154050 [10] EX_PO PRIMessageListFill
215 012500-154050 [10] ExEnumMessage
215 012500-154050 [10] ExSetEnumMessage
215 012500-154050 [10] ExSetEnumMessage - End
215 012500-154050 [10] ExGetNamedProperties
215 012500-154050 [10] ExGetNamedProperties - End
215 012500-154050 [10] ExEnumMessage - End
215 012500-154050 [10] ExGetMessage
215 012500-154050 [10] ExGetRow
215 012500-154050 [10] ExGetRow - End
215 012500-154050 [10] ExGetMessage - End
215 012500-154050 [100] EX_PO PRIMessageListFill - Message Subject: Voice Message
215 012500-154050 [10] ExGetMessage
215 012500-154050 [10] ExGetRow
215 012500-154050 [10] ExGetRow - End
215 012500-154050 [10] ExGetMessage - End
215 012500-154050 [100] EX_PO PRIMessageListFill - Message Subject:
    Voice Message
215 012500-154050 [10] ExGetMessage
215 012500-154050 [10] ExGetRow
215 012500-154050 [10] ExGetRow - End
215 012500-154050 [10] ExGetMessage - End
215 012500-154050 [10] ExFreeMessageList
215 012500-154050 [10] ExFreeMessageList - End
215 012500-154050 [10] EX_PO PRIMessageListFill - End
215 012500-154050 [10] ExFolderFind
```

```
215 012500-154050 [10] ExEnumFolder
215 012500-154050 [10] ExEnumFolder - End
215 012500-154050 [10] ExGetFolder
215 012500-154050 [10] ExGetRow
215 012500-154050 [10] ExGetRow - End
215 012500-154050 [10] ExGetFolder - End
215 012500-154050 [10] ExFreeFolderList
215 012500-154050 [10] ExFreeFolderList - End
215 012500-154050 [10] ExFolderFind - End
215 012500-154050 [10] EX_PO PRIMessageListFill
215 012500-154050 [10] ExEnumMessage
215 012500-154050 [10] ExSetEnumMessage
215 012500-154050 [10] ExSetEnumMessage - End
215 012500-154050 [10] ExEnumMessage - End
215 012500-154050 [10] ExGetMessage
215 012500-154050 [10] ExGetRow
215 012500-154050 [10] ExGetRow - End
215 012500-154050 [10] ExGetMessage - End
215 012500-154050 [10] ExFreeMessageList
215 012500-154050 [10] ExFreeMessageList - End
215 012500-154050 [10] EX_PO PRIMessageListFill - End
215 012500-154050 [10] EX_PO Open - End
215 012500-154050 [10] Logon done. Return[0]
215 012500-154050 [10] Logon End.
215 012500-154050 [10] //////////////////////////////////////
215 012500-154050 [10] ////////// ENUMERATING //////////////////////////////////
215 012500-154050 [10] //////////////////////////////////////
215 012500-154050 [10] MessageCount Start.
215 012500-154050 [10] MessageCount End.
215 012500-154050 [10] Log Time 4917 - Num Msgs 2
215 012500-154050 [10] MessageFirst Start.
```

```
215 012500-154050 [8] MessageFirst Type 2 From Dave Swanson
215 012500-154050 [10] MessageFirst End.
215 012500-154050 [10] MessageNext Start.
215 012500-154050 [8] MessageNext Type 2 From Dave Swanson
215 012500-154050 [10] MessageNext End 1774.
215 012500-154050 [10] MessageNext Start.
215 012500-154050 [10] MessageNext End 1774.
215 012500-154050 [10] Logoff Start.
215 012500-154050 [1] Logoff from Exchange(tm) .
215 012500-154050 [10] EX_PO Logoff
215 012500-154050 [10] ExLogoff
215 012500-154050 [10] PROFILE_POOL::Release
215 012500-154050 [10] EX_PROFILE::AddSession
215 012500-154050 [10] EX_PROFILE::AddSession - End
215 012500-154050 [10] PROFILE_POOL::Release - End
215 012500-154050 [10] ExLogoff - End
215 012500-154050 [10] EX_PO Logoff - End
215 012500-154050 [10] EX_PO Destructor
215 012500-154050 [10] EX_PO Logoff
215 012500-154050 [10] EX_PO Logoff - End
215 012500-154050 [10] EX_PO Destructor - End
215 012500-154050 [10] Logoff done.
215 012500-154050 [10] Logoff End.
215 012500-154050 [0] Log close.
```

## MAPI Error Codes

### General Errors (Used by More Than One MAPI Object)

<b>MAPI Error Code</b>	<b>Hexadecimal Value</b>
MAPI_E_CALL_FAILED	0x80004005
MAPI_E_NOT_ENOUGH_MEMORY	0x8007000E
MAPI_E_INVALID_PARAMETER	0x80070057
MAPI_E_INTERFACE_NOT_SUPPORTED	0x80004002
MAPI_E_NO_ACCESS	0x80070005
MAPI_E_NO_SUPPORT	0x80040102
MAPI_E_BAD_CHARWIDTH	0x80040103
MAPI_E_STRING_TOO_LONG	0x80040105
MAPI_E_UNKNOWN_FLAGS	0x80040106
MAPI_E_INVALID_ENTRYID	0x80040107
MAPI_E_INVALID_OBJECT	0x80040108
MAPI_E_OBJECT_CHANGED	0x80040109
MAPI_E_OBJECT_DELETED	0x8004010A
MAPI_E_BUSY	0x8004010B
MAPI_E_NOT_ENOUGH_DISK	0x8004010D



## General Errors continued

<b>MAPI Error Code</b>	<b>Hexadecimal Value</b>
MAPI_E_NOT_ENOUGH_RESOURCES	0x8004010E
MAPI_E_NOT_FOUND	0x8004010F
MAPI_E_VERSION	0x80040110
MAPI_E_LOGON_FAILED	0x80040111
MAPI_E_SESSION_LIMIT	0x80040112
MAPI_E_USER_CANCEL	0x80040113
MAPI_E_UNABLE_TO_ABORT	0x80040114
MAPI_E_NETWORK_ERROR	0x80040115
MAPI_E_DISK_ERROR	0x80040116
MAPI_E_TOO_COMPLEX	0x80040117
MAPI_E_BAD_COLUMN	0x80040118
MAPI_E_EXTENDED_ERROR	0x80040119
MAPI_E_COMPUTED	0x8004011A
MAPI_E_CORRUPT_DATA	0x8004011B
MAPI_E_UNCONFIGURED	0x8004011C
MAPI_E_FAILONEPROVIDER	0x8004011D
MAPI_E_UNKNOWN_CPID	0x8004011E
MAPI_E_UNKNOWN_LCID	0x8004011F

## Flavors of E\_ACCESSDENIED Used at Logon

<b>MAPI Error Code</b>	<b>Hexadecimal Value</b>
MAPI_E_PASSWORD_CHANGE_REQUIRED	0x80040120
MAPI_E_PASSWORD_EXPIRED	0x80040121
MAPI_E_INVALID_WORKSTATION_ACCOUNT	0x80040122
MAPI_E_INVALID_ACCESS_TIME	0x80040123
MAPI_E_ACCOUNT_DISABLED	0x80040124

## MAPI Base Function and Status Object Specific Errors and Warnings

<b>MAPI Error Code</b>	<b>Hexadecimal Value</b>
MAPI_E_END_OF_SESSION	0x80040200
MAPI_E_UNKNOWN_ENTRYID	0x80040201
MAPI_E_MISSING_REQUIRED_COLUMN	0x80040202
MAPI_W_NO_SERVICE	0x80040203

## Property Specific Errors and Warnings

<b>MAPI Error Code</b>	<b>Hexadecimal Value</b>
MAPI_E_BAD_VALUE	0x80040301
MAPI_E_INVALID_TYPE	0x80040302
MAPI_E_TYPE_NO_SUPPORT	0x80040303
MAPI_E_UNEXPECTED_TYPE	0x80040304
MAPI_E_TOO_BIG	0x80040305
MAPI_E_DECLINE_COPY	0x80040306
MAPI_E_UNEXPECTED_ID	0x80040307
MAPI_W_ERRORS_RETURNED	0x00040380

## Table Specific Errors and Warnings

<b>MAPI Error Code</b>	<b>Hexadecimal Value</b>
MAPI_E_UNABLE_TO_COMPLETE	0x80040400
MAPI_E_TIMEOUT	0x80040401
MAPI_E_TABLE_EMPTY	0x80040402
MAPI_E_TABLE_TOO_BIG	0x80040403
MAPI_E_INVALID_BOOKMARK	0x80040405
MAPI_W_POSITION_CHANGED	0x80040481
MAPI_W_APPROX_COUNT	0x80040482

## Transport Specific Errors and Warnings

<b>MAPI Error Code</b>	<b>Hexadecimal Value</b>
MAPI_E_WAIT	0x80040500
MAPI_E_CANCEL	0x80040501
MAPI_E_NOT_ME	0x80040502
MAPI_W_CANCEL_MESSAGE	0x00040580

## Message Store, Folder, and Message Specific Errors and Warnings

<b>MAPI Error Code</b>	<b>Hexadecimal Value</b>
MAPI_E_CORRUPT_STORE	0x80040600
MAPI_E_NOT_IN_QUEUE	0x80040601
MAPI_E_NO_SUPPRESS	0x80040602
MAPI_E_COLLISION	0x80040604
MAPI_E_NOT_INITIALIZED	0x80040605
MAPI_E_NON_STANDARD	0x80040606
MAPI_E_NO_RECIPIENTS	0x80040607
MAPI_E_SUBMITTED	0x80040608
MAPI_E_HAS_FOLDERS	0x80040609
MAPI_E_HAS_MESSAGES	0x8004060A
MAPI_E_FOLDER_CYCLE	0x8004060B
MAPI_W_PARTIAL_COMPLETION	0x00040680

## Address Book Specific Errors and Warnings

<b>MAPI Error Code</b>	<b>Hexadecimal Value</b>
MAPI_E_AMBIGUOUS_RECIP	0x80040700

## Appendix B: Subscriber QuickStart

The following section provides steps to quickly enable subscribers to get up and running. The information on these pages may be copied and distributed as necessary.

### Getting Help for CallXpress Unified Messaging for Microsoft Exchange

For information on working with voice and fax messaging within Microsoft Outlook, please refer to the online help.

➤ **To access online help:**


1. From the Start menu, point to Programs, then to **CallXpress Desktop**.
2. Click **UM for Exchange Help File**.

You might find it useful to print parts of the online help system for easy reference.

➤ **To print any help topic:**

- Click the **Print** button at the top of the window.  
The displayed topic will print on your default printer.

➤ **To print multiple help topics in a book:**

1. Select the book  on the Contents tab of the Help Topics window.
2. Click the **Print** button at the bottom of the window.

All the topics within that book are printed. You may want to open the book to see how many topics are selected. Some books contain a large number of topics.

## Configuring CallXpress Unified Messaging Settings

You may want to modify the settings for your subscriber mailbox from time to time. For example, you may decide you want to change one of your recorded greetings or switch the playback device from your telephone to your computer's sound card and speakers. These options can be modified in either Desktop PhoneManager or Web PhoneManager. For information on Web PhoneManager, please refer to the *Web PhoneManager* online book.

### ➤ To configure CallXpress Unified Messaging Settings:

1. Choose how to access Desktop PhoneManager.

If Microsoft Outlook is ...	Then ...
Running	From the Tools menu, click <b>Desktop PhoneManager</b> .
Not running	1. From the Start menu, point to Settings, then click <b>Control Panel</b> . 2. Double-click <b>Desktop PhoneManager</b> .

1. From the Start menu, point to Settings, then click **Control Panel**.
2. Double-click **Desktop PhoneManager**.

2. As appropriate, configure the tabs: Recordings, Record and Playback, Notification, Presentation, Passwords, and optionally SMS and VIM.



**IMPORTANT** The Record and Playback tab and the Server Settings dialog box must be configured before you can receive voice and fax messages in your Outlook Inbox. Typically, your system administrator configured them when the CallXpress Unified Messaging client was installed on your workstation.



- The Recordings tab lets you record your name and create personalized greetings. It also sets the default language to be used in that mailbox.
- The Record and Playback tab allows you to configure the default record and playback devices, specify a telephone extension, and display the Server Settings dialog box, which is used to set up the connection with CallXpress.
- The Notification tab allows you to enable and configure immediate message notification and the daily message reminder.
- The Presentation tab allows you to configure how messages are played and also lets you configure call settings, including call blocking, call screening, and Extension Specific Processing (ESP).
- The SMS tab allows you to configure the short message service (SMS) feature. This tab appears only if CallXpress has it installed and it has been allowed for your use.
- The VIM tab allows you to configure the voice intercept messaging (VIM) feature. This tab appears only if CallXpress has it installed and it has been allowed for your use.
- The Passwords tab allows you to change your mailbox password.


For more detailed information on working with Desktop PhoneManager, please see the online help.


## Sending a Voice Message

Once the client software has been installed on your workstation and server settings have been set up in Desktop PhoneManager, you can access the voice messaging and fax retrieval features through your Microsoft Outlook mail program. Steps for creating a voice message with Microsoft Outlook are shown below.


➤ **To create a new voice message:**

1. With Microsoft Outlook open, open the voice messaging form.



If you want to use...	Then
The toolbar	Click the <b>New Voice Message</b> icon  on the toolbar.
The menu bar	In Microsoft Outlook 2000 or 2003, select <b>Actions</b> then <b>New Voice Message</b> .

2. Click the **Record** button  on the recorder bar to begin recording the voice message.

For specific information on recording and playback options, please see the online help.

3. Click the **Stop** button  to end recording.
4. Click **To** to address the message or type an email address in the To box.
5. Click **Send** to send the voice message.

## Playing Voice Messages and Viewing Fax Messages

Received voice messages are indicated within Microsoft Outlook by a telephone icon  and received fax messages by a fax icon .

### ➤ To play a voice message or view a fax message:

1. Double-click the received message.

If the message is a voice message, the voice messaging form appears. If the message is a fax only, the fax viewer opens automatically, displaying the fax message over the voice messaging form. If, however, the message has both fax and voice components, only the voice messaging form appears.

2. Choose one:

#### If you want to ...

#### Then ...

Listen to the voice message

Click **Play** on the voice messaging form recorder bar to begin playback of message. Your mailbox may be set to play messages automatically, so you may not need to click Play.

View the fax

Click the **View Fax** button to launch the fax viewer. When accessing fax messages only, the viewer will automatically open the fax document in some cases.

For further information on replying to and forwarding voice and fax messages, please see the online help.

---

**NOTE** Using the Auto Play Messages box in Email Clients setting on the Record and Playback tab in Desktop PhoneManager, you can set some voice messages to play automatically as soon as you open them. For more information on the settings available in this box, please see the online help.

---

## Changing Your Mailbox Password

You can change your mailbox password, also known as the security code, in the Passwords tab.

➤ **To change your mailbox password:**

1. Open Desktop PhoneManager.
2. Click the **Passwords** tab.



**IMPORTANT** You must enter your password in the boxes under Change Telephony Server Password.

---

3. In the **New Password** box, type your new password.
4. In the **Confirm Password** box, retype your new password.



**IMPORTANT** You must click the appropriate **Save** button to save your new password.

---

5. Click **Save**.
6. Click **Apply**, then click **OK**.

## **Telephone User Interface Features**

The Telephone User Interface (TUI) features provided by CallXpress Unified Messaging covered in this section include:

- Replying to an email message by telephone
- Forwarding an email message with voice comments
- Faxing an email message to someone else
- Printing an email message by forwarding it to a fax machine
- Selecting email messages for group processing

These features are available only through the TUI.

## Replying to an Email Message by Telephone

You can reply to an email message with a voice message by telephone, rather than waiting to access the email system.

### ➤ **To reply to an email message by telephone:**

- 1.** Access your subscriber mailbox using a telephone.
- 2.** Press **1** to listen to messages in your Inbox, press **3** to listen to messages by type (if configured), or press **5** to listen to saved messages.
- 3.** While listening to the desired email message, press **8** to reply.
- 4.** If prompted, enter the mailbox number of the person to whom your voice message should be sent.
- 5.** Press **2** to start recording your message.
- 6.** Press **2** to stop recording.
- 7.** Press **5** to send your reply.
- 8.** To send your reply to someone else, press **1**; otherwise, press **9**.

## Forwarding an Email Message with Voice Comments

You can forward an email message with voice comments to anyone who has a computer that can play .wav files.

When you forward an email message with voice comments, message recipients receive a single message, with your recording attached as a .wav file.

### ➤ **To forward an email message with voice comments:**

- 1.** Access your subscriber mailbox using a telephone.
- 2.** Press **1** to listen to messages in your Inbox, press **3** to listen to messages by type (if configured), or press **5** to listen to saved messages.
- 3.** While listening to the desired email message, press **2** to forward it.
- 4.** Enter the mailbox number of the person to whom your message should be sent.
- 5.** Press **2** to start recording your message.
- 6.** Press **2** to stop recording.
- 7.** Press **5** to send the message with your introduction.
- 8.** To forward the message to someone else, press **1**; otherwise, press **9**.



## Faxing an Email Message to Someone Else

You can fax an email message to someone else by forwarding it to the appropriate fax delivery mailbox. However, to use this feature, your CallXpress server must have access to the RightFax Enterprise Fax Server.

### ➤ To fax an email message to someone else:

1. Access your subscriber mailbox using a telephone.
2. Press **1** to listen to messages in your Inbox, press **3** to listen to messages by type (if configured), or press **5** to listen to saved messages.
3. While accessing the desired email message, press **2** to forward it.
4. Enter the appropriate fax delivery mailbox number for the fax machine you want to use.
5. If you specified a fax delivery mailbox that prompts for a telephone number, follow these steps:
  - a. Specify the telephone number and press **#**.
  - b. Confirm that the number is correct by pressing **1**.
6. Identify your fax by entering your extension or telephone number and press **#**.
7. Confirm that the number is correct by pressing **1**.

- 8.** When prompted to record an introduction, press **5** to send your message. You should not record an introduction when forwarding an e-mail message to a fax machine. Pressing **5** allows you to send your message immediately.
- 9.** To forward the message to another fax machine or someone else, press **1**; otherwise, press **9**.

## Printing an Email Message on a Fax Machine

You can print an email message by forwarding it to a fax machine. CallXpress allows you to print at any time and at any fax machine. However, to use this feature, your CallXpress server must have access to the RightFax Enterprise Fax Server.

### ➤ **To print an email message:**

- 1.** Access your subscriber mailbox using a telephone.
- 2.** Press **1** to listen to messages in your Inbox, press **3** to listen to messages by type (if configured), or press **5** to listen to saved messages.
- 3.** While accessing the desired email message, press **2** to forward it.
- 4.** Enter the appropriate fax delivery mailbox number for the fax machine you want to use.
- 5.** If you specified a fax delivery mailbox that prompts for a telephone number, follow these steps:
  - a. Specify the telephone number, then press **#**.
  - b. Confirm that the number is correct by pressing **1**.
- 6.** Identify your fax by entering your extension or telephone number, then press **#**.
- 7.** Confirm that the number is correct by pressing **1**.

- 8.** When prompted to record an introduction, press **5** to print your message. Do not record an introduction when forwarding an email message to a fax machine. Pressing **5** allows you to immediately send your message for printing.
- 9.** To forward the message to another fax machine or someone else, press **1**; otherwise, press **9**.

## Selecting Email Messages for Group Processing

The CallXpress group selection feature saves you time and effort by letting you handle messages in a group. For example, you can select your email messages and forward them to a nearby fax machine for printing.

Messages lose their selected status once you exit CallXpress.

### ➤ **To select email messages for group processing:**

1. Access your subscriber mailbox using a telephone.
2. Press **1** to listen to messages in your Inbox, press **3** to listen to messages by type (if configured), or press **5** to listen to saved messages.
3. While accessing the desired email message, press **0**, then press **1** to select it for group processing.
4. Continue to access and select email messages following the instructions in Step 3.
5. Press **\*** to return to the main menu.
6. Press **6** to access selected messages. The following menu options are available:
  - To forward all selected messages, press **2**.
  - To discard all selected messages, press **4**.
  - To save all selected messages, press **5**.
7. Press the key for the desired action and follow the voice prompts.

## Appendix C: Migrating from Desktop Message Manager for Microsoft Outlook to CallXpress Unified Messaging for Microsoft Exchange

Although CallXpress Unified Messaging for Microsoft Exchange functions similarly to the older Desktop Message Manager for Microsoft Outlook client from a user's standpoint, the two client programs are much different in their internal operation. For this reason, it is important to remove all components of Desktop Message Manager for Microsoft Outlook before you install CallXpress Unified Messaging for Microsoft Exchange.

### ➤ **To migrate a user from Desktop Message Manager for Microsoft Outlook to CallXpress Unified Messaging for Microsoft Exchange:**

1. Remove the CallXpress Message Service from the subscriber's email profile.

---

**NOTE** If you prefer, you can create a new profile that excludes the CallXpress Message Service. After testing the new profile, delete the original profile.

---

2. Remove Desktop Message Manager for Microsoft Outlook.
3. Install the client for CallXpress Unified Messaging for Microsoft Exchange.

## **Appendix D: Disabling Email Access During System Maintenance**

Any time maintenance is performed on the Exchange server, it affects the ability of Unified Messaging to function normally. In sites that have multiple Exchange servers, maintenance on a single server can also have an undesired effect.

During the time work is being performed on the Exchange servers, the effect on CallXpress may result in new voice mail messages being unavailable to the subscriber until normal Exchange server operation resumes.

The following procedure places CallXpress Unified Messaging in maintenance (Store down) mode. Subscribers can use the TUI to log on to CallXpress and check for messages that have been received during the maintenance period. Any CallXpress messages already moved to the Exchange server's unified message store will be unavailable through the TUI until normal operation between the servers can be restored. Voice messages residing on the CallXpress server will be unavailable through the Outlook client. Once normal operation is restored, the CallXpress server will move the new messages still residing on it to the Exchange server, and all messages will be available through the TUI or the Outlook client. The interval between full restoration of service and new message availability may be up to one hour to prevent CallXpress from sending too many messages at once to the Exchange server.

➤ **To disable a messaging server profile immediately:**

1. From the Start menu, point to Settings, then click **Control Panel**.
2. Double-click **CallXpress Configuration**.
3. Click the **Email** tab.
4. Select a messaging server profile, then click **Edit**.
5. Clear the **Enabled** check box, then click **OK** to close the Server Profile dialog box.  
The messaging server profile is now disabled.
6. Click **Apply** to save the change in status.



➤ **To re-enable a messaging server profile immediately:**

1. From the Start menu, point to Settings, then click **Control Panel**.
2. Double-click **CallXpress Configuration**.
3. Click the **Email** tab.
4. Select a messaging server profile, then click **Edit**.
5. Select the **Enabled** check box, then click **OK** to close the Server Profile dialog box.  
The messaging server profile is now enabled.
6. Click **Apply** to save the change in status.

➤ **To disable a messaging server profile for server maintenance at a scheduled time:**

1. From the Start menu, point to Settings, then click **Control Panel**.
2. Double-click **CallXpress Configuration**.
3. Click the **Email** tab.
4. Select a messaging server profile, then click **Edit**.
5. Under Maintenance within the Server Profile dialog box, select **Enabled**.
6. Select a time to start server maintenance in the Start box.
7. Select a time to end server maintenance in the Stop box.
8. Click **OK** to save the changes to the messaging server profile and close the Server Profile dialog box.
9. Click **Apply** to save the changes.

## Using AT\_EMA



---

**IMPORTANT** Use of the AT\_EMA command disables the Email Access application for all messaging server profiles. We recommend that you disable individual messaging server profiles immediately or configure the messaging server profile to disable the Email Access interface for the time when system maintenance occurs on the email server, instead of using the AT\_EMA command.

---

AT\_EMA.exe, the CallXpress Email Access Switcher, is a command-line utility that switches Email Access on and off at the CallXpress server. When Email Access is switched off, its features are disabled for all subscribers. Because AT\_EMA is a command-line utility, it can be added to email server maintenance batch files or scripts.

---

**NOTE** AT\_EMA.exe is installed during CallXpress installation and is located in the CX\Bin directory on the CallXpress server.

---

AT\_EMA.exe can be run from the local hard disk drive of either the CallXpress server or the email server. If AT\_EMA is run from the email server, it must be installed locally and the NetBEUI protocol must be installed on both the CallXpress server and the email server. (NetBEUI is not required if AT\_EMA is run from the CallXpress server.)

## Switching Email Access Off Using AT\_EMA

➤ **To switch Email Access off from the CallXpress server using AT\_EMA:**

1. Start a command prompt in Windows Server.
2. Change to the CX\Bin directory.
3. Type **AT\_EMA off**, then press **Enter**.

Email Access is now switched off on the CallXpress server and maintenance of the email server can proceed.

➤ **To switch Email Access off from the email server using AT\_EMA:**



---

**IMPORTANT** AT\_EMA supports Named Pipes only, not TCP/IP addressing. If AT\_EMA will be run from the email server, the NetBEUI protocol must be installed on both the CallXpress server and the email server.

---

1. Copy AT\_EMA.exe from the CX\Bin directory on the CallXpress server to the email server.
2. From a command prompt on the email server or a email server maintenance batch file or script, type **AT\_EMA off** *CallXpress server name* (typically CallXpr1), then press **Enter**.

Email Access is now switched off on the CallXpress server and maintenance of the email server can proceed.

## Switching Email Access On Using AT\_EMA

➤ **To switch Email Access on from the CallXpress server using AT\_EMA:**

1. Start a command prompt in Windows Server.
2. Change to the CX\Bin directory.
3. Type **AT\_EMA on**, then press **Enter**.

Email Access is now switched back on.

➤ **To switch Email Access on from the email server using AT\_EMA:**



---

**IMPORTANT** AT\_EMA supports Named Pipes only, not TCP/IP addressing. If AT\_EMA will be run from the email server, the NetBEUI protocol must be installed on both the CallXpress server and the email server.

---

1. Verify that AT\_EMA.exe is located on the email server.
2. From a command prompt on the email server or an email server maintenance batch file or script, type **AT\_EMA on** *CallXpress server name* (typically CallXpr1), then press **Enter**.

Email Access is now switched back on.

## Appendix E: Troubleshooting Email Access After Setup

When encountering a problem with the Email Access application after setup, always check the Windows Server Event Viewer log before taking any action. It may provide information that will help you isolate the problem.

Review the following items if you have problems after the configuration of Email Access:

- If subscribers state that email messages previously deleted in the TUI persist in their email mailbox, verify that they are logging off their subscriber mailboxes correctly.
- Verify that the **Email Access Active** check box is selected on the Messaging tab of the System Configuration dialog box in CallXpress Administration.
- Verify that the Message Storage Location option is set to **External** on the Email tab of the subscribers' mailboxes.
- Verify that the Server Profile and user information on the Email tab of the subscribers' mailboxes are configured correctly.
- Verify that the LAN adapter card is properly configured with the correct network protocols to communicate with the email server.
- Verify that the CallXpress server and the CallXpress Service have sufficient permissions to log on to the Exchange server(s). Further, verify that the CallXpress server is a member of the same Windows Server domain as the Exchange server(s), or if it is a member of a different Windows Server domain, that the two Windows Server domains "trust" each other.



- Check for an ambiguous CallXpress domain account name on the Exchange server or in Active Directory. Although the CallXpress service authenticates properly to the domain with its account credentials, it must also invoke its copy of the Outlook client through an unambiguous account name to gain access to the Exchange server. For example, if the CallXpress account name on the Exchange server is VM2, and there is also an unrelated Exchange account named VM200, the Outlook client must prompt the CallXpress server to select one of the two accounts to complete the logon process. Because the CallXpress server cannot make a selection as a human user would, the process comes to a halt at this point and the Email Access feature cannot function normally.
- Using the following procedures, verify that the Outlook profile for CallXpress is created and create a profile manually, if necessary.

➤ **To verify that the Outlook profile is created:**

1. On the CallXpress platform, click Start, point to Settings, then click **Control Panel**.
2. Double-click **Mail**.
3. Click **Show Profiles**.
4. Continue according to whether the Telephony profile is listed.

**If the Telephony profile is ...**

**Then ...**

---

Listed

**Stop.** No configuration is needed.

Not listed

Continue with the next procedure.

➤ **To add a profile manually in Outlook XP or Outlook 2003:**

1. Click **Add ....**
2. In the Profile Name box, type **Telephony Route/Path** (for example, *Telephony ServerName*) and click **OK**.

---

**NOTE** The value of *Route/Path* must match the Route/Path string that is specified in a valid server profile on the Email tab in the CallXpress Configuration Utility. Also, make sure there is a space between the word Telephony and the *Route/Path* variable.

---

3. Select **Add a new e-mail account** and click **Next**.
4. Select **Microsoft Exchange Server** and click **Next**.
5. In the Microsoft Exchange Server box, type the Route/Path string that is specified in the appropriate server profile in CallXpress Configuration.
6. In the User Name box, type the CallXpress service account name.
7. Click **Check Name**. Verify that the string in the Microsoft Exchange Server box is replaced with the name of the appropriate Exchange server and that the name in the User Name box is properly confirmed.
8. Click **Next**, then click **Finish**.

---

**NOTE** If the route/path string and service account name are not resolved properly, refer to Appendix G.

---

➤ **To add a profile manually in Outlook 2000:**

1. Click **Add ...**
2. Select **Use the following information services:** and select the **Microsoft Exchange Server** box, then click **Next**.
3. In the Profile Name box, type **Telephony Route/Path** (for example, *Telephony ServerName*) and click **OK**.

---

**NOTE** The value of *Route/Path* must match the Route/Path string that is specified in a valid server profile on the Email tab in the CallXpress Configuration Utility. Also, make sure there is a space between the word Telephony and the *Route/Path* variable.

---

4. In the Microsoft Exchange Server box, type the name of the Exchange server.
5. In the Mailbox box, type the name of the mailbox, click **Next**, then click **Finish**.
6. In the list of profiles within the Mail dialog box, select the profile you have just created and click **Properties**.
7. In the property sheet for the profile, select **Microsoft Exchange Server** and click **Properties**.
8. On the General tab within the Microsoft Exchange Server property sheet, delete the server name in the Microsoft Exchange Server box. In its place, type the Route/Path string that is specified in the appropriate server profile in CallXpress Configuration.

- 9.** Verify that the Mailbox box still contains an appropriate mailbox name and click **Check Name**.
- 10.** Verify that the string in the Microsoft Exchange Server box is replaced with the name of the appropriate Exchange server and that the name in the User Name box is properly confirmed.
- 11.** Click **Cancel**, then **Cancel** again, then **Close**, and exit the Control Panel.

---

**NOTE** If the route/path string and mailbox name are not resolved properly, refer to Appendix G.

---

## Appendix F: Client Installation Command Line and Switch Information

CallXpress Unified Messaging provides the following two automated methods for installing client files on subscriber workstations from a network share:

- **“Push” installation**, in which an administrator starts the installation routine and the subscribers are not involved in it
- **“Pull” installation**, in which subscribers receive a link or path to the installation routine and start it themselves

This section describes both types of installation and discusses the necessary command-line syntax for deploying them.

## “Push” Installation

A “push” installation can be either attended or unattended, but all subscribers’ computers must be on and connected to the network. Both attended and unattended push installs rely on third-party push-installation software packages, all of which allow you to enter the name of an executable with command line arguments to be run on the client machine.

The following example shows typical command line syntax to perform an attended “push” install for a subscriber with a mailbox number of 1234 and extension 1234. All other install values would come from the Admin.ini parameter file, which was created during the administrator setup.

Executable: *setup.exe*

Command line arguments: *-vAdmin.ini -b1234 -u1234*

The following example shows typical command-line syntax for an unattended push install supporting a subscriber with a mailbox of 1234 and extension 1234. All other installation settings come from the Admin.ini file.

For an unattended “push” install (also called a *silent install*), you must include the `-s` switch and provide a response file. This file is created for you by the administrator setup and is always called `Setup.iss` in that context. For other setups, you can use the `-f1` switch to rename the response file. The `-s` switch must always be the last argument on the command line.

Executable: *setup.exe*

Command line arguments: `-vAdmin.ini -b1234 -u1234 -f1setup.iss -s`

---

**NOTE** In both of the attended and unattended installs you could omit the `-b1234` & `-u1234` arguments to make the install work for a group of users. Although installation would complete properly, subscribers could not use CallXpress Unified Messaging until they entered their mailbox and extension numbers in Desktop PhoneManager or Web PhoneManager.

---



## “Pull” Installation

A “pull” installation is always attended because a subscriber must be present to start it.

To set up a “pull” installation for a group of subscribers, the administrator must provide a copy of the shortcut file *UM Install.lnk* to each user in the group. This file is created as part of the administrator setup process and placed on the network share with the other install files. An administrator can distribute the shortcut file to the subscribers in one of two ways:

- Use whatever “push” installation software the customer has to place it on the subscribers’ desktops.
- Send it to all customers as an email attachment.

The subscriber then double-clicks the file to begin the installation.

The file is configured to invoke the following command line:

```
setup.exe -vAdmin.ini
```

In this command line, *Admin.ini* is the name of the parameter file created during administrator setup.

## Command-Line Syntax

The following table lists the valid command line arguments for both “push” and “pull” installations.

---

**NOTE** If you prefer, you can omit the `-v` switch and include the arguments in this table as switches on the command line.

---

Argument	Description
<code>-?</code>	Displays usage dialog showing command line parameters and values.
<code>-a</code>	Performs an administrator install. When this switch is specified, the setup file is created in the same directory that contains the file Admin.ini. This switch should not be used with the <code>-s</code> or <code>-r</code> switches.
<code>-b</code>	Mailbox. For example, <code>-b1234</code> where your mailbox is 1234.
<code>-h</code>	Server name. For example <code>-hCallXpr1</code> where your telephony server is CallXpr1.
<code>-l</code>	Record device. Values are <i>s</i> for sound card and <i>t</i> for telephone.
<code>-j</code>	Playback device. Values are <i>s</i> for sound card and <i>t</i> for telephone.
<code>-k</code>	Is an install OKI driver override. Values are <i>y</i> for Yes and <i>n</i> for No.
<code>-l</code>	Auto-play setting. Values are <i>a</i> for Always, <i>u</i> for New/Unread and <i>n</i> for Never.
<code>-n</code>	Record message format. Values are <i>m</i> for Mu-Law, <i>a</i> for A-Law, <i>p</i> for Linear PCM, <i>d</i> for OKI ADPCM, and <i>g</i> for GSM 610.

<b>Argument</b>	<b>Description</b>
-o	Override personal settings always. Values are <i>y</i> for Yes and <i>n</i> for No.
-p	Protocol. Values are <i>t</i> for TCP/IP and <i>n</i> for Named Pipes.
-u	Extension. For example <i>-u1234</i> where your extension is 1234.
-v	Administrator parameter file name. For example: <i>-vAdmin.ini</i> (the default). This switch cannot be used to set the path where the file resides.
-w	Record non-message format. Values are <i>m</i> for Mu-Law, <i>a</i> for A-Law, <i>p</i> for Linear PCM, <i>d</i> for OKI ADPCM, and <i>g</i> for GSM 610.
-y	Client install path. For example <i>-yc:\Program Files\UM</i> .
-s	Silent install. This should appear as the last command line argument.
-f1	Full path to the response file, optionally including the filename. The response file is required for silent installs. A default response file is created for you during the administrator install and is always called <i>setup.iss</i> .
-r	Record a new response file. For example, <i>setup -r</i> will go through a user install and record all user interactions into a response file called <i>setup.iss</i> , which will be located in the Windows directory.

The following sample command line assumes the name of your telephony server is callxpr1 and you are using TCP/IP for your protocol. Your mailbox and extension are 1234. You want your playback and record devices to be the telephone. You want to auto play all new or unread messages. The record message and record nonmessage formats are  $\mu$ -Law and the default client install path is c:\UM.

```
Setup -hcallxpr1 -b1234 -pT -u1234 -iT -jT -kN -IU -nM -wM -yc:\UM
```

## Using the Diagnostic Files

Because “push” and “pull” installations occur in your absence, you need some sort of evidence that the installation was completed correctly. To provide you that evidence, the setup program creates a diagnostic file in the topmost directory where the software was installed. The name of the diagnostic file indicates how the installation concluded.

### If the file is named... Then...

UMInstallSuccess.txt	The installation completed successfully and no further action is needed.
UMInstallReboot.txt	The installation completed successfully, but the computer must be restarted before the software can be used.
UMInstallErr.txt	The installation encountered problems, which the file describes.

If the UMInstallErr.txt file exists, it contains one or more error codes that explain why the installation could not complete successfully. The following table shows the codes that can help you troubleshoot the installation yourself; if the file contains other codes, contact AVST Technical Support for assistance.

Code	Error Message	Explanation
110	User cancelled install (OnCancel event)	A user interrupted the setup program as it was installing the software.
111	User cancelled uninstallation	A user interrupted the setup program as it was removing software.

---

112	Invalid file, CRC error encountered	<p>The setup program could not match the checksum given for an installed file, indicating that the file is corrupt.</p> <p>If you have installed the setup program and its associated files to a shared directory on your network, verify that all of the files were copied correctly. If you are installing from the CallXpress DVD, contact AVST Technical Support.</p>
113	File reported an error during filecopy	<p>The setup program could not copy a file successfully.</p> <p>Verify that the destination folder (or its parent folder) is shared, that the account running the setup program has permission to modify it, and that none of its files is marked read-only.</p>
115	Locked file was encountered	<p>The setup program could not copy a file successfully because it would need to replace a file that was in use at the time it ran.</p> <p>Make sure that no one has any files open in the directory where you are installing CallXpress Unified Messaging.</p>
119	Error occurred attempting to process the command line parameters	<p>The setup program could not understand all of the command line arguments it was given.</p> <p>Check the syntax of the command line you are attempting to use to install CallXpress Unified Messaging.</p>

---

## Appendix G: Testing Messaging Server Route/Path References

As discussed in the section “Creating Messaging Server Profiles to Communicate with the Microsoft Exchange Server” on page 62, the domain specified in the Route/Path box of a messaging server profile must resolve as a global catalog server in the organization’s LAN or WAN. If this domain does not resolve properly, functions that rely on Lightweight Directory Access Protocol (LDAP) will fail. For example, under these circumstances, the Subscriber Mailbox Email Search dialog box in CallXpress Administration fails to find even known subscriber mailboxes matching its specified search criteria.

This appendix discusses steps you can take to confirm that the domain specified in the Route/Path box of a messaging server profile resolves correctly. It also discusses how to configure the CallXpress server to recognize valid domains that do not resolve as global catalog servers.



**IMPORTANT** To support the following procedures, the site’s network administrator will need to provide you with the IP addresses of the global catalog servers in the site’s network and the domain names associated with those servers. This information is available in the Active Directory Sites and Services utility.

---

## Verifying the Global Catalog Server's Domain

The following procedure confirms the domain name that should be used in the CallXpress messaging server protocol in most systems.

➤ **To verify and test the domain name of a global catalog server:**

1. From the Start menu at the CallXpress server platform, select **Run....**
2. In the Open: box, type **command** and click **OK** to open a command prompt window.
3. At the command prompt, enter the command **ping %userdnsdomain%**.

Examine the text that the **ping** command returns. You should be able to see the domain name and IP address of the global catalog server associated with the CallXpress platform, as well as the results of the communication test that the command normally performs. Verify that the domain name stored in the messaging server profile on the CallXpress server is the same as the domain name returned by the **ping** command, and correct the profile if necessary.

---

**NOTE** For the purposes of configuring CallXpress, it is not necessary for the communication test to succeed. If the **ping** command identifies the domain name and IP address of the global catalog server correctly, you can proceed to verify and correct the configuration of the CallXpress messaging server profile.

---



## Configuring Other Domain Names for Use With CallXpress

In most systems, using the domain name of a global catalog server as the Route/Path in a CallXpress messaging server profile provides the best performance. However, you can substitute a different domain name (if it is valid) by adding it to the host file on the CallXpress server platform.

➤ **To configure a domain name for use with CallXpress:**

1. From the Start menu at the CallXpress server platform, select **Run....**
2. In the Open: box, type **notepad %windir%\system32\drivers\etc\hosts**.
3. Click **OK** to start Notepad and load the host file.
4. In Notepad, place the cursor at the beginning of an empty line at the bottom of the file. Type the IP address associated with the domain name you are configuring, then press the Tab key and type the domain name.
5. From the File menu, select **Exit**.
6. When asked if you want to save the changes, click **Yes**.

You can now use the domain name in the Route/Path boxes of CallXpress messaging server profiles.

# Index

## A

- Accessing
  - online help 126–127
- Adding CallXpress server to Windows server domain
  - Windows 2000 33–34
- Admin.ini 159
- Administrative access
  - assigning to CallXpress account 41
- Application programming interface (API) 9
- Assigning global email permissions in Exchange 2003 System Manager 39
- Associating
  - Windows 2000 server domain name and CallXpress service 44–46
  - Windows Server 2003 domain name and CallXpress service 44–48
- AT\_EMA, using 147–151

## B

- Backups, coordinating with MWI support 88
- Binary file attachments 20–21

## C

- Cache configuration, Email tab 69
- CallXpress
  - communication with Email Access 9
- CallXpress account
  - assigning email store permissions 39, 41
- CallXpress Email Access Switcher. See also AT\_EMA
- CallXpress server
  - accessing Exchange mailboxes 52
  - message cache 24
  - requirements 28–29
- CallXpress Unified Messaging
  - installation requirements 27
  - options for accessing messages 9
- Client settings for Unified Messaging 106–108
- Clustered Exchange servers
  - configuring for MWI 80–83
- Command line arguments 162
- Configuring
  - CallXpress mailboxes for Unified Messaging 66–68
  - Email tab for Exchange 69
  - Unified Messaging settings 128–129
- Creating
  - messaging server profiles 62–66
  - Server account using Windows 2000 or Windows Server 2003 35–44
  - user mailboxes on Exchange 2003 server 54

## D

- Deleting messages, Email Access 16
- Desktop PhoneManager
  - accessing 128–129
- Desktop PhoneManager utility 91
- Disabling Email Access 143–146
- Documentation requirements 30

## E

- Email Access
  - communication with CallXpress server 9
  - configuring Windows server 32
  - definition 10
  - disabling during system maintenance 143–146
  - enabling 49
  - messages 15
  - MWI 12
  - supported Exchange servers 11
  - text-to-speech rendering 16
  - troubleshooting 152
  - TUI features 11–13
  - workstation requirements 30
- Enabling
  - Email Access globally 49
  - Exchange server interface 53
  - voice lines 50
- Error codes, MAPI 120–125
- Exchange 2003
  - creating a messaging profile 62–65
  - creating user mailboxes 54

Exchange server  
  cache configuration 69  
  configuring for Email Access 52  
  enabling interface 53  
  installing MWI support on clustered servers 80–83  
  locating configuration information 73  
  mailboxes, accessing by CallXpress 52  
  preparing for Message Waiting Indicator components 71  
  requirements 28  
Extension Specific Processing (ESP) 14

**F**  
Fax messages, viewing 131–132  
Faxing email messages 137–138  
Forwarding messages, Email Access 19  
Forwarding, message with voice comments 136

**G**  
Graphic User Interface (GUI) 9  
  message access 14–15  
Group processing 141

**H**  
Help, accessing 126–127

**I**  
Installation requirements  
  documentation 30  
  telephony server 28  
  workstation 30  
Installing  
  client on a LAN 93–94  
  client on a workstation 98–105  
  Email Access 31  
  Message Waiting Indicator components 70–87  
  Outlook client on CallXpress 56–58

**L**  
Lightweight Directory Access Protocol (LDAP)  
  testing domain names 167–169  
Local Area Network (LAN) 9  
  installing Unified Messaging client 93–94  
  traffic 24

**M**  
Mailbox Password, changing 133  
Mailboxes, configuring for Unified Messaging 66–68  
MAPI error codes 120–125  
Mcheck.log 63, 109  
  examples 111–119  
Message cache  
  on CallXpress server 24

Message store, unavailable 25  
Message Transport Agent (MTA) 110  
Message Waiting Indicator 76  
Message Waiting Indicator components  
  configuring for SSL 79  
  configuring to support multiple Exchange mail stores 84–87  
  Installing 70–87  
  installing on clustered Exchange servers 80–83  
Message waiting indicators (MWI)  
  with Email Access 12  
Messages  
  deleting 16  
  enumeration 15  
  faxing email 137–138  
  forwarding 19  
  forwarding with voice comments 136  
  group processing 141  
  GUI access 14–15  
  modifying 19  
  notification 17  
  printing on a fax machine 139–140  
  replaying in Email Access 17  
  reply options 17  
  TUI access 11–13  
Messaging server profiles 62–66  
Migrating  
  from Unified Messaging for Outlook 142  
Modifying, messages 19

**N**

- net start* command 88
- net stop* command 88
- Non-subscribers, replying to 18
- Notes box modification 19

**O**

- Online help, accessing 126–127
- Outlook
  - installing on CallXpress server 56–58

**P**

- Permissions
  - assigning for email stores in Exchange 2003 System Manager 39
- Playing voice messages 131–132
- Printing email messages 139–140
- Profiles, messaging server 62–66
- Pull installation 161
  - configuring 158–166
  - troubleshooting 165
- Pulse Code Modulation (PCM) 19
- Push install
  - attended 159
  - unattended 159
- Push installation
  - configuring 158–166
  - troubleshooting 165

**R**

- replying to an email message 135
- RightFax, Server-Side Application (SSA) 20–21

**S**

- Saving messages
  - Email Access 16
- Secure Sockets Layer (SSL)
  - configuring Message Waiting Indicator components for 79
  - gathering configuration information 73
- Security certificate
  - configuring Message Waiting Indicator components for owner 79
  - identifying owner 73
- Security code, changing 133
- Sending a voice message 130
- Server account
  - using Windows 2000 or Windows Server 2003 35–44
- Server-based unified messaging
  - definition 7
- Servers
  - installation requirements 28
  - interrupted communication 25
  - time synchronization 26
- Server-side application (SSA)
  - requirements 20–21

- Silent install 160
- Subject line modification 19
- Subscribers, accessing Desktop PhoneManager 128–129
- System maintenance, disabling Email Access 143–146

**T**

- Telephone User Interface (TUI) 9, 134
  - faxing email messages 137–138
  - features 12–13
  - forwarding message with voice
    - comments 136
  - group processing 141
  - message access 11–13
  - printing email messages 139–140
  - Replying to an email message 135
- Telephony Password, changing 133
- Test button 109
- Testing
  - communication with Exchange server 110–119
    - Email Access interface 109–110
    - using Mcheck.log 109–119
- Text file attachments 16
- Text-to-speech rendering 16
- Third-party fax server support
  - configuring 89
  - described 22
- Time synchronization, utilities 26
- Troubleshooting, Email Access 152

## **U**

- Unified Messaging
  - migrating from Unified Messaging for Outlook 142
- Unified messaging, definition 7
- Using AT\_EMA 147–151
- Using unified messaging quickstart 126–141

## **V**

- Viewing, fax messages 131–132
- Voice lines, enabling 50
- Voice messages
  - playing 131–132
  - sending 130
- Voice reply 17

## **W**

- Warnings. See Error Codes
- Web PhoneManager 128
- Windows 2000
  - associating CallXpress service 44–46
- Windows 2000 or Windows Server 2003
  - creating a server account 35–44
- Windows server
  - configuring for Email Access 32
- Windows Server 2003
  - associating CallXpress service 44–48
- Workstation
  - installation requirements 30
  - installing Unified Messaging client 98–105

## Edition Information

This is the sixteenth edition of the *CallXpress Unified Messaging for Microsoft Exchange* online book.

This document was produced by AVST.

## Copyright

© 1999–2007 Applied Voice & Speech Technologies, Inc.

All rights reserved.

Produced in the United States of America

## Disclaimer

AVST reserves the right to revise this publication and to make changes from time to time in the content hereof without obligation of AVST to notify any person of such revisions or changes.

## Trademarks

CallXpress and AVST are registered trademarks and Desktop Message Manager, Web PhoneManager, and Email Access are trademarks of Applied Voice & Speech Technologies, Inc. Microsoft and Windows are registered trademarks of Microsoft Corporation. Captaris and RightFax are registered trademarks of Captaris, Inc. Citrix and MetaFrame are trademarks or registered trademarks of Citrix Systems, Inc., in the United States and other countries. Esker is a registered trademark and Esker Fax is a trademark of Esker S.A. Fenestrae and Faxination are registered trademarks of Fenestrae B.V. XMediusFAX is a registered trademark and Interstar is a trademark of Interstar Technologies, Inc.

All other products, brand names, or companies mentioned in this document may be trademarks or registered trademarks of their respective companies.

Applied Voice & Speech Technologies, Inc.

27042 Towne Centre Drive, Suite 200

Foothill Ranch, CA 92610

(949) 699-2300

**<http://www.avst.com>**