

Fax Messaging

For many of today's businesses, fax communication is still the preferred way to send signatory documentation. With NEC's UC for Business (UCB) Fax Messaging, access, control and security of fax communications is improved.



Faxes can now be delivered directly to your PC, making your site more responsive and providing a superior level of customer service.

No more hovering around the fax machine, waiting for confidential documents to print out... No more misplaced faxes or delayed deliveries.

With Fax Messaging, you can view your faxes in Desktop, Console or Unified Messaging (Microsoft® Exchange Outlook or Lotus Notes)

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Introduction

Unified Messaging

Fax Messaging is the final component to complete NEC's UC for Business (UCB) Unified Messaging offering.

Unified Messaging can be defined as an advanced message management solution that covers all media types: phone, email, voice messaging and fax. It allows access to any message from any application, at any time.

Unified Messaging creates a single infrastructure for managing multimedia contacts allowing users to access their messages via whatever mechanism they prefer, or is convenient for them at the time.

Fax Messaging provides management of fax traffic from within Console, Desktop¹ or Unified Messaging. Fax Messaging allows the traditional phone call management features and tools provided by the Messaging suite to be applied to fax media. Faxes can be viewed and printed in Console, Desktop or Microsoft® Outlook.

Paperless Fax

Many industries still rely on the paper trail of signatures. For many companies, faxes are still the preferred order-taking medium.

Are you tired of waiting at the fax machine for faxes to arrive – or worse still, missing them because they've got caught up in a pile of other work for somebody else? Fax Messaging improves the access, control and security of fax communication by allowing customers to send signed orders and other important documents directly to the appropriate person so they can view and/or print the fax at their own discretion, at the best time for them.

Fax Messaging is also fully integrated into UCB's comprehensive reporting package, ensuring that users have a complete picture of inbound and outbound fax traffic.

¹ In this document, "Desktop" represents Executive Desktop and Executive Insight

Business Drivers

Fax Messaging provides many advantages for your business:

- Signatures on faxes are still the only electronic legal tender used by some organizations. Maximize the sale opportunities for your business by giving potential customers a simple way to send signed orders through to immediately begin the purchase process.
- Give your customers instant contact with your staff, minimizing misplaced orders and delay frustrations.
- Your business can now confidently expect individual ownership and management of incoming faxes.
- Fax Messaging integrates with the existing Console, Desktop and Unified Messaging applications; there is no need to purchase additional applications.
- One solution from one vendor – the UCB suite of products covers all methods of customer contacts – phone, web chat, email, web callback and fax, providing a fully integrated solution as well as a lower total cost of ownership via a single communications platform.
- Reduce paper confusion and interruptions by providing your staff members with the ability to view faxes on screen.
- By instantly responding to the inbound fax request, your staff can maintain a fluid process that is easily tracked as required.
- Fax Messaging is the integral solution for a paperless office; centralized reporting on inbound and outbound faxes gives managers the confidence to take on a paperless form of communication.

User Benefits

Improve the flow of communication and the sharing of information within your organization – faxes can be forwarded to colleagues and easily stored for future reference. Your staff members can expect such individual advantages as...

- Privacy
- Immediacy
- Simplicity
- Notification of fax via the phone, Console, Desktop, email and Voice Messaging
- Multiple application access (Console, Desktop and Microsoft Outlook)
- Ability to forward received faxes off site via email
- Remote access via Outlook Web Access.

Administrator Benefits

One of the many advantages of Fax Messaging is its straightforward administration...

- Simple configuration
- Centralization of multimedia communications in a single familiar administrative environment
- Intuitive GUI and context sensitive Online Help

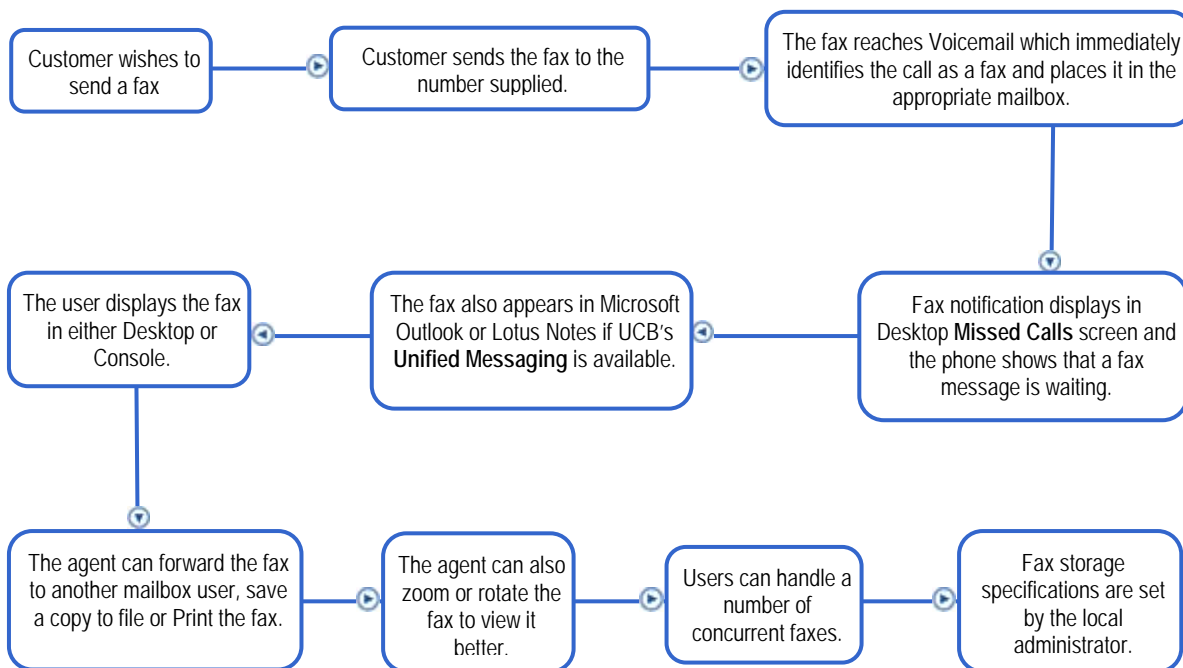
Customer Benefits

Customers are the immediate beneficiaries of this effective medium.

- Managing and retrieving fax, email and voice messages from a central application (Microsoft Outlook) instantly improves efficiency in the business.
- Customers can now guarantee their fax will arrive at the required destination in the shortest possible time, and that the user will receive instant notification of its arrival.
- The privacy of the fax is likewise guaranteed, at the user's discretion.

The Inbound Fax Messaging Process

Here is what happens when somebody sends a fax to a Fax Messaging user...



Physical Architecture Overview

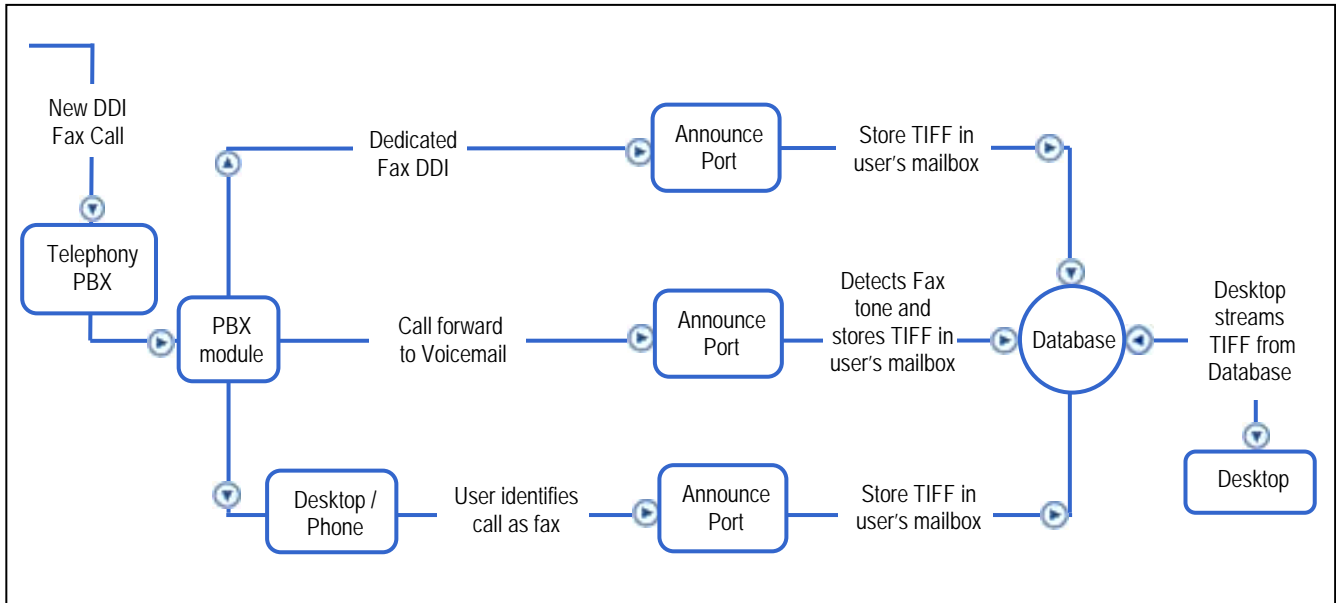


Figure 1. Physical Architecture

How does Fax Messaging Work?

Overview

The Fax Messaging process is very straightforward:

- Faxes must be directed to Voice Messaging which instantly identifies fax tone and processes the fax accordingly.
- The fax is then stored in the appropriate Voice mailbox.
- The user can view the fax as a TIFF, which can be saved, printed and forwarded as required.

Licensing

Fax Messaging requires the following licenses...

- A UCB Voice Messaging mailbox is required in order to receive any faxes.
- Console, Desktop, Executive Insight or Unified Messaging is required in order to view and process inbound or received faxes.
- Console, Desktop or Executive Insight is required in order to view transmission status of outbound or sent faxes.
- Unified Messaging is required in order to view faxes in Microsoft Outlook or Lotus Notes and forward them offsite.

² Note that the Cisco CallManager, which uses the Router for inbound Fax, does not use Announce/voice ports.

Directing a Fax to Voice Messaging

Fax calls can reach Voice Messaging in 3 ways.

- **Via a dedicated fax DDI:** Directing faxes to a specific fax number is the quickest, cleanest form of fax delivery offered by Fax Messaging. Users are not required to interact with the fax call as Fax Messaging will ensure that the fax is automatically delivered to the user's mailbox.
- **Via a personal phone DDI³:** Although not as automated as using a dedicated fax DDI number, this method allows users to receive faxes on the same DDI number as their phone. When they answer the phone and hear fax tone, they simply redirect the call straightaway to their voice mailbox using a single mouse-click in Desktop or Console. If they are away from their phone, the call forwards unanswered to Voice Messaging without any manual handling and is processed immediately.
- **Via a group fax number:** All company faxes can be directed to a single fax mailbox. The operator then views and distributes these faxes to users. The operator can either print the faxes in order to distribute by hand, or forward the fax to the mailbox of appropriate staff.

Storing a Fax in a Mailbox

- As soon as Voice Messaging identifies fax tone, the fax is stored in the appropriate user's Voice mailbox. Voice Messaging uses the digits received to associate the fax with the correct user mailbox.
- The dedicated DDI number sends the appropriate digits via the PBX.
- The transferred or redirected personal DDI number passes digits automatically on transfer.
- The group fax number is used for all users; the target person for the fax is identified by viewing or printing the fax.

Viewing a fax

- Faxes can be viewed in Desktop, Console or Executive Insight or UM.
- **Desktop** – Like Voice messages, sent and received faxes appear in the **Call History** tab page, or inside the **Fax** tab page. From the main screen, users can choose to delete, forward, print or view the fax, or they can simply double-click the record to open the Fax viewer. In the Fax viewer, the user can Print, save or view (including zoom and rotate). The Fax viewer is a separate Window, allowing the user to expand the window to the size of the monitor to gain maximum visuals, as well as to keep the window open independently of any other activity.
- **Console** – Console operators can View and Delete sent and received faxes from the main Console screen, or they can simply double-click the record to open the Fax viewer, providing all the same functionality as in Desktop above.
- **Executive Insight** – Users can view sent and received faxes along with calls and voice messages inside the Calls tab page.
- **UM** – Users can receive faxes into their Microsoft Outlook or Lotus Notes email application, giving them full email functionality such as View, Print, Save, Forward etc. Sent faxes are not shown.

Example

The following screen sequence shows a fax arriving in Desktop via a personal phone DDI/DID.

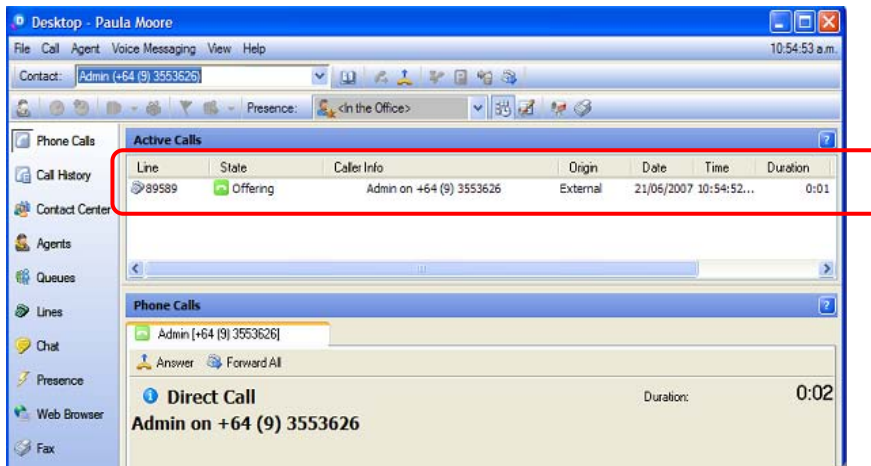
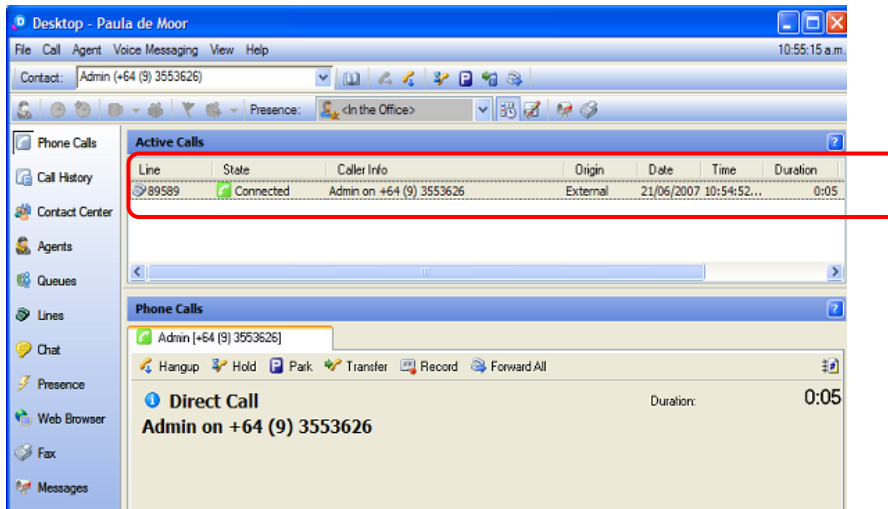


Figure 2. The first step to receiving a fax is when the phone rings. If the number is recognized, the user may know even before answering that a fax is being sent.

Figure 3. If the user answers the call, they will hear the tones generated by the sending fax. If the user has already identified the call as a fax, without picking up the phone, there is no need to handle the call at all, see figure four.



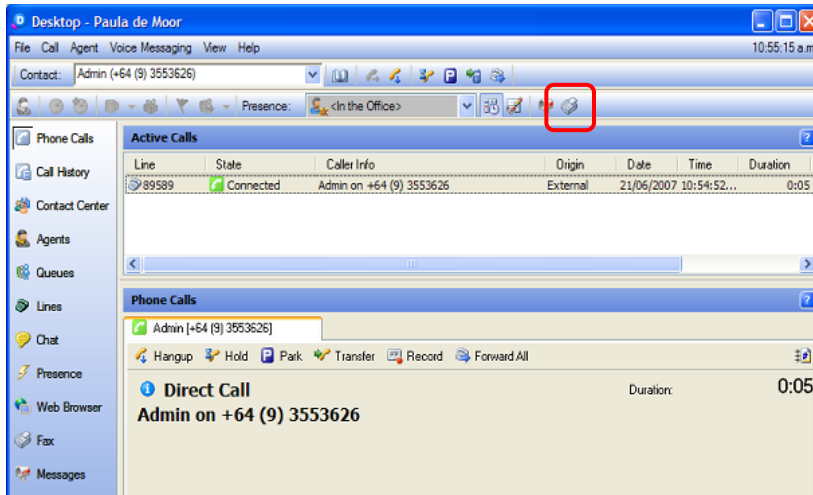


Figure 4. On answer, the user identifies fax tone and clicks the Fax button in Desktop, sending the fax immediately to Voice Messaging.

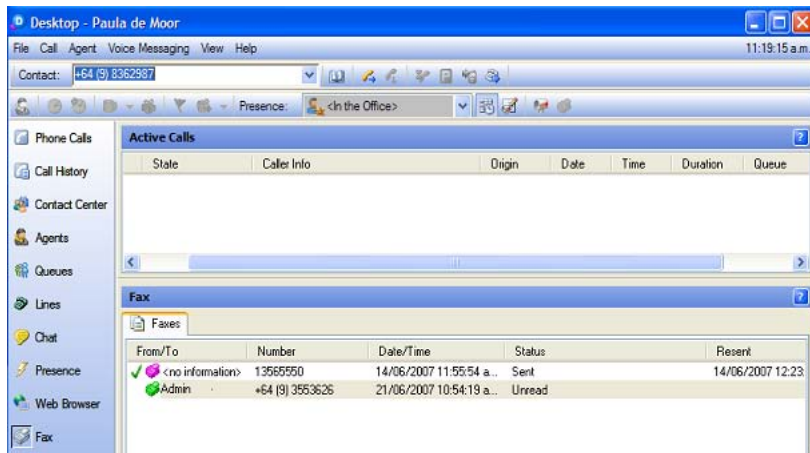


Figure 5. Fax Messaging takes a few seconds to process the fax, just like a standard fax machine. As soon as the fax is received, it is moved to the Voice Messaging mailbox and displayed in Desktop, Console and/or Microsoft Outlook.

Core Features and Benefits

Features

Fax Messaging provides the following core functionality:

- Users can send and receive faxes directly from their PC.
- Fax integration allows users to receive or process faxes via Console, Desktop or Unified Messaging (Microsoft Outlook or Lotus Notes).
- All phones that can display message waiting notification will also provide fax notification. NEC or Cisco proprietary display telephones show detailed and specific notification of faxes.
- Voice Messaging will also provide verbal notification, i.e., “You have 1 Urgent message, 2 New messages and 1 New Fax message.”
- Users can print, save and forward faxes from any of the applications above.
- Operators can drag and drop faxes directly from any mailbox⁴ (e.g., the company fax mailbox) into the appropriate destination mailbox.
- Support staff can remotely view any unprocessed Faxes at another extension via their Desktop or Console Presence buttons.
- Users have immediate access to an introductory Fax Messaging Video Tutorial on startup, as well extensive context sensitive Online Help. This assistance is instantly available at any time.
- Inbound and Sent fax information can be viewed in the relevant fax report.
- UCB Administrator provides a single administration interface for configuring fax users.
- The simplicity provided by the Windows GUI and Online Help allows the local administrator to easily configure new fax users without requiring a technician to come to the site.

- To allow for unpredictable peaks in inbound fax traffic, Voice mailboxes can be configured to overflow faxes to a legacy fax machine when the voice ports are busy, ensuring fax delivery service is not interrupted.
- Faxes are stored for the period pre-specified in the UCB Administrator for each user class.
- A “safety net” or administrative backup option is available, allowing each user who wishes to, to automatically print all faxes on arrival in the mailbox. UCB security options also allow this functionality to be controlled by the Administrator.

Benefits

Fax Messaging offers some unique benefits:

- Give your customer the option of committing to you with a confirmed, signed order – this is not available in any medium other than hand delivery or face-to-face.
- Your customers can send their faxes directly to you, not to a group fax.
- Directing faxes to users’ personal phone DDI numbers reduces the telecommunications costs incurred in dedicated fax lines, and allows companies to offer fax facilities to more users.
- The significant savings of eliminating paper from the equation cannot be overlooked.
- Fax Messaging is easy to use for both customer and users, saving the time and expense associated with training.
- Customer service levels and sales revenues can be dramatically improved by offering the ability to send an order directly.
- Consistency of fax user interface in other UCB applications allows users to handle their fax communications intuitively, improving customer service and reducing handling time.
- Ability to view faxes remotely on other extensions via Presence buttons allows Operators to reassign or redistribute work as required, or to monitor faxes for absentees.

⁴ This functionality is controlled by Security permissions set by the system administrator

- The module includes easy to use reporting tools, bringing fax management effectively into the paperless office.
- Fax Messaging completes the single, fully integrated solution for telephone, fax and email contacts, integrated as a “single supplier” solution from NEC.
- While the theory of the paperless office is very attractive to management, individuals may require the reassurance of paper copies in order to make the transition comfortably.

Examples

Faxes are viewable and able to be processed in Desktop, Console and Microsoft Outlook.

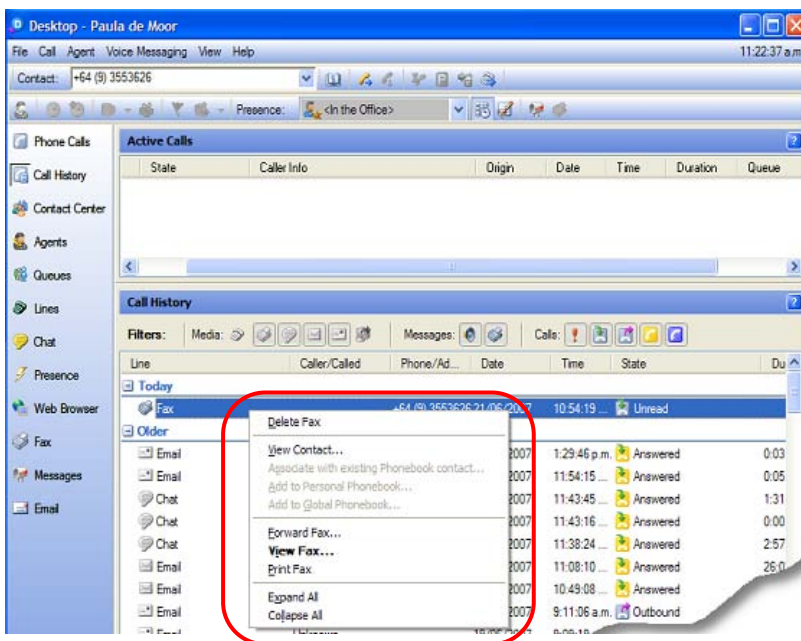


Figure 6. Right-click on the Fax in Desktop Missed calls to view your immediate options

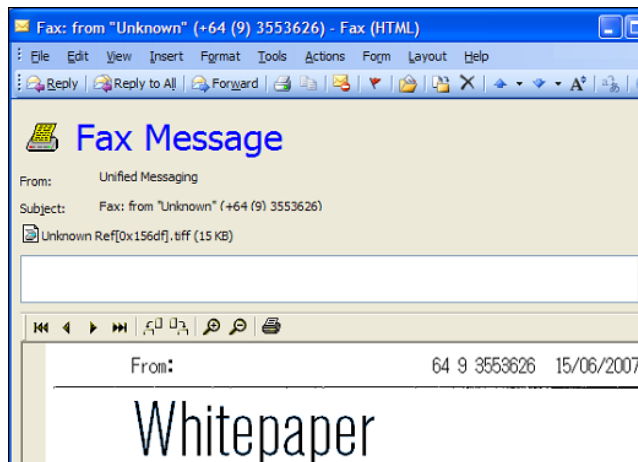
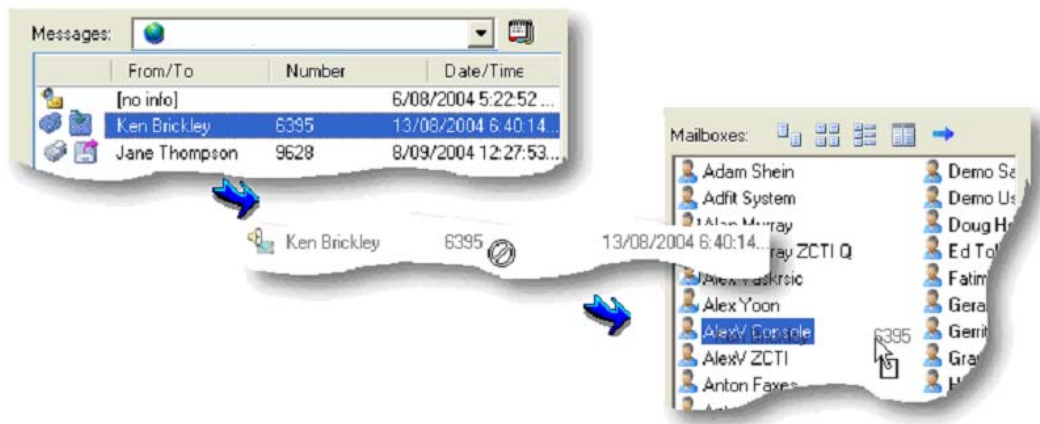


Figure 7. Open the fax item in Desktop or Console to display the fax in the independent Fax Viewer window. Here the user has the option to zoom, print, save or rotate the fax.

Figure 8. In Console (or Desktop) Messages view, the Operator can drag and drop faxes directly into the appropriate mailbox, after either viewing the fax, or identifying the sender.



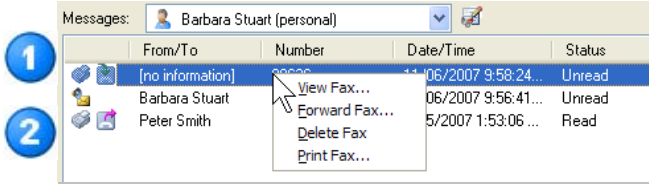
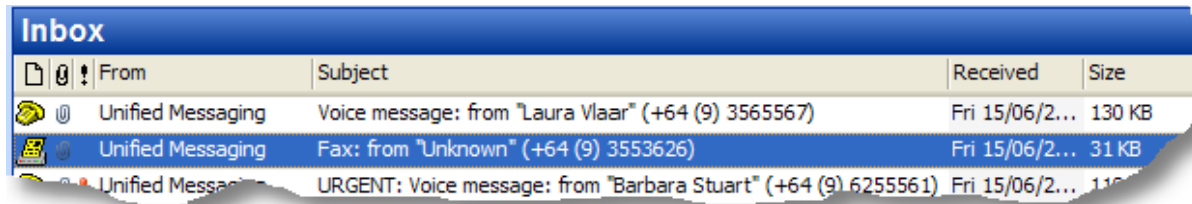


Figure 9. Console operators or permitted Desktop users can send and receive faxes, as well as viewing and distributing faxes for other mailbox owners, allowing them to centrally manage your enterprise's fax communications without leaving their desk



or requiring extra equipment.

Figure 10. Double-click on the Fax in Unified Messaging inside Outlook...

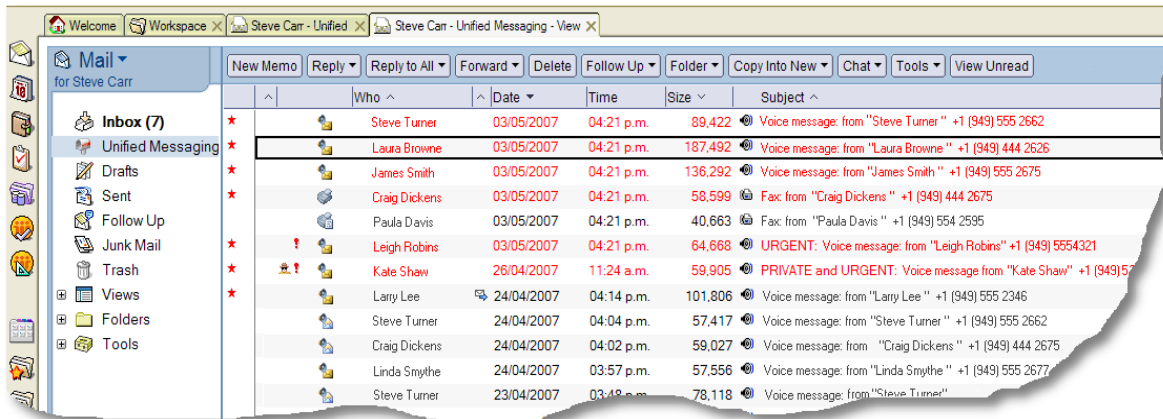


Figure 11. ... or inside Lotus Notes

Faxes appear as TIFF attachments in Microsoft Outlook. Users can use the default Microsoft Windows viewer or install a custom UCB viewer that allows them to simply double-click the fax email in their Microsoft Outlook or Lotus Notes inbox in order to display it.

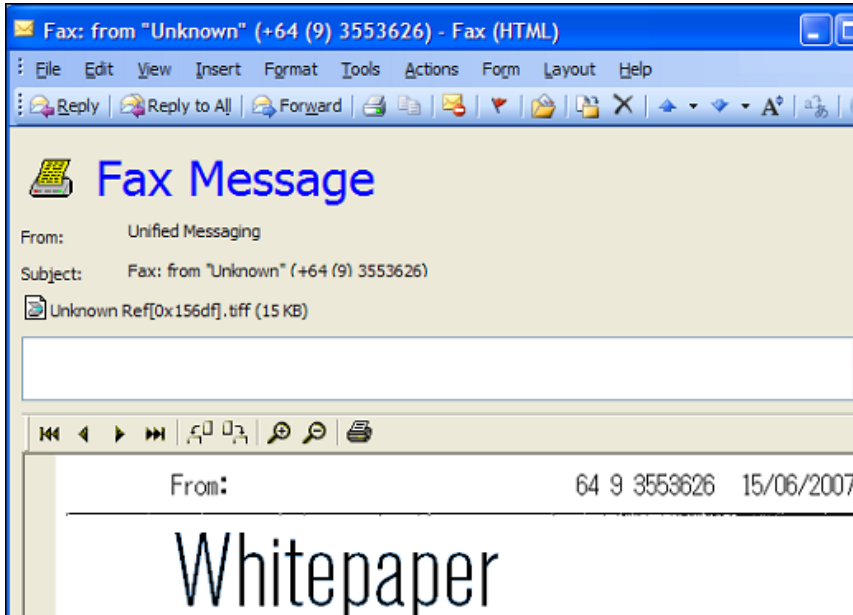


Figure 12. Faxes can be sent and received from within Outlook using Executive Insight, providing Unified Messaging.

Presence							
Calls							
Line	Caller Info	Number	Date	Time	State	Origin	Duration
Fax - Inbound							
89589	ABC Company	+1 (949) 356 5558	14/06/2007	11:50:54 a.m.	Read	Fax - Inbound	
Fax - Outbound							
89589	[no information]				a.m. Sent	Fax - Outbound	
89589	ABC Company				a.m. Sent	Fax - Outbound	
Internal							
89589	Jason Carr				a.m. Answered	Internal	0:25
89589	Steven Roberts				a.m. Answered	Internal	3:06
89589	Craig Smith				a.m. Answered	Internal	0:17
89589	Martha Browne				a.m. Missed	Internal	0:00
89589	Belinda Gilling				a.m. Missed	Internal	0:00
89589	Rochelle Ashton				a.m. Answered	Internal	0:53
89589	Callum Moore				a.m. Answered	Internal	0:28

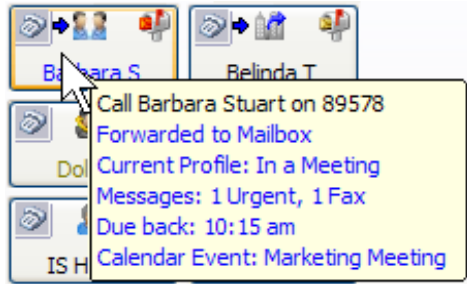


Figure 13. Fax message notification displays on Console and Desktop Presence pages. Mouse over any button to view the tooltip.

Fax Messaging “Print to Fax” (Outbound Fax)

Features

Fax Messaging allows PC users to send faxes directly from their PC.

- Using Microsoft Office Fax, PC users can send a fax simply by printing any document to the “fax printer” on their local network⁵ using the standard print option.
- Microsoft Windows 2003 Server allows a fax device located on the server to be accessible as a fax/printer device from client PCs on the network.
- Faxes are sent using the existing Messaging voice ports, so no additional hardware is required on the client PC.
- Every Fax message sent is stored in the mailbox, so every user wanting to use Fax Messaging Print to Fax must have a Voice Messaging mailbox configured.
- Users can send to a one-off destination and fax number or access Microsoft Contacts or Global Address book from the Microsoft Fax Send Fax wizard.
- The **sent fax** status is displayed in the Desktop Faxes and Recent Calls tab screens, as well

⁵ Microsoft Windows Server 2003 is required for Fax Messaging Print to Fax

as the Console Messages pane⁶, allowing Desktop and Console users to monitor the event.

- Users can view a list of faxes that have been sent, including the date and time and the result (such as ‘sent successfully’, ‘pending retry’, or ‘failed to send’).
- Users can review the content of a sent fax. Double-clicking a fax listed on the Faxes tab opens a new page that displays the body of the fax.
- Inbound and Sent fax information can be viewed in the relevant fax report.

Benefits

The ability to send a fax from the PC provides greater efficiency which inevitably results in a higher service level to customers.

- Instead of waiting until a convenient moment to leave their desk and walk to the fax machine, users can hit the print button and send it immediately.
- Typically, sending a fax is fraught with the frustrations caused by sharing the equipment, understanding the hardware, etc. With Fax Messaging Print to Fax the user has instant access, whenever it suits them, to the familiar Microsoft Windows technology that is used to send the fax.
- Sending faxes from the PC is more time efficient than the usual 3-step method of print, pick up and send fax, which often involves visiting a fax machine in another part of the office, and places security at risk.
- Even in a “paperless” environment, users can keep track of their own correspondence, printing and paper filing only as required.
- The user’s ability to review their personal sent fax traffic from Desktop speeds up any troubleshooting required with incorrect fax numbers, etc...and increases efficiency.

⁶ The Messages pane, used for distributing faxes, can also be made available to specified Desktop users

Examples

Fax Messaging Print to Fax uses familiar Microsoft Windows technology to print faxes to the network Fax printer.



Figure 14. Printing to the Fax Printer initiates the Microsoft Windows Send Fax Wizard and users simply follow the steps through to Finish to send the fax.

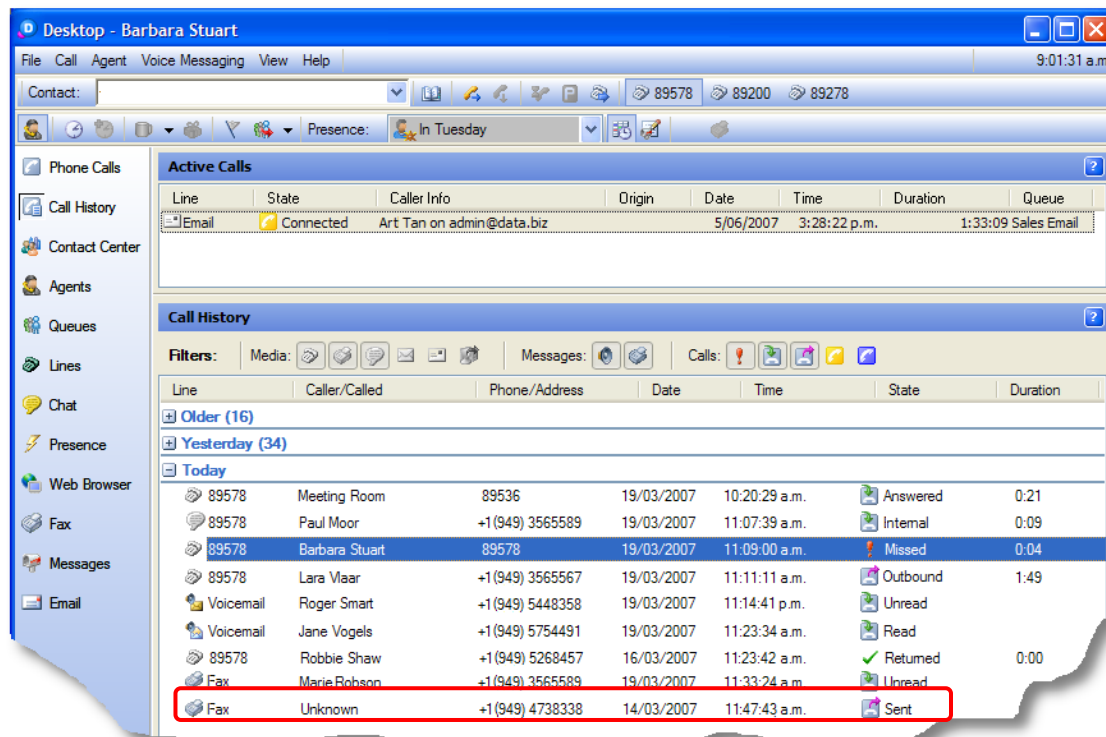


Figure 15. Sent Fax in Recent Calls view Fax transmission information such as the date, the time and the number the fax was sent to. Double-click the fax record to open or display the fax TIF file.

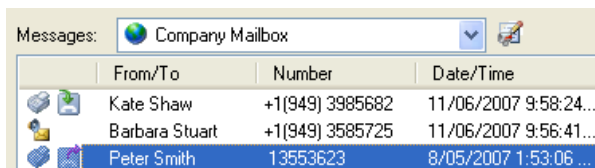


Figure 16. Sent and received faxes in Console/Desktop Messages Pane.

Reports

Features

Reports for Fax Messaging traffic are accessed from the standard UCB Reports package.

Standard reports used for Fax Messaging are...

- **Voice Messaging Usage Report** - Run this report to review fax use, and access history for all voice/fax mailboxes. This can provide a daily summary of voice mail / fax traffic for your entire system
- **System Announce Usage Report** - Run this report to view a breakdown of how the voice ports are being used. This provides a detailed record of how the voice ports were used and the types of calls and actions associated.

Specific Fax reports used for Fax Messaging are...

- **Inbound Fax Messaging Report** – Provides details on Fax Messaging faxes that are received in user mailboxes.
- **Fax Destination Report** – Provides information on faxes that were sent or received from particular customers or fax numbers. You can limit the report by Phonebook contact or CLI, to identify the volume of faxes sent or received from a specific contact.
- **Outbound Fax Messaging Report** – Provides information on outbound faxes using Fax Messaging Print to Fax option.

Benefits

The Reports application provides managers with the flexibility to report on faxes side by side with other media, as well as enabling them to identify fax activity specifically.

- Fax reports can be used for trouble shooting, e.g., identifying missing faxes.
- The site administrator can use the fax reports to review and address voice port load.
- Managers can also review potential work load issues based on fax traffic reports.

Example

Inbound Fax Messaging Report Example

Managers run fax reports from the central Reports application, controlled by standard Messaging security settings.

- 1 Number of fax pages received into the user's mailbox
- 2 The CLI details of the contact sending the fax (if available)
- 3 The name of the contact (provided CLI is available and matches a Phonebook contact)
- 4 The company name from the Phonebook record (provided CLI is available and matches a Phonebook contact)

Figure 17. Inbound Fax Report

Date	Time	Pages	CLI	Caller	Company
9578 Barbara Taylor					
5/05/2007	7:32:41	1	+1 (949) 544 3660	Joe Robinson	ABC Company
		1		1	
9/05/2007	11:05:36	1	+1 (949) 622 3600	Mary Davies	Mary Davies
		1		1	
14/05/2007	11:14:13	1	+1 (949) 522 2771	Martha Browne	Mentor Co
14/05/2007	17:56:56	1	+61 (2) 7222 8220	Callum Smythe	Callum Smythe
14/05/2007	18:02:50	1	+1 (949) 355 3600	Laura Pond	Laura Pond
		1		3	

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