ISOFAX WINCLIENT 9.0

Reference Manual

Notice

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1

INTRODUCTION

This document is the manual for IsoFax WinClient 9.0, The Bristol Group's fax solution for Microsoft® Windows®. IsoFax WinClient provides a PC, running Windows, access to all the power of The Bristol Group's fax server, IsoFax. This means that PC users can now obtain full fax capabilities for a fraction of the cost of a Windows fax software package, a fax modem, and a telephone line for each computer. In addition, IsoFax WinClient enables your system administrator to manage both PC and fax usage.

How to Use this Manual

This manual provides instructions for the installation of IsoFax WinClient and explains the different components of the software. This manual contains the following chapters:

- This chapter, *Introduction,* describes IsoFax WinClient and the organization of this manual.
- Chapter 2, *Installation*, explains how to install the IsoFax WinClient software.
- Chapter 3, *IsoFax FaxManager,* describes the IsoFax WinClient fax application that lets you compose faxes, create distribution lists, and monitor incoming and outgoing faxes.
- Chapter 4, *IsoFax FaxManager Phone Book,* describes the IsoFax WinClient fax phone book and its many features.

- Chapter 5, *IsoFax FaxGateway*, describes the IsoFax WinClient fax printer driver which allows you to send faxes from any application by printing to FaxGateway.
- Chapter 6, *The IsoPrint API*, explains the API that lets programs or macros automatically submit recipient and scheduling information to FaxGateway.
- Chapter 7, *Creating Custom Cover Sheets*, explains how to create and customize fax cover sheets.

Appendices

The appendices contain reference and troubleshooting information about IsoFax.

- Appendix A, *Troubleshooting*, provides a description of possible problems you may encounter and gives possible solutions.
- Appendix B, *IsoFax WinClient Program Files*, lists all the files that are copied to your system during installation.
- Appendix C, *Fax File Errors*, lists file error messages, with descriptions, that you might encounter.

Product Description

Structurally, IsoFax WinClient is a client of an IsoFax server that is already installed on your network system. This means that faxes sent and received by IsoFax WinClient inherit all the powerful features of the IsoFax server software. IsoFax WinClient is not a single program, but, as is customary in Windows, a suite of programs that together provide a complete array of fax services. The product features include:

- Efficient client / server network architecture
- Low per-user cost
- Print-to-fax interface
- Fax and phone book management
- Fax viewing
- Import and export of popular graphics file formats
- Automatic cover sheets on the server, and on the client
- Per-page attachment of fax files
- Delivery for incoming faxes

IsoFax WinClient Requirements

- IsoFax server for UNIX or Windows NT, Release 8.0 or greater.
- TCP / IP network software on both the PC and the server side of the network.
- A PC running the Windows 95, 98 or Windows NT 4.0 operating system.

Network Requirements

IsoFax WinClient relies on connectivity between the PC and the TCP / IP network on which the IsoFax fax server is installed. You must install the TCP / IP protocol on your Windows machine to use IsoFax WinClient.

2

INSTALLATION

When you install IsoFax WinClient, you must ensure that the correct version of the server software is installed before you install the application on your PC. For server installation instructions, see the IsoFax manual. This chapter provides instructions for installing IsoFax WinClient.

Individual PC Installation

Server-Side Setup

If your IsoFax client and server software release is 8.0 or later, you have everything you need.

The first requirement for installing IsoFax WinClient is that the IsoFax server be installed and functioning correctly.

Important: If you're installing the IsoFax server for the first time, do not attempt to install IsoFax WinClient until you have the IsoFax server completely installed and are satisfied with the results.

Once the fax server has been installed, perform the following tasks:

1. Make certain that the TCP/IP network software is successfully installed on both the PC and the server-sides of the network. If you have installed the TCP/IP protocol on your machine but still are unsure if it is running correctly, use the telnet or ftp programs to verify a network connection. See Appendix A, *Troubleshooting* for information on how to do this.

   The IsoFax WinClient Fax Network Agent test dialog will help you with IsoFax Server setup issues, but will not help with basic network service availablity.

2. You need at least a temporary license to run IsoFax WinClient. Verify that you have the licenses necessary to run IsoFax WinClient by running the server program *license_info*, which should reveal a line containing the phrase "*nnn* isofaxwin licenses," where *nnn* is a number from 1-999 indicating how many *isofaxwin* licenses you have. Alternatively you may have a *winbridge* license that permits anybody running WinClient to use a floating *faxclient* license. If you have a *winbridge* license, you have everything you need, and you need go no further in these instructions.

3. Unless you have a *winbridge* license, edit the *USER_LIST.info* file located in the server's ISOFAXHOME directory. Edit *USER_LIST.info* carefully—it contains information for other purposes besides IsoFax WinClient. For each WinClient user, create a `[user]` record such as this one:

   ```
   [joec]
         winclient     = true
         human_name    = Joe Cavanaugh
         email_address = joec@yours.com
   ```

   The `[user]` record consists of the user-name, surrounded by square brackets, followed by multiple attribute value pairs. The `winclient = true` authorizes you to use a WinClient license. The name inside the brackets must correspond *exactly* with the name entered in the IsoFax Required Settings window.

There may be an unlimited number of entries in the *USER_LIST.info file*, but the actual number of users is limited at run-time to the first *n* users, where *n* is the number of "isofaxwin" licenses you found in step 2 above. Licenses are issued according to the "depth" of your `[user]` record in *USER_LIST.info* file; that is, the eleventh `[user]` will never obtain a license if only ten "isofaxwin" licenses have been purchased. Kill and then restart the license server, *blserver*.

Requirements

The Windows portion of the IsoFax WinClient software is distributed on CDROM. Before starting installation, you should obtain the following information from your IsoFax administrator:

- The name of the computer running the fax server software, *faxd*
- The name of the computer running the license server software, *blserver*
- The IsoFax user name that you have been authorized to use; this must correspond to your [user] entry in *USER_LIST.info*

Windows Setup

To install IsoFax WinClient on your machine go to the directory on the CDROM or network drive where your system administrator has copied the setup files. Run the setup.exe program, and follow the setup wizard instructions.

Network Install

When you have multiple pc's where you wish to install WinClient it might be advisable to do a network install. There are multiple ways to do this, two of which are described here.

Share the setup directory

The easiest way to do this is you can allow each person using their workstation to install the software from a shared network setup directory. Do the following steps to do a shared directory install:

1. Copy all the files from the \client directory on the CDROM to a directory on the network which can be accessed by all users who would like to install WinClient.

2. If you are using ‘isofaxwin’ licenses enter all the users' names in the *USER_LIST.info* file. WinClient setup will use the login name by default when the user runs the setup.exe program.

3. Post a message to all the users authorized to use WinClient notifying them of the location of the setup directory and the fax server and license server.

4. Each user should run the setup.exe program located in the shared directory on the server.

Use a setup response file

Another method of network installation is to create a setup response file. The response file tells the WinClient what settings to use automatically without requiring any input from the user. This is called a ‘silent setup.’ A fully commented response file is provided on the distribution CD. Following are the steps to use this method of network install:

1. Create a response file. You can use the response file provided, or create your own. To create your own, run the setup.exe with the following command line parameters: ‘setup.exe /r’. This creates a response file in the Windows directory. The name of the response file is setup.iss. A fully documented response file can be found in the distribution CD.

2. Using this response file you can now run silent setups on machines where you want to install WinClient. To run a silent setup put the setup.iss file in the same directory as the setup.exe file, and run the following command: setup.exe /i. No user interface will come up. To verify that the setup succeeded check the setup.log file for errors.

3

ISOFAX FAXMANAGER

IsoFax FaxManager is the fax application that lets you compose a fax free-style from existing fax images. In addition, you can manage the phone book and distribution lists, and monitor incoming and outgoing fax activity.

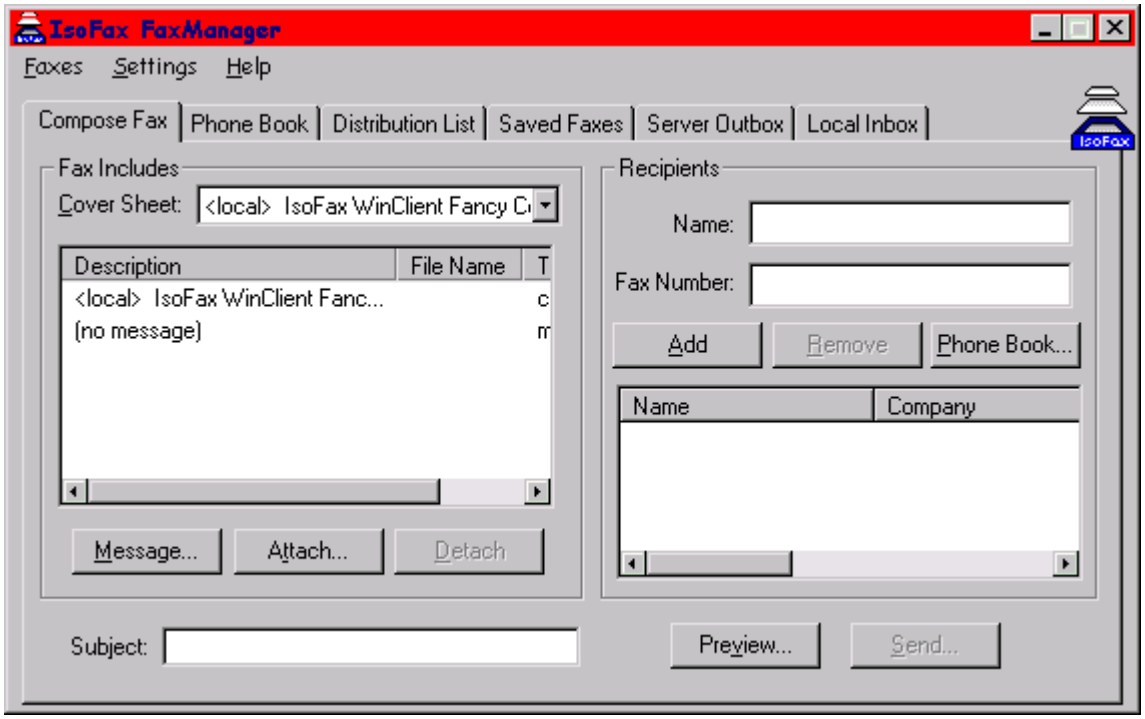
The IsoFax FaxManager window offers six functions. Each function is represented graphically as a folder tab on the window:

- The **Compose Fax** tab to create and send faxes.
- The **Phone Book** tab to manage your phone book by adding, modifying, and deleting entries. Described in more detail in Chapter 4.
- The **Distribution Lists** tab to manage distribution lists, which lets you group individuals in your phone book into aggregate entries. Described in more detail in Chapter 4.
- The **Saved Faxes** tab to list and view saved faxes.
- The **Server Outbox** tab to see the status of the faxes you have submitted to the fax server.
- The **Local Inbox** tab to view received faxes.

Click a tab to select it.

The Compose Fax Tab

You use the fields on the Compose Fax tab, shown below, to build a fax by specifying its contents. The Recipients section of the Compose tab lets you specify a single addressee. You can go to the Phone Book or Distribution List tab to retrieve other recipients. The list of individuals you have selected to receive your fax appears in the Recipients list box, along with their company, phone number and other information.



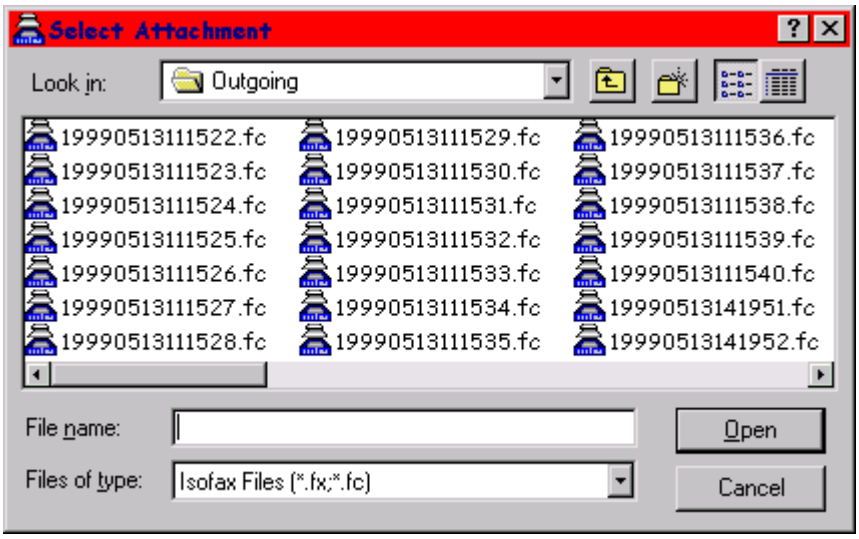
Below is a brief description of each field and button on the tab.

Field/Button	Description
Cover Sheet	IsoFax WinClient is shipped with two ready-to-use local cover sheets that you can select from in this drop-down list. These cover sheets are named Fancy and Regular. You can easily create additional custom cover sheets, as described in Chapter 7, *Creating Custom Cover Sheets*. Server cover sheets are installed and maintained by your system administrator.

Field/Button	Description
Subject	The subject of the fax exactly as you wish it to appear on the cover sheet and in the Fax Lists.
Message...	Click this button to include a brief message in addition to the cover sheet and attachments. If you select the Fancy cover sheet, the message starts on the bottom of the cover sheet; if you select Regular cover sheet, the message starts on the page following the cover sheet.
Attach...	Click this button to select files to attach to the fax. The FaxManager Attachment Select window, where you can select files or individual pages to attach, appears.
Detach	Click this button to delete files from the attachment list.
Name	This field allows you to manually enter a recipient name. You can enter a name here and add it to the Recipients list by clicking the Add button.
Fax Number	This field allows you to manually enter a fax number to go along with the recipient name that you entered above.
Add	This button adds the name and number you entered in the Name and Number fields to the Recipients list.
Remove	Click this button to remove the currently selected entry from the Recipient list.
Phone Book...	Clicking this button takes you directly to the Phone Book tab where you can select individuals and add them to the recipient list.
Preview...	This button composes the current fax and opens it in a viewer.
Send...	Click this button to send your fax.

To Add Attachments

1. At the Compose tab, click the Attach… button. The FaxManager Select Attachment window, shown below, appears.



2. In the list, select the file you want to attach or type in the name of the file in the File Name field.

3. Click Open. This places the file you selected into the attachments list.

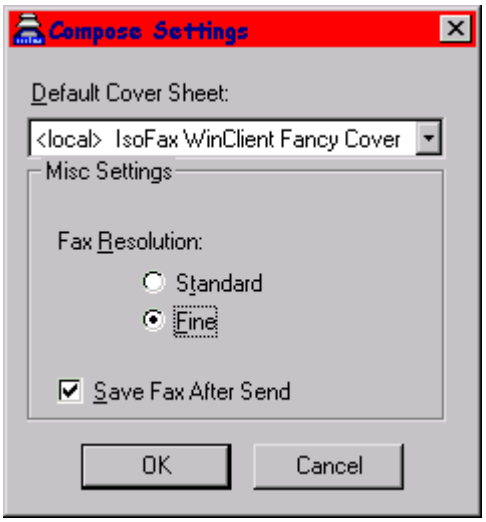
To Remove Attachments

1. At the Compose tab, in the **Fax Includes** box, select the attachment you want to remove by clicking it.

1. Click the **Detach** button.

The Compose Settings Window

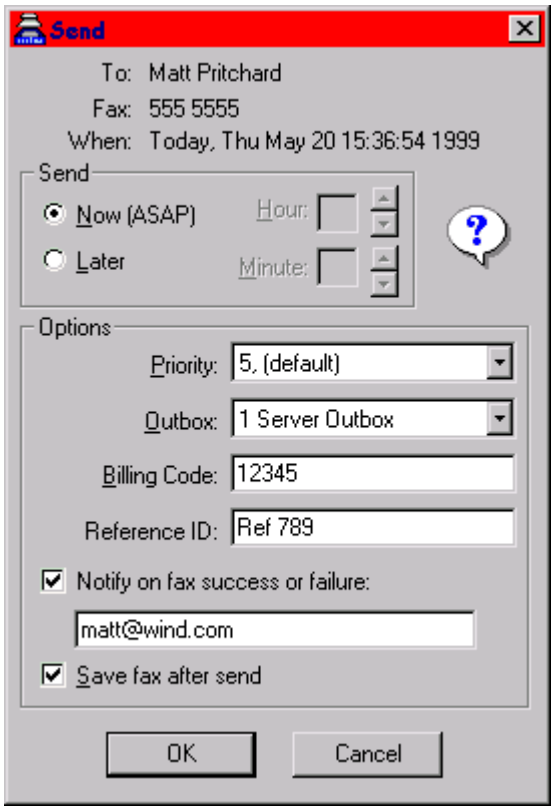
You can use the Compose Settings window, shown below, to select a default cover sheet and to choose the resolution at which new faxes are created.



The **Default Cover Sheet** drop-down list lets you select a default cover sheet. You can select a local cover sheet (*<local>)* or a server cover sheet (*<server>)*. Server cover sheets are installed and maintained by your system administrator. Refer to the *System Administration* chapter of the IsoFax server manual for details.

If you want IsoFax WinClient to automatically save your faxes after successful transmission, check the **Save Fax After Send** box. If you check this box, your faxes are retained in the Local Fax directory.

The Send Window



After filling in the necessary information on the Compose Fax tab—recipient, attachment(s), and cover sheet—you are ready to send your fax. When you click the Send button, the Send window, shown below, appears.

Below is a brief description of the components of this window.

Field/Button	Description
Now (ASAP)	Click **Now** to send the fax as soon as possible (ASAP). The actual time of transmission depends upon how busy the fax server is at the moment.
Later	Click **Later** to send the fax in the future.
Hour/Minute	If you choose to send your fax at a later time, you must click the Later button, and define a time in

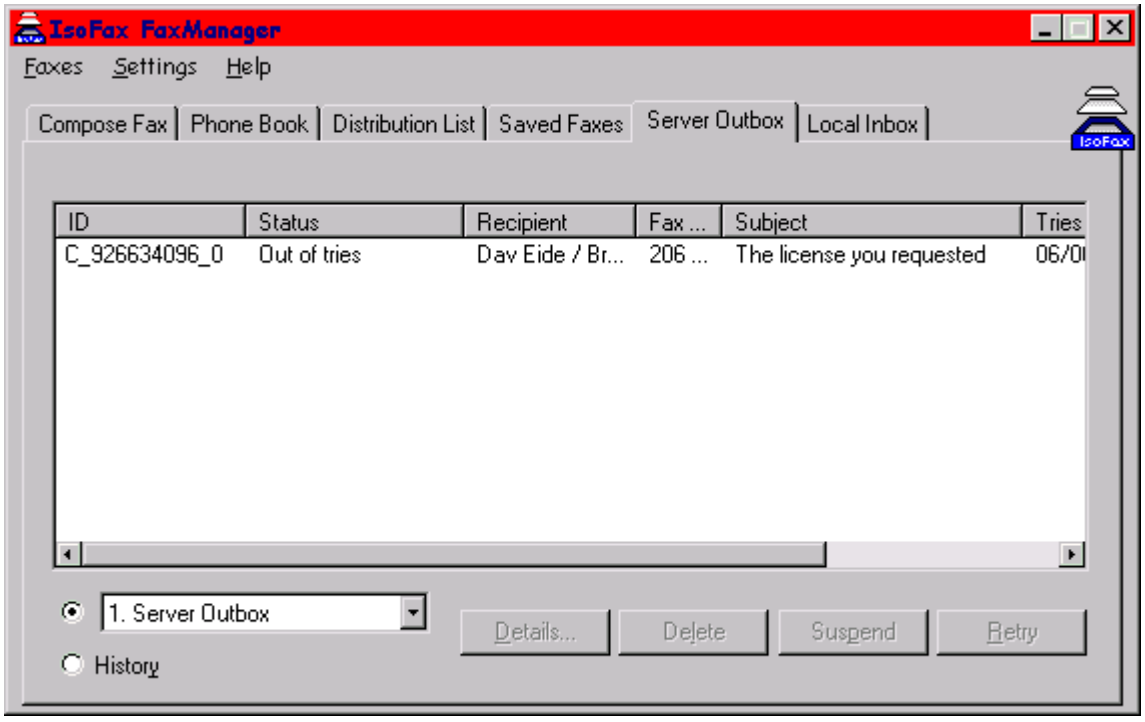
Field/Button	Description
	the **Hour** and **Minute** boxes.
Priority	A drop-down list from which you can select a priority. Smaller numbers have higher priority (one is highest). You may discover that you are unable to change this to a more favorable number, because the range of permitted values is controlled by the system administrator. Refer to "Overriding Client Settings" in the *IsoFax Administration* chapter of the IsoFax manual.
Outbox	A drop-down list from which you can select a specific fax queue to which you want to submit this fax. The choices in this drop-down list are controlled by the system administrator. Refer to "Overriding Client Settings" in the *IsoFax Administration* chapter of the IsoFax manual.
Billing Code	Defines the billing code. You set the default for this field in the Personal Info window that you can access from the Settings menu. The default can also be controlled by the system administrator. Refer to "Overriding Client Settings" in the *IsoFax Administration* chapter of the IsoFax manual.
Reference ID	This identification field lets you enter a personal reference number or phrase that will appear on your cover sheet.
Notify on fax success or failure	Check this box to receive an email message about the success or failure of the fax. Provide the email address in the box below the check box. You set the default for this field in the Personal Info windows from the Settings menu.
Save fax after send	Check this box if you want the system to automatically save your faxes after successful transmission. A change entered here affects only this fax. You set the default for this field in the Compose Settings window.

The Saved Faxes Tab

Whenever you send a fax, you can save a local copy of the fax after it has been sent to the fax server. The Saved Faxes tab lets you view these saved faxes. The body of a saved fax has the extension ".fx" while the cover sheet is ".fc." The **Other Fax Directory** radio button lets you view faxes in the directories you have entered in the Other Fax Directories window which you can access from the Settings menu.

The Server Outbox Tab

You can monitor the progress of active faxes you have submitted to the server for transmission using the Server Outbox tab. You can also view your fax history, a record of the faxes you have sent in the recent past.

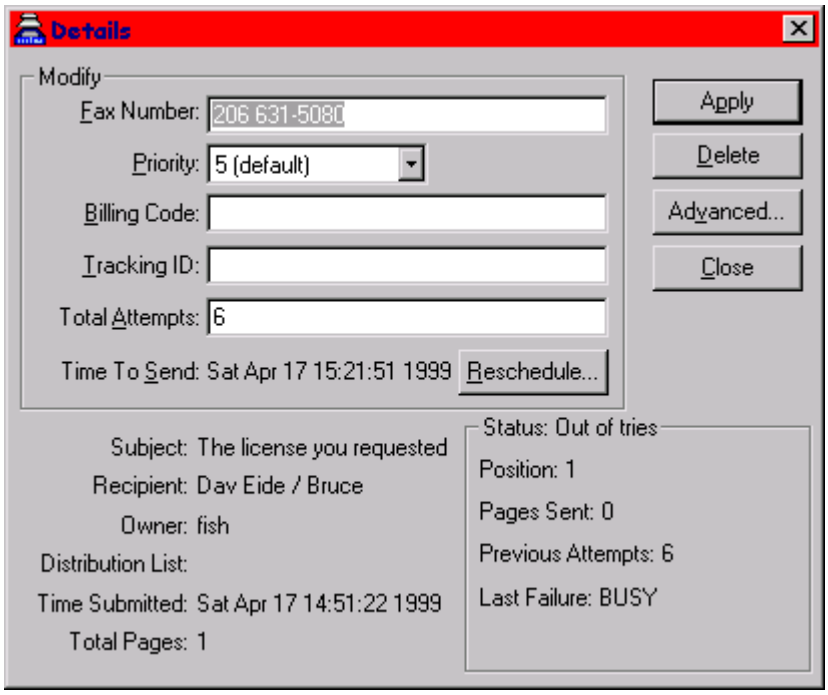


Below is a brief description of the fields and buttons on the tab.

Field/Button	Description
ID	A unique identifier given to the fax.
Status	Shows the status of the fax in the queue.

Field/Button	Description
Recipient	Shows the recipient of the fax.
Fax Number	Shows the number to which the fax was sent.
Subject	Shows the subject as it appeared on the cover sheet.
Tries	Shows the number of attempts so far and the maximum number of times the system will try to send the fax.
Details	Lets you change particular details for a fax.
Delete	Deletes the fax from the queue, but preserves the information about the fax in history.
Suspend	Suspends the fax; to un-suspend a fax, you must click the Retry button.
Retry	For faxes that are out of tries (or suspended) clicking this button adds another retry and schedules it for immediate transmission.

The Details Window



The Details window displays all known information about a fax. Only the information in the Modify section can be edited to affect the next attempt to send the fax. The most common use of the details screen is to correct a phone number. Other uses are also possible; for example, if a fax has run out of tries because of a perpetual busy signal, you can increase the total attempts and use the Reschedule feature to set the next attempt for an off-peak time.

What to Do with a "Dead" Fax

A fax is declared "dead" in the Server Outbox if it has some flaw that renders further attempts to send it futile. To see the reason for the failure, click the Details button and check the Status section of the Details window, shown on the previous page. If the **Last Failure** is an error you can correct (such as an invalid phone number), make the correction and reschedule. If you cannot correct the failure (such as a corrupted or missing fax file), delete the fax from the queue and try again.

Faxes with Shortened Retries

You may sometimes notice that a fax has an "Out of tries" status and that the maximum number of attempts is inexplicably set to two. If you examine the **Last Failure** on the Details window, you will doubtless discover that the fax failed because there was no answer or no carrier; in other words, a fax machine did not answer. Since the likelihood of successfully resending such faxes is low, this condition is dealt with heuristically by the fax server and is controlled by the dynamic server variable RETRY_NONFAX_CALLS. Refer to the *Server Configuration* chapter in the IsoFax manual for details.

Viewing the History Log

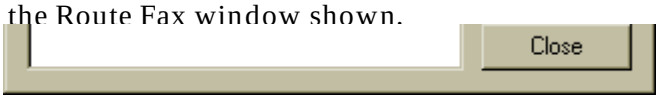
At the Server Outbox tab, you can click the History radio button to see information about faxes that are still in the history logs. The window, shown below, is almost identical to the Server Outbox. You can view details about your recent faxes, but you cannot change them.

The History view shows successfully sent faxes, faxes canceled by the user, and faxes automatically deleted by the server. Faxes that have been automatically deleted by the fax server retain their status at the time of deletion, while faxes deleted by the user have a status of "Canceled by User." To see why a fax was not sent, select it and click the Details button. (For more information about the DELETE_AFTER dynamic server variable, refer to the *Server Configuration* chapter in the IsoFax manual.)

Routing Incoming Faxes

IsoFax uses a mechanism, referred to as "forwarding," for distributing received faxes from the server's *incoming* directory to the ultimate recipient. The *designated forwarder* is a trusted person who is allowed to view every incoming fax and route it to its ultimate recipient.

To learn how to define a user as a designated forwarder, see the *Designated Forwarder* chapter in the IsoFax manual. If you are a designated forwarder, you can choose Route from the Faxes menu to access the Route Fax window shown.



The top part of the window shows all the faxes in the server's incoming directory, with the sender's identifier (usually a phone number), the date the fax arrived, and the number of pages contained in the fax. You can double-click a fax in this list to open it in the FaxReader.

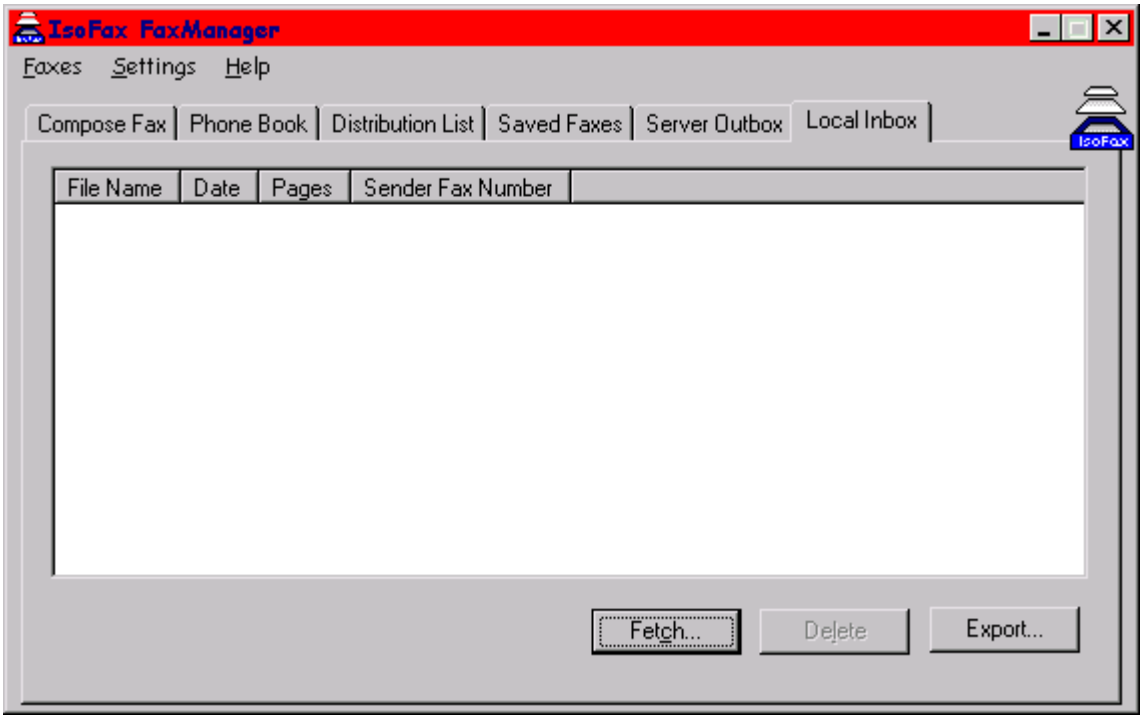
To route a fax, select one or more recipients in the Users list box and click the Deliver button. The system will deliver the fax according to the *delivery_method* given in the users' records in the *USER_LIST.info* file. If you do not know who the fax should be routed to, click the Discard button to deliver the fax to the administrator.

Obtaining Delivered Faxes

When incoming faxes are available, the fax button in the upper-right portion of the IsoFax FaxManager window changes to indicate that a fax has been routed to you. When you click this button, the focus of the window changes to the Local Inbox tab.

Note: If FaxManager is iconized on your desktop, its icon also changes.

The Local Inbox Tab



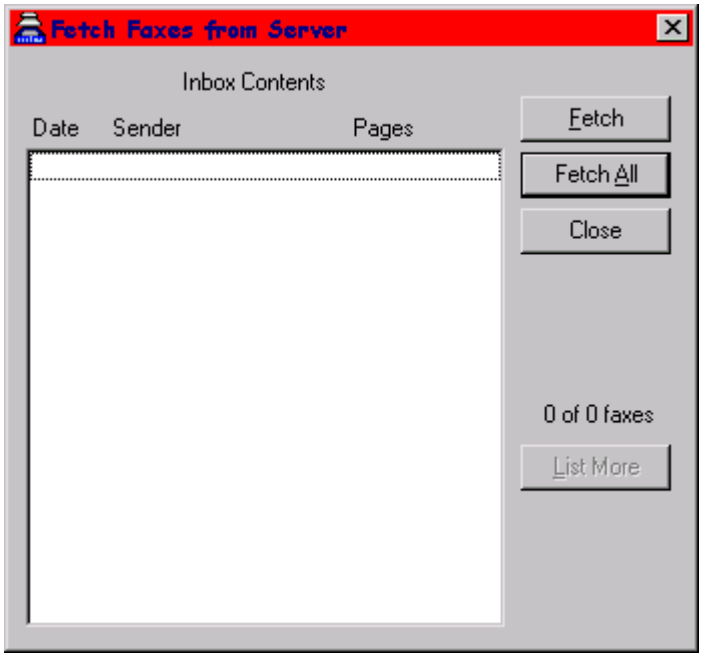
The Local Inbox tab, shown below, lists the faxes that have been delivered to you by the designated forwarder. Note that while the faxes shown in the Server Outbox tab exist on the server, the Local Inbox faxes actually reside on your computer.

Turning Off Auto-Fetching

The Network Settings window contains an Auto Fetch Faxes check box. By default, this box is checked, which causes immediate delivery of your faxes from the server to your PC's local inbox. Because these faxes must be delivered and transferred in a single, uninterrupted operation, your computer can unexpectedly slow down or even appear to freeze momentarily during the transfer.

If you clear the Auto Fetch Faxes check box, you must manually fetch the faxes from the server at your convenience. This means that when FaxManager's icon indicates that there are faxes for you, you must fetch them from the server before you can view them.

To Fetch Faxes Manually



1. Click the Fetch button on the Local Inbox tab.
   The Fetch Faxes from Server window appears.

2. This window shows how many faxes are waiting for you on the server, the phone numbers (or other id) of the senders, and the number of pages in each fax.

3. To fetch a specific fax, select it in the Inbox Contents list box and click the Fetch button.

   To fetch all incoming faxes, click the Fetch All button.
   The system moves the fax(es) to your local inbox.

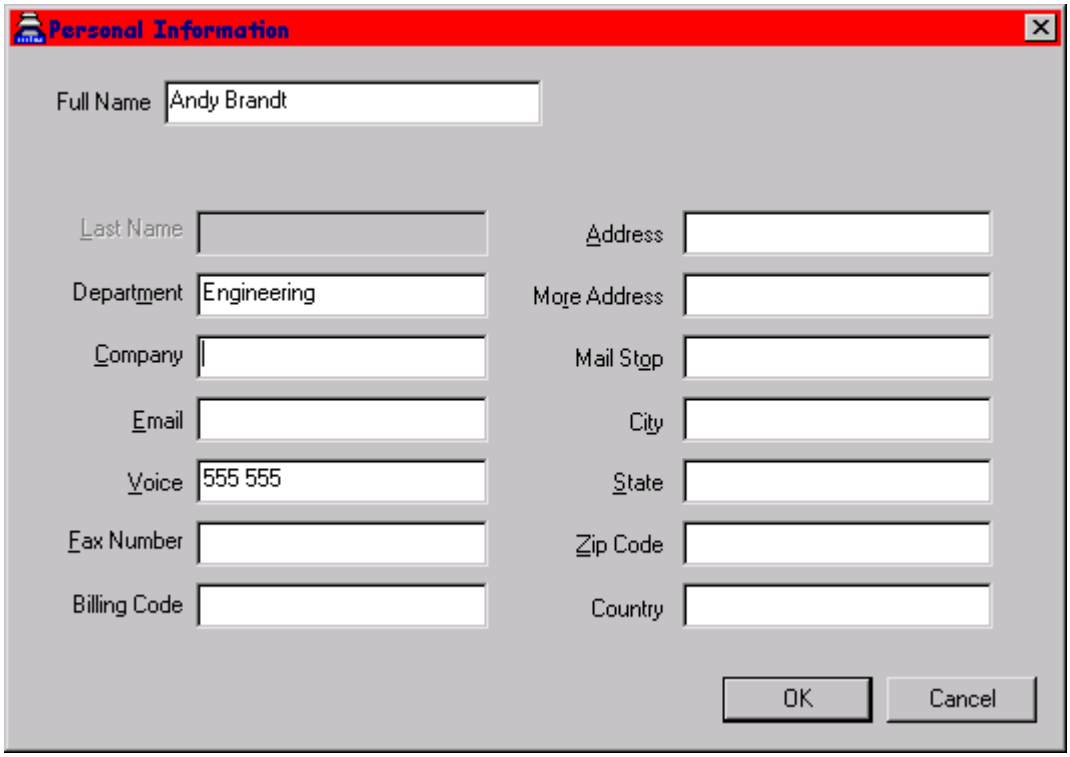
4. Click the Close button. The Local Inbox tab appears.

The Settings Menu

Most of the options in the Settings menu are described in the sections of the tabs they govern. However, some of these items are general-purpose and therefore require separate discussion.

The Personal Information Window

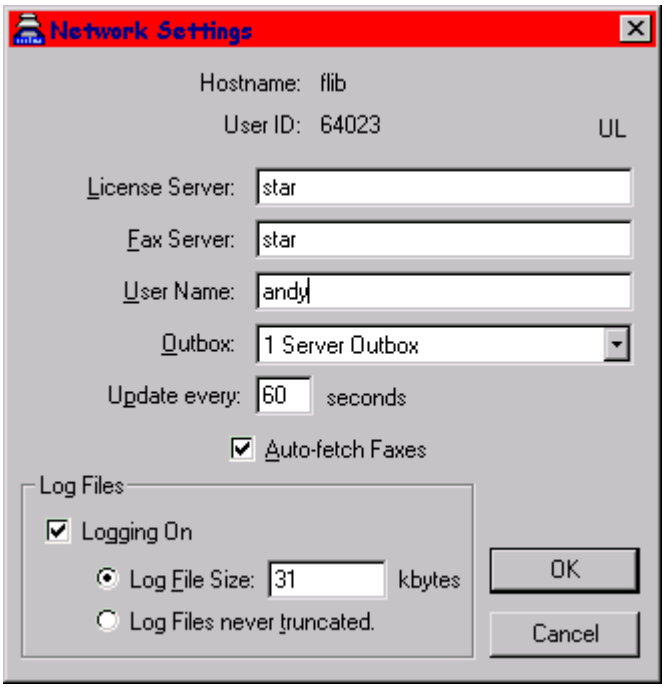
You access the Personal Information window, shown below, by choosing Personal Information from the Settings menu. You use this window to define information that can appear on cover sheets,



collateral information for tracking faxes, and email notification.

The Network Settings Window

You access the Network Settings window, shown below, by choosing Network from the Settings menu. Use this window to define your network preferences.



Below is a brief description of the components of the window. Note that if you do not know which information to enter in any of the fields described below, you should consult your IsoFax administrator.

Field/Button	Description
License Server	The name of the computer on which the IsoFax license server (*blserver*) is running.
Fax Server	The name of the computer on which the IsoFax fax server (*faxd*) is running.
User Name	The *exact* name entered for you by your system administrator in the file *USER_LIST.info* discussed earlier. This name does not have to match your network user id.
Outbox	A drop-down list that contains the names of the server outboxes (server fax queues) available to you.
Update Every	Defines how often FaxManager should request

Field/Button	Description
	an update of the contents of the fax queue or the inbox. Setting this value too low produces excessive network traffic and hence a potential slowdown of your computer's performance. For this reason, the system administrator may wish to place a maximum on this value. Refer to "Overriding Client Settings" in the *IsoFax Administration* chapter of the IsoFax manual.
Auto-fetch faxes	Indicates that faxes located in your server inbox are transferred to your PC as they arrive.
Logging On	If this button is checked then two log files are created in your `\Windows` directory (isonet.log and license.log). These files are useful to track down network and/or licensing problems.

4

ISOFAX FAXMANAGER

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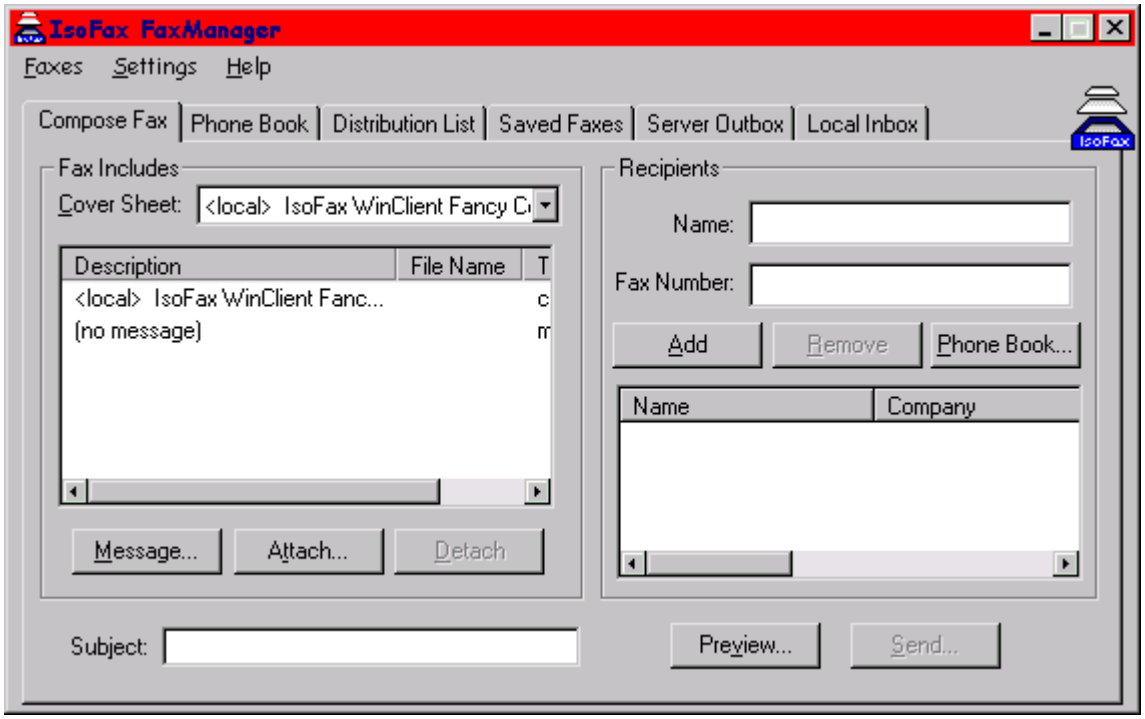
The Compose Fax Tab

You use the fields on the Compose Fax tab, shown below, to build a fax by specifying its contents. The Recipients section of the Compose tab lets you specify a single addressee. You can go to the Phone Book or Distribution List tab to retrieve other recipients. The list of individuals you have selected to receive your fax appears in the Recipients list box, along with their company, phone number and other information.



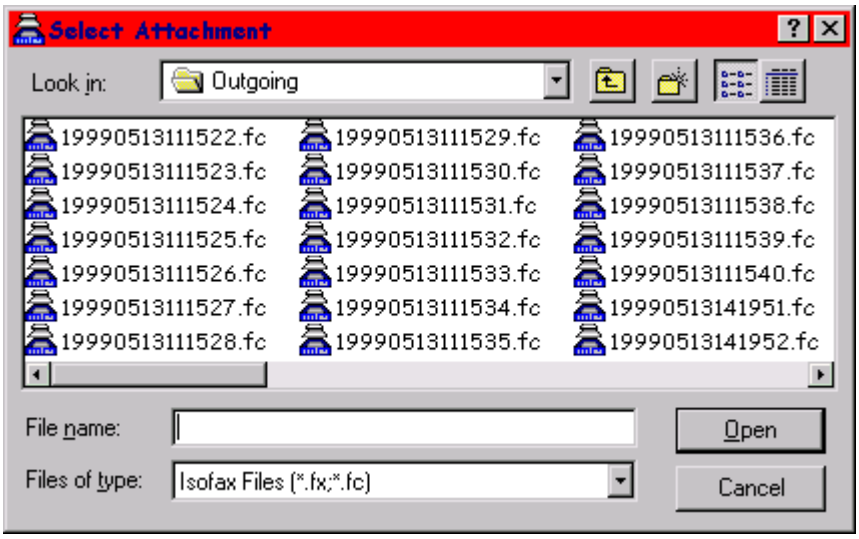
Below is a brief description of each field and button on the tab.

Field/Button	Description
Cover Sheet	IsoFax WinClient is shipped with two ready-to-use local cover sheets that you can select from in this drop-down list. These cover sheets are named Fancy and Regular. You can easily create additional custom cover sheets, as described in Chapter 7, *Creating Custom Cover Sheets*. Server cover sheets are installed and maintained by your system administrator.

Field/Button	Description
Subject	The subject of the fax exactly as you wish it to appear on the cover sheet and in the Fax Lists.
Message...	Click this button to include a brief message in addition to the cover sheet and attachments. If you select the Fancy cover sheet, the message starts on the bottom of the cover sheet; if you select Regular cover sheet, the message starts on the page following the cover sheet.
Attach...	Click this button to select files to attach to the fax. The FaxManager Attachment Select window, where you can select files or individual pages to attach, appears.
Detach	Click this button to delete files from the attachment list.
Name	This field allows you to manually enter a recipient name. You can enter a name here and add it to the Recipients list by clicking the Add button.
Fax Number	This field allows you to manually enter a fax number to go along with the recipient name that you entered above.
Add	This button adds the name and number you entered in the Name and Number fields to the Recipients list.
Remove	Click this button to remove the currently selected entry from the Recipient list.
Phone Book...	Clicking this button takes you directly to the Phone Book tab where you can select individuals and add them to the recipient list.
Preview...	This button composes the current fax and opens it in a viewer.
Send...	Click this button to send your fax.

To Add Attachments

4. At the Compose tab, click the Attach… button. The FaxManager Select Attachment window, shown below, appears.



5. In the list, select the file you want to attach or type in the name of the file in the File Name field.

6. Click Open. This places the file you selected into the attachments list.

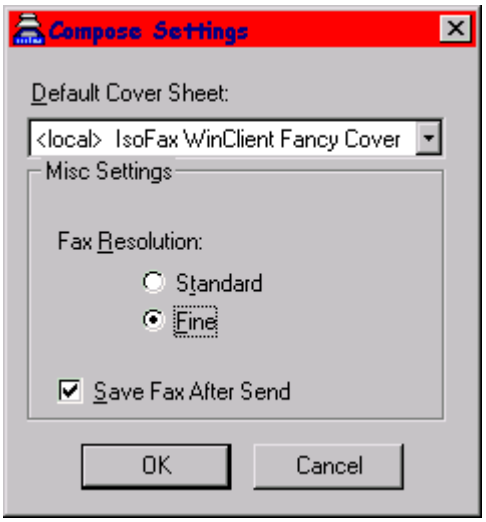
To Remove Attachments

2. At the Compose tab, in the **Fax Includes** box, select the attachment you want to remove by clicking it.

2. Click the **Detach** button.

The Compose Settings Window

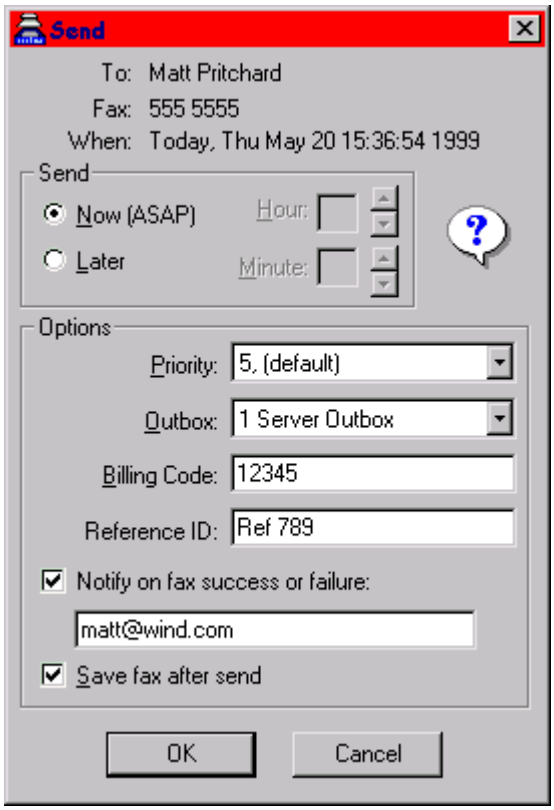
You can use the Compose Settings window, shown below, to select a default cover sheet and to choose the resolution at which new faxes are created.



The **Default Cover Sheet** drop-down list lets you select a default cover sheet. You can select a local cover sheet (*<local>)* or a server cover sheet (*<server>)*. Server cover sheets are installed and maintained by your system administrator. Refer to the *System Administration* chapter of the IsoFax server manual for details.

If you want IsoFax WinClient to automatically save your faxes after successful transmission, check the **Save Fax After Send** box. If you check this box, your faxes are retained in the Local Fax directory.

The Send Window



After filling in the necessary information on the Compose Fax tab—recipient, attachment(s), and cover sheet—you are ready to send your fax. When you click the Send button, the Send window, shown below, appears.

Below is a brief description of the components of this window.

Field/Button	Description
Now (ASAP)	Click **Now** to send the fax as soon as possible (ASAP). The actual time of transmission depends upon how busy the fax server is at the moment.
Later	Click **Later** to send the fax in the future.
Hour/Minute	If you choose to send your fax at a later time, you must click the Later button, and define a time in

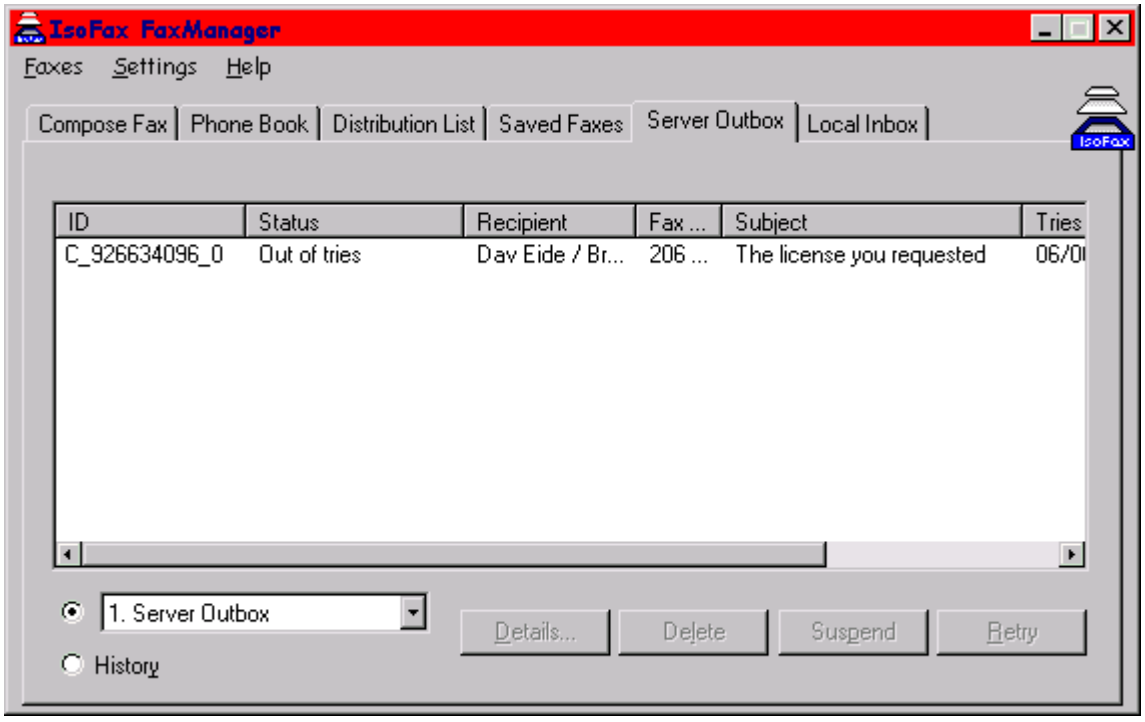
Field/Button	Description
	the **Hour** and **Minute** boxes.
Priority	A drop-down list from which you can select a priority. Smaller numbers have higher priority (one is highest). You may discover that you are unable to change this to a more favorable number, because the range of permitted values is controlled by the system administrator. Refer to "Overriding Client Settings" in the *IsoFax Administration* chapter of the IsoFax manual.
Outbox	A drop-down list from which you can select a specific fax queue to which you want to submit this fax. The choices in this drop-down list are controlled by the system administrator. Refer to "Overriding Client Settings" in the *IsoFax Administration* chapter of the IsoFax manual.
Billing Code	Defines the billing code. You set the default for this field in the Personal Info window that you can access from the Settings menu. The default can also be controlled by the system administrator. Refer to "Overriding Client Settings" in the *IsoFax Administration* chapter of the IsoFax manual.
Reference ID	This identification field lets you enter a personal reference number or phrase that will appear on your cover sheet.
Notify on fax success or failure	Check this box to receive an email message about the success or failure of the fax. Provide the email address in the box below the check box. You set the default for this field in the Personal Info windows from the Settings menu.
Save fax after send	Check this box if you want the system to automatically save your faxes after successful transmission. A change entered here affects only this fax. You set the default for this field in the Compose Settings window.

The Saved Faxes Tab

Whenever you send a fax, you can save a local copy of the fax after it has been sent to the fax server. The Saved Faxes tab lets you view these saved faxes. The body of a saved fax has the extension ".fx" while the cover sheet is ".fc." The **Other Fax Directory** radio button lets you view faxes in the directories you have entered in the Other Fax Directories window which you can access from the Settings menu.

The Server Outbox Tab

You can monitor the progress of active faxes you have submitted to the server for transmission using the Server Outbox tab. You can also view your fax history, a record of the faxes you have sent in the recent past.

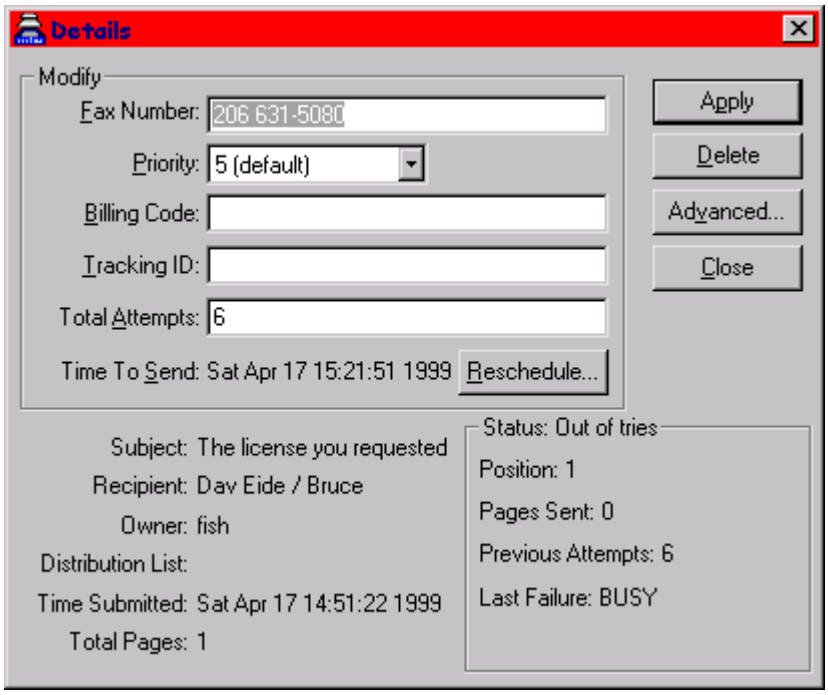


Below is a brief description of the fields and buttons on the tab.

Field/Button	Description
ID	A unique identifier given to the fax.
Status	Shows the status of the fax in the queue.

Field/Button	Description
Recipient	Shows the recipient of the fax.
Fax Number	Shows the number to which the fax was sent.
Subject	Shows the subject as it appeared on the cover sheet.
Tries	Shows the number of attempts so far and the maximum number of times the system will try to send the fax.
Details	Lets you change particular details for a fax.
Delete	Deletes the fax from the queue, but preserves the information about the fax in history.
Suspend	Suspends the fax; to un-suspend a fax, you must click the Retry button.
Retry	For faxes that are out of tries (or suspended) clicking this button adds another retry and schedules it for immediate transmission.

The Details Window



The Details window displays all known information about a fax. Only the information in the Modify section can be edited to affect the next attempt to send the fax. The most common use of the details screen is to correct a phone number. Other uses are also possible; for example, if a fax has run out of tries because of a perpetual busy signal, you can increase the total attempts and use the Reschedule feature to set the next attempt for an off-peak time.

What to Do with a "Dead" Fax

A fax is declared "dead" in the Server Outbox if it has some flaw that renders further attempts to send it futile. To see the reason for the failure, click the Details button and check the Status section of the Details window, shown on the previous page. If the **Last Failure** is an error you can correct (such as an invalid phone number), make the correction and reschedule. If you cannot correct the failure (such as a corrupted or missing fax file), delete the fax from the queue and try again.

Faxes with Shortened Retries

You may sometimes notice that a fax has an "Out of tries" status and that the maximum number of attempts is inexplicably set to two. If you examine the **Last Failure** on the Details window, you will doubtless discover that the fax failed because there was no answer or no carrier; in other words, a fax machine did not answer. Since the likelihood of successfully resending such faxes is low, this condition is dealt with heuristically by the fax server and is controlled by the dynamic server variable RETRY_NONFAX_CALLS. Refer to the *Server Configuration* chapter in the IsoFax manual for details.

Viewing the History Log

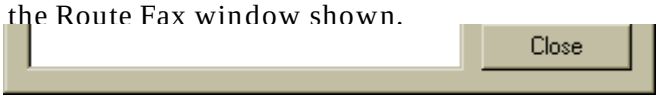
At the Server Outbox tab, you can click the History radio button to see information about faxes that are still in the history logs. The window, shown below, is almost identical to the Server Outbox. You can view details about your recent faxes, but you cannot change them.

The History view shows successfully sent faxes, faxes canceled by the user, and faxes automatically deleted by the server. Faxes that have been automatically deleted by the fax server retain their status at the time of deletion, while faxes deleted by the user have a status of "Canceled by User." To see why a fax was not sent, select it and click the Details button. (For more information about the DELETE_AFTER dynamic server variable, refer to the *Server Configuration* chapter in the IsoFax manual.)

Routing Incoming Faxes

IsoFax uses a mechanism, referred to as "forwarding," for distributing received faxes from the server's *incoming* directory to the ultimate recipient. The *designated forwarder* is a trusted person who is allowed to view every incoming fax and route it to its ultimate recipient.

To learn how to define a user as a designated forwarder, see the *Designated Forwarder* chapter in the IsoFax manual. If you are a designated forwarder, you can choose Route from the Faxes menu to access the Route Fax window shown.



The top part of the window shows all the faxes in the server's incoming directory, with the sender's identifier (usually a phone number), the date the fax arrived, and the number of pages contained in the fax. You can double-click a fax in this list to open it in the FaxReader.

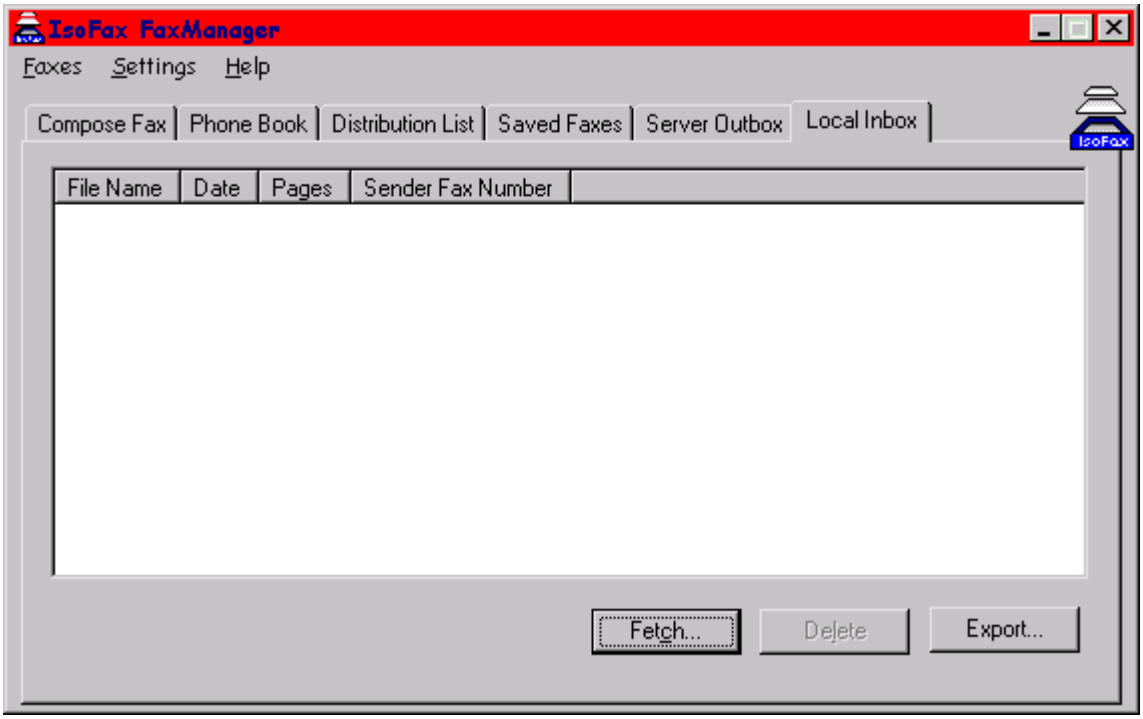
To route a fax, select one or more recipients in the Users list box and click the Deliver button. The system will deliver the fax according to the *delivery_method* given in the users' records in the *USER_LIST.info* file. If you do not know who the fax should be routed to, click the Discard button to deliver the fax to the administrator.

Obtaining Delivered Faxes

When incoming faxes are available, the fax button in the upper-right portion of the IsoFax FaxManager window changes to indicate that a fax has been routed to you. When you click this button, the focus of the window changes to the Local Inbox tab.

Note: If FaxManager is iconized on your desktop, its icon also changes.

The Local Inbox Tab



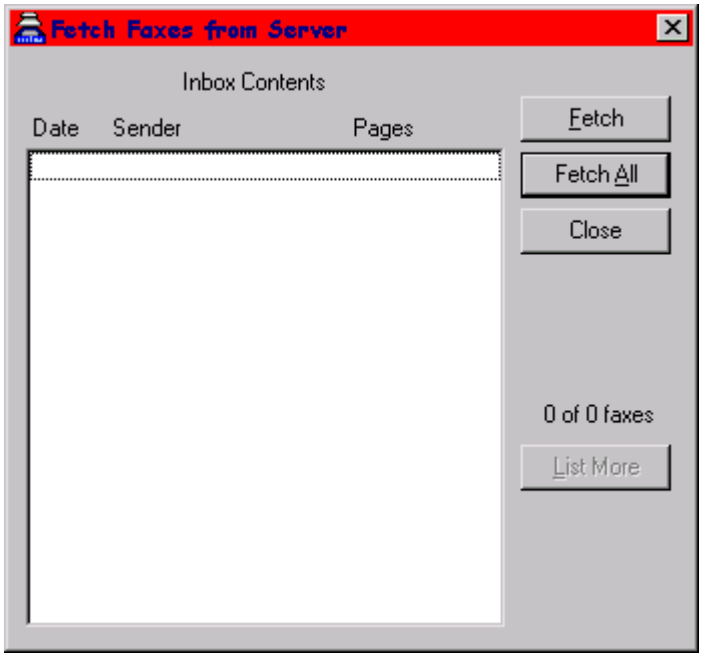
The Local Inbox tab, shown below, lists the faxes that have been delivered to you by the designated forwarder. Note that while the faxes shown in the Server Outbox tab exist on the server, the Local Inbox faxes actually reside on your computer.

Turning Off Auto-Fetching

The Network Settings window contains an Auto Fetch Faxes check box. By default, this box is checked, which causes immediate delivery of your faxes from the server to your PC's local inbox. Because these faxes must be delivered and transferred in a single, uninterrupted operation, your computer can unexpectedly slow down or even appear to freeze momentarily during the transfer.

If you clear the Auto Fetch Faxes check box, you must manually fetch the faxes from the server at your convenience. This means that when FaxManager's icon indicates that there are faxes for you, you must fetch them from the server before you can view them.

To Fetch Faxes Manually



5. Click the Fetch button on the Local Inbox tab.
   The Fetch Faxes from Server window appears.

6. This window shows how many faxes are waiting for you on the server, the phone numbers (or other id) of the senders, and the number of pages in each fax.

7. To fetch a specific fax, select it in the Inbox Contents list box and click the Fetch button.

   To fetch all incoming faxes, click the Fetch All button.
   The system moves the fax(es) to your local inbox.

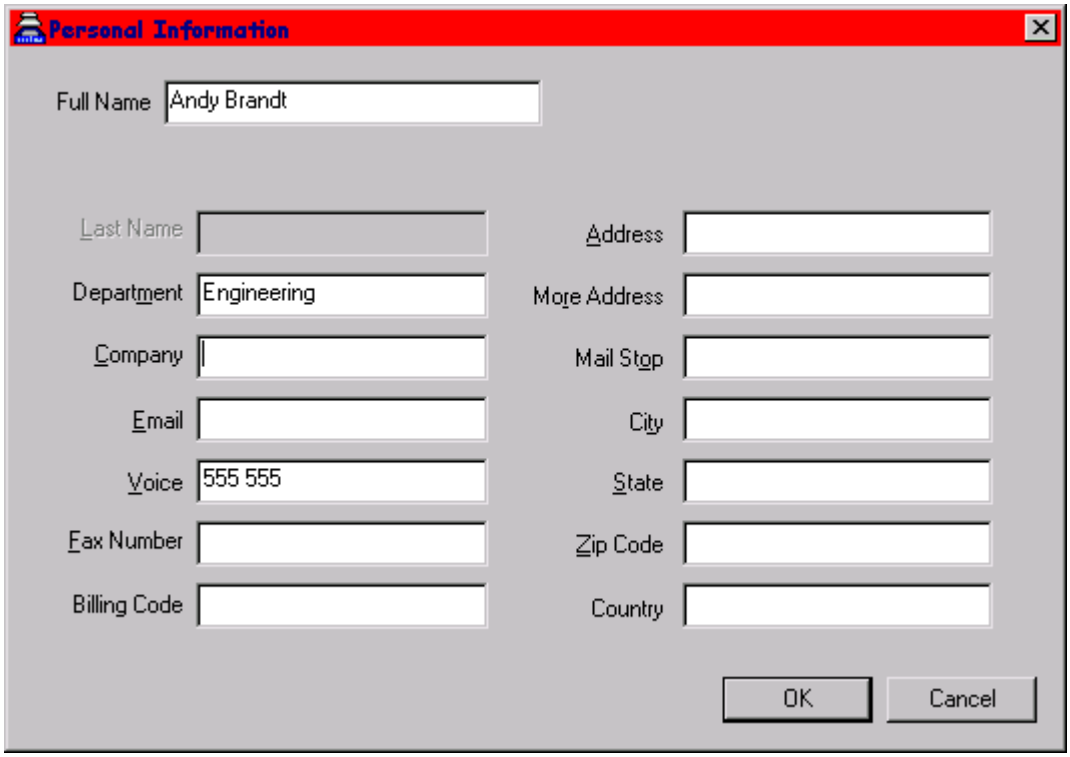
8. Click the Close button. The Local Inbox tab appears.

The Settings Menu

Most of the options in the Settings menu are described in the sections of the tabs they govern. However, some of these items are general-purpose and therefore require separate discussion.

The Personal Information Window

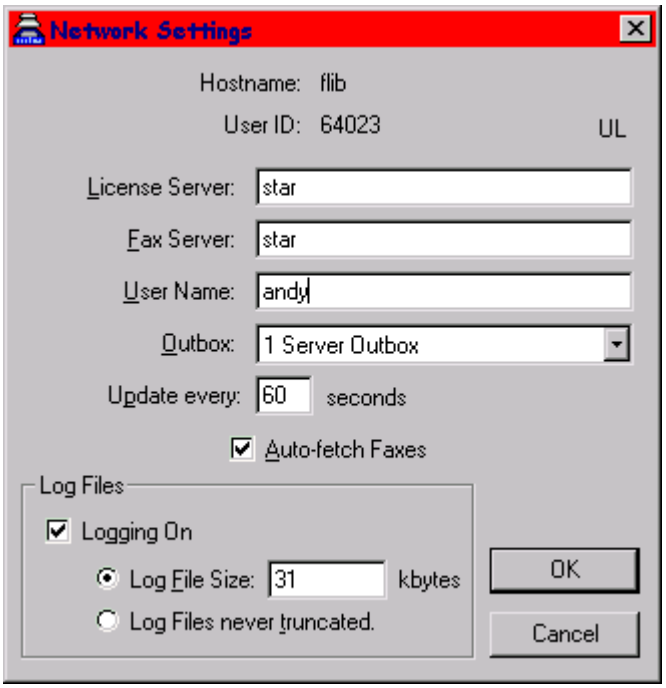
You access the Personal Information window, shown below, by choosing Personal Information from the Settings menu. You use this window to define information that can appear on cover sheets,



collateral information for tracking faxes, and email notification.

The Network Settings Window

You access the Network Settings window, shown below, by choosing Network from the Settings menu. Use this window to define your network preferences.



Below is a brief description of the components of the window. Note that if you do not know which information to enter in any of the fields described below, you should consult your IsoFax administrator.

Field/Button	Description
License Server	The name of the computer on which the IsoFax license server (*blserver*) is running.
Fax Server	The name of the computer on which the IsoFax fax server (*faxd*) is running.
User Name	The *exact* name entered for you by your system administrator in the file *USER_LIST.info* discussed earlier. This name does not have to match your network user id.
Outbox	A drop-down list that contains the names of the server outboxes (server fax queues) available to you.
Update Every	Defines how often FaxManager should request

Field/Button	Description
	an update of the contents of the fax queue or the inbox. Setting this value too low produces excessive network traffic and hence a potential slowdown of your computer's performance. For this reason, the system administrator may wish to place a maximum on this value. Refer to "Overriding Client Settings" in the *IsoFax Administration* chapter of the IsoFax manual.
Auto-fetch faxes	Indicates that faxes located in your server inbox are transferred to your PC as they arrive.
Logging On	If this button is checked then two log files are created in your `\Windows` directory (isonet.log and license.log). These files are useful to track down network and/or licensing problems.

5

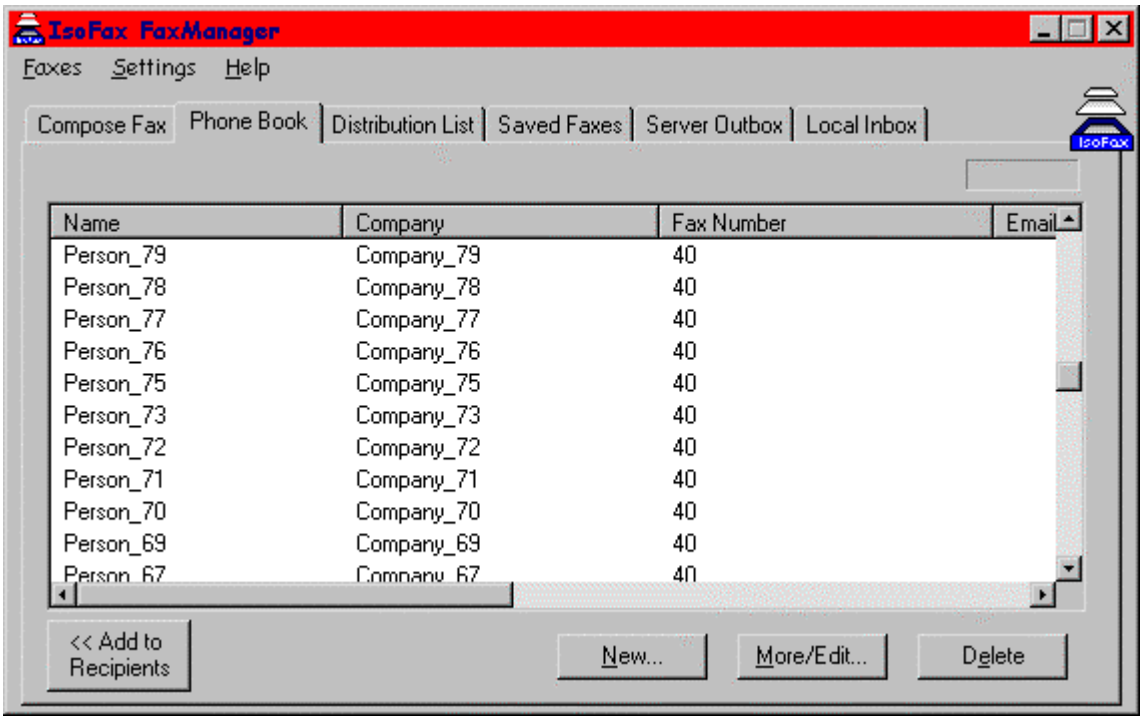
ISOFAX FAXMANAGER PHONE BOOKS

IsoFax FaxManager allows you to maintain a local phone book and access LDAP directories for phone book and cover page information. This chapter describes first the local phone book functionality, and then describes the setup to access LDAP directories directly from IsoFax FaxManager.

The Phone Book Tab

The Phone Book tab lets you manage your phone book file. The format of the WinClient phone book is identical to the one used in IsoFax for UNIX, so the same physical phone book may be used, provided they are not used at the same time; that is, *simultaneous access of the phone book file by multiple clients is not recommended.* You define the location of the phone book file from the Phone Book Settings window.

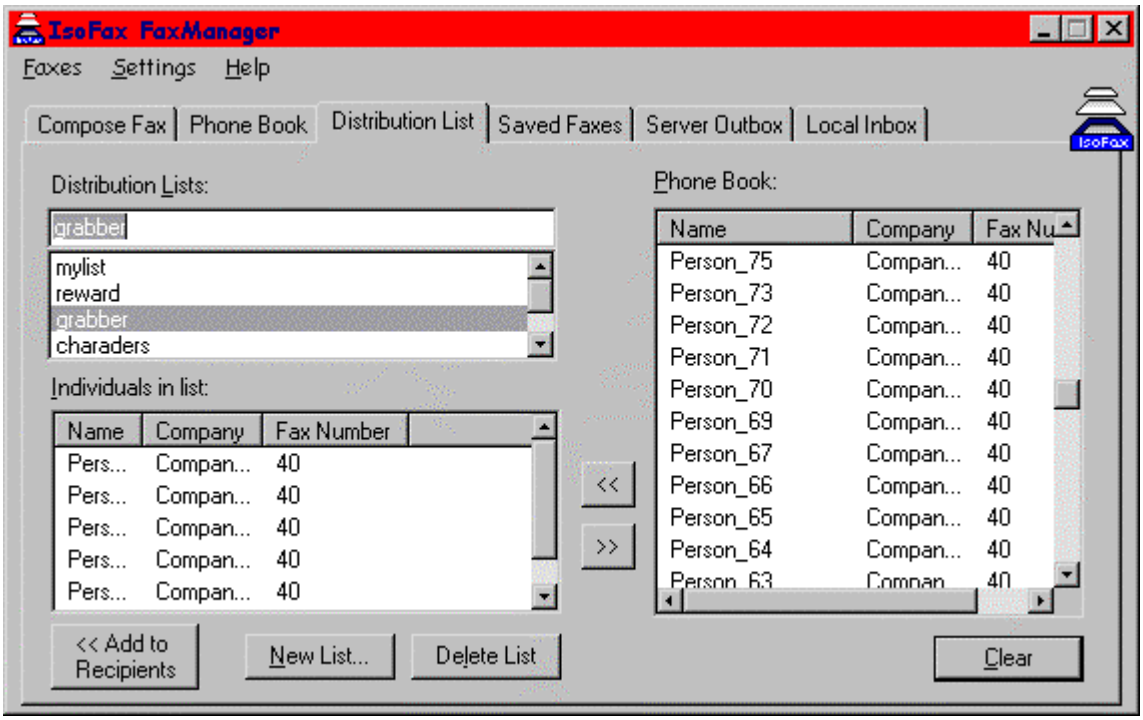
You can edit the entries in the Phone Book tab, shown below, and then store the changes permanently by clicking the More/Edit… button Alternatively, you can delete a selected entry by clicking the Delete button.



Below is a brief description of the fields and buttons on the Phone Book tab.

Field/Button	Description
New	Lets you create a new entry in the phone book.
More/Edit...	Lets you view more details and change an existing entry in the phone book.
Delete	Lets you delete the selected entry(ies) from the phone book.
<< Add to Recipients	Adds the selected phone book entries to the recipient list on the Compose Fax tab.

The Distribution Lists Tab



If you frequently send faxes to the same group of persons, choosing them repeatedly from the phone book becomes tedious and time-consuming. The IsoFax distribution list lets you group these recipients in a distribution list. Then, to send a fax to every individual in the group, you need only click the Distribution List that you would like to use, and the Add to Recipients button. You use the Distribution List tab, shown below, to define, change, and delete distribution lists.

Below is a brief description of the fields and buttons on the tab.

Field/Button	Description
Distribution Lists	A list box that contains the names of all your distribution lists.
Individuals in list	Shows the people that have already been added to this distribution list
Phone Book	A list box containing all the entries in your phone book.
>>	Removes the entry you select from the

Field/Button	Description
	distribution list currently selected.
<<	Adds the entry you select in the Phone Book Entries list box to the distribution list currently selected.
Clear	Clears any entries you selected in the Phone Book entries list box.
Delete List	Deletes the distribution list you select from the Distribution Lists drop-down list.
New List	Lets you create a new distribution list.
<< Add to Recipients	Adds the currently selected distribution list's individuals to the Recipient list in the Compose Tab.

To Create a Distribution List

1. At the Distribution Lists tab, click the **New List** button. A dialog box appears asking you to provide a name for the new distribution list.

2. Enter a name for the distribution list and click **OK**. The Distribution Lists drop-down list contains the name of the distribution list you are creating.

3. To add recipients to the list, select one or more entries in the **Phone Book** list box, then click the "**<<**" button. The system adds the entries you selected to the distribution list.

Note: To select multiple consecutive entries in the phone book entries list, click the first entry, hold down the Shift key and select the last entry. To select multiple non-consecutive entries hold down the Ctrl key and click each entry. To clear all your selections, click the Clear Selections button.

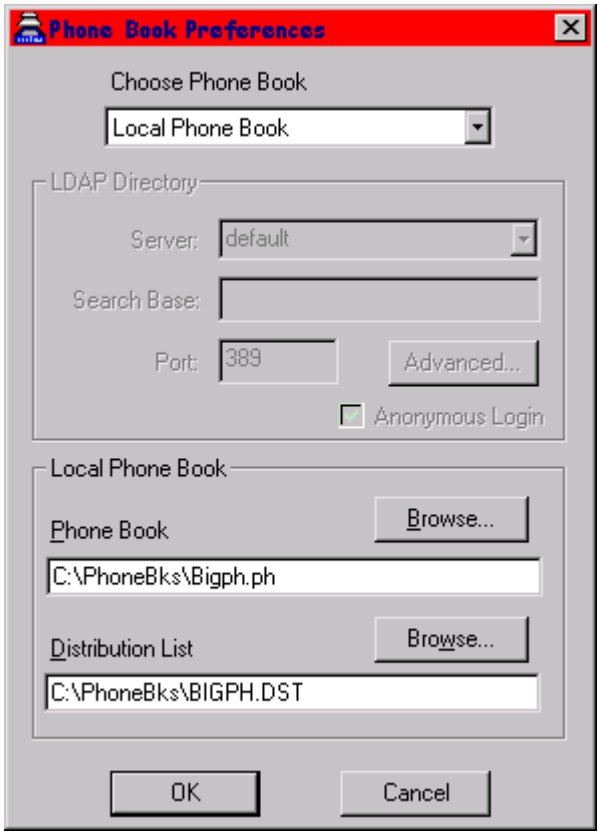
To Remove Members From a Distribution List

1. From the **Distribution Lists** list box, select the distribution list.
2. In the list of members, select the recipient you want to remove.
3. Click the **">>"** button.

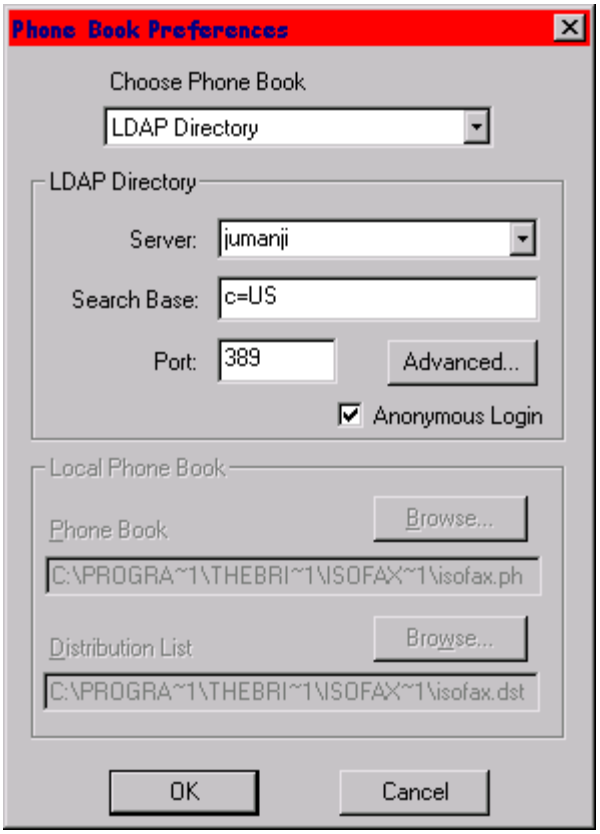
Phone Book Settings

The Phone Book Settings dialog allows you to select the type of phone book you wish to work with. Currently there are two types of phone books that WinClient supports, the IsoFax Local Phone Book file and LDAP Directories.

When you choose 'Local Phone Book' from the box at the top of the Preferences Dialog, the portion at the bottom of the dialog is enabled. You can browse your directories from here to find the phone book you currently wish to work from. If no phone book is specified here, then isofax.ph and isofax.dst are used by default.

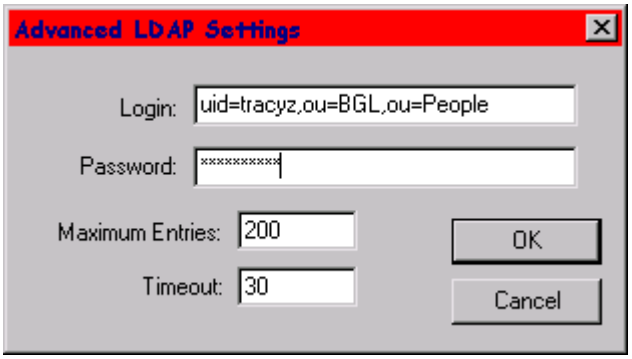


If you choose to use the LDAP Directory phone book, the Phone Book Settings Dialog enables the LDAP Directory settings portion of the dialog. This allows you to set an LDAP server, and Search Base, as well as other typical LDAP options.



Field/Button	Description
Server	The LDAP Directory server may be a machine in your local area network such as a proxy server or internal LDAP directory server, or it could be the name of a public LDAP directory server.
Search Base	Allows you to narrow your directory search to a specific country or location.
Port	The default LDAP port is 389. If you need to use a port other than 389, change it here.

Field/Button	Description
Anonymous Login	To access most databases, this item should be checked. If a user id is required, enter your it and your password in the Advanced LDAP Settings Window.



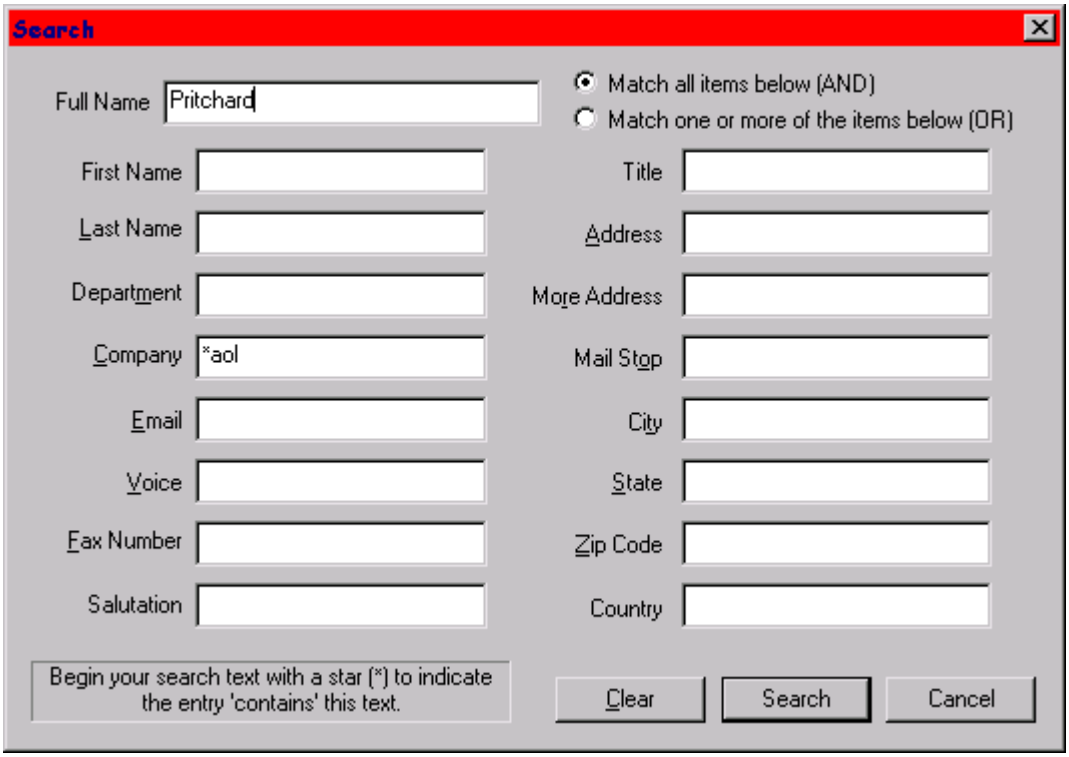
Field/Button	Description
Login, Password	If you have a login and password for the LDAP directory you wish to access, set it here. In most cases you will use the Anonymous Login checkbox.
Maxmimum Entries	This is the number of individual entries that the server will list in the Phone Book and Distribution List list boxes. If you would like to see more items for a particular search criteria, increase the maximum entries here. It is always better, however, to narrow your search in the Search dialog than to have to scroll through thousands of entries. Note that it may take a very long time to list a large number of individuals. The default is 100 entries.
Timeout	Set the number of seconds here to wait for the search to complete. For larger maximum searches, you may need larger timeouts. The default is 30 seconds.

Searching an LDAP Database

Typically an LDAP Database contains thousands, even tens of thousands of entries. You would never want to list all of the entries in an LDAP directory from WinClient. So WinClient provides a way to list entries, matching a search that you enter.

When you choose to use the LDAP Directory from the Phone Book Settings dialog, a few new buttons appear on the Phone Book and Distribution List Tab areas. These buttons allow you to search the directory for specific entries.

Phone Book Search



When you press the Search... button on the Phone Book tab the following dialog appears:

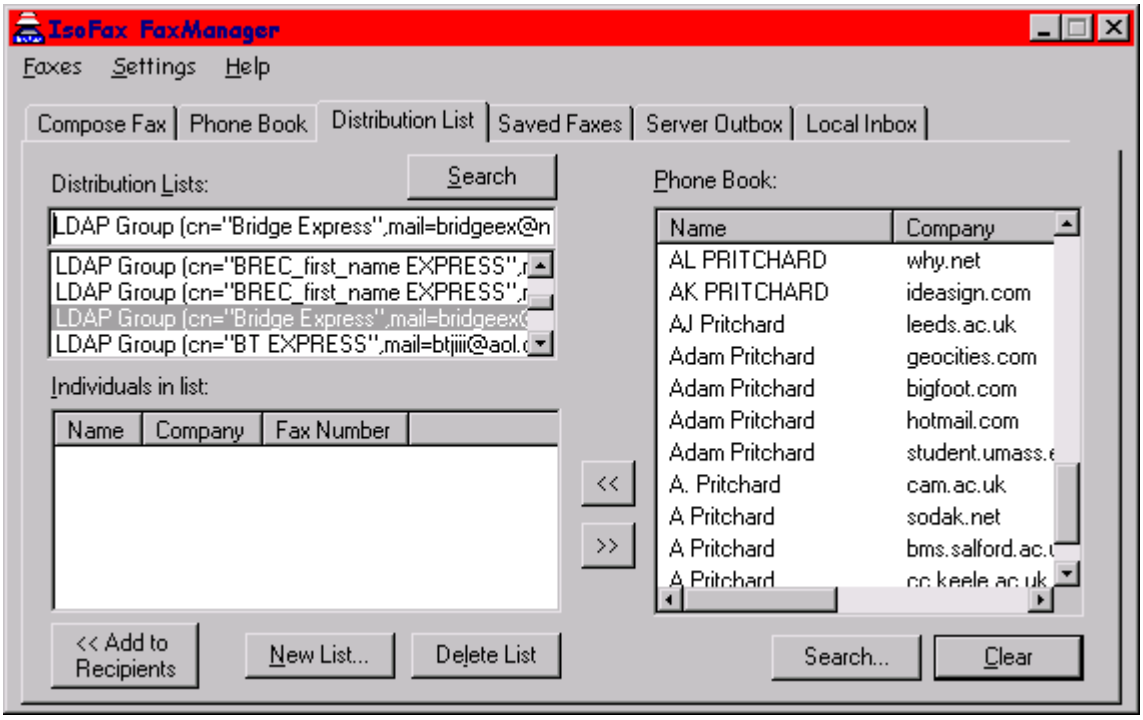
Field/Button	Description
Full Name, First Name,...	The text entry fields correspond directly with data located in the LDAP database. By default LDAP assumes that the search **starts** with the characters you enter. But, as noted on the dialog, you can also place a '*' character at the front to indicate that the text is located anywhere in the search.
Match all items (AND)	Tells the LDAP server to give you items that satisfy all of the criteria. For example, in the dialog above, the search would give you all the people with the name Pritchard and work at AOL.
Match one or more of the items (OR)	Tells the LDAP server to give you all the items that satisfy either of the criteria. By clicking the OR button in the dialog above, the search would give you all the people with the name Pritchard and all the people who work at AOL.
Clear	Clears all the fields in the dialog.
Search	Uses the information here to list items from the LDAP directory.

Distribution List Search

There are two search buttons in the distribution list tab that show up when you select to use the LDAP Directory.

The search button on the right, labeled 'Search...', will bring up the same dialog that appears in the Phone Book Tab. This allows you to search and add to the distribution list (only if you have permission, usually not with public databases) directly from this tab without having to always go back to the Phone Book Tab to fill the phone book list with different individuals.

The Search button on the left top is used to search for group entries in the LDAP database (in LDAP these groups contain the objectclass ‘groupofnames’ or ‘groupofUniqueNames’). Type some text into the edit box just under the Search button, then press the Search button to get all the entries that contain this text. To narrow your search, enter more specific text.



6

ISOFAX FAXGATEWAY

IsoFax WinClient takes a simple view of faxing: that a fax machine is merely a printer with a phone number. Anything that is printable is also faxable. This model fits well with the Windows standard for managing graphical devices: Graphical Device Interface (GDI).

During installation, a new printer, IsoFax FaxGateway, is added to your system printer list. To view this list, double-click the Printers icon in the Control Panel. Now, whenever you wish to "print" faxes (send a fax via the fax printer), simply select the new IsoFax FaxGateway printer.

FaxGateway Printing

When you choose Print from the File menu and choose the IsoFax FaxGateway printer, the FaxManager is launched, or if it is already running, it is brought to the foreground. The document that you were printing is added automatically as an attachment to the FaxManager attachments list.

From the FaxManager you can now select recipients, add a Subject, and add other attachments if you wish and send the fax as usual, directly from the FaxManager.

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THE ISOPRINT API

This chapter describes the IsoPrint application programming interface (API), which allows programs to submit recipient and scheduling information to the FaxGateway printer driver automatically. Here is a step-by-step description of the use of the API.

1. Windows applications pass recipient and scheduling information to the FaxGateway printer driver by writing a Windows initialization (.INI) file called ISOPRINT.INI. This file is placed in the \Windows directory.

2. The application initiates a print operation; if FaxGateway is the selected printer, it obtains certain values from ISOPRINT.INI instead of those ordinarily obtained from the FaxManager window.

3. The Dialog attribute in ISOPRINT.INI determines whether the FaxManager window appears. If it does appear, it contains the information submitted in the ISOPRINT.INI file, which can be edited. Otherwise, the user sees only the windows associated with the encoding and queuing of the fax.

4. Once the ISOPRINT.INI file is read, it is deleted. If the ISOPRINT.INI file is found, but is not readable, an error message warns the user and FaxGateway proceeds as if ISOPRINT.INI does not exist.

Important: All attribute-value pairs in ISOPRINT.INI are written in the [FaxGateway] section (there is only this one section in brackets at the top of the ISOPRINT.INI file and all the values must be entered under this section). You must have one of the following values defined - **Recipient Fax#**, **SaveAs**, or **Create Custom Cover Sheet** - in order for ISOPRINT API to successfully complete.

The following table provides a list of supported attributes with their default value and description. These attributes must appear in a `[FaxGateway]` section of the ISOPRINT.INI file.

Attribute and Default Value (the attribute must be typed in exactly as shown here under the [FaxGateway] section)		**Description**
Dialog	= no	Brings up FaxGateway window if set to 'yes'
Subject	= string	Subject of fax, truncates at 50 characters
TimeToSend	= 0	Time from C run-time function time(), or zero to send as soon as possible
TrackingID	= integer	For tracking in server fax_log
BillingCode	= integer	For tracking in server accounting_log
QueueNumber	=1	The queue number where the fax should be queued. The default will almost always be fine unless your IsoFax administrator tells you differently.
CoverSheet	= [no value]	Full path of cover sheet. Must be in ISOCOVER.INI
Attachment1	= [no value]	Full path to attachment, valid attachments are files with the extensions fx, txt, bat, fc, and fax

Attribute and Default Value (the attribute must be typed in exactly as shown here under the [FaxGateway] section)		Description
Attachment*x*	= [no value]	Additional attachments
Message	= [no value]	Message that appears on cover sheet (truncated at 512 characters)
Recipient Name	= unknown	Recipient name
Recipient Fax#	= [no value]	Recipient phone number
Recipient Address	= [no value]	Recipient address for cover sheet
Recipient Company	= [no value]	Recipient company for cover sheet
Recipient Voice#	= [no value]	Recipient voice number for cover sheet
Create Custom Cover Sheet	= No	Set this value to 'Yes' to create a custom cover sheet.
SaveAs	= [no value]	A file name where the fax can be saved. If this value is present then the fax will not be sent to the fax server.

The following is an example of a valid ISOPRINT.INI file:

```
[FaxGateway]
Subject=Meeting Reminder
CoverSheet=C:\ISOFAX\MYCOVER.BMP
Recipient Name=Ora Brown
Recipient Fax#=415 925 9278
Recipient Company=Favorite Toys, Inc.
```

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CREATING CUSTOM COVER SHEETS

This chapter describes how to create custom cover sheets. Begin by using a word processor or editor to create a cover sheet template, complete with appropriate field labels such as “Subject,” “To,” and “From.” Next, use the IsoFax Gateway to convert the template to a Windows bitmap file and an accompanying cover sheet definition file. Viewing the bitmap file in a graphic viewer, ascertain the x-y coordinates where you wish to merge the cover sheet text into the bitmap, and then, using an editor, manually type the x-y coordinates in the cover sheet definition file. This chapter contains detailed instructions on how to do this.

To Create a Custom Cover Sheet

1. Using your favorite word processor, editor, or page layout program, create a cover sheet template. Use the *merge tag* names (see below) as a guide in selecting names for the *field labels* on your template. There are no layout rules for the template—you can add a logo, clip art, or other stylistic items. If you plan to have an area for placing text in your cover sheet, be sure to set aside space for this.

2. Print the template to the IsoFax Gateway printer driver using the **ISOPRINT API** (see Chapter 6 for more information on ISOPRINT API). Set the keyword **Create Custom Cover Sheet** to "Yes" in the ISOPRINT.INI file, then print the document you created in step 1 to the IsoFax FaxGateway printer. This will create a '.bmp' file in your Local Work directory and place a reference to that bitmap file in the Cover Sheet combo box on the Compose Fax tab. You may have to restart FaxManager to see this.

3. View the bitmap file created in step 3 using a graphics editing program. Activate cursor reporting (reporting the x-y coordinates of the cursor). Using Paintbrush (included with Windows), select Cursor Position from the View menu to activate cursor reporting.

4. Move the cursor to a point on the extended base line of a field label. Write down the cursor position for each merge tag on a piece of scrap paper. Repeat this for each field label.

5. Edit the cover sheet definition file ISOCOVER.INI located in your Windows directory. The `[CoverSheetList]` section contains the following lines:

   ```
   [CoverSheetList]
   IsoFax WinClient Fancy Cover=C:\ISOFAX\FANCY.BMP
   IsoFax WinClient Regular Cover=C:\ISOFAX\REG.BMP
   19990520180958.bmp=C:\ISOFAX\19990520180958.bmp
   ```

   The first two entries correspond to the Fancy and Regular cover sheets supplied with IsoFax WinClient. The third entry was created when the bitmap file was created in step 2.

6. To define a title for your cover sheet so that it appears in the Compose Tab of the FaxManager and the FaxGateway window, modify the line as shown below in the `[CoverSheetList]` section in the ISOCOVER.INI file:

   from

   19990520180958.bmp=C:\ISOFAX\19990520180958.bmp

   to

   My Cover Sheet = C:\ISOFAX\19990520180958.bmp

7. The section that describes the cover sheet you created is added automatically. The following is an example of such a section:

   [C:\ISOFAX\19990520180958.bmp]
   Font=Arial
   Point Size=10
   Subject=
   #Pages=
   Date=
   Fax ID=
   Sender Name=
   Sender Company=
   Sender Dept=
   Sender Address=
   Sender Fax#=
   Sender Voice#=
   Sender Email=
   Receiver Name=
   Receiver Company=
   Receiver Address=
   Receiver Dept=
   Receiver Fax#=
   Receiver Voice#=
   Receiver Email=
   Note=
   Salutation=

8. Return to the notes you wrote in step 4. Locate the merge tags that correspond to the field labels used in your template. On the right side of the equal sign, enter the cursor coordinates—separated by a comma—where you want the merged text to begin. (It is extremely helpful to use one of the built-in cover sheet definitions for reference.)

9. Test your work by opening FaxManager and selecting your cover sheet. Select a recipient and then click the **Preview** button. The FaxReader will show your cover sheet with the text placed on it as you specified in the ISOCOVER.INI file.

Merge Tag Syntax

The information to the right of the equal sign of a simple merge tag consists of a single cursor location—the lower left hand coordinate where you want the merged text to begin. If no other coordinates are supplied, the text is merged blindly at those coordinates using the default typeface and the default typeface size. This means, for example, that if the merged text is longer than anticipated, it overwrites other graphical items on the template.

The syntax for a blind merge tag is as follows (elements in brackets are optional):

<merge tag>=<left>,<bottom> [,<Font>,<Point Size>]

For additional control (for example, to create multi-line addresses), you can provide optional coordinates to define a rectangular drawing area. The merged text is then automatically wrapped in order to keep it within the boundary of the defined rectangle; if the text image is still too large to fit into the drawing area, the image is clipped to fit.

Note: You can force a line break by embedding a | (ASCII 124) character in the text.

The syntax to limit the merged text to a rectangular drawing area is as follows:

<merge tag>=<left>,<top>,<right>,<bottom>
[,<Font>,<Point Size>]

Merge Tag Names

Merge Tag Name	Merges Text From	Notes
Font	Automatic	Default typeface
Point size	Automatic	Default typeface size
#Pages	Automatic	Cover sheet is page one
Date	Automatic	Date *and* time
Note	Compose Fax tab	Use rectangular drawing area.
Subject	Compose Fax tab	
Fax ID (Reference ID)	Send window	See “The Send Window” in Chapter 3.
Sender Name	Personal Information window	See “The Settings Menu” in Chapter 3.
Sender Company	Personal Information window	
Sender Dept	Personal Information window	
Sender Address	Personal Information window	
Sender Address2	Personal Information window	
Sender Fax #	Personal Information window	
Sender Voice #	Personal Information window	
Sender Suite	Personal Information window	
Sender CityStateZip	Personal Information window	
Sender Country	Personal Information window	
Sender Mailstop	Personal Information window	

Merge Tag Name	Merges Text From	Notes
Sender Email	Personal Information window	
Receiver Name	Phone Book Entry	See “The Phone Book Tab” in Chapter 4.
Receiver Company	Phone Book Entry	
Receiver Dept	Phone Book Entry	
Receiver Address	Phone Book Entry	
Receiver Address2	Phone Book Entry	
Receiver Suite	Phone Book Entry	
Receiver Fax #	Phone Book Entry	
Receiver Voice #	Phone Book Entry	
Receiver Country	Phone Book Entry	
Receiver Mailstop	Phone Book Entry	
Receiver Email	Phone Book Entry	
Receiver CityStateZip	Phone Book Entry	
Salutation	Phone Book Entry	Also known as “Letter Intro”

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TROUBLESHOOTING

This appendix describes problems you may encounter and provides possible solutions.

IsoFax WinClient

The following table provides a description of problems you may encounter with IsoFax WinClient. Each problem has a corresponding cause and solution.

Problem	Cause	Solution
First-time IsoFax users cannot get an IsoFax WinClient license.	The spelling of your user name in the Network Settings window and in your record in the USER_LIST.info file is not the same. -or- Your entry in the *USER_LIST.info* file does not contain the statement `winclient = true`	Make sure the spelling of your user name is identical. Add the statement `winclient = true` to your record in the *USER_LIST.info* file.

Problem	Cause	Solution
During installation, the network test reports fail.	Your TCP/IP stack is not WinSock compliant. -or- Your TCP/IP stack is not correctly configured.	Use your TCP/IP stack provider's documentation, technical support, and utilities to make sure your TCP/IP stack is operating correctly.
Unable to check out a license for the FaxManager or the FaxGateway after a system or application crash.	The license has been checked out, but has not yet been checked in.	1. Wait for a minimum of four (4) minutes for the license to become available again. 2. Close the Fax Network Agent icon, and restart it from the Startup Menu.

Testing your Network Connection

Sometimes it is difficult to verify that your TCP/IP connection is stable. It is possible that you have different network protocols installed on your system that are working while the TCP/IP protocol is still not set up properly.

One way to verify that your TCP/IP connection is good is to run a TCP/IP utility such as FTP. If you are not familiar with this utility, you will not need to do anything major with it to verify your TCP/IP connection. Please use the following steps to test your connection.

1. Get the name of the fax and license server that you will be using. For purposes of this explanation 'faxserver' will be used as the fax server name.

2. Open a command line utility usually called 'Command Prompt' in Windows (this is fine for 95, 98, and NT). Type 'ftp faxserver', then press 'Enter'.

3. If the next line you see is 'Connected to faxserver', then you are in good shape. You can press the Enter key and you probably won't be able to log on, but you have verified TCP/IP protocol is set up to recognize the fax server you would like to connect to.

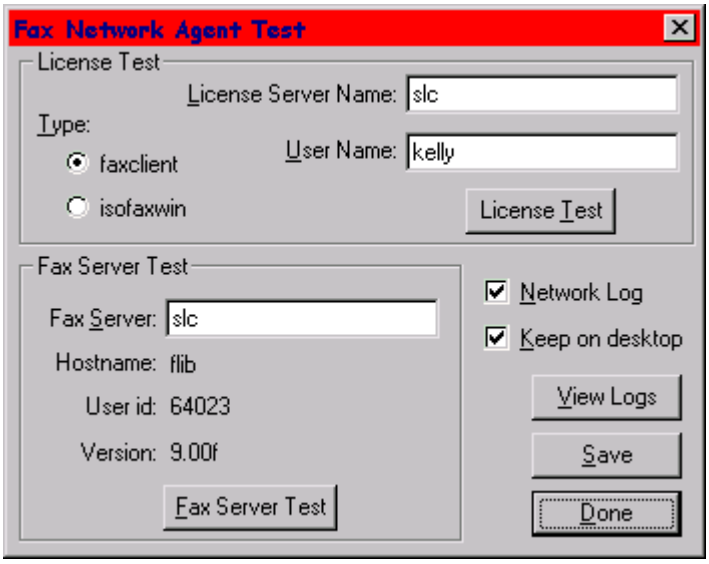
4. Do the same thing for the license server if it is different.

5. To get out of ftp, type the word ‘bye’ at the ‘ftp>’ prompt.

Some ftp errors and their solutions are provided below.

Problem	Cause	Solution
Unknown Host	TCP/IP cannot find an address for the machine name you provided.	You may have to specify a DNS machine name in your TCP/IP protocol setup. Please see your system administrator to set this up.
Connection refused	An ftp server is most likely not running on this machine.	Try another machine to verify the TCP/IP network connection is working properly. Chances are, if you can connect to one computer, you are set up to connect to other machines on the network, too.

BRISTOL LICENSING



The IsoFax WinClient installation program proceeds normally as long as it is able to establish a simple connection with your network. But before any program in IsoFax WinClient can function successfully, it must be able to obtain a license from the IsoFax license server, *blserver*. The Fax Network Agent Test window, shown below, lets you verify the connectivity necessary to obtain that license.

Below is a brief description of the fields and buttons on the window.

Field/Button	Description
Type	The type of license. The *faxclient* license is available on virtually every IsoFax installation, and the *isofaxwin* license is the license used by IsoFax WinClient.
License Server Name	This is the name of the computer on which the IsoFax license server *blserver* is running. The default is the name you entered in the Required Settings dialog on install.

User Name	This defaults to the User Name entered in the Required Settings dialog on install.

After ensuring that the **License Server Name** and **User Name** are correct, and that you have selected the **faxclient** button, there are two steps to testing your licensing:

1. Click the **License Test** button to obtain a *faxclient* license, a license type available on most IsoFax server installations. A "License retrieved successfully" message box establishes that the network connectivity exists to obtain an IsoFax WinClient license. Otherwise an error box is shown with a short message indicating the problem.

2. If step 1 succeeds, select the License Type *isofaxwin* (the kind of license required by IsoFax WinClient) and click the **License Test** button again. A "License retrieved successfully" message box establishes that the proper license is available for the various IsoFax WinClient applications. Otherwise, an error box is shown with a short message indicating the problem. See the next section for a list of errors and their solutions.

License Troubleshooting Table

Bristol licensing requires an individual license for each IsoFax WinClient user. A record for *each* WinClient user name must be created in the *USER_LIST.info* file. Each record must contain the statement

winclient = true

The following table describes some of the errors that may occur if there are any problems with licensing.

Error	Cause and Solution
Unable to get license: user "user" is in the USER_LIST.info file, but it does not contain a winclient attribute.	Locate the *USER_LIST.info* file in the ISOFAXHOME directory on the license server host. Look for your record *USER_LIST.info* file and verify that it contains the statement winclient = true.

Error	Cause and Solution
Unable to get license: there is no user named “user” in the USER_LIST.info file.	Edit the *USER_LIST.info* file in the ISOFAXHOME directory on the license server host, and follow the instructions in the IsoFax manual for entering your user name in the list.
Your IsoFax user name was found in the USER_LIST.info file, but an insufficient number of isofaxwin licenses exist.	Go to the ISOFAXHOME directory on the license server host. Type `license_info` on the command line to see how many *isofaxwin* licenses you have available. Count the number of authorized users who are in the *USER_LIST.info* file above your name. If there are more users than there are licenses you must purchase additional licenses from The Bristol Group.
Unable to get license: All “isofaxwin” licenses are in use.	This error can occur if your license was for some reason not properly checked in (for example, if your machine crashed) and the license server thinks that you still have a license checked out. In that case you can either restart the license server program *blserver* on the license server host or close the Fax Network Agent application and try again. This error could also occur if someone else is using your user name to run their version of WinClient at the same time as you.
Unable to get license: license not available	There are no isofaxwin licenses on the specified license server.
Unable to get license: unknown host	Use the correct host name or use the IP address.
Unable to get license: program not registered	Start *blserver*.
Unable to get license: in blocking call	Try again.

Error	Cause and Solution
The USER_LIST.info file on license server 'server_name' has changed for user 'user_name'. Please press OK and wait a moment while the Fax Network Agent updates the licensing information.	This indicates that the license server is rereading the *USER_LIST.info*. This is not an error, merely an informative message.
There is no license server name entered in the Fax Network Agent dialog. Please enter the name of the network computer that is running the IsoFax license server.	Go to the Fax Network Agent application and verify that you have entered a valid license server name or IP address.
Unable to get license: your client is Release xxx. Your fax server is licensed only for clients Release yyy or lower. Contact the The Bristol Group for an upgrade.	Your server is not licensed to run newer clients. You need to purchase an upgrade license.

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ISOFAX WINCLIENT PROGRAM FILES

It is often useful to know which files a specific setup program has installed on your computer. Here is a list of the files that the IsoFax WinClient may install on your system.

FaxMngr.exe
FaxNet.exe
Isonet.dll
Isofile.dll
Isodrw.dll
Isores.dll
Isoapi.dll
Winrpc.dll
Isodrv.drv
Isonet32.dll
Isofile32.dll
Isodrw32.dll
Isores32.dll
Isoapi32.dll
Winrpc32.dll
Isodrv32.dll
Isoui32.dll
Isofaxmn.dll
Isofaxpm.dll
Isoaipc.dll
Isothk32.dll
Isothk16.dll
msword.ips
msexcel.ips
msppt.ips

The following are program and preference files that may be created by IsoFax WinClient.

Isofax.ph

Isofax.dst

License.log

Isonet.log

Isoprefs.ini

Isocover.ini

Isoprint.ini

*.fx, *.fc, *.fax

C

FAX FILE ERRORS

Error#	Meaning	Solution
401	Invalid function	
402	File not found	
403	Path not found	Verify that your Local Fax directory is valid. Modify your local fax directory at the Directories Settings window that you access by choosing Set Directories from the Settings menu.
404	Too many open files	Close some documents that you have open in the current application and other applications.
405	Access denied	Change the permissions on the directory or file that you wish to open. Make sure that your TMP environment variable is set.
406	Invalid handle	
407	Arena trashed	Memory may be low, close one or more Windows applications.
408	Not enough memory	Close one or more Windows applications.

Error#	Meaning	Solution
409	Invalid block	
410	Bad environment	Your TMP environment variable may be invalid.
411	Bad format	
412	Invalid access	
413	Invalid data	
415	Invalid drive	Verify that the drive you are referring to exists and is readable.
416	Current directory	
417	Not same device	
418	No more files	Close some documents that you have open in the current application and other applications.
419	Write protect error	The floppy diskette is write protected, take it out of the disk drive and reset the floppy.
420	Bad unit	Hardware failure
421	Not ready	Hardware failure
422	Bad command	Hardware failure
423	CRC error	Hardware failure
424	Bad length	Hardware failure
425	Seek error	Hardware failure
426	Not MS-DOS disk	Hardware failure
427	Sector not found	Hardware failure
428	Out of paper	Hardware failure
429	Write fault	Hardware failure

Error#	Meaning	Solution
430	Read fault	Hardware failure
431	General failure	Hardware failure
432	Sharing violation	The file that you wish to access is already being used by some other application. Close the file in that application.
433	Lock violation	Operating System Failure
434	Wrong disk	Operating System Failure
435	File control block unavailable	Operating System Failure
436	Sharing buffer exceeded	Operating System Failure
450	Not supported	Operating System Failure
451	Remote not listed	Operating System Failure
452	Duplicate name	Operating System Failure
453	Bad netpath	
454	Network busy	Try again. The network drive that you are trying to access is busy.
455	Device does not exist	
456	Too many commands	
457	Adaptor hardware error	
458	Bad network response	
459	Unexpected	

Error#	Meaning	Solution
	network error	
460	Bad remote adaptor	
461	Print queue full	
462	No spool space	Disk space may be low on your local or network machine.
463	Print canceled	
464	Netname deleted	
465	Network access denied	Verify that you have a good network connection. May also indicate that you are trying to save files to a CD drive. Change the drive for your local fax directory.
466	Bad device type	
467	Bad network name	
468	Too many names	
469	Too many sessions	
470	Sharing paused	
471	Request not accepted	
472	Redirection paused	
480	File exists	
481	Duplicate file control block	
482	Cannot make	
483	Interrupt 24 failure	
484	Out of structures	You may be out of memory. Close one or more Windows applications and try again.

Error#	Meaning	Solution
485	Already assigned	
486	Invalid password	
487	Invalid parameter	
488	Net write fault	