MITEL

Inter-Tel® Unified Messaging
Open Standards Edition

Administrator's Guide

MITEL®

Unified Messaging Open Standards Edition Administrator's Guide

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Notice

This document is released by Inter-Tel (Delaware), Inc., a Mitel company, as a guide for Unified Messaging Open Standards Edition administrators. It provides information necessary to properly administer the system.

The contents of this document reflect current company standards and are subject to revision or change without notice. Some features or applications mentioned may require a future release and are not available in this release. Future product features are subject to availability and cost. Some features may require additional hardware and/or specific software.

The contents of this guide may include technical or other inaccuracies. Inter-Tel (Delaware), Inc. reserves the right to make revisions or changes without prior notice. Software packages released after the publication of this guide will be documented in addenda to the manual or succeeding issues of the guide.

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Contents

Contents

Overview

Introduction

Inter-Tel® Unified Messaging Open Standards Edition (OSE) is a software product integrated with the Enterprise® Messaging (EM) voice processing system. Unified Messaging OSE provides access to voice and fax messages from the user's desktop computer.

Unified Messaging OSE provides the following ways to access, play, and manage voice mail messages from a computer or mobile device:

- **E-mail client**: When users are configured for Unified Messaging OSE, their voice mail messages are available in their e-mail clients. The message format may include an audio file attachment, a Uniform Resource Locator (URL) to the Voice Mail Web interface, or both. For more information about e-mail client integration, see page 17.

- **Voice Mail Web Interface**: Users can manage and listen to their voice mail messages from a Web browser on their computer or mobile device using the Voice Mail Web Interface. For more information about the Voice Mail Web interface, see page 23.

Unified Messaging OSE also provides inbound and outbound fax features. Outbound fax features are supported for computers only. Users cannot send faxes from their mobile devices.

Fax features include:

- **Outbound Fax**: Unified Messaging OSE provides two methods to send outgoing faxes from computers:

  - *Fax Print Driver*: This software application allows users to send faxes from computers running Microsoft® Windows® 2000 or later operating systems. Any Windows application that supports printing can use this print driver.

  - *Web Fax Form*: Users can send multiple fax documents using a Web-based fax form from a Web browser. Unlike the fax print driver, users do not need to install a software application on their computers to send a fax with the Web Fax Form.

  For more information about outbound faxes, see page 30.

- **Inbound fax**: Inbound faxes are sent to users' e-mail address for fax delivery, as configured on the EM server. Faxes are sent via e-mail notification messages, which include a Portable Document Format (PDF) or Tagged Image File Format (TIFF) file attachment for the fax transmission. For more information about inbound faxes, see page 44.

New Features

The following sections describe new features and enhancements provided with v2.0 Maintenance Release.

Throughout the guide, version 2.0 Maintenance Release new features or changes are indicated by change bars, like the one shown in the margin to the left of this text.

BlackBerry Enhanced Integration

Unified Messaging (UM) OSE v2.0 Maintenance Release provides integration support for BlackBerry® devices. The devices must be running BlackBerry enterprise server software integrated with the site's e-mail server. BlackBerry users can now configure their accounts with the new "BlackBerry Enhanced Integration" level to receive voice messages to their e-mail addresses and voice mailboxes. This feature requires a Mitel 5000 v3.1 or later system or an Axxess v11.010 or later system running an EM v2.0 or later system. See page 5 for details.

The new BlackBerry Enhanced Integration level has been added to the Unified Messaging Level folder in Database (DB) Programming under
Voice Processor\Devices\Mailboxes\Local\<*mailbox*>\Unified Messaging.

See page 46 for programming information.

Upgrading to Version 2.0

To upgrade to Unified Messaging v2.0 or later, order one of the following Enterprise Messaging v2.0 Upgrade Kits:

- EM v1.2 to 2.0 Upgrade Kit, Without Memory (part number 828.1758).
- EM v1.2 to 2.0 Upgrade Kit, With Memory (part number 828.1763).
- EM v1.0 or 1.1 to 2.0 Upgrade Kit Without Memory (part number 828.1760).
- EM v1.0 or 1.1 to 2.0 Upgrade Kit With Memory (part number 828.1764).

After upgrading to EM v2.0, determine which Unified Messaging level (see page 4) you want to configure for each mailbox. See page 46 for important information about field location changes that may affect which fields you need to configure in DB Programming.

Upgrade steps vary based on which Unified Messaging version you are upgrading from and which Unified Messaging level you are programming the user for.

To upgrade a Unified Messaging OSE v1.0 user to v2.0:

1. *If upgrading from v1.0 to v2.0 Enhanced Forward and Copy, Enhanced Integration, or BlackBerry Enhanced Integration*, delete the Internet Message Access Protocol (IMAP) account (and IMAP inbox) programmed in the user's e-mail client. The IMAP inbox is not needed for these Unified Messaging levels.

   I*f upgrading from v1.0 to v2.0 Basic Integration*, do **not** delete the IMAP account programmed in the user's e-mail client. The IMAP inbox is required for Basic Integration users who want to access voice messages from their e-mail client.

2. Program the user's voice mailbox using DB Programming, as described in "Programming Users" on page 46.

To upgrade a Unified Messaging v2.3 user to Unified Messaging OSE v2.0:

1. Uninstall the existing Unified Messaging v2.3 Client application from the e-mail client's computer.

2. Program the user's voice mailbox using DB Programming, as described in page 46.

Unified Messaging OSE Levels

Enterprise Messaging provides six Unified Messaging configuration levels for system users. These levels are programmed per mailbox in DB Programming (see page 46). The level that is configured for the mailbox determines the following:

- How voice messages are integrated into the e-mail client (see page 17).

- Whether the EM server and e-mail server are synchronized or not (see page 21).

- Which Unified Messaging OSE features are available (see Table 1 on page 5).

The following levels of Unified Messaging are available with the Enterprise Messaging server: Note that only the Enhanced Forward and Copy, Basic Integration, Enhanced Integration, and BlackBerry Enhanced Integration levels apply to Unified Messaging OSE:

- **Forward Only**[1]: Delivers a voice message to the user's e-mail address when they receive a new voice message in their voice mailbox. After the message is sent, the original message is deleted from the mailbox. This level *does not* provide synchronization between the user's e-mail client and voice mailbox.

- **Forward and Copy**[1]: Delivers a copy of a voice message to the user's e-mail address when they receive a new voice message in their voice mailbox. The original message can still be retrieved from the mailbox. This level *does not* provide synchronization between the user's e-mail client and voice mailbox.

- **Enhanced Forward and Copy**: Similar to the Forward and Copy level, this level delivers a copy of a voice message to the user's e-mail address when they receive a new voice message in their voice mailbox. However, with the Enhanced Forward and Copy level, users can configure the voice message format and they can specify the folder to receive voice messages (see page 25). In addition, users receive a Welcome e-mail, and error notification e-mail messages if an error occurs. This level *does not* provide synchronization between the user's e-mail client and voice mailbox.

- **Basic Integration**: Provides direct access into the user's voice mailbox from their e-mail client when they configure an IMAP account in their e-mail client (see page 60). Voice messages are available from the IMAP folder. This level *does* provide synchronization between the user's e-mail client and voice mailbox.

NOTE	This functionality was available in the initial release of Unified Messaging OSE and is now known as Basic Integration.

- **Enhanced Integration**: Delivers new voice messages to the user's e-mail address and voice mailbox, and synchronizes those messages. For example, if the user deletes a voice message from their e-mail client, the message is also deleted in their voice mailbox. With this level, users can configure voice message format, specify which e-mail client folder that voice messages are delivered, and synchronize their endpoint's message lamp with their e-mail client (see page 25). In addition, users receive a Welcome e-mail, and error notification e-mail messages, if an error occurs. This level *does* provide synchronization between the user's e-mail client and voice mailbox.

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1. These levels are provided with Inter-Tel's legacy Unified Messaging product. Refer to the *Unified Messaging v2.3 Administrator's Guide* for information about these levels.

- **BlackBerry Enhanced Integration**: Similar to the Enhanced Integration level, the BlackBerry Enhanced Integration level delivers new voice messages to the BlackBerry user's e-mail address and voice mailbox, and synchronizes those messages.

  Keep the following considerations in mind:

  o When a user is configured to have WAV attachments, BlackBerry Enhanced Integration does not currently detect size restrictions. When the remote store rejects a message that is too large, the user may not receive notification of that message and a subsequent message with the URL without the WAV attachment.

  o BlackBerry Enhanced Integration does not automatically synchronize messages into folders other than the "Inbox" folder. If you attempt to change the e-mail account folder to anything other than "Inbox" in the E-mail Account Folder for Synchronization field (see pages 26 and 50), a warning appears indicating that messages may be deleted unless certain actions are taken. To support integration into folders other than the "Inbox" folder, you must set up message routing rules at the e-mail server (server-based rules) so that voice mail messages that are sent using BlackBerry Enhanced Integration will be routed into the expected folder.

  o Messages added to a user's email account using Blackberry Enhanced Integration have the timestamp of the time in which the message was added. This is different from Enhanced Integration. Enhanced Integration creates a message with the timestamp in which the message was actually received on the voice mail side.

Table 1 provides a summary of the supported features for the Unified Messaging OSE levels.

Table 1. *Unified Messaging OSE Levels*

Feature	Enhanced Forward and Copy	Basic Integration	Enhanced Integration	BlackBerry Enhanced Integration
Voice mailbox and e-mail client synchronized (see page 21)		✓[1]	✓	✓
Voice Mail Web Interface available (see page 23)	✓	✓	✓	✓
Welcome and error e-mail messages provided (see page 18)	✓		✓	✓
User configuration options available (see page 25)	✓		✓	✓
Fax Print Driver available (see page 30)	✓	✓	✓	✓
Web Fax Form available (see page 40)	✓	✓	✓	✓

1. To access voice messages from the e-mail client users must configure an IMAP account (see page 22).

Component Summary

This section lists the Unified Messaging OSE server-side and client-side components. Because the Unified Messaging OSE software is included with the Enterprise Messaging software, there is no Unified Messaging OSE-specific software to install on the EM server.

Server-Side Components

The following server-side components are used with Unified Messaging OSE:

- **Message Store Manager (MSM) and IMAP Compliance**: The central component for all voice message capabilities for the Unified Messaging OSE distribution is the IMAP Server encapsulated within the EM server's MSM component. MSM's IMAP implementation supports the following capabilities:

  o IMAP port that is exposed to support external IMAP connections (TCP port 143 for non-encrypted connections or TCP port 993 for encrypted connections).

  o Secure connections using IMAP SSL (Secure Sockets Layer). It is enabled by default and cannot be disabled.

  o Strong security encryption using TLS (Transport Layer Security) certificates.

  o RFC 3501 compliance (http://www.faqs.org/rfcs/rfc3501.html).

  o MSM is responsible for enforcing Unified Messaging OSE licenses by monitoring concurrent IMAP connections.

  o Along with the plain LOGIN command, MSM supports the AUTHENTICATE command allowing for CRAM-MD5 (Challenge-Response Authentication Mechanism with MD5) authentication for those e-mail clients that support it.

- **Fax Web Services and SMTP (Simple Mail Transfer Protocol) component**: The Web-based fax service component located on EM allows delivery of outbound fax delivery jobs to an e-mail address.

Client-Side Components

The following client-side components are used with Unified Messaging OSE:

- **E-Mail Client**: Unified Messaging OSE is integrated with the user's IMAP version 4 RFC 3501 compliant e-mail client. The e-mail client must be able to connect to the EM IMAP Server, which uses the Unified Messaging OSE voice message retrieval capabilities to provide access to voice messages. See Table 3 on for a list of supported e-mail clients.

- **Voice Mail Web Interface**: Consists of an HTTP connection to a Web-based interface used to access, manage, and play voice messages from a computer or mobile device. This client-side component mirrors the user's voice mailbox. The URL for the Voice Mail Web Interface is http://<EM server name>/umosevm, where *EM server name* is the Enterprise Messaging hostname or IP address.

- **Web Fax Form**: Consists of an HTTP connection to the Web-based fax service located on EM. This fax client supports outbound faxes that are in TIFF or PDF format only. The URL for the Web Fax client is http://<EM server name>/faxclient, where *EM server name* is the Enterprise Messaging hostname or IP address.

- **Fax Print Driver and Fax Client**: The Fax Print Driver is a software application that allows users to send faxes from any computer running the Microsoft Windows 2000 or later operating system. Any application that supports printing can use this print driver. Users must first install the Fax Print Driver application (`UMFaxDriver.msi`) on their computers. Printing to the print driver launches the Inter-Tel Unified Messaging OSE Fax Client application that allows the user to program fax settings and send the fax.

- **Cover Page Editor**: The Cover Page Editor is a software application (`CoverPage C++ Sample.exe`) that you install on your computer. With this application you can create or edit a fax cover page and add it to the cover page template folder, located in the EM server. The cover page is then used in the Inter-Tel Unified Messaging OSE Fax Client application for sending outgoing faxes. Because uploading a new cover page requires access to the EM server, this application should not be distributed to users.

Requirements

The Unified Messaging OSE system and user requirements are described below.

System Requirements

The following are system requirements for Unified Messaging OSE v2.0:

- Mitel® 5000 Network Communications Solutions v2.4 or later, or Inter-Tel Axxess® Converged Communications Platform v11.0 or later.
- Inter-Tel EM v1.2 or later.
- An IMAP-compliant, version 4 e-mail server.
- The appropriate software licenses (see page 13).

NOTES	• Unified Messaging OSE v2.0 is not supported by the Inter-Tel 7000 Network Communications Solution. • To upgrade to EM v1.2, sites must be running EM v1.1.43.2 or later software.

User Requirements

To access Unified Messaging OSE full features and functionality users must have an e-mail account with your company's e-mail system and a voice mailbox on the EM system.

The user requires one of the following hardware devices (and associated software applications) to access Unified Messaging OSE features and functionality:

- A computer with:
  - Network access.
  - A compatible operating system.
  - An HTML-capable browser.
  - 20 MB available hard disk space.
  - A monitor, mouse, and keyboard.
  - A sound card and speakers (or headset/headphones).
  - A media player that can play WAV files encoded as 8-bit, 8 kHz, mono, and mu-law.
- A mobile device with:
  - Network access.
  - A compatible operating system.
  - An HTML-capable browser.
  - A media player that can play WAV or MP3 files.

NOTE	To view inbound faxes computers and mobile devices must include a graphics software program that is compatible with the TIFF or PDF file formats.

See page 11 for the operating systems and software applications that have been validated to interoperate with Unified Messaging OSE.

To ensure that users have the information they need to use Unified Messaging OSE features, refer to Table 2 when you add Unified Messaging OSE users to the system.

Table 2. *Unified Messaging OSE Required User Information*

Unified Messaging OSE Feature	Required Information.
User Accounts	
Unified Messaging OSE Level	Inform users which Unified Messaging OSE level they are configured for (see page 4): • **Enhanced Forward and Copy**: Users receive a Welcome e-mail that includes the synchronization type (Unified Messaging OSE level). • **Basic Integration**: Inform users that if they want access to voice messages from their e-mail clients, they need to create an IMAP account (see page 22) using the instructions in the user guide. • **Enhanced Integration** and **BlackBerry Enhanced Integration**: Users receive a Welcome e-mail that includes the synchronization type (Unified Messaging OSE level).
Voice Mail Web Interface	
	Provide users with the Voice Mail Web Interface URL (see page 23). The URL is `http(s)://<EM server name>/umosevm`, where *EM server name* is the Enterprise Messaging hostname or IP address.
	If you enable the **Allow User to Configure Settings** option in DB Programming for a user (see page 50), provide the user with the required information to complete the fields on the Voice Mail Web interface Configuration tab. See page 25 for detailed information about these fields. • **E-mail Address for Voice Messages:** This is the user's e-mail address. • **E-mail Address for Fax Delivery: T**his is the user's e-mail address. • **E-mail Server**[1]: For example, XYZ_Exchange_Server. • **E-mail Account Username**[1]: This is the username used to log on to the user's e-mail client. • **E-mail Account Password**[1]: This is the password used to log on to the user's e-mail client. • **E-mail Account Folder for Synchronization**[1]: By default, the specified folder is the **Inbox** folder. If users do not want to use the Inbox folder, Inform them that they must first create the folder or sub-folder in their e-mail client and then specify that folder in the Voice Mail Web interface. Also inform users that if they move voice messages from the specified folder, the messages may be deleted from the EM server. • **E-mail Client Message Format**[1]: Options include URL, Attachments or Both. • **Download Format for Mobile Web Page**: Options include MP3 or WAV. • **Fax CC**: This option sends a copy of an outgoing fax to the sender. • **Synchronize MWI with E-mail Client**[1]: (Enhanced Integration and BlackBerry Enhanced Integration only) Synchronizes the user's endpoint message lamp with their e-mail client.

Table 2. *Unified Messaging OSE Required User Information (Continued)*

Unified Messaging OSE Feature	Required Information.
Fax Features	
Web Fax Form	Provide users with the Web Fax Form URL (see page 40). The URL is `http(s)://<EM server name>/faxclient`, where *EM server name* is the Enterprise Messaging hostname or IP address.
Fax Print Driver	Provide the `UMFaxDriver.msi` file to users and have them install it on their computers (see page 30).
	Provide the following user/company-specific information for the Fax Client Configuration tab (see page 31): **Mailbox**: For example, 1000. **Voicemail Password**: For example, 1000. **Web Server**: For example, XYZ_EM_Server. **Use HTTPS option**: Enable or disable.
	Provide the following user/company-specific information for the Fax Client User Settings tab (see page 31): **Telephone Number**: For example, 480-961-9000. **Fax Number**: For example, 480-961-1370. **Copy fax to sender**: Enable or disable.

1. This field does not apply to users configured for Basic Integration.

Software Compatibility

Table 3 shows the operating systems and software applications that Inter-Tel has validated to support Unified Messaging OSE on the user's computer.

Table 3. *Computer Compatibility Matrix*

Software Application	Operating System			
	Windows 2000	**Windows XP**	**Windows Vista®**	**Mac OS X**
E-mail Client				
Microsoft Outlook® 2003	✓	✓	✓	
Microsoft Outlook 2007		✓	✓	
Outlook Express	✓	✓	✓	
Windows Mail v1.0			✓	
IBM® Lotus Notes® v6 or later	✓	✓	✓	✓
Novell® GroupWise® v6.5 or later	✓	✓	✓	
Apple® Mac OS® X Tiger™ Mail 2				✓
Microsoft Entourage® 2004 for Mac				✓
Internet Browser				
Internet Explorer® 6 and 7	✓	✓	✓	✓
Firefox® 2	✓	✓	✓	✓
Apple Safari	✓	✓	✓	✓
Media Player				
Windows Media® Player 11	✓	✓	✓	✓
RealNetworks RealPlayer® 10	✓	✓	✓	✓
Apple QuickTime®	✓	✓	✓	✓

IMPORTANT Consult with your e-mail system administrator about message size limitations and e-mail policies to determine the possible impact to Unified Messaging OSE users.

Inter-Tel has tested the following mobile devices with Unified Messaging OSE:

- HP® iPAQ Pocket PC
- Palm Treo™ 650 and Later
- BlackBerry 7000 and 8000 Series

Table 4 shows the operating systems and software applications that Inter-Tel has validated to support Unified Messaging OSE on the user's mobile device.

Table 4. *Mobile Device Compatibility Matrix*

Software Application	Operating System		
	Windows Mobile® 5 and Later	Palm® 1.0 and Later	RIM BlackBerry® 4.2
E-mail Client			
Flexmail	✓		
Windows Mobile Office Outlook	✓		
Internet Browser			
Internet Explorer® 6	✓		
Palm Blazer 4.0 and later		✓	
BlackBerry Built-In™			✓
Media Player			
Windows Media Player for Pocket PC	✓	✓	
MicroEdition Media			✓

Capacities

When using Unified Messaging OSE v2.0, keep the following EM capacities in mind:

- The EM server can handle one call every two minutes per mailbox on a 32-port system.
- EM supports up to 3000 Unified Messaging OSE users per system, however, only 400 of those users can be configured for the Enhanced Integration or BlackBerry Enhanced Integration level (see page 4).
- The Unified Messaging OSE outbound fax feature requires at least one fax port license on the EM server.
- Each Unified Messaging OSE user requires two ports per connection. The EM Base I server, which runs the Microsoft Windows 2000 Professional operating system, supports a maximum of five concurrent users.

Licensing

This section describes the Unified Messaging OSE licensing information for EM.

EM comes with a 25-user Unified Messaging license by default. To increase the number of users, you must purchase additional Unified Messaging software licenses.

The EM server determines license capability based on the following usage:

- Users configured for Enhanced Forward & Copy, Enhanced Integration, or BlackBerry Enhanced Integration (see page 4) always consume a user license, whether the user's e-mail client is open or not.

- Users configured for Basic Integration (see page 4) consume a user license when the user starts his or her e-mail client.

- Users downloading MP3 files to their mobile devices from the mobile Voice Mail Web interface consume an MP3 Encoder license.

- Users consume a fax port license when sending an outgoing fax using the Web Fax Form or the Fax Print Driver.

- The EM system consumes a fax port license when it receives an incoming fax via the telephone interface. Users do not need a license to open fax attachments.

The available Unified Messaging software licenses and their associated part numbers are provided in Table 5.

Table 5. *Unified Messaging OSE Software Licenses*

Unified Messaging Licenses	Part Numbers
5 Users	840.0153
10 Users	840.0154
25 Users	840.0155
50 Users	840.0156
100 Users	840.0256
250 Users	840.0257
500 Users	840.0258
1000 Users	840.0153
MP3 Encoder License	840.0832
Fax Licenses	**Part Number**
Enterprise Messaging Single Fax Port	840.0147
Unified Messaging TIFF Converter[1]	840.0760

1. Customers upgrading to Unified Messaging OSE from a legacy Unified Messaging product require this license. This license allows users to convert PDF files to TIFF files on the server for outgoing faxes, and TIFF files to PDF files for inbound faxes. New Unified Messaging OSE customers or customers upgrading from a previous Unified Messaging OSE version do not require this license.

Features

Feature Summary

Unified Messaging OSE provides the following features:

- Access to voice and fax messages through the user's e-mail client (see page 17).
- Access to voice messages through the Unified Messaging OSE Voice Mail Web Interface (see page 23).
- Access to outbound fax features (see page 30).
- Access to inbound fax features (see page 44).

For detailed information about how to use Unified Messaging OSE features, refer to the *Unified Messaging Open Standards Edition User Guide* (part no. 835.3155).

For information about programming Unified Messaging OSE, see page 46.

E-Mail Client Configuration

Unified Messaging OSE requires an IMAP-compliant version 4 RFC 3501 compatible e-mail client. See Table 3 on and Table 4 on for e-mail client compatibility.

E-mail client configuration varies depending on which Unified Messaging level (see) the user's account it set up to use.

Enhanced Forward and Copy, Enhanced Integration, and **BlackBerry Enhanced Integration**: For these levels, users do not need to configure their e-mail client after you complete all of the required configuration in DB Programming (see). The system delivers new voice messages to the specified folder in the user's e-mail client. By default, this is the Inbox folder in the e-mail client.
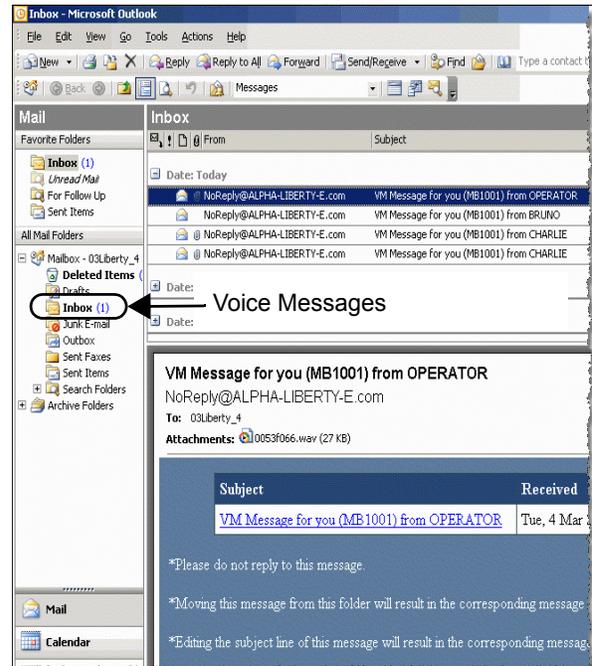
Basic Integration: If configured for the Basic Integration level, users must create an IMAP account in their e-mail clients if they want to access voice messages from their e-mail accounts. Creating an IMAP account creates a corresponding IMAP folder in the e-mail client. Users can access new voice messages from this folder.
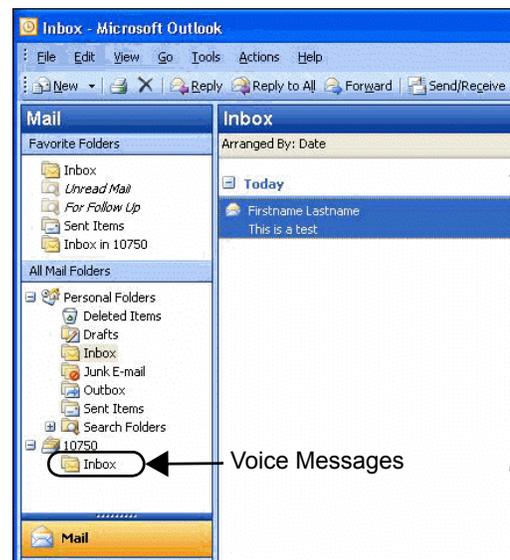
If you enable the Allow User to Configure Settings option in DB Programming (see), the user can configure certain options using the Configuration tab in the Voice Mail Web interface (see).

Unified Messaging OSE E-mail Messages

Unified Messaging OSE includes several types of e-mail messages as described in this section.

Welcome Message

After you configure the user's account for Enhanced Forward and Copy, Enhanced Integration, or BlackBerry Enhanced Integration, they receive a Welcome e-mail. Welcome e-mail messages contain the following information:

- **From**: The "From" address is NoReplyWelcome@<servername>.com, where server name is the name of your EM server.
- **Sent**: Includes the day, date, and time the message was sent by the EM server.
- **To:** The "To" address is the user's e-mail address for voice messages as configured in DB Programming. For example, John_Doe@mitel.com.
- **Subject**: The subject of this message is Welcome to UMOSE Synchronization.

The Welcome e-mail contains basic account information and indicates the user's synchronization type, which corresponds to the Unified Messaging OSE level the account is configured for (see page 4).

Options include:

- Enhanced Forward and Copy
- Enhanced Integration
- BlackBerry Enhanced Integration

Welcome to Mitel's Integrated Voice Mail synchronization	
Your messages will be synchronized to	Inbox
Your voice mail address is	john_doe@mitel.com
Your voice mailbox is	1000
Your remote folder is	Inbox
Your synchronization type is	Enhanced Integration
SSL enabled for remote server connection	yes

Users configured for Basic Integration do not receive a Welcome e-mail.

New Voice Message

When a caller leaves a new voice message in a user's voice mailbox, the system sends the user an e-mail notification message. New voice message notification messages include the following:

- **From**: The "From" address is **NoReplyDelivery@<servername>.com**, where server name is the name of your EM server.
- **Sent**: Includes the day, date, and time the message was sent by the EM server.
- To: The "To" address is the user's e-mail address for voice messages as configured in DB Programming. For example, John_Doe@mitel.com.
- **Subject**: The subject of this message is **VM Message for you <*your voice mailbox extension*> from <*sender*>**. Depending on how you have configured the user's account, when you open the message, the subject line may be a URL link to the Voice Mail Web interface (see page 23).
- **Attachments**: Depending on how you have configured the user's account, the message may contain an audio file attachment. The user can play the audio file using the media player installed on his or her computer or mobile device.

Error Message

Error messages indicate that Unified Messaging encountered a problem delivering a voice message. Error messages contain the following:

- **From**: The "From" address is **NoReplyError@<*servername*>.com**, where server name is the name of your EM server.
- **Sent**: Includes the day, date, and time the message was sent by the EM server.
- To: The "To" address is the user's e-mail address for voice messages as configured in DB Programming. For example, John_Doe@mitel.com.
- **Subject**: The subject of this message is Error Synchronizing UMOSE Mailbox. Additional error text is available in the body of the message.

See for a troubleshooting table that provides a list of error messages, the possible causes, and corrective actions.

New Fax Message

When users receive a fax at their e-mail address, the system sends an e-mail notification message with a TIFF or PDF fax attachment. New fax notification messages include the following:

- **From**: The "From" address is the e-mail address of the fax sender.
- **Sent**: Includes the day, date, and time the message was sent by the EM server.
- **To**: The "To" address is the user's e-mail address for fax delivery as configured in DB Programming. For example, John_Doe@mitel.com.
- **Subject**: The subject of this message is **Fax Message for you from <*sender*>**.
- **Attachments**: The fax transmission is included in the attachment. Depending on the file type configured for the system for inbound faxes, the attachment is either a TIFF or PDF file. Users can view the fax using the graphics software installed on their computer or mobile device.

Copy of an Outgoing Fax Message

You can enable the Copy Fax to Sender option in DB Programming, which will provide the user with a copy (TIFF attachment) of the outgoing faxes that they send. Fax copy notification messages contain the following:

- **From**: The "From" address is the user's e-mail address for fax delivery as configured in DB Programming. For example, John_Doe@mitel.com.
- **Sent**: Includes the day, date, and time the message was sent by the EM server.
- **To**: The "To" address is the user's e-mail address for fax delivery as configured in DB Programming. For example, John_Doe@mitel.com.
- **Subject**: The subject of this message is **Fax Message for you from <*your e-mail address*>**.
- **Attachments**: The fax transmission is included as a TIFF attachment. Users can view the fax using the graphics software installed on their computer or mobile device.

Fax Delivery Status Message

When users send a fax to a fax machine using the Web Fax form (see page 40) or the Fax Print driver (see page 30), the system sends a fax delivery status message via e-mail. Fax delivery status messages (success, temporary failure, or failure) are not delivered until the fax is sent. Fax delivery status messages contain the following:

- From: The "From" address is the user's e-mail address for fax delivery as configured in DB Programming. For example, John_Doe@mitel.com.
- **Sent**: Includes the day, date, and time the message was sent by the EM server.
- **To**: The "To" address is the user's e-mail address for fax delivery as configured in DB Programming. For example, **John_Doe@mitel.com**.
- **Subject**: The subject includes one of the following:
- *Fax Delivery Success*: Indicates that the fax was delivered successfully.
- *Fax Delivery Failure, <fax number>: Retrying in 10 mins*: Indicates a temporary failure. The EM server tries to send the fax every 10 minutes, 10 times.
- *Fax Delivery Failure*: Indicates that the fax was not delivered.
- **Attachments**: Each status message contains a text file that provides the history of the fax delivery attempts. Users can view the text file using the text editing software installed on their computer or mobile device.

See page 41 for additional information about Fax Status Messages.

Voice Message Access

When a user receives a new voice mail message, the system sends an e-mail notification message to the user's e-mail client.

IMPORTANT	Consult with your e-mail system administrator about message size limitations and e-mail policies to determine the possible impact to Unified Messaging OSE users.

To access a voice message from the e-mail client:

1. Locate and open the e-mail notification message. This message contains the following text in the subject line:

   VM Message for you *<user's voice mailbox extension>* from *<sender>*

   Depending on how the E-mail Client Message Format field is configured in DB Programming (see page 51), the e-mail message contains *one or both* of the following:
   - A URL that opens the Unified Messaging OSE Voice Mail Web Interface.
   - An audio file attachment (WAV or MP3).

2. To play the voice mail message do one of the following:

   If the message contains a URL:

   a. Click the URL in the e-mail message. The default Web browser opens and displays the logon page for the Unified Messaging OSE Voice Mail Web Interface (see page 23).

   b. Log on to the Web interface. The default media player automatically plays the voice mail message.

   If the message contains an audio file attachment:

   Double-click the audio file attachment. The default media player automatically plays the voice mail message.

Voice Message Synchronization

Depending on which Unified Messaging you configure for the mailbox, voice messages on the EM server (and user's voice mailbox) may or may not be synchronized with the e-mail server (and user's e-mail client).

Voice message synchronization for the Unified Messaging levels is described below:

- **Enhanced Forward and Copy**: The EM and e-mail servers are *not* synchronized for this level. Therefore, when the user makes changes to voice messages in the e-mail client they are *not* reflected in the user's voice mailbox. For example, if the user deletes a voice message from the e-mail client, the message is *not* deleted from the voice mailbox.

- **Basic Integration**: The EM and e-mail servers *are* synchronized for this level. Therefore, when the user makes changes to voice messages in the IMAP inbox of the e-mail client they *are* reflected in the user's voice mailbox. For example, if the user deletes a voice message from the e-mail client, the message is deleted from the voice mailbox.

- **Enhanced Integration** (Default) or **BlackBerry Enhanced Integration**: The EM and e-mail servers *are* synchronized for this level. Therefore, when the user makes changes to voice messages in the e-mail client they *are* reflected in the user's voice mailbox. For example, if the user deletes a voice message from the e-mail client, the message is deleted from the voice mailbox, and vice versa.

  In addition, the following user actions delete the voice message from the user's voice mailbox:

  o Moving the voice message from the folder specified for voice messages to another folder in the e-mail client.

  o Changing the subject line of the e-mail notification message sent when a user receives a voice message.

NOTE	If the user's account is configured for "Event" synchronization and the e-mail server supports the IDLE command, the user sees real-time message updates. If the user's account is configured for "Polling" synchronization or if the e-mail server does not support the IDLE command, the user sees updates generated at a slower interval based upon the configured "Polling" time value. See page 52 for more information about the IMAP Synchronization Method field.

Synchronize MWI with E-Mail Client Option

The Message Waiting Indication (MWI) feature provides a flashing message lamp on the user's endpoint to indicate that a new voice message is in the user's voice mailbox.

When the user receives a new voice mail message in the e-mail client, the status of the message is UNREAD on the e-mail server, and RECENT on the EM server. The message lamp on the user's endpoint flashes to indicate that a new message is available.
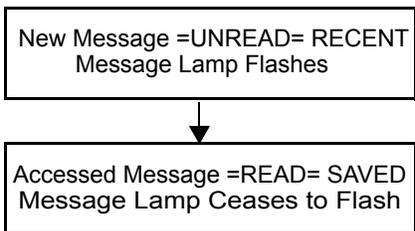
Enabling the **Synchronize MWI with E-Mail Client** option provides synchronization between the MWI feature and the user's e-mail client for users configured for the Enhanced Integration or BlackBerry Enhanced Integration level. This option is not available for users configured for the Enhanced Forward and Copy and Basic Integration levels.

You can enable and disable this option for the user in DB Programming (see page 50). If you enable the **Allow User to Configure** option in DB Programming (see page 50), the user can also enable and disable this option on the Voice Mail Web interface Configuration tab (see page 25).

The following describes what occurs when the user accesses the message from his or her e-mail client when the Synchronize MWI with E-Mail Client is enabled and disabled.

- **Synchronize MWI with E-mail Client Enabled***:* When the user accesses the message in the e-mail client, the message is marked as READ by the e-mail server, the status of the message changes to SAVED on the EM server, and the message lamp on the endpoint ceases to flash.

New Message =UNREAD= RECENT Message Lamp Flashes
↓
Accessed Message =READ= SAVED Message Lamp Ceases to Flash

- **Synchronize MWI with E-mail Client Disabled**: When the user accesses the message in the e-mail client, the message is marked as READ by the e-mail server, the status of the message changes to SEEN on the EM server, and the message lamp on the endpoint continues to flash.

New Message =UNREAD= RECENT Message Lamp Flashes
↓
Accessed Message =READ= SAVED Message Lamp Flashes
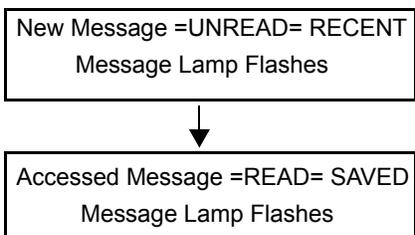
IMAP Accounts

Users configured with the Basic Integration level must configure an IMAP account in their e-mail client if they want to access voice messages from their e-mail client. The IMAP account provides access to voice messages on the EM server. Creating an IMAP account creates an IMAP folder in the user's e-mail client. This folder is separate from the default Inbox. See page 60 for IMAP account configuration requirements.

After users configure their IMAP accounts, they can access voice messages from the IMAP folder. For each voice message, the IMAP inbox contains an e-mail notification message, with an audio file attachment. Users can play the audio file using the default media player installed on their PC.

Refer to the *Unified Messaging OSE User Guide* (part number 835.3155) for instructions about how to create an IMAP account.

Voice Mail Web Interface

Unified Messaging OSE includes a Web-based interface to access, manage, and play voice messages from a computer or mobile device. The Voice Mail Web Interface is available for all levels of Unified Messaging OSE. Users can access the interface in one of the following ways:

- By clicking the URL included in the e-mail notification message that is delivered to their e-mail client (see page 18). This option is only available for users with the Enhanced Forward and Copy, Enhanced Integration, and BlackBerry Enhanced Integration levels.

- By opening a Web browser and navigating directly to the URL associated with voice mail Web access. This option is available for the Enhanced Forward and Copy, Basic Integration, Enhanced Integration, and BlackBerry Enhanced Integration levels.

The Voice Mail Web Interface varies slightly for computers vs. mobile devices. See the following sections for additional details:

- Voice Mail Web Interface for computers, see below.
- Voice Mail Web Interface for mobile devices, see page 27.

Voice Mail Web Interface for Computers

The Unified Messaging OSE Voice Mail Web interface contains the Voice Messages and Configuration tabs.

Voice Messages Tab

The Voice Messages tab functions as the main browser to manage voice messages. The messages are categorized and the user can sort them by the Sensitivity, From, Subject, Date, and Duration column headers.

The tab contains the following folders:

- **Inbox**: Displays voice mail messages that have not been saved or deleted.
- **Deleted Items**: Displays messages that are deleted.
- **Saved**: Displays messages that are saved.

Each folder has the following options:

- **Move To**: Moves messages to a different folder.

  To move a message:

  a. Select the message.

  b. Select **Saved, Deleted Items,** or **Inbox** from the Move To box.

- **Delete**: Deletes messages.

  To delete a message:

  Select a message, and then click **Delete**. If the selected message is in the Saved or Inbox folders, the message is moved to the Deleted Items folder. If the selected message is in the Deleted Items folder, the message is purged permanently.

  Messages left in the Deleted Items folder are deleted after the Deleted Message Holder Duration timer in DB Programming has expired. The default value is set to one hour. To change the default setting, refer to the *Enterprise Messaging Installation and Maintenance Manual* (part no. 780.8006) for instructions about how to change the Deleted Message Hold Duration timer.

- **PC Speakers** or **Phone**: *(Not applicable to the Deleted Items folder.)* Determines how the messages are played. The messages can be played on the PC speaker or through the user's endpoint. For information about how to listen to a message, see page 20.

Configuration Tab

If the **Allow User to Configure** option is enabled in DB Programming (see page 50), the user can customize the options in the Configuration tab. The changes that are made in the Unified Messaging OSE Voice Mail Web interface are automatically updated in DB Programming.
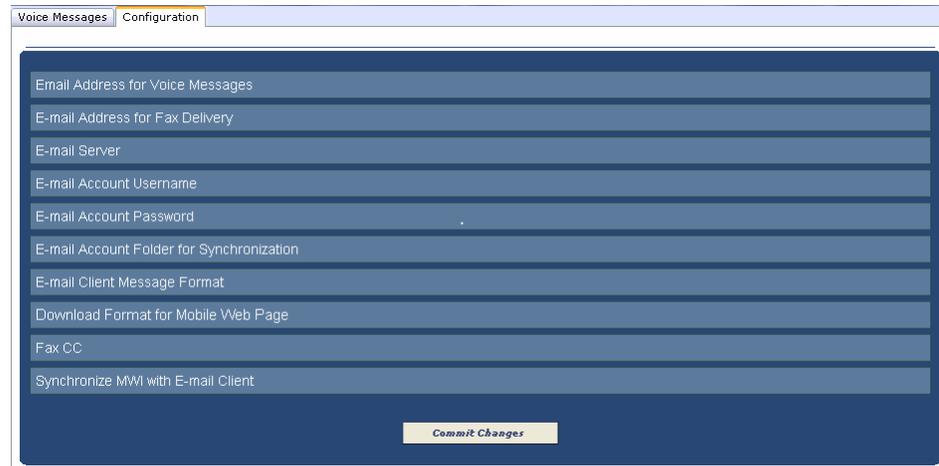
The Configuration tab provides the fields listed below. All of these fields can also be programmed in DB Programming (see page 46). Several of these fields are required for synchronization as noted in the field description.

Table 6 indicates which fields in the Configuration tab must be programmed for each Unified Messaging level. The field appears with a red "X" if it does not apply to a specific level.

Table 6. *Programmable Fields for the Configuration Tab*

Programmable Fields	Unified Messaging Level			
	Enhanced Forward and Copy	Basic Integration	Enhanced Integration	BlackBerry Enhanced Integration
E-mail Address for Voice Messages	✓	✓	✓	✓
E-mail Address for Fax Delivery	✓	✓	✓	✓
E-mail Server	✓		✓	✓
E-mail Account Username	✓		✓	✓
E-mail Account Password	✓		✓	✓
E-mail Account Folder for Synchronization	✓		✓	✓
E-mail Client Message Format	✓		✓	✓
Download Format for Mobile Web Page	✓	✓	✓	✓
Fax CC	✓	✓	✓	✓
Synchronize MWI with E-mail Client			✓	✓

Configuration tab fields include:

- **E-mail Address for Voice Messages**: Specifies the e-mail address of the account that receives voice messages. This is also the e-mail address where welcome and error e-mails are sent to accounts configured with the Enhanced Forward and Copy, Enhanced Integration, and BlackBerry Enhanced Integration Unified Messaging levels.

- **E-mail Address for Fax Delivery**: Indicates the e-mail address of the account that receives in bound fax messages and copies of outbound fax messages.

- **E-mail Server**: Indicates the hostname or IP address of the Internet Message Access Protocol 4 (IMAP4) e-mail server used for account synchronization (for example, **XYZ_Exchange_Server**). Note that this is not the Enterprise Messaging Voice Mail server.

- **E-mail Account Username**: Indicates the user's e-mail username. This username is used to log on to the e-mail client and access e-mail messages from the IMAP4 e-mail server.

- **E-mail Account Password**: Indicates the user's e-mail password. This password is used to log on to the e-mail client and access e-mail messages from the IMAP4 e-mail server.

- **E-mail Account Folder for Synchronization**: Indicates the path and folder in the e-mail client used for synchronization between the EM server and the IMAP4 e-mail server. For example, to send and synchronize voice messages to the e-mail client Inbox, type `Inbox` in this field. To send and synchronize voice messages to a sub-folder named "Voice Mail" under the "Inbox" folder in the e-mail client account, type `Inbox/Voice Mail` in this field. A backslash (\) is not a supported character for this field. To indicate a path, use a forward slash (/) instead. Any folder or sub-folders specified in this field must first be created by the user in the e-mail client. If the user moves voice messages to another folder, they are deleted from the EM server.

> ## NOTICE
>
> **Possible Data Loss**. Changing the E-mail Account Folder for Synchronization to anything other than "Inbox" when the account is setup for BlackBerry Enhanced Integration may result in the deletion of messages. To support integration into folders other than the "Inbox" folder, you must set up message routing rules at the e-mail server (server-based rules) so that voice mail messages that are sent using BlackBerry Enhanced Integration will be routed into the expected folder. For information about setting up server-based rules, refer to the appropriate e-mail server's guide or Help.

- **E-mail Client Message Format**: Indicates whether the e-mail notification message that the user receives contains a URL (a link to the voice message), a file attachment, or both. The default value is attachment.

NOTE	If your company uses e-mail retention software that automatically moves the e-mail notification message to another location, Inter-Tel recommends that you select **File Attachment** or **Both** for your message format. Otherwise users' voice messages may be deleted from the EM server.

- **Download Format for Mobile Web Page**: Specifies which file format to use when downloading voice messages from the mobile device Voice Mail Web page. Options include MP3 or WAV file formats. The default value is MP3.

NOTE	Most mobile devices do not support the WAV file format. The user should check to see which file format is supported by his or her mobile device and program this field accordingly.

- **Fax CC**: Enables a copy of the user's outbound fax to be sent to his or her e-mail address (TIFF attachment), as specified in the E-mail Address for Fax Delivery field. For details about the Copy Fax to Sender option, see .

- **Synchronize MWI with E-mail Client**: Synchronizes the Message Waiting Indicator (MWI) feature (see) with the user's e-mail client.

  Options include:

  - *Enabled*: When users access a message in their e-mail client, the message is marked as saved, and the message lamp on their endpoint ceases to flash.

  - *Disabled*: When users access a message in the e-mail client, the message is marked as seen, and the message lamp on their endpoint continues to flash.

After changing fields, users must click **Commit Changes**.

Voice Mail Web Interface for Mobile Devices

The Voice Mail Web Interface for mobile devices contains the following tabs in the main page:

- **New**: Displays voice mail messages that have not been saved or deleted.

- **Saved**: Displays messages that are saved.

- **Deleted**: Displays messages that are deleted.

- **More Options**: Determines how the messages are sorted and how they are played. See for details.

Saved Messages
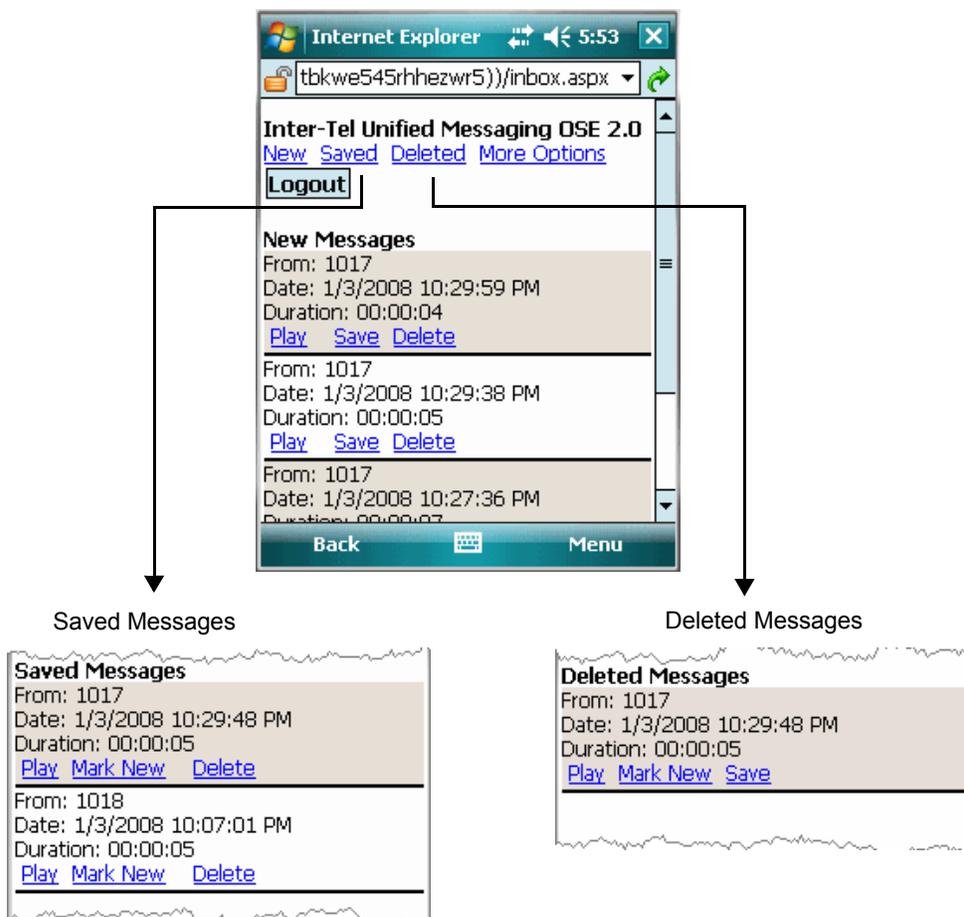
Deleted Messages

|	
NOTE	There are numerous types of mobile devices and each functions differently. The examples shown in this section were captured using a Windows Mobile 6 emulator.

To display new, saved, or deleted message:

1. Tap **New**, **Saved**, or **Deleted**.

2. Tap one of the following options:

   - **Play**: Plays the message.
   - **Save**: Saves the message (applies to new messages only). The message is moved to the Saved Messages page.
   - **Delete**: Deletes the message. The message is moved to the Deleted Messages page.
   - **Mark New**: Marks the message as New again (applies to saved and deleted messages only). The message is moved back to the New Messages page.

You can change the interface settings using the More Options tab.

To change the interface settings:

1. Tap **More Options**. The More Options page appears.

2. Change the following settings, if necessary:

   - **Sort By**: Determines how the messages are sorted. You can sort messages by Date: New first, Date: Old first, or Sender. It is set to **Date: New first** by default.
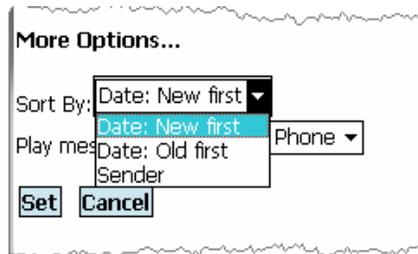
   - **Play message using**: Determines how the messages are played. The messages can be played on the mobile device or through the user's endpoint. It is set to **Mobile Phone** by default.

3. Tap **Set**.

MWI Operation with the Voice Mail Web Interface

The MWI feature functions identically for the Voice Mail Web interface as it does for the endpoint interface. This functionality is described below.

When the user receives a new voice mail message, the status of the message on the EM server is RECENT. The message lamp on the user's endpoint flashes to indicate that a new message is available.

```
┌─────────────────────────────┐
│   New Message = RECENT       │
│   Message Lamp Flashes       │
└─────────────────────────────┘
                │
                ▼
┌─────────────────────────────┐
│  Accessed Message = SEEN     │
│   Message Lamp Flashes       │
└─────────────────────────────┘
                │
                ▼
┌─────────────────────────────┐
│   Saved Message = SAVED      │
│ Message Lamp Ceases to Flash │
└─────────────────────────────┘
```

When the user accesses the message through the Voice Mail Web interface, the status of the message changes to SEEN. If the user does not save the message, the message lamp on the endpoint continues to flash.

When the user saves the message, the status of the message changes to SAVED on the EM server and the message lamp on the endpoint ceases to flash.
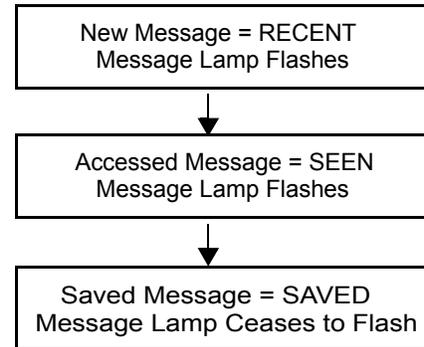
Outbound Fax

A fax license is required to send an outgoing fax. If the appropriate license does not exist on the server, users will not be able to send outgoing faxes.

Users can generate an outgoing fax using one of the following methods:

- "Fax Print Driver" below
- "Web Fax Form" on page 40

NOTES	• Unified Messaging OSE outbound fax features are supported for computers only. Users cannot send faxes from their mobile devices. • Canceling a fax is currently not an option. The fax continues to retry every 10 minutes for 10 attempts. If, after 10 attempts, the fax transmission is not successful, the fax is automatically deleted. The ability to cancel a fax will be available in a future release.

Fax Print Driver

Unified Messaging OSE v2.0 is equipped with a fax print driver that allows the user to send faxes from any computer running the Microsoft Windows 2000 or later operating system. Any application that supports printing can use this print driver.

To send a fax, the user opens a printable file, and then selects the Unified Messaging OSE Fax Print Driver as the printer. Printing to the print driver launches the Inter-Tel Unified Messaging OSE Fax Client application that allows the user to program fax settings (see below).

The Fax Print Driver is an alternative to the existing Inter-Tel Unified Messaging OSE Web Fax Form to send faxes. Unlike the Web Fax Form:

- Users do not have to attach a file to the fax form.

- Users can fax any file that is printable; a fax document can be in any format, not limited to TIFF or PDF.

- Users can create a customized fax cover page or use a cover page template (see page 32).

NOTES	• The Mac OS operating system currently does not support the Inter-Tel Unified Messaging OSE Fax Client application. • If port 80 (or 443 for HTTPS) is opened to the messaging server, users do not have to be on the local area network to send faxes.

The Fax Print Driver is available on the EM v1.2 software DVD and on the Inter-Tel *edGe*® Web site.

To download the Fax Print Driver from the *edGe*:

1. From an Internet Explorer window, access the Inter-Tel *edGe* TechCentral Software Downloads (www.inter-tel.com/software) Web site.

2. Select Applications Software – **Unified Messaging Software**, and then download the Unified Messaging OSE Fax Print Driver (UMFaxDriver.msi).

After you download the zip file, distribute it to users. Users must then install the UMFaxDriver.msi file on their computers.

When using the fax client for the first time an error message prompts the user to configure the settings on the Fax Client Configuration tab. The user is required to configure and confirm these settings one time only. In addition, users need to configure the fields on the User Settings tab one time only. When you distribute the Fax Print Driver to users, make sure you provide the following information to each user.

For the Configuration tab:

- **Mailbox**: Provide new users with their mailbox extension (for example, **1000**).

- **Voicemail Password**: Provide new users with their default voice mail password (for example, **1000**). For security reasons, instruct users to log in to their voice mailbox and change this password as soon as possible.

- **Web Server**: Provide users with the hostname or IP address of the EM server (for example, **XYZ_EM_Server**). If the Web Server field is left blank or contains the wrong value, the Fax Client cannot connect to the EM server when the user sends a fax.

- **Use HTTPS**: Instruct users to select this option only if you have configured and HTTPs connection for the Web-based fax service on the EM server (see page 63). Users receive an error message if they select this option and you have not configured an HTTPS connection. Using the HTTPS protocol prevents user credentials and document information from being transmitted in clear text. Inter-Tel recommends that you use HTTPS.

For the User Settings tab:

- **Telephone Number**: Provide users with the appropriate company telephone number.

- **Fax Number**: Provide users with the appropriate company fax number.

- **Copy fax to sender**: Instruct users to select this option if they want to receive a copy of each fax that they send. This option must also be configured for the user (see page 51).

Installation and usage instructions for the Fax Print Driver are included in the *Unified Messaging OSE User Guide*.

Fax Cover Page Options

The following options are available for creating a fax cover page:

- **The Cover Page Editor**: The Cover Page Editor allows you to create a fax cover page template and then upload it to the EM server. Users can then select the template when they use the Fax Client to send a fax. Cover page templates that you create can only be used with the Fax Client. They cannot be used with the Web Fax Form.

- **A Printable File**: Users can create their own fax cover page using a printable file. A user who does not want to use any of the existing fax cover page templates, available in the Fax Client may use this method. See the *Unified Messaging OSE User Guide* (part number 835.3155) for instructions.

The Cover Page Editor is available on the EM v1.2 software DVD and on the Inter-Tel *edGe*® Web site.

To download the Cover Page Editor from the *edGe*:

1. From an Internet Explorer window, access the Inter-Tel *edGe* TechCentral Software Downloads Web page (www.inter-tel.com/software).

2. Select Applications Software – **Unified Messaging Software**, and then download the Unified Messaging OSE Cover Page Editor (`cpedit.zip`) file.

This section contains instructions on how to customize a fax cover page using the Cover Page Editor software. See the following sections for details:

- "Installing and Starting the Cover Page Editor" on page 33
- "Editing or Creating a Fax Cover Page" on page 35
- "Viewing the Cover Page" on page 38
- "Saving the Cover Page File on the EM Server" on page 39

Installing and Starting the Cover Page Editor

Follow the instructions below to install and start the Cover Page Editor.

**To install and start the Cover Page Editor:**

1. Unzip the `cpedit.zip files` to a folder on your local machine, and then double-click the `CoverPage C++ Sample.exe` file. The Cover Page Editor appears.
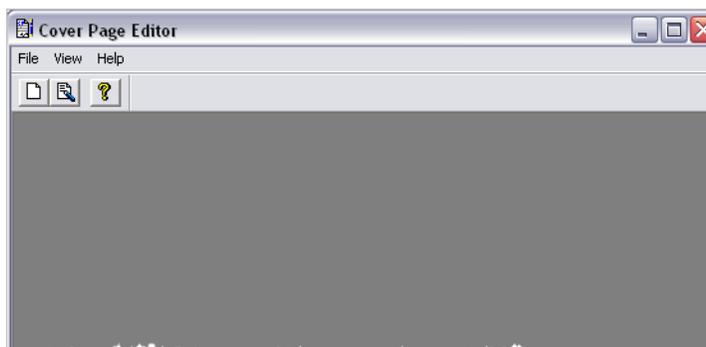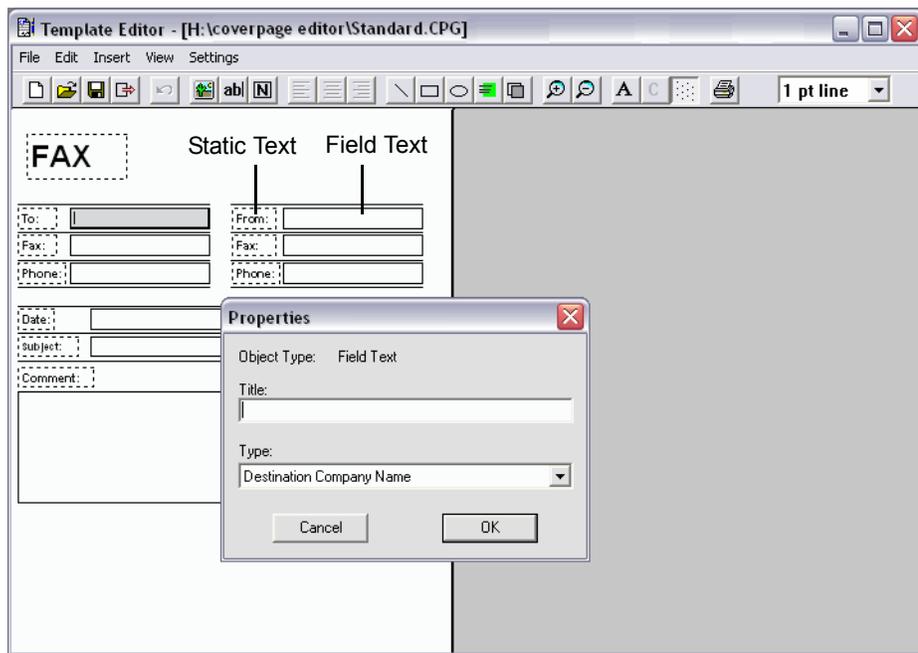

2. Go to File – **Template Editor**. The Template Editor folder appears.
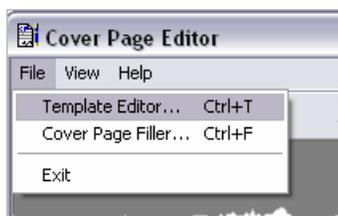
3. The cover page templates that are stored in the cover page folder appear in the Template Editor dialog box. Select the desired cover page (`.cpg`) file, and then click **Open**. A cover page template appears.
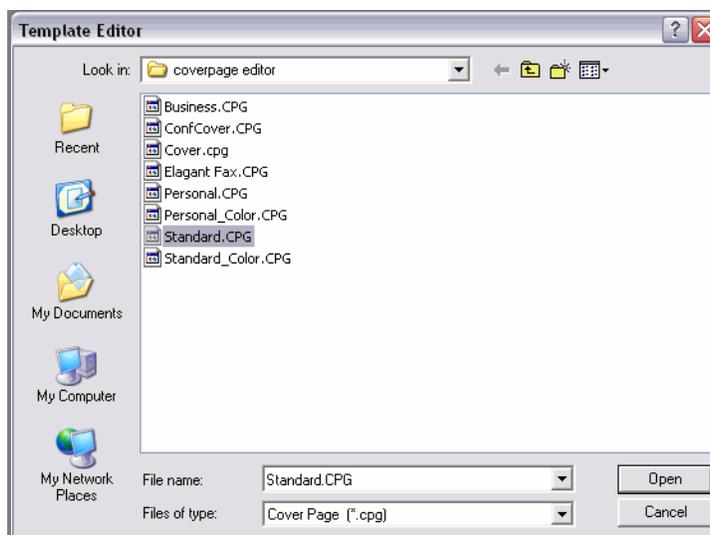
Below is an example of the `standard.cpg` file.

The template file is made up of the following types of text:

- **Static Text**: Indicates the field that does not change when the cover page template is being populated, such as To:, From:, Date:, etc.

- **Field Text**: Indicates the field that is editable. Each Field Text box has a Properties dialog box that allows you to assign a title and/or type. The box must correlate with the Static Text box to which they are assigned. For example, to display the recipient's name in the To: field, you must insert a "Field Text" object and set its type to "Destination Name." When the cover page data is populated, this field will contain the recipient's name.

See the following pages for instructions about editing or creating a fax cover page.

Editing or Creating a Fax Cover Page

Follow the instructions below to edit or create a fax cover page.

To edit or create a fax cover page:

1. If necessary, follow the steps on page 33 to open a cover page template file.

2. *To create a new fax page,* select **NEW** from the **File** menu. A blank cover page appears.

    To edit an existing fax page, skip this step and go to step 3.

3. From the Insert menu, select the object that you want to add to the existing template. You can select one of the objects shown below, or click the associated icon from the Tool bar.
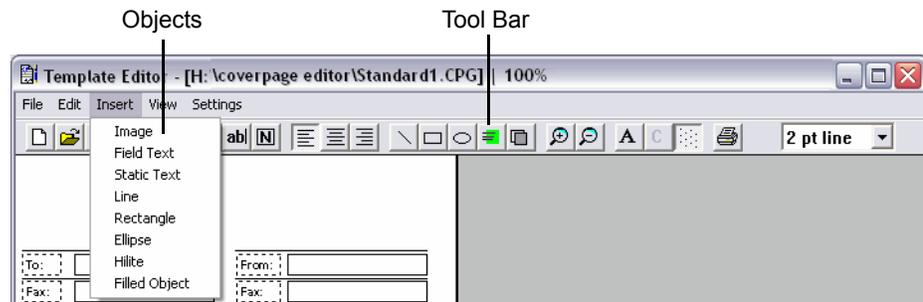
| NOTE	Do not overlay an object that is added to the cover page (for example, an image, text box, static text, line, etc.) with other objects within the cover page. You cannot see any part of the object that is overlaid, even if it is only slightly overlaid.

To insert or edit static text:

a. *To insert new text,* select **Static Text** from the Insert menu. Use the mouse to lay out the region of the text box where the box is to be located.

    To edit existing text, double-click the text box that you want to edit.

b. Type or edit the text in the text box, and then move and/or resize the text box, as desired.

c. Do any of the following:

    o **To change the font attributes for text**: Highlight the text to modify, and then select **Font** from the Settings menu. When the Font dialog box appears, select the desired font, font size, and font style. Click **OK**.

    o **To change the text alignment attributes**: Highlight the text to modify, and then click the desired justification (**Left**, **Center**, or **Right**).

    o **To change the view size**: Select the desired view option (**Zoom In**, **Zoom Out**, **Fit to Width**, or **Fit to Window**) from the View menu.

To insert or edit field text:

a. *To insert new text,* select **Field Text** from the Insert menu. Use the mouse to lay out the region of the text box where the box is to be located, and then double-click the text box.

   To edit existing text, double-click the text box that you want to edit.

b. The Properties dialog box appears.
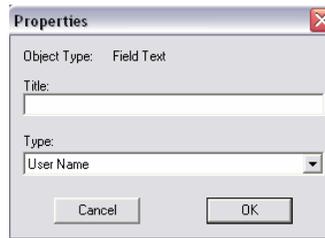
c. Enter the desired title in the Title box (if applicable), and then select the desired type from the Type box. All of the field text types, except the User Name type, require a title. Table 7 shows the default titles and available types that are used in a cover page template.

Table 7. *Field Text Properties*

| Title	Type	Shows:
PageCount	User Name	The total number of pages including the cover page that is being sent. This field is commonly used as the pages field. For this field, the Title field must be labeled "PageCount." When the template data is populated, the "PageCount" string is explicitly searched.
None	From Name	The name of the person sending the fax.
None	From Company Name	The company name of the person sending the fax.
None	From Phone	The number of the person sending the fax.
None	From Fax Number	The fax number of the person sending the fax.
None	Destination Name	The name of the person receiving the fax.
None	Destination Company Name	The company name of the person receiving the fax.
None	Destination Phone Number	The phone number of the person receiving the fax.
None	Destination Fax Number	The fax number of the person receiving the fax.
None	Date	The date of the fax that is being sent.
None	Subject	The brief description of what the fax contains.
None	Comment	The more detailed area where sender can enter instructions, additional data, etc.
None	Title	The title of the fax.
None	Department	The department name of the person sending the fax.

Table 7. *Field Text Properties (Continued)*

Title	Type	Shows:
None	Address 1	The primary address of the person sending the fax.
None	Address 2	The secondary address of the person sending the fax.
None	City	The city of the person sending the fax.
None	State	The state of the person sending the fax.
None	ZIP Code	The zip code of the person sending the fax.

   d. Click **OK**.

   e. Type or edit the text in the Field Text box, and then move and/or resize the box, as desired.

IMPORTANT	Make sure the Field Text boxes correlate with the Static Text boxes to which they are assigned. Failure to do this will result in a cover page with mismatched information.

   f. Do any of the following:

   o **To change the font attributes for text**: Highlight the text to modify, and then select **Font** from the Settings menu. When the Font dialog box appears, select the desired font, font size, and font style. Click **OK**.

   o **To change the text alignment attributes**: Highlight the text to modify, and then click the desired justification (Left, Center, or Right).

   o **To change the view size**: Select the desired view option (Zoom In, Zoom Out, Fit to Width, or Fit to Window) from the View menu.

4. If needed, repeat step 3 on to include an additional Static Text or Field Text.

5. You can also insert any of the following objects to the cover page:

   • **Image**: Insert Bitmap or TIFF graphics. When the File Open dialog box appears, select the desired image file, and then click **Open**. The image then appears in the cover page you just created. Move and/or resize the image, as desired.
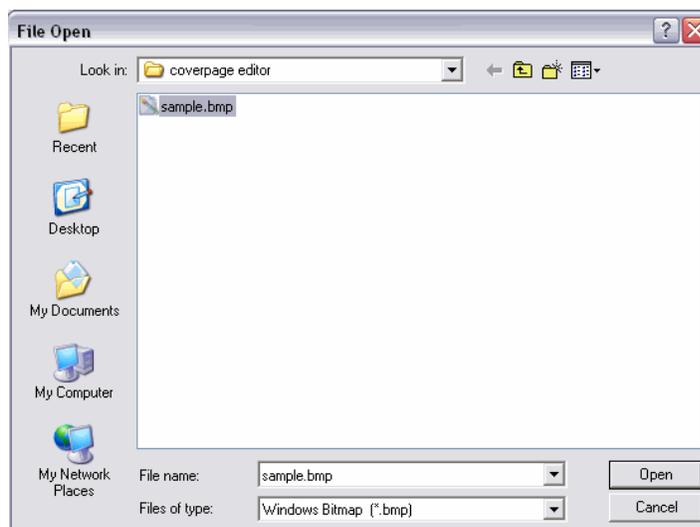
   • **Line**: Add lines to the cover page. Use the mouse to lay out the start and end points of the line to be added. Move and/or resize the line, as desired.

- **Rectangle**: Add rectangles to the cover page. Use the mouse to lay out the start and end points of the rectangle to be added. Move and/or resize the object, as desired.

- **Ellipse**: Add ellipses to the cover page. Use the mouse to lay out the start and end points of the ellipse to be added. Move and/or resize the object, as desired.

- **Hilite**: This option is currently not supported.

- **Filled Object**: Fill rectangles or ellipses with black. Select the desired rectangle or ellipse, and then select **Filled Object**. The object is filled with black. Although you can change the colors on the cover page using the Change Color option, Inter-Tel recommends that you only use black or white. Fax machines do not support colors, and some colors may not display properly.

6. Select **Save As** from the File menu to rename and save the file.

| TIP	Every time you modify an existing cover page, save it with a different file name. If you have a cover page with text fields that do not display the correct information (that is, the fields are blank), try deleting one of the fields and recreating it.

Viewing the Cover Page

Follow the instructions below to view the cover page that you just created.
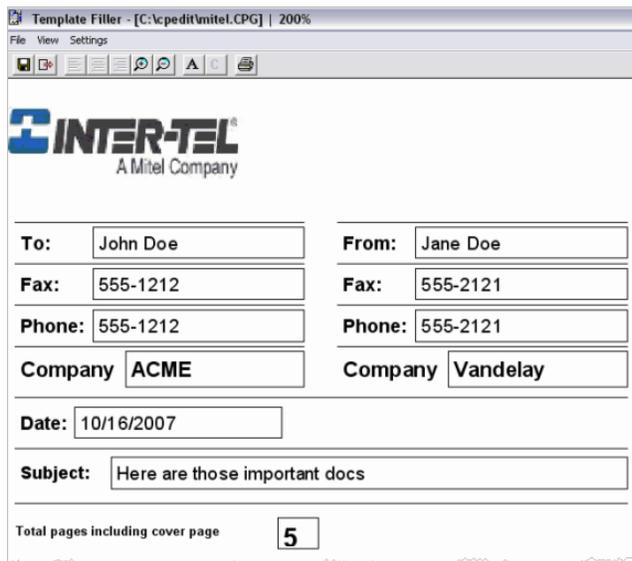
To view a cover page:

1. In the main Cover Page Editor, select **Cover Page Filler** from the File menu. The Cover Page Filler dialog box appears.

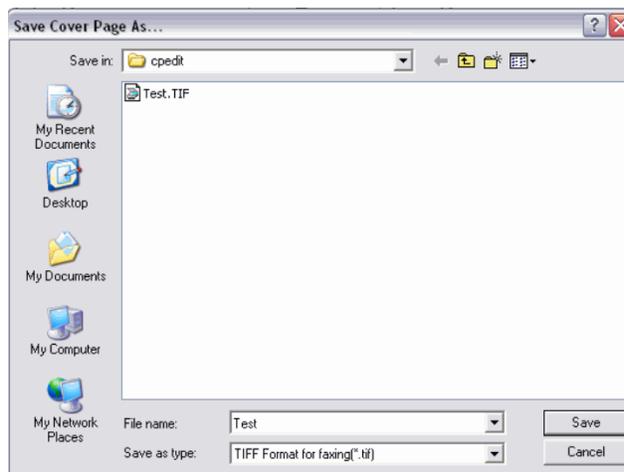2. Select the cover page file (`.cpg`), and then click **Open**.
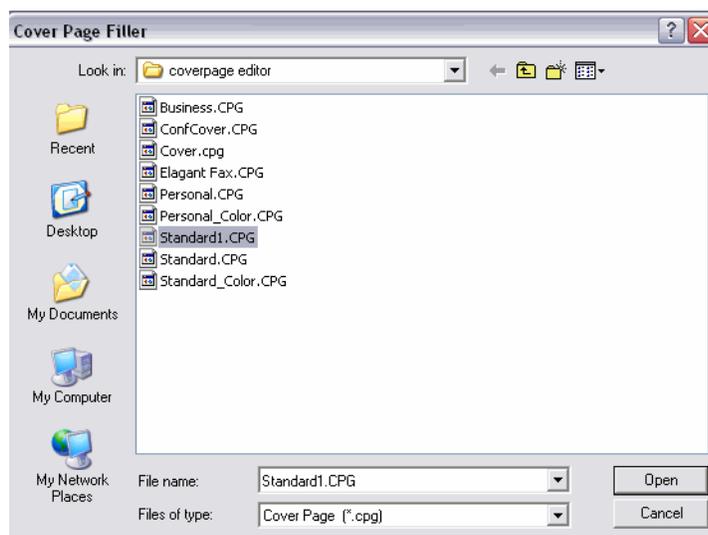
3.   The file you selected appears in the Template Filler dialog box. Complete the fields with the appropriate text.

4.   Rename and save the file in TIFF format.

5.   Navigate to where you saved the file, and then open it.

Saving the Cover Page File on the EM Server

You must save the cover page file on the EM server so that users can select it from the OSE Fax Client interface (see page 30).

To add the cover page file to the template folder in the EM server:

1.   On the EM server, open Windows Explorer.

2.   Save the file to the `C:\Inter-Tel\EnterpriseMessaging\FaxService\bin` folder.

Web Fax Form

The Web-based Fax Form allows users to send multiple fax documents without installing any software application on their computers. You will need to provide users with the URL for the Web Fax Form. Users log in to the Web Fax Form using their mailbox extension and voice mail password.

The Web-based Fax Form uploads TIFF or PDF files and builds a fax delivery message containing the uploaded files and any other pertinent delivery information. The message is then placed in the EM server's message delivery subsystem for outbound fax delivery. When uploading PDF files to the EM server, the PDF document is converted to TIFF before the fax is delivered. This conversion takes place at a lower priority than all other telephone activity such as voice calls and should not cause latency problems. This conversion is performed for both fax machine and e-mail destinations.

The Web Fax Form page is shown below. For instructions about how to use the Web Fax Form, refer to the *Unified Messaging OSE User Guide* (part number 835.3155).

Inter-Tel Unified Messaging Web Fax Form

IMPORTANT	Inter-Tel strongly recommends that your EM server use a secure HTTP connection (HTTPS, or HTTP over SSL) to access the Unified Messaging OSE Fax Form page. Using the HTTPS protocol prevents user credentials and document information from being transmitted in clear text. If the HTTP connection is not secured, a user's password will be sent across the network in an unencrypted message. For instructions about setting up a secure HTTP connection on an EM server, see page page 63.	

Copy Fax to Sender Option

The **Copy Fax to Sender** option provides a copy of an outbound fax to the user who sent it as a TIFf attachment. The "Copy Fax to Sender" flag in DB Programming enables and disables this function. The flag, located under Voice Processor\Devices\Mailbox\<*mailbox*>\Unified Messaging, is enabled by default. For programming information, see page 51.

Users configured for the Enhanced Forward and Copy, Enhanced Integration, or BlackBerry Enhanced Integration Unified Messaging level, can also enable and disable this function themselves using the Fax CC field on the Unified Messaging OSE Voice Mail Web interface (see page 26).

In addition, users can also access this feature when using the Fax Print Driver (see page 30) or the Web Fax Form (see page 40). If the submit operation is a success, the user receives a TIFF attachment showing exactly what was sent in the submit process. If the submit operation fails, specifically if the file conversion fails, the user receives exactly what they sent in the job request for the attachment.

Fax Status Messages

Unified Messaging OSE provides a fax status message after every delivery attempt for faxes sent to a fax machine from the Web Fax form (see page 40) or the Fax Print Driver (see page 30). The fax status message is sent as an e-mail to the "E-mail Address for Fax Delivery" configured for the sending mailbox (see page 51 for programming instructions). This fax status message contains a text file that provides the history of the fax delivery attempts. The user does not receive active fax delivery updates until the fax is sent (success, temporary failure, or failure). The text file includes a timestamp that corresponds with the EM server's time zone.

NOTES	Users currently cannot cancel a fax. The fax continues to retry every 10 minutes for 10 attempts. If, after 10 attempts, the fax transmission is not successful, the fax is automatically deleted (see page 82).

Success Report Example

Below is an example of the fax status e-mail message when the fax is sent successfully.

Attached Report File
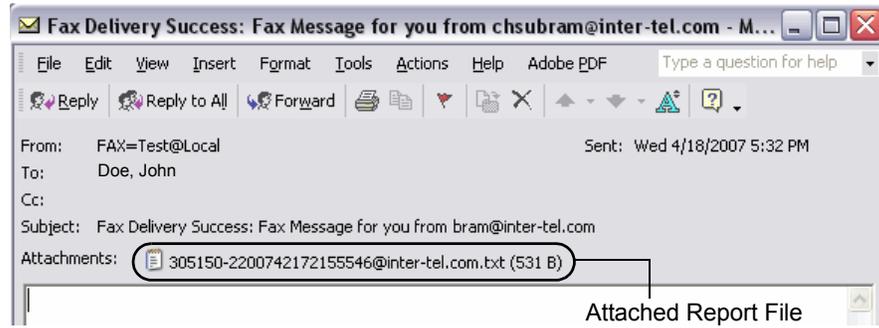
The attached report file contains a report similar to the one below.
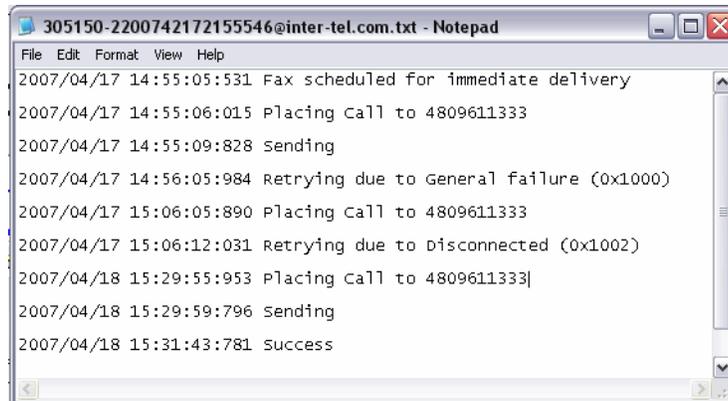
Temporary Failure Report Example

Below is an example of a fax status e-mail message indicating a temporary failure error. If a failure occurs, the system attempts to resend the fax in 10 minutes.

Attached Report File

The attached report file contains a report similar to the one below.
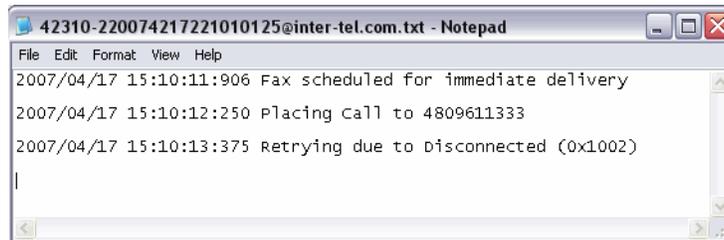
Failure Report Example

Below is an example of a fax status e-mail message indicating a delivery failure.

Attached Report File
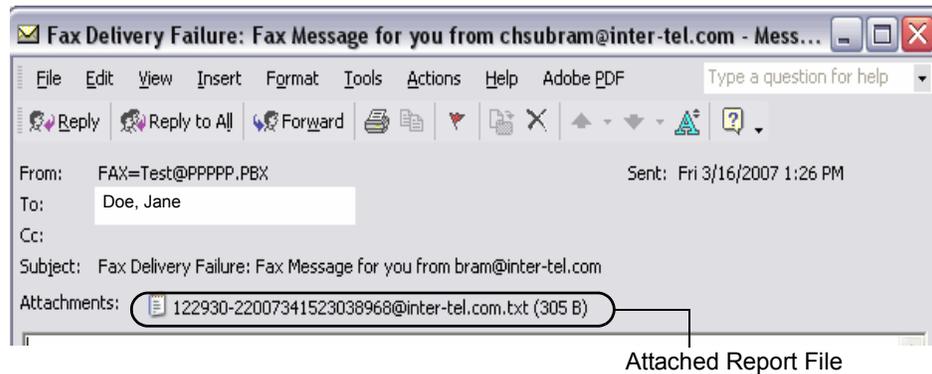
The attached report file contains a report similar to the one below.
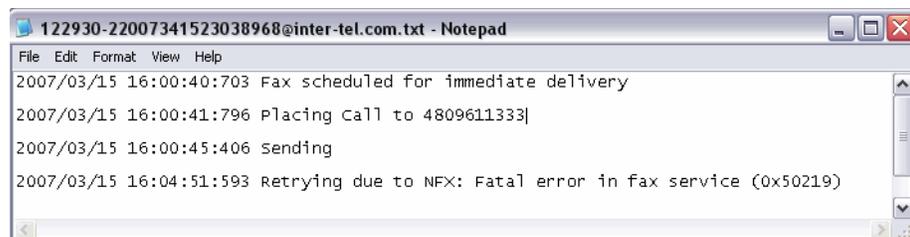
Inbound Fax

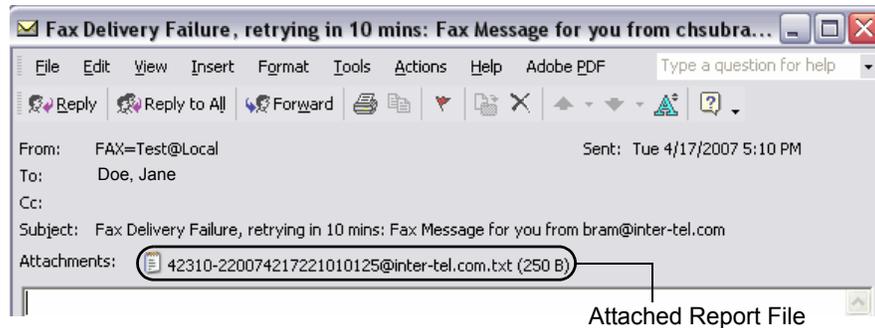The user can receive faxes as e-mail messages with TIFF or PDF attachments and then view these attachments using the graphics software installed on their computer or mobile device. All users receive inbound fax as a TIFF attachment by default, however, you can change this format to PDF in DB Programming (see page 56) or in the EM FCU (see page 57).

A Unified Messaging TIFF Converter license is required for receiving faxes as PDF attachments for the existing Unified Messaging v2.3 customers who are upgrading to Unified Messaging OSE. New fax feature users do not have to purchase this license because it is already included in the fax port license.

Programming

Programming Unified Messaging OSE

This section provides programming instructions for Unified Messaging OSE and includes the following main topics:

- "Programming Users" below.
- "Programming Outbound Fax" on page 53.
- "Programming the Unified Messaging System Level Folder" on page 56.
- "Configuring EM Field Configuration Utility (FCU) Options" on page 57.

Programming Users

To program users for Unified Messaging OSE, in DB Programming go to Voice Processor – Devices – Mailboxes – *<mailbox>*.

The first field in the Unified Messaging folder is the Unified Messaging Level. The level that is programmed in this field specifies the Unified Messaging level of integration. This field was previously known as the E-mail Gateway field and it was located in the Fax/E-mail Forwarding folder.

IMPORTANT	The Fax/E-mail Forwarding folder in DB Programming has been eliminated and the fields within this folder have been moved to the Unified Messaging folder (see page 49). If previously programmed, the values for these fields remain the same and the fields automatically map to their new location under Voice Processor\Devices\Mailboxes\<mailbox>\Unified Messaging.

Options for the Unified Messaging Level field vary depending on the Voice Processor type (see Table 8 on page 47).

Table 8. *Unified Messaging Levels for Basic Voice Mail (BVM), Voice Processing Unit (VPU), and EM*

Unified Messaging Level	Voice Processor Type		
	BVM	VPU	EM
Disabled: Delivers a voice message to the user's mailbox just as normal. No e-mail is sent.	✓	✓	✓
Forward Only: Delivers a voice message to the user's e-mail address when the user receives a new voice message in his or her voice mailbox. After the message is sent, the original message is deleted from the mailbox.	✓	✓	✓
Forward and Copy: Delivers a copy of a voice message to the user's e-mail address when the user receives a new voice message in the voice mailbox. The original message can be retrieved from the mailbox.	✓	✓	✓
Unified Messaging: Allows the user to use the Unified Messaging v2.2 functionality.		✓	
Enhanced Forward and Copy: Provides the user with direct access into the voice mailbox from the e-mail client. This level provides full integration with the e-mail client, but does not provide synchronization between the EM server and the e-mail server. With this level, the user has configuration control over the format of the messages, and can specify the folder in his or her e-mail client to receive voice messages.			✓
Basic Integration: Provides the user with direct access into the voice mailbox from the e-mail client through an IMAP account created by the user (see page 22). With this level, the user has no configuration control over the format of the messages, and cannot specify the folder in his or her e-mail client to receive messages.			✓
Enhanced Integration: Provides full integration for voice messages with the e-mail client, and provides full synchronization between the EM server and the e-mail server. The user has configuration control over the format of the message, can specify the folder to receive voice messages, and can synchronize the Message Waiting Indication (MWI) feature with their e-mail client.			✓
BlackBerry Enhanced Integration: Similar to the Enhanced Integration level, the BlackBerry Enhanced Integration level delivers new voice messages to the BlackBerry user's e-mail address and voice mailbox, and synchronizes those messages.			✓

The Unified Messaging level you select determines which additional fields in the Unified Messaging folder are programmable. See page 49 for programming instructions and field descriptions.

Table 9 indicates which fields in the Unified Messaging folder must be programmed for each Unified Messaging level. The field appears with a red "X" if it is not supported by a specific level.

Table 9. *Programmable Fields for the Unified Messaging Folder*

Programmable Fields	Unified Messaging Level						
	Disabled	Forward Only, Forward and Copy	Unified Messaging	Enhanced Forward and Copy	Basic Integration	Enhanced Integration	BlackBerry Enhanced Integration
Unified Messaging Level	✓	✓	✓	✓	✓	✓	✓
Enable SSL for E-mail Server Connection				✓		✓	✓
E-mail Account Folder for Synchronization				✓		✓	✓
E-mail Server				✓		✓	✓
E-mail Account Password				✓		✓	✓
E-mail Account Username				✓		✓	✓
E-mail Address for Voice Messages		✓	✓	✓	✓	✓	✓
Allow User to Configure Settings				✓		✓	✓
Download Format for Mobile Web Page				✓	✓	✓	✓
E-mail Client Message Format				✓		✓	✓
Synchronize MWI with E-mail Client						✓	✓
E-mail Address for Fax Delivery[1]	✓	✓	✓	✓	✓	✓	✓
Copy Fax to Sender	✓	✓	✓	✓	✓	✓	✓
Fax Delivery Destination[1]	✓	✓	✓	✓	✓	✓	✓
IMAP Synchronization Method[2]				✓		✓	✓
IMAP IDLE Timeout				✓		✓	✓
IMAP Polling Timeout				✓		✓	✓

1. This field is disabled if the voice processor type is BVM, which does not support faxing.
2. The option selected for the IMAP Synchronization Method determines which related fields are programmable:
   • Event (default): The IMAP IDLE Timeout field is enabled and the IMAP Polling Timeout field is disabled.
   • Polling: The IMAP IDLE Timeout field is disabled and the IMAP Polling Timeout field is enabled.

To configure the fields in the Unified Messaging folder:

1.   Go to Voice Processor – Devices – Mailboxes – <*mailbox*> – **Unified Messaging**.

2.   Configure the following fields:

- **Unified Messaging Level**: Specifies the level of integration for Unified Messaging. This field was previously located in the E-mail Gateway field under the Fax/E-mail Forwarding folder. It is set to **Disabled** by default. Options for this field vary depending on the Voice Processor type:
  - Disabled
  - Forward Only
  - Forward and Copy
  - Unified Messaging
  - Enhanced Forward and Copy
  - Basic Integration
  - Enhanced Integration
  - BlackBerry Enhanced Integration

  To synchronize the user's voice mailbox and e-mail client, select Basic Integration, Enhanced Integration, or BlackBerry Enhanced Integration. See Table 8 on page 47 for descriptions of the options above.

- **Enable SSL for E-mail Server Connection**: Indicates whether the integration connection is made using Secure Socket Layer (SSL). It is set to **Yes** by default.

- **E-mail Account Folder for Synchronization**[1]: Indicates the path to the account folder (such as Inbox, Voice Mail, etc.) on the e-mail server to use for message synchronization. The folder name can be up to 127 characters. For example, to synchronize messages to the folder named "Voice Mail" in the user's e-mail client account, type **Voice Mail** in the text box. To synchronize messages to the subfolder named "VM" under the "Inbox" main folder, type `Inbox/VM` in the text box. This field is set to **Inbox** by default.

  If you are configuring multiple voice mailboxes to synchronize with a single e-mail account, only one voice mailbox can synchronize with the default Inbox folder. Users must create separate folders in their e-mail client for each voice mailbox they want to synchronize.

  > ## NOTICE
  >
  > **Possible Data Loss**. Changing the E-mail Account Folder for Synchronization to anything other than "Inbox" when the account is setup for BlackBerry Enhanced Integration may result in the deletion of messages. To support integration into folders other than the "Inbox" folder, the user must set up message routing rules at the e-mail server (server-based rules) so that voice mail messages that are sent using BlackBerry Enhanced Integration will be routed into the expected folder. For information about setting up server-based rules, refer to the appropriate e-mail server's guide or Help.

- **E-mail Server**[1]: Indicates the name of the e-mail server for the account synchronization. The server name can be up to 127 characters. This field is blank by default.

- **E-mail Account Password**[1]: Indicates the password of the account to use for message synchronization. This is the user's network password. The password can be up to 40 characters.

- **E-mail Account Username**[1]: Indicates the user name of the account to use for message synchronization. This is the user's network username. The username can be up to 127 characters. This field is blank by default.

- **E-mail Address for Voice Messages**[1]: Specifies the e-mail address to which the voice mail messages will be forwarded. This is also the e-mail address where welcome and error e-mails are sent for the Enhanced Forward and Copy, Enhanced Integration, and BlackBerry Enhanced Integration Unified Messaging levels. The content and format of the field depends on the e-mail system being used. The address can be up to 127 characters. If you enter an invalid character (: ; " \ | ( ) , < > '), an error tone occurs. For example, when using Lotus Notes, this field could be set to John Doe/Chandler/Mitel, and when using e-mail, it would be john_doe@mitel.com. This field was originally located in the Fax/E-mail Forwarding folder.

- **Allow User to Configure Settings**: Delegates account configuration control to the individual account users. The users may configure their accounts through the Unified Messaging OSE Voice Mail Web interface (see). It is set to **Yes** by default.

- **Download Format for Mobile Web Page**[1]: Specifies which file format to use when downloading voice messages from the mobile device Voice Mail Web page. Options include MP3 or WAV file formats. The default value is **MP3**.

  > | NOTE | Most mobile devices do not support the WAV file format. Check to see which file format is supported by the user's mobile device and program this field accordingly. |
  > |---|---|

---

1. This field can also be configured in the Voice Mail Web interface. Not all fields apply to all levels. See for more information.

- **E-mail Client Message Format**[1]: Indicates whether the message that the user receives contains a URL (a link to the message), a file attachment, or both. It is set to **Attachment** by default.

NOTE	If your company uses e-mail retention software that automatically moves the e-mail notification message to another location, Inter-Tel recommends that you select **File Attachment** or **Both** for your message format. Otherwise users' voice messages may be deleted from the EM server.

- **Synchronize MWI with E-mail Client**[1]: Synchronizes message waiting indicator (MWI) support with the e-mail client. If set to "Yes" (default), the message lamp is turned off when the e-mail message is read. See page 22 for additional information about this feature.

- **E-mail Address for Fax Delivery**[1]: Specifies the e-mail address of the account that will receive incoming faxes (TIFF or PDF attachment) and copies of outbound faxes, if enabled (TIFF attachment). The address can be up to 127 characters. If you enter an invalid character (: ; " \ | ( ) , < > '), an error tone occurs. Prior to EM v1.2, this field was located in the Fax/E-mail Forwarding folder.

- **Copy Fax to Sender**[1]: Sends a copy of a fax (TIFF attachment) via e-mail to a user's e-mail address as specified in the E-mail Address for Fax Delivery field (see above). The flag is enabled by default. For complete information about this feature, see page 41.

- **Fax Delivery Destination**: Specifies the extension of the fax machine that receives incoming faxes routed through this mailbox. This field appears with a red "X" if the Voice Processor type is BVM because BVM does not support faxing. This field was originally located in the Fax/E-mail Forwarding folder.

  To program the extension number, use one of the following methods:

  Method A

  1.) Select the current value and enter the new value in the text box.

  2.) Press **ENTER**. A screen displays what is associated with the number you entered.

  3.) Click **OK**. The new number appears in the field.

  Method B

  1.) Right-click on the existing extension number. An option box appears.

  2.) Click **Change Fax Delivery Destination**. A window appears prompting you to select the type of device to include.

  3.) Select the type of device and then click **Next**. The list of devices appears. (You can view them in a list by selecting the List button or view details by selecting the Details button.)

  4.) Highlight the extension number associated with the fax machine then click **Finish**. Your selection appears in Fax Delivery Destination field.

---

1. This field can also be configured in the Voice Mail Web interface. Not all fields apply to all levels. See page 23 for more information.

- **IMAP Synchronization Method**: Determines how the IMAP server synchronizes messages between the server and an IMAP client account. By default, it is set to **Event**. This allows message changes on the remote IMAP server to be automatically recognized by the Inter-Tel synchronization client, as they occur. If the IMAP server does not support the IMAP IDLE command, select **Polling**. This will force the Inter-tel synchronization client to query for changes on the account on the remote server. If you do not know if the remote IMAP server supports the IDLE command, default to **Event**. At run time the Inter-Tel synchronization client automatically detects if the IDLE command is supported. If not supported, the client will use the Polling method. Polling can be used as default to reduce load on the EM unit.

- **IMAP IDLE Timeout**: Determines the maximum length that the IDLE command will wait for the IMAP server. The field appears with a red "X" if the Integration Synchronization Method is set to "Polling." The range is 1–30 minutes; the default value is **20 minutes**. This field appears with a red "X" if the IMAP Synchronization Method is set to "Polling" as it only applies for Event or unless Unified Messaging Level is set to Enhanced Forward & Copy, Enhanced Integration, or BlackBerry Enhanced Integration.

- **IMAP Polling Timeout**: Indicates how often the synchronization process polls for message updates. Use this when the server does not support the IDLE command and the user is not concerned about real-time updates. Synchronization occurs much more slowly in this mode, depending on the polling timeout. The range is 1–20 minutes; the default value is **10 minutes**. The field appears with a red "X" if the IMAP Synchronization Method is set to "Polling" as it only applies for Event or unless Unified Messaging Level is set to Enhanced Forward & Copy, Enhanced Integration, or BlackBerry Enhanced Integration.

3. Press **Enter** or click another field to save the change.

Programming Outbound Fax

This section explains how to configure outbound faxing in DB Programming for Unified Messaging OSE.

To program outbound faxing:

1. Go to Voice Processor – **Fax-On-Demand**.
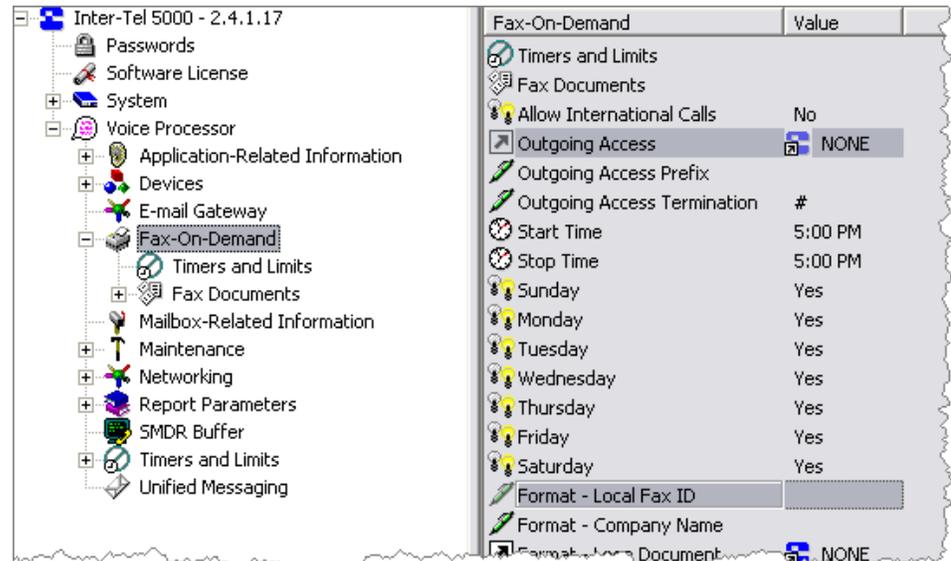
2. Program the following fields.

    *   **Outgoing Access**: Contains the outgoing trunk access code that the EM unit's Message Notification/Retrieval application will use to place the outgoing fax delivery calls. This field defaults to Trunk Group 1 (92001). Change this field to use the Automatic Route Selection (ARS) code **92000** instead of directly accessing a trunk group.

    *   **Format - Local Fax ID**: Appears at the top of each fax page sent. The ID should include the valid site telephone number and/or the company name. The ID can be up to 20 characters. Valid characters include uppercase letters, digits 0-9, and the plus sign (+).

    Press **ENTER** or click on another field to save the change. Leave all other fields in this section at their default values.

3. Go to Voice Processor – Fax-On-Demand – **Timers and Limits**.
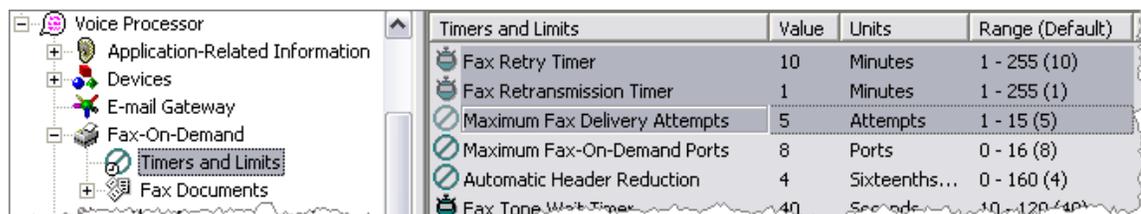
4. Program the following fields as necessary.

-   **Fax Retry Timer**: When EM is unable to complete a fax delivery because the line is busy or there is no answer, it will wait until this timer expires to attempt the delivery again. The range for this field is 1–255 minutes. It defaults to 10 minutes.

-   **Fax Retransmission Timer**: When EM is unable to complete a fax delivery because the connection failed (for example, the receiving fax machine had a power failure), it will wait until this timer expires to attempt the delivery again. The range for this field is 1-255 minutes. It defaults to 1 minute.

-   **Maximum Fax Delivery Attempts**: Indicates the number of times that EM will attempt to send a fax when the number is busy, there is no answer, or there are transmission errors. If the system encounters unavailable resources (fax ports, documents, outgoing calls, or outgoing trunks), the attempt does not count toward the Maximum Fax Delivery Attempts. The range for this field is 1–15 attempts. It defaults to 5 attempts.

Press **ENTER** or click on another field to save the change.

Some Telcos require account codes for all outbound calls, including faxes. For EM v1.1.43.2 and later, Telco account codes are supported for Unified Messaging OSE outbound faxes.

To ensure that account codes are sent to the Telco, verify that the following fields in DB Programming are configured correctly:

-   System – Numbering Plan – **Dial Rules**: A Pause dial rule is required by the Facility Group configured for outbound faxes. If necessary, add a Pause dial rule as shown in the figure below.
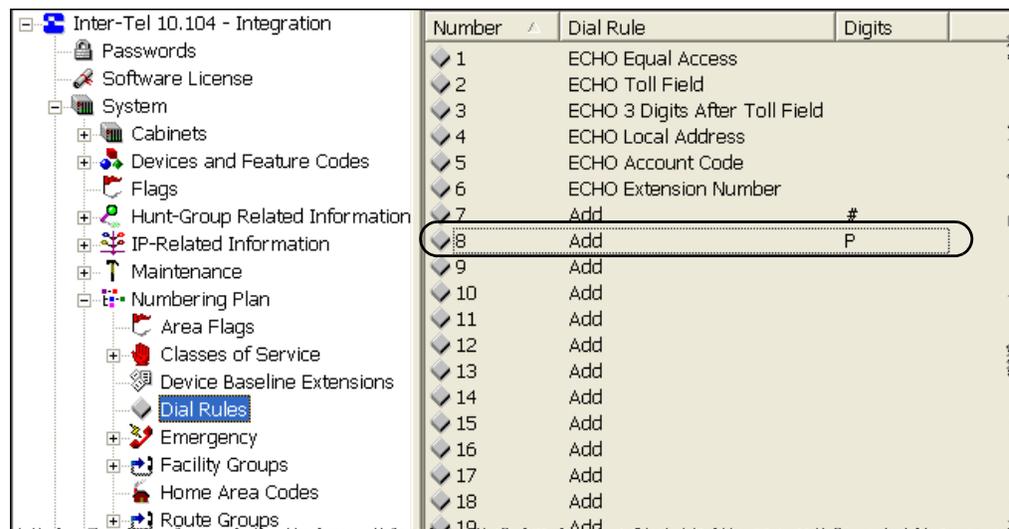
- System – Numbering Plan – Facility Groups – *<Facility Group>* – **Dial Rules**: The dial rules list must conclude with a Pause dial rule followed by the ECHO Account Code dial rule as shown below.

Number	Dial Rule	Digits
8	ECHO 3 Digits After Toll Field	
4	ECHO Local Address	
8	Add	P
5	ECHO Account Code	

Inter-Tel 10.104 - Integration
- Passwords
- Software License
- System
  - Cabinets
  - Devices and Feature Codes
  - Flags
  - Hunt-Group Related Information
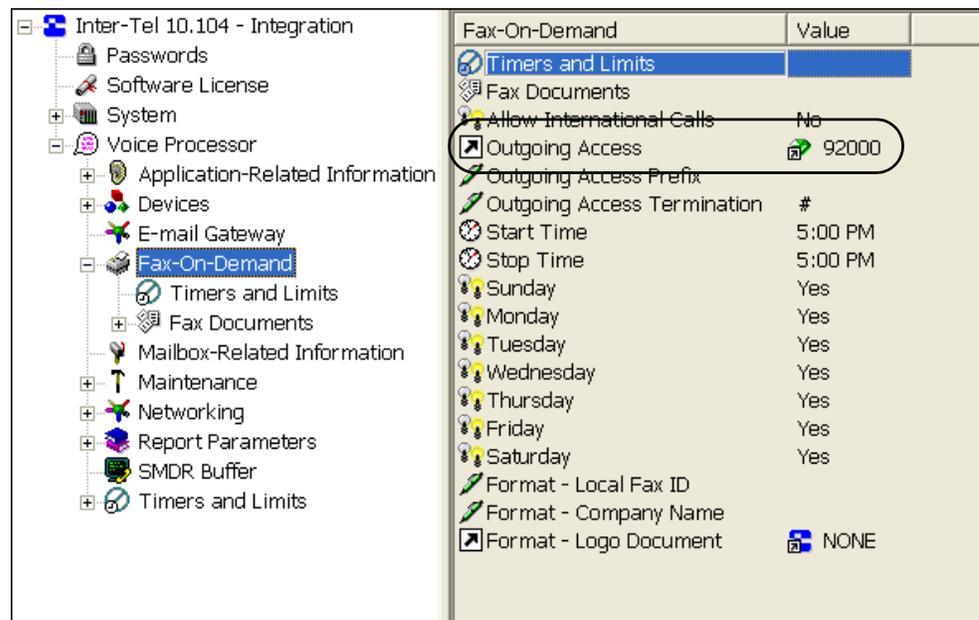 - IP-Related Information
  - Maintenance
  - Numbering Plan
    - Area Flags
    - Classes of Service
    - Device Baseline Extensions
    - Dial Rules
    - Emergency
    - Facility Groups
      - P1500
        - Dial Rules
        - Trunk Groups/Nodes

- Voice Processor – **Fax-on-Demand**: Verify that the Outgoing Access field is set to feature code **92000** for Automatic Route Selection (ARS) as shown below.

Inter-Tel 10.104 - Integration
- Passwords
- Software License
- System
- Voice Processor
  - Application-Related Information
  - Devices
  - E-mail Gateway
  - Fax-On-Demand
    - Timers and Limits
    - Fax Documents
  - Mailbox-Related Information
  - Maintenance
  - Networking
  - Report Parameters
  - SMDR Buffer
  - Timers and Limits

Fax-On-Demand	Value
Timers and Limits	
Fax Documents	
Allow International Calls	No
Outgoing Access	92000
Outgoing Access Prefix	
Outgoing Access Termination	#
Start Time	5:00 PM
Stop Time	5:00 PM
Sunday	Yes
Monday	Yes
Tuesday	Yes
Wednesday	Yes
Thursday	Yes
Friday	Yes
Saturday	Yes
Format - Local Fax ID	
Format - Company Name	
Format - Logo Document	NONE

ARS allows the system to select the route that you want for placing a call, as programmed in the database. For additional information about ARS and other system programming, refer to the appropriate version of your system programming documentation:

- *Axxess Converged Communications Platform Installation and Maintenance Manual* (part number 550.8000).

- *Mitel 5000 Features and Programming Guide* (part number 580.8006).

For additional information about programming Fax-on-Demand, refer to the *Enterprise Messaging Installation Manual* (part number 780.8600).

Programming the Unified Messaging System Level Folder

The system level **Unified Messaging** folder, contains four Unified Messaging OSE fields. This folder is located under Voice Processor – Unified Messaging. The functionality associated with these fields was introduced in a previous version of Unified Messaging OSE, and can also be configured in one of the following interfaces:

- **OAM telnet interface**: For additional information, refer to the *Enterprise Messaging Installation Manual*, part number 780.8006.

- **Field Configuration Utility (FCU) interface**: For additional information, refer to the *Enterprise Messaging Field Configuration Utility Instructions*, part number 835.2848.

To program the fields in the Unified Messaging folder:

1. Go to Voice Processor – **Unified Messaging**. The Unified Messaging system fields are displayed.

2. Configure the following fields:

- **Attachment Format for Inbound Faxes**: Indicates the system-wide format of fax attachments in e-mails sent for inbound faxes. Options include **TIF** (Default), and **PDF**.

  | NOTE | Outbound faxes (and user copies) are sent as TIFF attachments. |

  You can also configure this option in the **Fax Attachment** panel of the FCU interface (see page 57).

- **Enable Delivery of Incomplete/Failed Inbound Faxes**: Enables e-mail notification for fax receivers when they receive a failed or incomplete inbound fax. Options include **No** (Default), and **Yes**.

  You can also configure this option using the **ToggleFaxErrors** command in the OAM telnet interface.

- **Enable IMAP Login for EM Server**: Enables remote IMAP login. Options include **No** (Default), and **Yes**.

  You can also configure this option in the **IMAP** panel of the FCU interface (page 58).

- **EM Server IMAP Connection Timeout**: Determines the maximum length that the remote IMAP will wait for a connection to be established. Select the current value and type a new value in the text box. The range is 30–1440 seconds; the default is 30 seconds.

  You can also configure this option in the **IMAP** panel of the FCU interface (see page 58).

3. Press **Enter** or click on another field to save the change.

Configuring EM Field Configuration Utility (FCU) Options

The following panels on the FCU interface contain options that support Unified Messaging OSE functionality:

- **Fax Attachment Panel**: By default, inbound fax attachments are received as TIFF files, however, you can change the file type to PDF.

- **IMAP Panel**: This panel contains the following programming options:

  o *Allow authentication type LOGIN*: By default, this option is disabled, but can be enabled in this panel. This field applies to users configured for Basic Integration only.

  o *Auto Logout Time (minutes)*: By default this is set to 30 minutes. The valid range is 30 to 1440 minutes (24 hours).

  o *Certificates*: Use this option to generate and install a Transport Layer Security (TLS) certificate.

To use the EM FCU to configure Unified Messaging OSE options:

1. Launch the Field Configuration Utility. See the *Enterprise Messaging Field Configuration Utility Instructions*, part number 835.2848 for detailed instructions.
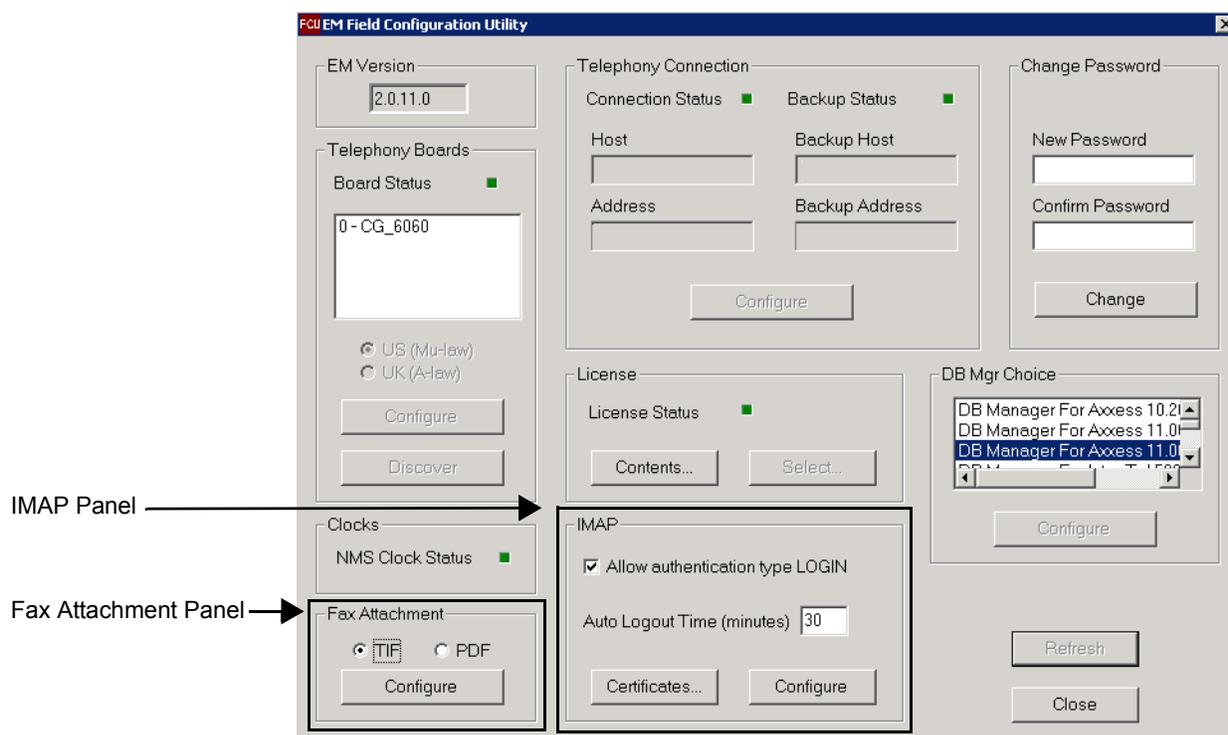
2. **To receive inbound faxes as a PDF attachments,** select the **PDF** check box in the Fax Attachment panel, and then click **Configure**. It is set to **TIF** by default.

> **NOTE** The Fax Attachment setting applies to inbound faxes only. Outbound faxes (and user copies) are sent as TIFF attachments.

You can also configure this option in the **Attachment Format for Inbound Faxes** field in DB Programming (see page 56).

3. **To enable the authentication type LOGIN command,** select the **Allow authentication type LOGIN** check box in the IMAP panel. Click **Configure**.

   You can also configure this option in the **Enable IMAP Login for EM Server** field in DB Programming (see page 56).

IMPORTANT	When this option is selected, you are enabling credentials to be passed in plain text over the network, which poses a security risk. See page 60 for more information.

4. **To change the auto logout time,** type the desired value in the box in the IMAP panel. The valid range is 30 to 1440 minutes (24 hours). Click **Configure**.

   You can also configure this option in the **EM Server IMAP Connection Timeout** field in DB Programming (see page 56).

5. To generate and install a TLS certificate, do one of the following:

   To generate and install a self-signed TLS certificate:

   a. Click **Certificates** in the IMAP panel. The SSL/TLS Certificate dialog appears.

   By default, the EM Field Configuration Utility fills the hostname field with the fully qualified host name of the EM server. In most cases, the host name should be correctly determined by the utility. If you know the host name is different, modify it accordingly. The host name must exactly match what e-mail clients use in their e-mail configuration; otherwise users will receive a warning message, or Unified Messaging OSE may not work at all when connecting to the EM server.

   b. Click **Generate Certificate/Key**. The certificate file (`ldpcert.pem`) and key file (`ldpkey.pem`) are generated and saved under `C:Inter-Tel\EnterpriseMessaging\data\cert`.

 | IMPORTANT | A warning message appears if the files already exist. Do *not* overwrite the certificate. It may compromise the secure communications of e-mail clients with the IMAP message store. |
   |---|---|

   c. Distribute the generated certificate to an e-mail client as described on page 62.

To install a TLS certificate that is purchased from a Certificate Authority (CA):

a. Click **Certificates** in the IMAP panel. The SSL/TLS Certificate dialog appears.
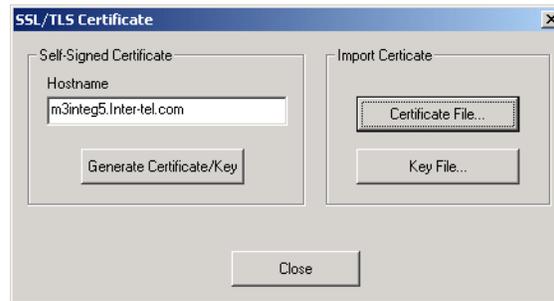
b. In the Import Certificate panel, click **Certificate File**. The New Certificate File dialog box appears.
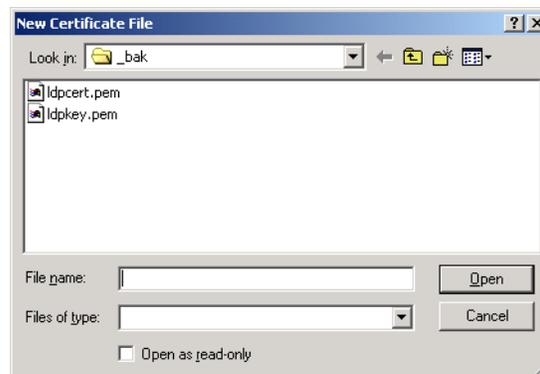
c. Click **Open** to browse for and select the certificate file (`Idpcert.pem`). Note that a certificate that is imported (purchased) from a CA may have a different name.

d. Click **Key File** in the SSL/TLS Certificate dialog. The New Certificate File dialog appears.

e. Click **Open** to browse for and select the key file (`Idpkey.pem`). Note that a certificate that is imported (purchased) from a CA may have a different name.

f. Click **Close** in the SSL/TLS Certificate dialog.

6. Click **Close**.

For more information about TLS certificates, see .

Configuring IMAP Accounts

This section lists the information that must be configured in an e-mail client to create an IMAP account. An IMAP account is required for users configured with the Basic Integration level. It is not required for users configured with the Enhanced Forward and Copy, Enhanced Integration, and BlackBerry Enhanced Integration levels.

To create an IMAP e-mail account, the following information must be configured in the user's e-mail client to connect the e-mail client to the IMAP Server:

- Specify the IP address or host name of the EM server as the IMAP server.
- Specify the IP address or host name of the SMTP server.
- Specify the account login name and password for the given mailbox. The account login name is the mailbox number (for example, 1000), and the password is the voice mail password for EM.
- *(Optional)* Enable IMAP SSL for e-mail clients that support IMAP SSL for a more secure connection.
- *(Optional)* Download a self-signed TLS certificate (see page 61).
- *(Optional)* Enable authentication type LOGIN for e-mail clients that support authentication type LOGIN.

For complete configuration instructions for each e-mail client, refer to the *Unified Messaging Open Standards Edition User Guide* (part no. 835.3155).

IMAP Inbox

When an e-mail client is configured with the IMAP Server and account credentials, the client is able to retrieve voice messages via IMAP. Configuring the e-mail client with an IMAP account creates an additional Inbox within the e-mail client's folder list. This additional e-mail Inbox is where voice mail messages and fax status e-mail messages for outbound fax appear.

The IMAP account provides a direct connection between the e-mail client and the EM IMAP server. This connection allows Basic Integration users to access their voice messages from their e-mail account.

Messages appear either by clicking the **Send/Receive** button on the e-mail client or automatically if the e-mail client supports the IMAP IDLE command.

LOGIN Authentication Type

For security reasons, the EM server by default does not allow IMAP e-mail clients to authenticate with plain text passwords. However, you can allow this option by enabling LOGIN authentication type, which uses plain text credentials. You can configure this option using the EM FCU (see page 58) or DB Programming (see page 56).

When the authentication type LOGIN command is enabled, Unified Messaging OSE allows the IMAP command named "LOGIN." This command is not secure and if someone is monitoring network traffic, they can obtain the password. If this command is disabled, Unified Messaging OSE disables the LOGIN command and forces the IMAP client to use the AUTHENTICATE command, which is more secure.

You do not have to enable the authentication type LOGIN command if the IMAP client is configured to connect over the secure SSL port. With SSL the entire connection is encrypted, so even though the LOGIN command uses a plain text password, it will be encrypted by virtue of the SSL connection. If the IMAP account is not configured for the appropriate authentication type or encryption type, users will not be able to log into their accounts.

Generating TLS Certificates

TLS certificates are used by the IMAP message store to encrypt a communication between an e-mail client and EM. Although using a TLS certificate is optional, Inter-Tel strongly recommends that you generate a TLS certificate for your system.

When the e-mail client uses a secure connection to the IMAP message store, the server uses the TLS certificate for two purposes:

- **Encrypting all communications with the client**: This means no one other than the two parties will be able to read the message exchange.

- **Authentication of server identity**: This proves that the server is really what it says it is, thus making difficult a "man-in-the-middle" attack.

In order for an e-mail client to authenticate the server, it needs to validate the certificate the server provides when the connection is established. For that purpose, most clients have a built-in list of trusted Certificate Authorities (CA) which they can query for validating certificates. There are two types of TLS certificates based on their origin:

- **Self-signed**: As the name implies, these are certificates that anyone can generate without a fee. For an e-mail client to trust self-signed certificates, the certificates need to be distributed to e-mail clients before being able to establish a secure connection to the server

- **Generated by a "trusted" CA, such as VeriSign®**: The advantage of these certificates is that they can be validated by e-mail clients automatically, with no user intervention, so they work right out of the box. There is a fee for CA certificates.

Unified Messaging OSE can use either one of the certificate types. It is up to the customer to decide whether to purchase a certificate from a trusted CA or to use a self-signed one.

Whenever a TLS certificate (`ldpcert.pem`) is generated, another file named a "private key" (`ldpkey.pem`) is also generated. These two files must be kept together. The files are saved on the EM server under `C:\Inter-Tel\EnterpriseMessaging\data\cert`.

Note that if the server name changes, the TLS certificate must be renewed. This applies to both types of certificates. There is no need to restart the EM server for the changes to take effect.

To generate and validate self-signed certificates:

1. Generate and install certificates using the EM Field Configuration Utility (see).

2. Distribute self-signed certificates to e-mail clients (see).

To validate certificates generated by a trusted CA:

> After you install a certificate from a trusted CA, users' e-mail clients will automatically validate the certificate against a list of trusted CAs.

Distributing TLS Certificates

After you have generated and validated a self-signed certificate using the Field Configuration Utility (see page 58), you need to distribute the certificate to users. Users' e-mail clients must authenticate the server by downloading the certificate to their "trusted authorities" list. The downloading method varies depending on where the certificate file is located.

If the certificate file is on an enterprise Web server:

1. Rename the `ldpcert.pem` file to `server.crt` in order for a Web browser to recognize the file as a certificate. Note that the private key does not need to be distributed to clients.

2. Make the certificate file available to users by placing it on an enterprise Web server, such as an FTP site, a shared folder, etc.

3. Users can download the certificate using a Web browser. A Web browser automatically recognizes the certificate and prompts the users to download them in their computers' "root of trusted authorities."

If the certificate file is on a network server:

1. Rename the `ldpcert.pem` file to `server.crt` so that a Web browser can recognize the file as a certificate. Note that the private key does not need to be distributed to clients.

2. Users can download the certificate by going to Control Panel – Internet Options – Content – Certificates – Trusted Root Certification Authorities – **Import**.

3. Users can select the certificate file from the network server and download it.

If the certificate installation failed or the incorrect certificate was installed, users receive an error message when their e-mail clients attempt to open a secure connection to the IMAP server for the first time. The connection will still be encrypted, but the authentication of the IMAP server will fail. The message may vary from client to client. Below is an example of the message that an e-mail client may receive:

"A certificate chain processed, but terminated in a root certificate which is not trusted by the trust provider. Do you want to continue using this server?"

If the user selects **Yes**, he or she is not asked again for the duration of that session. However, the error message will reappear when the user's e-mail client is restarted. The only way to stop the message from reappearing is to properly install the TLS certificate on the server and, if using a self-signed certificate, configure the e-mail client to use it by enabling SSL.

Configuring HTTPS Connections

Although using the HTTPS protocol is optional, Inter-Tel strongly recommends that you use HTTPS to prevent user credentials from being transmitted in clear text when using the Web Fax Form. You can configure HTTPS on the EM server using Internet Information Services (IIS).

The following instructions allow you to configure IIS for setting up a secure HTTP connection (HTTPS) on an EM server.

If using a certificate generated by a trusted CA, follow their instructions for setting up IIS with those certificates. If using a self-signed certificate, follow the instructions below.

To set up an HTTPS connection on the EM server:

1. Generate a self-signed certificate as described on page 61.

2. Using a Web browser, access the Inter-Tel *edGe*® Technical Software Downloads Web site. To access the Inter-Tel resources, you must log in using your username and password.

3. Select Applications Software – **Enterprise Messaging**.

4. Locate the **Setup HTTPS for Enterprise Messaging v2.x** link and download the `setuphttps_v1.2.zip` file.

5. Extract the files in `setuphttps_v1.2.zip` to `C:\Inter-Tel\EnterpriseMessaging\util`.

6. Go to Start – **Run**. The Run dialog appears.

7. Type `C:\Inter-Tel\EnterpriseMessaging\util\SetupHTTPS.bat` in the text box, and then click **OK**. If no errors are reported, click any key and go to step 8. If errors are reported, contact Inter-Tel technical support.

8. Go to Start – Control Panel – Administrative Tools – **Internet Services Manager**.

9. Navigate to the **Default Web Site** web site.

10. Right-click the site, and then click **Properties**. The Properties dialog box appears for the Web site.

11. Click the **Directory Security** tab.

12. Click **Server Certificate** in the Secure Communications field. The Web Site Certificate Wizard screen appears.

13. Click **Next**.

14. Select the **Assign an existing certificate** option, and then click **Next**. A screen appears displaying the contents of your computer's personal certificate store.

15. Select your Web server certificate (denoted by the common name), and then click **Next**. A summary screen appears providing the details about the certificate you are installing. Be sure that this information is correct or you may have problems using SSL or TLS in HTTP communications.

16. Click **Next**.

17. Click **OK** to exit the wizard.

Setting the Automatic Idle Logout Time

The EM server automatically disconnects e-mail clients that have been idle for a predetermined amount of time. It is set to 30 minutes by default. The valid range is 30 to 1440 minutes (24 hours).The Automatic Idle Logout Time can be configured in the FCU (see page 58) or in DB Programming (see page 56).

Enabling Audio Features in a Citrix Environment

To support the IMAP portion of UM OSE in a Citrix® and Terminal Services environment, audio features must be enabled in the Citrix MetaFrame® Presentation Server.

To enable audio features, program the following areas in the Citrix MetaFrame Presentation Server (Citrix Server):

- "Client Connection Settings" below
- "Published Application Settings" on
- "Citrix Policy Settings" on

For complete information about the Citrix Server, refer to the manufacturer's guide.

Client Connection Settings

To enable audio in the client connection settings:

1. Go to Start – Programs – **MetaFrame Tools**.

2. Click **Citrix Connection Configuration**. The Citrix Connection Configuration dialog box appears.
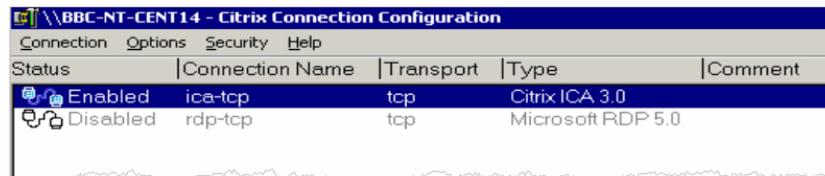
3. Double-click the type of ICA connection (for example, **ica-tcp**) for which you want to enable audio. The Edit Connection dialog box appears.
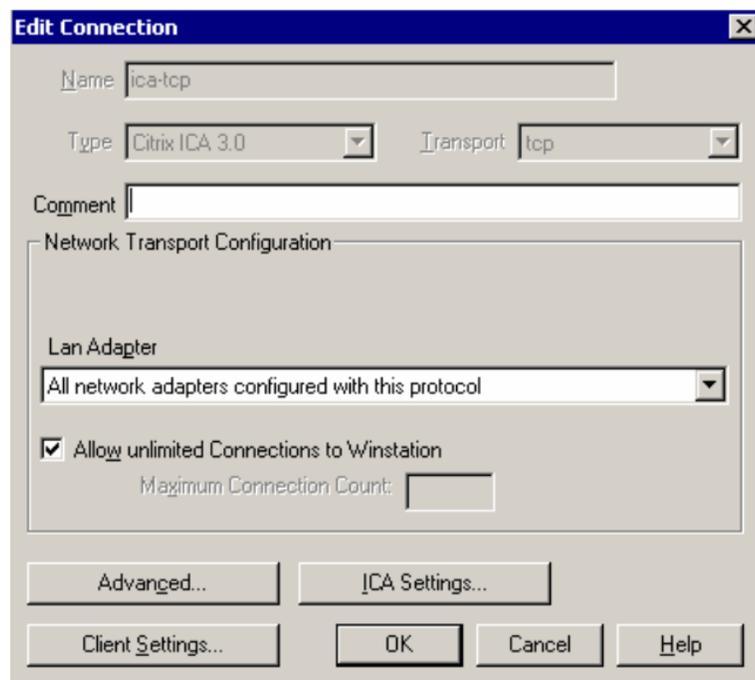
4. Click **Client Settings**. The Client Settings dialog box appears. Clear (uncheck) the **Disable Client Audio Mapping** check box, and then click **OK**.
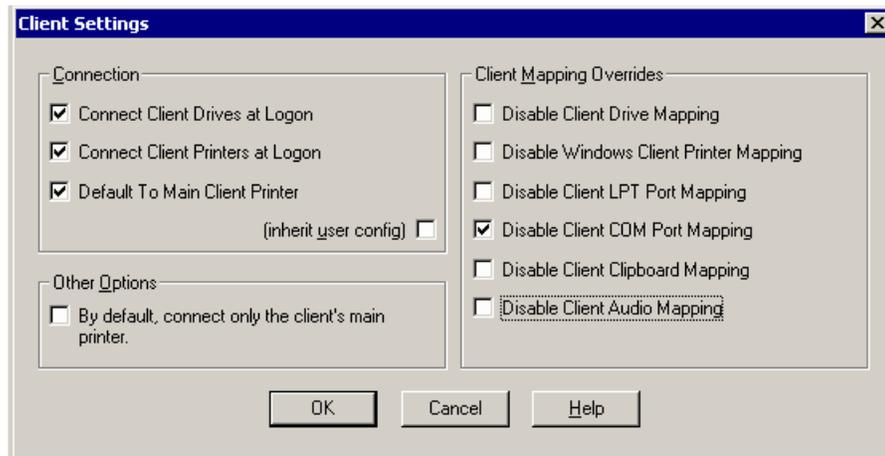
5. Click **ICA Settings**. The ICA Settings dialog box appears. Select **Medium** for the Client Audio Quality, and then click **OK**.
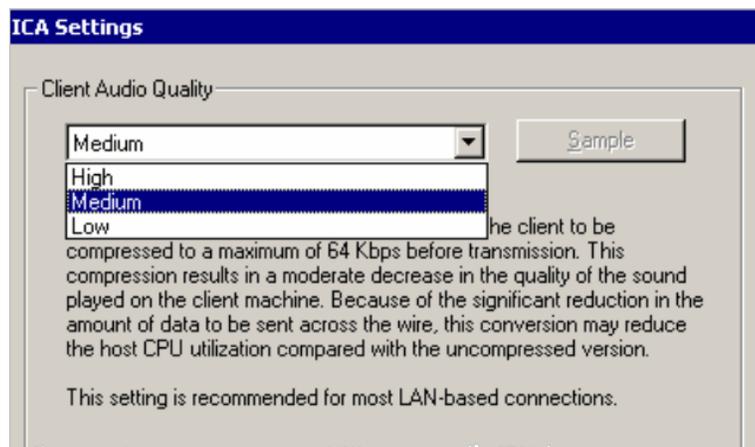

6. Exit the Citrix Connection Configuration dialog box.

Published Application Settings

To enable audio for a published application:

1. Launch the Management Console for the Citrix Server.

2. Select the published application for which you want to enable audio.

3. From the **Actions** menu select **Properties**.

4. Click **Next** several times until the Publish Application - Audio Application dialog box appears, as shown below.
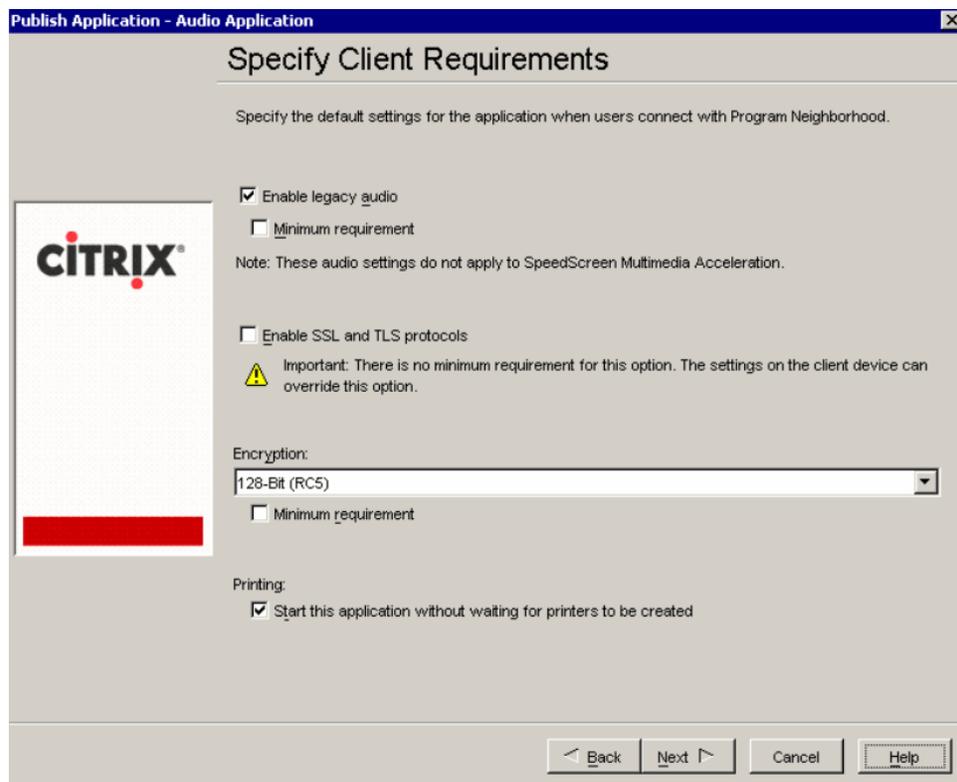
5. Select the **Enable legacy audio** check box.

6. Click **Next** several times until the Finish button appears.

7. Click **Finish**.

Citrix Policy Settings

To enable audio for client sessions:

1. If not already started, launch the Management Console for the Citrix Server.

2. Select the policy for which you want to enable audio input.

3. From the **Actions** menu select **Properties**. The Application Audio Properties dialog box appears.

4. Go to Client Devices – Resources – Audio – **Microphones**.
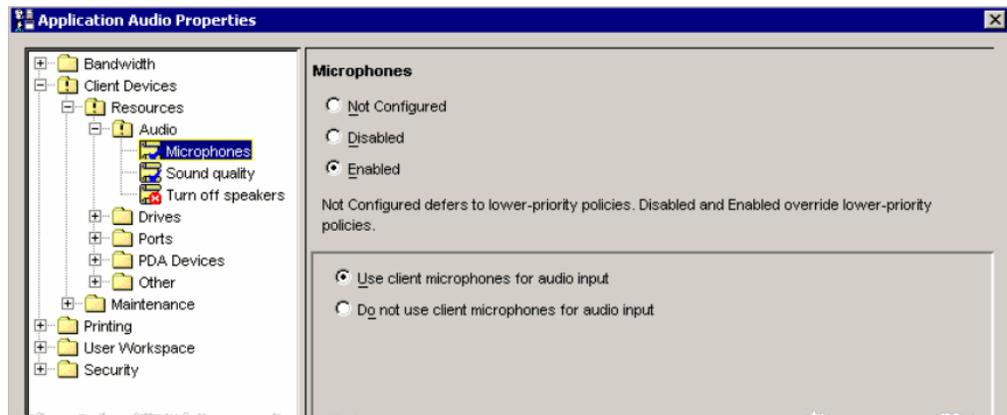
5. Select **Enabled** and **User client microphones for audio input**.

6. Click **OK**.

7. Go to Client Devices – Resources – Audio – **Sound quality**.
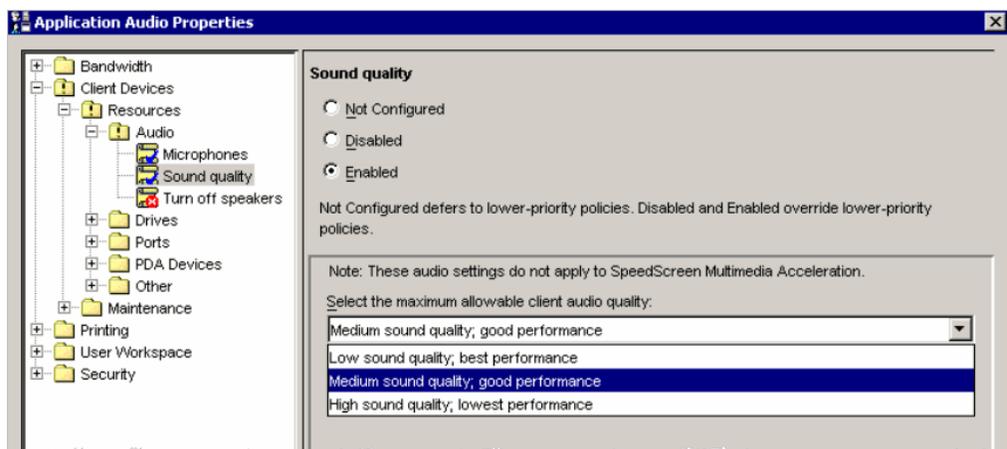
8. Select **Enabled** and **Medium sound quality; good performance**.

9. Click **OK**.

Reports

Introduction

The following reports can be generated by System Manager or by an Operations, Administration, and Management (OAM) command through the OAM console (for EM). A report can be delivered to an e-mail address or simply written to a file.

- **IMAP Connection Status and Statistics Report**: Collects remote IMAP connection statistics. This report is an automatic or manual report.

- **Unified Messaging OSE Synchronization Status Report**: Collects Unified Messaging OSE integrated inbox functionality. This is an automatic report.

For complete information about OAM, refer to the *Enterprise Messaging Installation and Maintenance Manual* (document part no. 780.8006).

Generating a Report

To generate a report using the EM OAM console:

1. Access the OAM console by following the instructions in the Diagnostics and Troubleshooting chapter in the *Enterprise Messaging Installation and Maintenance Manual* (document part no. 780.8006).

2. Use one of the OAM commands, shown in "OAM Commands" on , to generate the report.

OAM Commands

The following commands are used for Unified Messaging OSE reports.

- "IMAP Connection Status and Statistics Commands," below
- "Unified Messaging OSE Synchronization Status Command" on

IMAP Connection Status and Statistics Commands

Alias: `imapinforprt`

Example:

```
>imapinforprt -f <filename) -c
```

Remarks: This is an alias for a long command "`Report_Provider:<spacebar> Report_Gen -r imap_info_rprt`" for generating an IMAP-specific report.

Valid Option ID	Description
-f *<filename>*	The name of the file for file output. The default name of the file is `IMAP_Info_Rprt_Manual.txt` and can be found in `<DRIVE>/InterTel/Reports/IMAP_Info_Rprt` directory.
-e *<email>*	The e-mail address. This sends output as an e-mail with a report file attached. Use -e or -c but not both.
-c	The output destination is the OAM console window from which the command was issued. Use -e or -c but not both.

Command: `Report_Provider:<spacebar> Report_Gen -r <unique_report_ID>`

Example:

```
>Report_Provider:<spacebar> Report_Gen -r IMAP_Info_Rprt -f
<filename> -e <email>
```

Remarks: Report_Provider" is the name of the EM component responsible for report generation and **"**Report_Gen**"** is the command invoked to generate report.

Valid Option ID	Description
-f *<filename>*	The name of the file for file output. The default name of the file is `IMAP_Info_Rprt_Manual.txt` and can be found in `<DRIVE>/InterTel/Reports/IMAP_Info_Rprt` directory.
-e *<email>*	The e-mail address. This sends output as an e-mail with a report file attached. Use -e or -c but not both.
-c	The output destination is the OAM console window from which the command was issued. Use -e or -c but not both.
-r *<unique_report _ID>*	The unique name or ID. For IMAP statistics reports, the ID is `Imap_Info_Rprt`.

Unified Messaging OSE Synchronization Status Command

Command: `UMOSESynchRprt -c -f <filename> -e <email>`

Example:

```
>UMOSESynchRprt -c -f <filename> -e <email>
```

Remarks: This report contains a component summary as well as characteristics for individual mailboxes that are configured for synchronized inbox integration.

Valid Option ID	Description
-f *<filename>*	The name of the file for file output.
-e *<email>*	The e-mail address. This sends output as an e-mail with a report file attached. Use -e or -c but not both.
-c	The output destination is the OAM console window from which the command was issued. Use -e or -c but not both.

Report Structure

This section shows an example of the reports. The header consists of a name and the date corresponding to the date of generation of the report. The footer consists of the page number of the report. This information is included in every page of the report.

- "IMAP Connection Status and Statistics Report," below
- "Unified Messaging OSE Synchronization Status Report" on

IMAP Connection Status and Statistics Report

The IMAP connection status and statistics report consists of two pages. The first page displays IMAP status and the second page displays IMAP statistics. The IMAP status and statistics information are reported based on a remote connection. Remote Connections are made by clients not located in the same machine as the IMAP server. See Figure 1 and Figure 2 on for report examples.

IMAP Status Report

Figure 1shows an example of the IMAP Status Report that is displayed on the first page.

Figure 1. *Sample IMAP Connection Status and Statistics Report — Page 1 (IMAP Status)*

```
IMAP_Info                                          Date:  01/10/2007


Number of Active Connections: 1


Worst Case Latency (ms):        687.00


REMOTE Active Connections:


Account    IP Address         Last Login          Last Command        Max Latency
(ms)

MB1000    172.16.9.157:1129 1/10 08:31:31AM      1/10 08:45:17AM     672
                                        …
                                  Page:  01


 -------------------------------  Page Break  --------------------------------
```

The IMAP connection status information consists of:

- **Number of Active Connections:** Displays the number of active remote IMAP connections.
- **Worst Case Latency:** Displays the worst case latency corresponding to all previous connections. Worst case latency is defined as the time (in milliseconds) the last byte of IMAP command is received until the time the first byte of content is returned.
- **Remote Active Connections:** Displays all the remote active IMAP connections including the account name, the IP address from which the account is accessed together with the port number, the last login time, the last time an IMAP command is executed and the maximum latency for each connection.

A page break is forced after the status information is displayed.

IMAP Statistics Report

Figure 2 shows an example of the IMAP Statistics Report that is displayed on the second page.

Figure 2. *Sample IMAP Connection Status and Statistics Report — Page 2 (IMAP Statistics)*

```
  IMAP_Info                                             Date:  01/10/2007


              IMAP Statistics from 1/4/2007 (THU) TO 1/11/2007 (THU)


                          THU      FRI      SAT      SUN      MON      TUE      WED


  Total Auth Requests     144      73       0        0        16       22       4


  Disconnects W/Out Auth:


  Normal                  0        0        0        0        0        0        0
  Timeout                 0        0        0        0        0        0        0
  Client                  0        0        0        0        0        0        0


  REMOTE Connection Statistics:


  Auth Requests           128      68       0        0        12       21       4
  Auth Failed             0        0        0        0        0        0        0
  License Failure         26       15       0        0        0        0        0
  Normal Disconnects      128      66       0        0        9        19       2
  Timeout Disconnects     0        0        0        0        0        0        0
  Client Disconnects      0        0        0        0        2        1        1
  Commands Processed      388      283      0        0        288      261      46
  Average Latency(ms)     17.13    10.92    0.00     0.00     1.95     34.28    31.26


                          Page:  02
```

The IMAP connection statistics are reported weekly. The first part of the statistics report comprises cumulative information corresponding to all types of IMAP connections as follows:

- **Total Authentication requests**: Displays the total number of authentication requests made by all remote clients irrespective of the outcome of the authentication requests.

- **Disconnects without Authentication**: Displays the total number of disconnects and also displays the type of disconnects. A Normal disconnect is the result of closing a connection through a valid IMAP command such as logout. A timeout disconnect results from the IMAP server disconnecting the client automatically after a certain time during which the client connection was idle. A Client disconnect happens if the client application that accesses the IMAP server is forcibly closed when the IMAP connection is still active.

The second part of the statistics report is made up of details for each type of connection as follows:

- **Authentication Requests**: Displays the number of authentication requests made with the IMAP server.

- **Authentication Failure**: Displays the number of authentication failures corresponding to all authentication requests with the IMAP server.

- **License Failure**: Displays the number of failed attempts to acquire a Unified Messaging license. A license failure occurs whenever an e-mail client IMAP connection is attempted but there are already the maximum number of clients connected as permitted by the license. The IMAP server will refuse connections from clients if the maximum connections per the license is exceeded.

- **Normal, Timeout, and Client Disconnects**: Display the total number of normal, timeout, and client disconnects. See the "Disconnects without Authentication" bullet item for details about normal, timeout, and client disconnects.

- **Commands Processed**: Displays the number of IMAP commands processed by the server for all clients for a particular type of connection.

- **Average Latency**: Displays the average latency in milliseconds. All connections of a particular type are reported as the total latency divided by the number of commands processed. If no commands were processed, zero is reported as the latency time.

By default only the remote connection statistics are reported. The details are the same for all type of connections.

Unified Messaging OSE Synchronization Status Report

Figure 3 shows a sample of the Unified Messaging OSE Synchronization Status Report.

Figure 3. *Sample Unified Messaging OSE Synchronization Status Report*

```
UM OSE Inbox Integration Info                    Date: 03/14/2008


Number of Users Configured:                           2
Number of Active Poll Sessions:                            0
Number of Active IDLE Sessions:                            2
Number of Failed Connections:                              26
Number of Messages Sychronized:                            0
Number of Messages that Failed Sychronization:        0
Number of Successful Connections:                     18


----------------------------------------------------------------------------------
------
Account      Synch Type          # of Local store    # of Remote store    # of Messages
Connection
                         connection failures    connection failures    synchronized    status
----------------------------------------------------------------------------------
-----
MB1016       Enhanced Integration      8              9                  0           0
MB1000       Enhanced Integration      0              9                  0           0
```

The Unified Messaging OSE synchronization status information consists of:

- **Number of Users Configured:** Displays the current number of mailboxes using inbox integration.

- **Number of Active Poll Sessions**: Displays the number of mailboxes that employ polling to synchronize with the remote message store.

- **Number of Active IDLE Sessions**: Displays the number of mailboxes that employ idling to synchronize with the remote message store.

- **Number of Failed Connections**: Displays the total number of connections that have failed either to the voice mail or remote message store.

- **Number of Messages Synchronized**: Displays the total number of messages that have been synchronized (added to the remote message store).

- **Number of Messages that Failed Synchronization**: Displays the total number of errors encountered when trying to synchronize messages.

- **Number of Successful Connections**: Displays the total number of successful connections to the voice mail and remote message stores.

Individual statistics include:

- Synchronization type (Enhanced Forward and Copy, Enhanced Integration, or BlackBerry Enhanced Integration).

- Number of times the voice message store has been connected to.

- Number of times the remote message store has been connected to.

- Number of messages synchronized for this mailbox.

- Connection status (1 = connected, 0 = disconnected).

Troubleshooting

Troubleshooting Summary

This section describes the following troubleshooting issues to support Unified Messaging OSE:

- "E-mail Client Issues"
- "Voice Mail Web Interface Issues" on
- "Fax Issues" on

E-mail Client Issues

includes troubleshooting issues related to e-mail clients and error e-mail message text. The From address for error e-mail messages is **NoReplyError@<*EM server name*>.com**, where *EM server name* is the Enterprise Messaging hostname or IP address.

NOTES	If your company uses e-mail retention software that automatically moves the e-mail notification message to another location, Inter-Tel recommends that you select **File Attachment** or **Both** for the E-mail Client Message Format (see page 51). Otherwise users' voice messages may be deleted from the EM server.
	Instruct users to not move voice messages from the specified folder in their e-mail clients (see page 50). If users move voice messages from this folder, the messages may be deleted from the EM server.

Table 10. *E-mail Client Troubleshooting Issues*

Symptom/ Error Message	Possible Cause	Correction Action
The user's IMAP account does not work.	Incorrect settings.	Do the following: • Verify that the settings are programmed correctly for the user's e-mail client (see page 60). • Verify that the user has programmed the correct host name/IP address of the EM server.
Lotus Notes does not delete e-mail messages in the IMAP Inbox folder.	The view refresh option is not set properly.	Set the refresh option to automatic as described in the *Unified Messaging OSE User Guide* (part number 835.3155).
The user receives a voice message with the following note: "There was an error appending this message. Check message size to see if it exceeds your e-mail server's configured limit."	The e-mail attachment is larger than the file size limitation set for the user's e-mail account on the e-mail server.	Large messages can be rejected due to limitations imposed by the e-mail server configuration. If this occurs, users can still listen to the voice message from the Voice Mail Web interface (see page 23).
The user receives an error message with the following text: "Cannot specify EM server as remote IMAP server."	The E-mail Server field is programmed incorrectly.	The E-mail Server field should be programmed with the name or IP address of the IMAP4-compliant e-mail server (not the Enterprise Messaging server). This must be either a Domino or Exchange server. See page 11 for a list of compatible e-mail clients.

Table 10. *E-mail Client Troubleshooting Issues (Continued)*

Symptom/ Error Message	Possible Cause	Correction Action
The user receives an error message with the following text: "Error logging into: *<user name>*."	The user's e-mail credentials are incorrect.	Verify that the proper e-mail user name and password are programmed for the user (see page 50).
The user receives an error message with the following text: "Not all required attributes for remote server are populated for: MB*<xxxx>*."	Not all of the required fields are configured for the e-mail server.	Verify that the following fields are programmed properly in DB Programming: • E-mail Server (page 50) • E-mail Account Username (page 50) • E-mail Account Password (page 50) • E-mail Account Folder for Synchronization (see page 50)
The user receives an error message with the following text: "Error selecting folder: Inbox/*<folder name>*."	When configuring the E-mail Account Folder for Synchronization field, the user selected a folder that does not exist.	Verify that the user selects a folder in the e-mail client that already exists for this field (see page 26).

Voice Mail Web Interface Issues

Table 11 includes troubleshooting issues related to the Voice Mail Web interface.

Table 11. *Voice Mail Web Interface Troubleshooting Issues*

Symptom	Possible Cause	Correction Action
Even though the user has correctly configured the E-mail server on the Configuration tab (see page 25), the user still gets an error message stating that the account cannot be synchronized.	The e-mail server does not support SSL.	If the mailbox has SSL enabled and the e-mail server does not support it, the connection will fail. Set the Enable SSL for E-mail Server Connection field to **No** (see page 49).
	The user's e-mail password has changed.	Sometimes network policies require users to change their passwords periodically. If this is the case, change the password to the current and correct password in one of the following locations: • Unified Messaging OSE Voice Mail Web interface (see page 25) • DB Programming (see page 50)
When users attempt to change their configuration settings using the Configuration tab (see page 25), the fields are all disabled.	The Allow User to Configure option is disabled for the user in DB Programming.	Enable the Allow User to Configure option in DB Programming (see page 50).
The user changed the message structure (see page 26), but the existing messages still reflect the old message structure.	None.	Changing message structure only affects **new** messages that are placed in the remote message store (the user's e-mail client) after the changes are made.
The user configured the account using the Configuration tab (see page 25), but the user is not seeing messages in the e-mail client.	Programming error.	The following mandatory fields must be programmed for synchronization to work: • E-mail Server (page 26) • E-mail Account Username (page 26) • E-mail Account Password (page 26) • E-mail Account Folder for Synchronization (see page 26)
There was an issue with synchronization (for example, a failure during authentication), but the user did not receive any notice that there was a problem.	Programming error.	To receive notifications about synchronization changes and failures, configure the E-mail Address for Voice Messages in one of the following locations: • Unified Messaging OSE Voice Mail Web interface Configuration tab (see page 25). • The E-mail Address for Voice Messages field in DB Programming (see page 50).

Table 11. *Voice Mail Web Interface Troubleshooting Issues (Continued)*

Symptom	Possible Cause	Correction Action
When the user logs on to the Voice Mail Web interface, new messages are in the Deleted folder.	The user has configured more than one mailbox to synchronize with one e-mail client folder.	Instruct the user to configure one mailbox per e-mail client folder for synchronization. The user needs to create a new e-mail client folder for each additional mailbox that he or she wants to synchronize (see page 26).
	Your company's e-mail archiving system deleted the messages.	If your company uses e-mail retention software that automatically moves the e-mail notification message to another location, Inter-Tel recommends that you select **File Attachment** or **Both** for your message format (see page 51). Otherwise users' voice messages may be deleted from the EM server.

Fax Issues

Table 12 includes troubleshooting issues related to the Voice Mail Web interface.

Table 12. *Fax Print Driver Troubleshooting Issues*

Symptom	Possible Cause	Correction Action
The first time the Fax Client application starts, the user sees a dialog box with the following error message, "Please configure and confirm user settings."	This is the first time the user has attempted to use the Fax Print Drive and the required user settings have not been configured.	The user must configure information on the Configuration tab of the Fax Client interface before he or she can use the Fax Print Driver (see page 31). Note that the information on the Configuration and User Settings tabs are a one-time only requirement.
When the user clicks on the Cover Page Preview tab, the user only sees a gray box.	The Cover Page option is not selected on the Main tab.	The Cover Page Preview tab displays the cover page that the user has selected on the Main tab in the Fax Client application.
When the user clicks the Submit Fax button on the Fax Client interface, the user receives an error stating that there are no available fax licenses.	A fax license is required, but there are no available fax licenses.	Verify that the system has the appropriate Unified Messaging and fax conversion licenses.
The user selected the Delayed Delivery option for a fax message, but the fax message was delivered immediately.	The fax was sent to an e-mail recipient, not a fax machine.	The Delayed Delivery option only applies to outbound faxes sent to a fax machine. This option does not apply to faxes sent via e-mail.
The user cannot log in to the Web fax form.	Incorrect settings.	Make sure the user is configured for Unified Messaging.
The user cannot send a fax in TIFF format.	The TIFF file may not be in CCITT Group 3 Format.	Currently Unified Messaging OSE does not support TIFF format in CCITT Group 4. Instruct the user to convert the TIFF file into PDF format using a third-party TIFF-to-PDF conversion software. Then tell the user to try sending the fax again.
The user tried to cancel an outgoing fax, but the fax continues to attempt a transmission.	Users cannot cancel a fax.	Canceling a fax is currently not an option. The fax continues to retry every 10 minutes for 10 attempts. If, after 10 attempts, the fax transmission is not successful, the fax is automatically deleted. The ability to cancel a fax will be available in a future release.

Index