FAXmaker for Exchange

Manual

By GFI FAX & VOICE Ltd.

This manual was produced by GFI FAX & VOICE Ltd.

Contents

FAXmaker - an overview

Introduction

Congratulations with purchasing FAXmaker. FAXmaker for Exchange will save your company time and money by offering you advanced network fax technology. With FAXmaker, sending a fax is as easy as printing a document.

FAXmaker for Exchange is designed to integrate seamlessly with MS Exchange server. Therefore this manual assumes that you have a working knowledge of Microsoft Exchange server, and that Exchange Server is already up and running.

Requirements

FAXmaker for Exchange requires the following;

- MS Exchange Server
- A Windows NT server machine with at least 32 MB memory and a 100 Mhz Pentium. The machine does not need to be dedicated to FAXmaker. You can run the FAXmaker server alongside the MS Exchange server Windows NT machine. FAXmaker requires very little resources or processing time.
- One or more class 2 compatible fax modems, preferably quality modems. FAXmaker uses standard CLASS 2 fax modems. Although technically speaking you can use any class 2 modem, the reliability (how long you can leave the modem unattended), connect rate (average bps speed at which your faxes will be sent) and connect success percentage (The amount of fax machines the fax modem will connect to) will depend almost entirely on the quality of modem you use. We recommend using a quality fax modem such as Zyxel or Multitech. They may cost a little more, but they are well worth the extra money.

 Why class 2 and not class 1? Class 2 is actually a more advanced protocol, which offloads a lot of the processing time to the modem. This allows your fax server to use less processor time and to be less sensitive to machine load.

The FAXmaker system

The FAXmaker system consists of a Fax server program running as a gateway or "Connector" on the computer running Exchange server, and the client software, running on the users' workstations. The client software consists only of a fax printer driver and a viewer, which enables all Exchange users to send a fax by printing to the FAXmaker driver.

The system is depicted in the following figure;
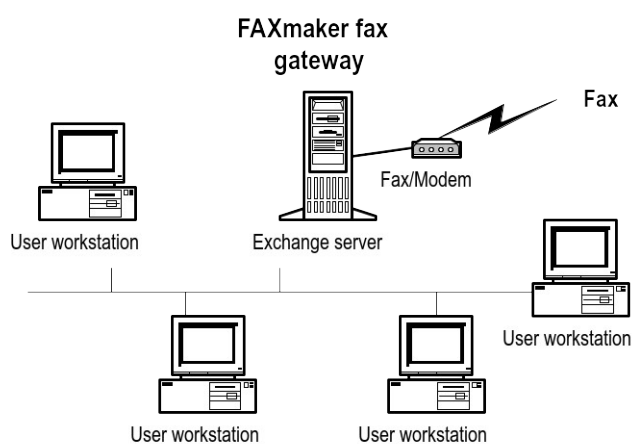
Figure 1 FAXmaker fax gateway running on MS Exchange server.

Figure 1 shows the FAXmaker fax server/gateway running on the Exchange server machine. Because FAXmaker was designed to run on Windows NT, it does not require a separate machine. Rather it will run in the back ground on the same machine as MS Exchange server.

Preparing for the installation of FAXmaker for Exchange

Before continuing installation of FAXmaker for Exchange, ensure that you have understood how it works and that the requirements mentioned at the beginning of this chapter are met. Furthermore, you will need to have Exchange server up and running. Please consult the manual of Exchange to find out how to do this.

Installation

Introduction

This chapter describes the installation of the FAXmaker software on to the Exchange server. It will help you choose the installation options available, but will not discuss the user's configuration options, which are explained in the following chapter.

Prior to running the installation procedure, you are advised to read the chapter "FAXmaker - an overview".

Running the installation procedure

!!BEFORE STARTING THE FAXMAKER FOR EXCHANGE SETUP PLEASE MAKE SURE THAT THE EXCHANGE ADMINISTRATOR IS NOT RUNNING.

!!IF YOU ARE REINSTALLING FAXMAKER, BE SURE TO DELETE THE DIRECTORY OBJECT IN THE EXCHANGE ADMIN FIRST.

!!MAKE SURE YOU ARE LOGGED IN AS ADMINISTRATOR

1. Insert the FAXmaker CD ROM in your diskette drive. Remember that you must run the installation program from the computer running Exchange server.

2. Run 'setup.exe' from the File Manager or choose 'Run' from the 'File' menu in Program Manager and type in <a:\setup.exe>.

3. The set-up procedure will now start, and you will be prompted by the installation routine whether you want to continue set-up. Click on the 'Continue' button.

4. Setup will prompt you which language you wish to install. This option refers to the language in which FAXmaker will appear.
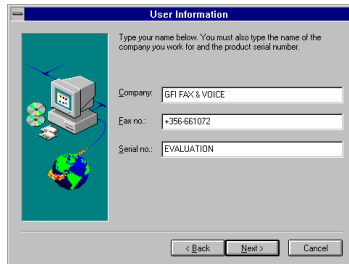
User information

5. Setup will now prompt you for your company name, fax number and registration number. The registration number is located on the registration card or on the CD ROM cover. If you are evaluating the product, do not enter a registration number.

6. FAXmaker will prompt you for the country in which you are located. Please enter the appropriate country.
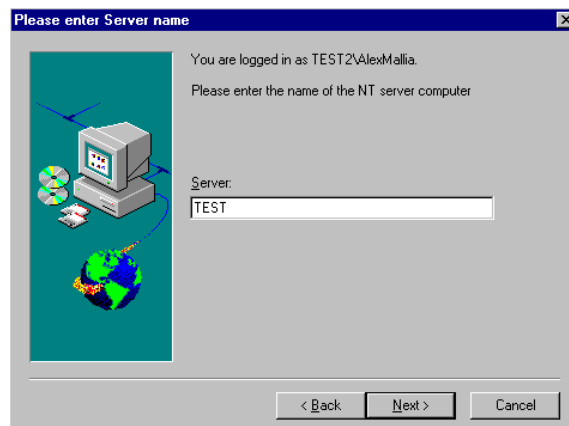
Setup prompts for machine name

7. Setup will now query the name of the server computer. Please confirm it.
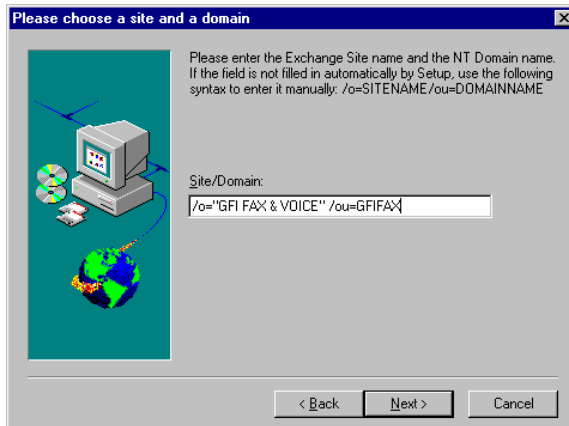
Exchange Organisation name

8. The setup program will now query the organisation/site, which consists of the site/organisation name and domain name. In most situations, FAXmaker will return the correct site name and domain name, but sometimes the automatic querying will not succeed or return erroneous information.

Therefore you must always check it as follows;

The format of the organisation name should be as follows;

/o=SITE NAME/ou=DOMAIN

Where Sitename is the name, shown at the top of the Exchange administrator. For example, in the screen grab below, this is GFI FAX & VOICE. If your site name contains spaces or other special characters, you must enclose the site name in quotes, as follows; "GFI FAX & VOICE".

The domain name is displayed in the Exchange administrator with a "World" icon next to it.
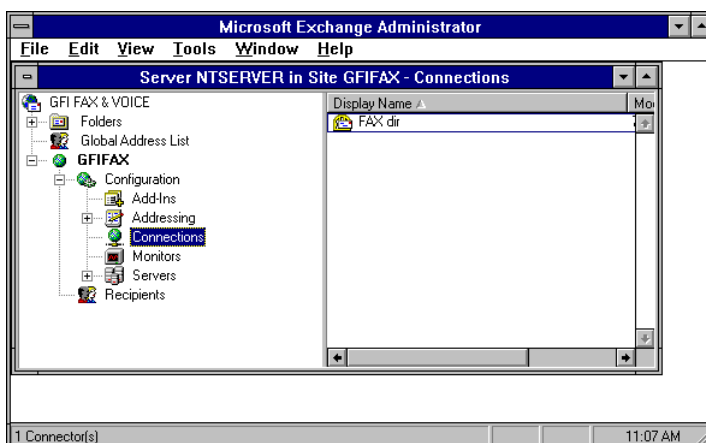
Exchange administrator with site "GFI FAX & VOICE' and domain "GFIFAX"
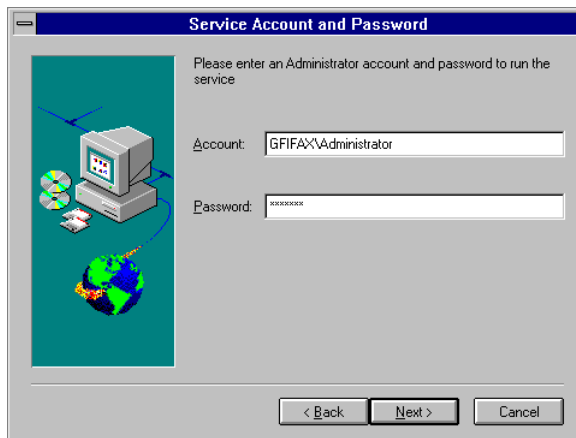
Account name for services

9. Setup will now prompt you for an administrator account to run the service. You should enter the name and password of a valid NT account with administrator rights.

If you change your password after installing FAXmaker, you must update the password for the FAXmaker gateway and fax services from the control panel as well. Otherwise the services will no longer start.

10. Setup will prompt you whether your domain has multiple Exchange servers or not. If you do have multiple EXCHANGE servers, select multiple, otherwise select 'Next'. If you have selected multiple servers, please observe the note on installing for multiple servers at the end of this chapter.

11. **THIS STEP IS ONLY APPLICABLE TO USERS WITH DOMAINS WHICH ARE RUNNING MULTIPLE EXCHANGE SERVERS.**
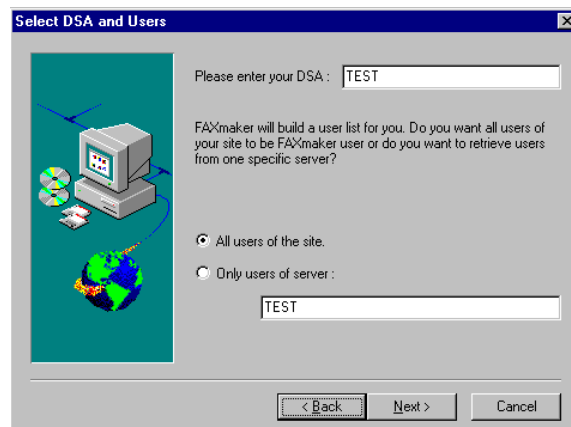
In multi server sites, Setup will prompt you for the DSA/PDC name.

If your domain has multiple exchange servers installed, FAXmaker can

support users on other servers as well. To activate this, you must enter the name of your DSA (Directory service agent). The DSA resides on the primary domain controller (PDC), and its name is identical to the name of the PDC. So in other words, enter the name of your PDC. If you select multiple servers, FAXmaker must be installed in a shared directory, i.e. accessible to other users as well.
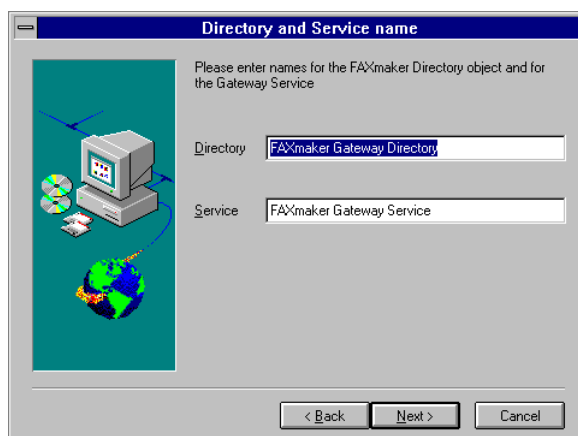
Setup prompts for Exchange directory and service name

12. Setup will now prompt you for a directory name and service name. There is no need to change the service and directory name, however in certain cases in which you are re-installing FAXmaker, you might need to change the name in order not to conflict with the previous FAXmaker service names.

13. Setup will now ask you where you want FAXmaker to be installed FAXmaker will need approx. 15 megabytes of free hard disc space. In addition to this you must reserve approximately 100 Mbytes for temporary fax files. (depending on the amount of users you have on your server)
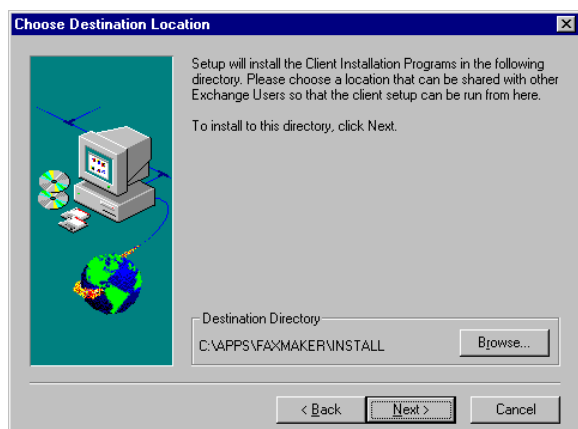
Setup prompts you where to install the client installation programs

14. Setup will now prompt you where to copy the client setup programs. The client setup program installs the fax printer driver and fax viewer on the user's PC. The location where you copy the client setup programs should be accessible to all users. Please make note of this directory because users often forget where the client install programs where copied by Setup.

15. The setup program will now copy all program files.

16. FAXmaker setup will now prompt you for a FAX service name. There is no need to change the service name, however in certain cases in which you are re-installing FAXmaker, you might need to change the name in order not to conflict with the previous FAXmaker service names. Click OK to continue.

 To de-install a service, you must delete all references to it from the registry and re-boot.

Setup prompts for a fax server service name

17. Setup will now finish the installation by creating a FAXmaker program group. This program group includes a number of applets (small applications) which you need to run to complete the installation of FAXmaker for Exchange.

18. Setup is now ready copying the files and modifying the registry. To complete the installation and start the operation of FAXmaker for Exchange, you must follow the steps outlined below.
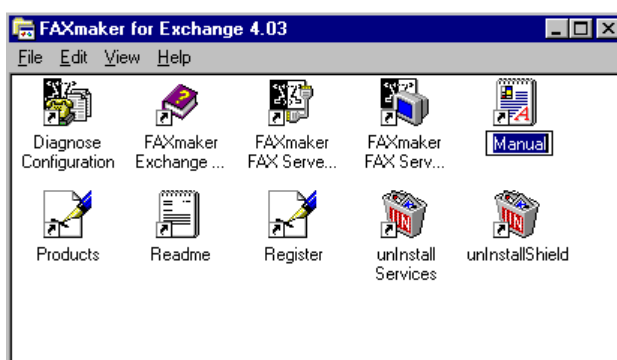
The FAXmaker for Exchange program group

Steps to complete installation

Step 1: Reboot your PC

Reboot your PC. This is necessary for the printer driver to be installed.

Step 2: Install the FAXmaker Printer driver

You need to install the printer driver as described in the readme, or in the Chapter 'Installing the client software' of this manual.

Step 3: Configure the FAX server

Configure the fax server. You need to setup at least one port (modem or fax board) to start the fax server. This is done using the Fax server configuration applet, located in the FAXmaker program group. The first time you start it, it will scan your PC for installed modems. You must have at least one class 2 or class 1 modem installed.

After FAXmaker detects a class 2 modem, it will automatically configure the port for you with default settings. Accept these for now and close the Fax server configuration applet. For more information on the fax server configuration applet, consult the Chapter 'Fax server' in this manual.

 If you have an ISDN card, you must cancel the detection process. The fax server configuration utility will automatically start, after which you must click 'Add'. Now select 'ISDN controller' from the list of available devices.

 If you have a Gammalink card, you must cancel the detection process. The fax server configuration utility will automatically start, after which you must click 'Add'. Now select 'Line 1' from the list of available devices. The gammalink driver will be installed.

If you are using an ISDN or a Gammalink card, check the website (http://www.gfifax.com) for special notes on which drivers to use with these cards.

Step 4: Configure the users

The fourth step is to activate a number of Exchange users as FAXmaker users, so that they are allowed to send and receive faxes. This is done from the FAXmaker connector dialog, located in the Exchange administrator. The first time you doubleclick on the FAXmaker connector, FAXmaker will automatically scan the exchange users (This may take some time) and set default settings per user. For more information on setting up the users, please consult the chapter 'User setup'.

Step 5: Start the FAXmaker Gateway service

You can now start the FAXmaker Exchange gateway service. This program will communicate with Exchange server and check for outgoing and incoming faxes and distribute them to the fax server or the users respectively. You can start this program as a service from the services applet in the control panel.

 If you have not entered an administrator account or a valid equivalent (with administrator rights in NT server and in Exchange server), the services will not start because they will not be allowed to do so by Windows NT server.
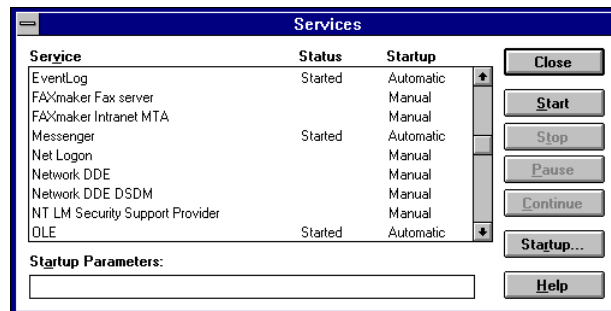
The Windows NT services applet

The 'Startup' dialog of the FAXmaker Fax service.

 To have the FAXmaker Fax service and FAXmaker Exchange gateway service start up automatically, change the Startup type setting to 'Automatic'. Make sure however that the FAXmaker gateway service is started after Exchange server itself.

Step 6: Start the FAX server program

Start the FAXmaker fax server. This program handles the sending and receiving of faxes on one or more ports. You can start as a service from the services applet in the control panel.

You can monitor the fax server using the FAXmaker monitor, which displays port activity and modem status.

 If you want to run the FAXmaker Fax server as a service, you must enter an account that has rights to log on as a service. This is done by highlighting the FAXmaker Fax server service and clicking 'Startup'.

 If for some reason you wish to run the fax service on a different machine on the network, you can do so. Please check the chapter ' Fax server' for more information on this.

Installation of the OCR routing module

THIS SECTION IS ONLY APPLICABLE TO FAXMAKER USERS WHO HAVE PURCHASED THE OCR MODULE.

FAXmaker users can opt to purchase an OCR module, that can automatically route incoming faxes to the right recipient. With this module, the fax server will scan the incoming fax for a recipient name, and if it finds a recipient's name, FAXmaker will automatically route that fax to the recipient's mailbox.

The module includes 2 OCR support disks, as well as a revised serial number.

To install the module, run a:\setup.exe from the file run command in the Program manager menu.

Follow the instructions explained during the installation.

You will now be able to setup OCR routing per user from the Exchange administrator, by going to the "OCR tab" in the routing setup. More information on how to setup OCR can be found in the Chapter 'User setup'.

Furthermore, the OCR installation installs a word document with complete installation details and last minute information. Print out this document and follow the instructions in this document.

If you have more than 1 Exchange server in your domain

When installing FAXmaker for multiple Exchange servers, you must do the following procedure, in addition to the above installation steps.

1) On the machine where FAXmaker is going to be installed create a directory where the FAXmaker directory will be installed (For example c:\apps).

2) Make this drive shared with full rights for everybody.

3) On each Exchange server machine (including the machine where FAXmaker will be installed) make a drive mapping to this drive. The mapping on each machine must be the same.

For example; If you have Exchange servers on machines 1,2 and 3, and you are installing Exchange on machine 1 you should have a drive mapping on each machine of h:\ to the c:\apps on machine 1.

4) During the installation you are asked for single or multiple server installation. Select Multiple.

5) You are then prompted for the DSA name and which users you want to select. Select your option and enter the correct DSA name (it should be displayed by default)

6) After selecting the DSA name you are asked for the path where to install FAXmaker. You should now specify the mapped path eg. h:\ FAXmaker for the above example.

7) The installation will now proceed normally. Follow the instructions in the manual to see how to configure the users.

PLEASE CHECK the FAXmaker for Exchange FAQ for last minute information regarding setup of FAXmaker in a multiple server environment.

User setup

Introduction

The setup of the FAXmaker users is done from the Exchange Administrator. The person who is authorised to supervise the system can add or delete FAXmaker users and administer their settings.
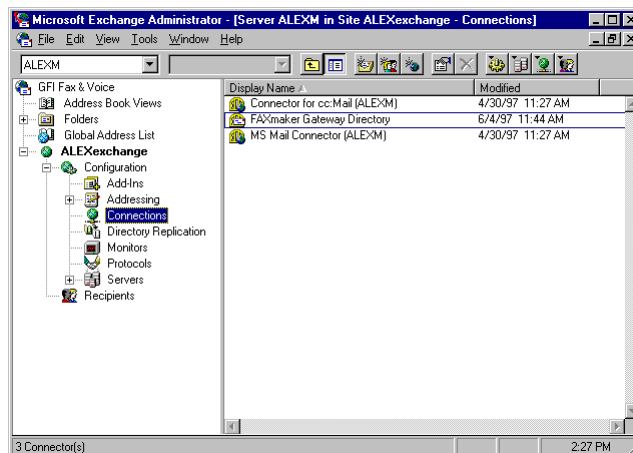
The Exchange administrator

After FAXmaker has been installed, a new directory objects has been added to the Exchange administrator;

It is located in connections, which is a sub branch under your domain name.

Registration

Before you setup the users, enter your serial number in the options tab. This serial number will also allow you to upgrade to more users or add additional modules. To read more about the upgrade options of FAXmaker, please visit our web site at http://www.gfifax.com.

To enter the serial number;

1. Double-click on your domain name in the Exchange administrator.

2. Double-click on 'connections'. In the right pain, the FAXmaker directory is listed. (The exact name may differ, because you specify it during installation.)

3. Double-click on the FAXmaker directory object.

The FAXmaker directory property dialog appears. Go to the options tab. enter the registration number at the top of the dialog. Click OK to continue.

Note; If you are evaluating FAXmaker for Exchange, leave this field empty and test FAXmaker with 2 Exchange users maximum. (This is done by disabling Exchange users as FAXmaker users.)

User settings

To setup the FAXmaker users from the Exchange administrator;

1. Double-click on your domain name in the Exchange administrator.

2. Double-click on 'connections'. In the right pain, the FAXmaker directory is listed. (The exact name may differ, because you specify it during installation.)

3. Double-click on the FAXmaker directory.

The FAXmaker directory properties dialog appears. This dialog has 4 tabs; General, Address Space, Options, Users

To setup users, go to the users tab. To setup a user, highlight his/her name with the mouse and select the appropriate settings;

The user setup dialog in the FAXmaker connector

General Options

FAXmaker user - This option will effectively enable or disable the user as a FAXmaker user. If you have more Exchange users than the number of FAXmaker users licensed, you must disable users.

Permission to configure settings remotely - This option will allow the user to change coverpage, faxheader and send resolution by sending mail to the faxadmin. (See the chapter on Remote administration for more information)

Send Options

Normal resolution/High resolution - Select the default resolution to send faxes in. This option can be overridden by specifying a different resolution in the body of the message. (See fax options in the "Sending faxes" chapter).

Personal FAX header - activating this option will include the sender's name on top of the FAX. This will allow recipients of the FAX to identify the sender.

Receive Options

Receive incoming faxes - This option specifies that this user must receive incoming faxes, so that she/he can route faxes to the right users.

Include/Exclude routed faxes - When receiving all incoming faxes in one mailbox, this option allows you to specify whether to include or exclude faxes for which a recipient already has been found, using available routing methods.

Advanced options

Attachments

The Attachments dialog allows you to specify whether you wish to have faxes files attached to your fax reports sent to your inbox. In case you dial in to pick up email you might want to disable this option.

The following options are available;

Include fax files after failed tranmission

Include fax files after succesfull transmission

Include OCR output to incoming fax – this option allow you to specify whether the OCR output must be attached to the incoming fax, allowing you to edit the fax. This requires the OCR module to be installed.

Routing

Routing refers to the ability of FAXmaker to automatically route an incoming fax to the right person. There are a number of ways to achieve this;

CSID routing - this method relies on the FAX ID which each FAX machine/FAX card displays when sending a FAX. Since it rarely changes, it can be used to identify the sender and thus the corresponding recipient.

Recognise FAX ID　　　　　Search in Database.
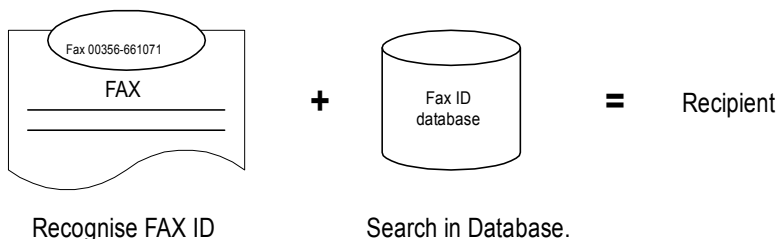
Routing a fax using the FAX ID (CSID)

You can setup CSID routing by adding CSIDs (FAX IDs) to a user's CSID list. FAXmaker will then route incoming faxes with that particular CSID to that user.

Automatic Updating of the user's CSID list.

Activating the option 'Store CSIDs of all outgoing faxes in list' will automatically update the user's CSID list. Each time a user sends a fax, the CSID of the recipient(s) will be stored in the CSID list. This technique relies on the fact that if a user sends a fax to a particular fax machine, he is likely to be the recipient of the answer to the fax. If you enable this option, each time the user sends a fax, the CSID of the receiving fax is stored in the user's CSID database.

DTMF routing - DTMF (Dual Tone Multi Frequency) tones are the tones generated by a telephone handset, and can be used to identify a recipient. The DTMF number can be appended after the regular fax number. The system works in the following way: the caller dials the fax number and waits until the call is answered. The fax card will now transmit a tone, after which the caller must enter the DTMF routing number. The FAXmaker server will recognise the DTMF number and use it to identify the recipient of the fax.

DTMF routing can work well, if you explain your callers how to use it. This can be done on the FAX coverpage of outgoing faxes. DTMF routing can also be used behind a PBX which supports DID. In this case you can use excess DID lines from the PBX to route the FAX to an extension.

Fax
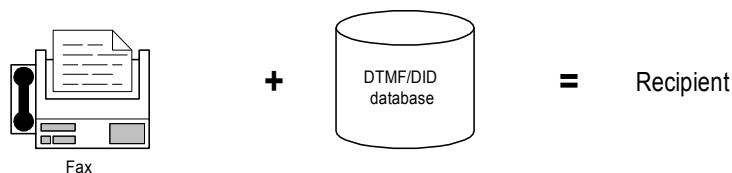
Receive DTMF tones
from calling fax machine

+   DTMF/DID
database

Search in Database.

=   Recipient

Routing a fax using DTMF/DID routing

DID routing (Direct Inward Dial) - DID routing is generally considered the most reliable form of automatic inbound routing, because it relies on information provided by the telephone exchange, not on information provided by the caller. DID requires you to purchase 'virtual phone numbers' from your telecom company, which you can assign to users or departments. The virtual phone number (DID number) will be passed to FAXmaker so that FAXmaker knows to whom the fax should be routed. A DID number is passed using either a PBX with DID capability, or a fax card with DID as a DID device. These devices must pass the DID number to FAXmaker as a series of DTMF tones. The system is completely transparent to the caller and does not require any effort on his part.

To setup both DID and DTMF routing, click on the 'Routing-Setup' button. Then go to the DID/DTMF tab in the routing dialog. Fill in an appropriate routing code for the user. Remember that actual activation

of DID or DTMF routing is done in the FAX server. The administrator only stores the users' routing code. The same routing code can be used for both DID or DTMF routing.

 If you are going to use an ISDN card to perform DID routing, please refer to the 'FAX server' Chapter for more information how to setup this up
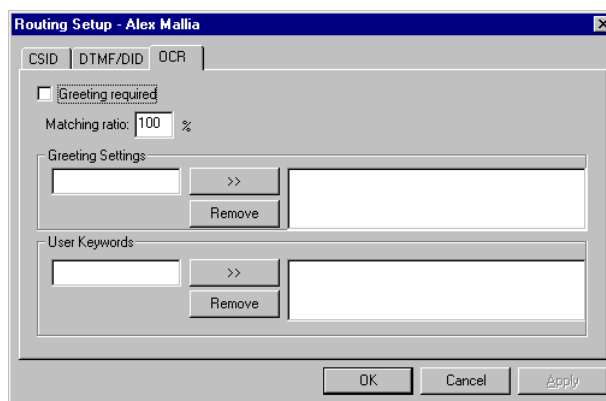
The OCR routing setup dialog

OCR routing - OPTIONAL MODULE - Another easy way to route faxes automatically is using OCR. This system will OCR the first page of a fax, and consequently search the fax for a recipient name. If it finds one, it will route it to the recipients mailbox. This option requires the optional OCR module.
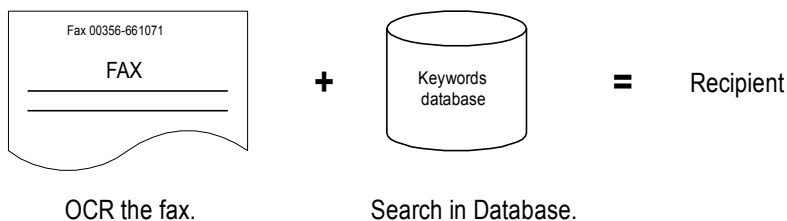
Routing a fax using OCR

To setup OCR routing, click the OCR setup button in the Routing tab. This dialog has two tabs:

Greeting - meaning that the FAX server will search for a greeting such as Dear, Mr., Ms., etc., before the actual user name. This means that the FAX server will only attempt to recognise a user name after it has recognised a   greeting word. You can add and remove greetings by clicking the add and remove buttons. You can enter a matching ratio, or confidence level in the edit box. This allows you to specify the confidence FAXmaker must have before it will actually recognise it as a greeting. Using this option you can tune the system to your specific needs. For normal use, a low setting is required, since greetings are

short, and a lower matching ratio allows for OCR mistakes, and for 'spelling mistakes'.

User keywords - here you can enter keywords per user, which FAXmaker will search for to identify the recipient of a FAX. If, for example, an individual Mr. Johnson, is also known as John, this keyword may be entered also, as well as Mr. Johnson. In addition, if Mr. Johnson is responsible for international sales, one might add international sales as a keyword too. A matching ratio can be entered to tune the system.

Do not use 100% as a matching ratio.!

Call blocking

Call blocking allows you to exercise control over the fax numbers that the users can send to. To enable this option, activate the radio box. You can now add numbers to the list which may not be dialled by the user. FAXmaker will check the list before each fax transmission, and not send any faxes starting with numbers listed in the call blocking list. This means that if you want to disallow certain users making international fax transmissions, you only need to insert the international dial out number (for example 00, 09 or 011). Alternatively you can block specific fax-numbers.

Coverpages & Templates

A number of coverpages and templates can be used for sending faxes. The administrator can do this from the Coverpage and Template properties dialog. Users can also change coverpage and templates from the client (see chapters 'Sending and receiving faxes' and 'Remote Administration').
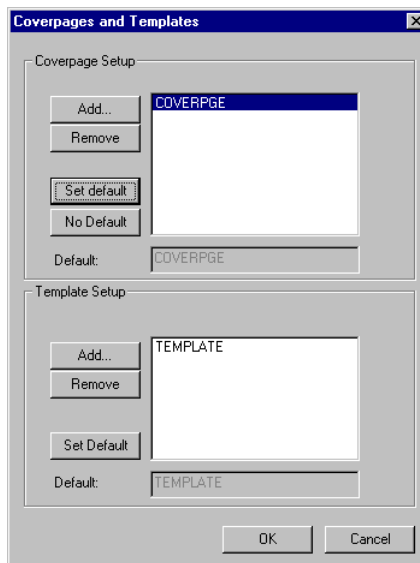
The Coverpage and Template setup dialog

Difference between a coverpage and a template

A coverpage is inserted in front of a fax, whereas a template is the format or lay-out of the actual fax message. This means that by designing a template with a letter head and fields, you could eliminate the use of a coverpage (see also chapter 'Designing CoverPages & Templates').

Whether you use a template or coverpage or both is up to you to decide.

Adding templates or coverpages

FAXmaker ships with a number of sample templates and coverpages. By default, FAXmaker will use the file template.rtf (located in the Faxmaker-coverpge subdirectory) as a template for all users.

By modifying template.rtf you can avoid configuring a template file for each user.

To add a custom coverpage or template:

1. Design your coverpage/template in your word processor and save it as an RTF (Rich Text format) file (i.e. with extension '.rtf'). For more information on designing a coverpage/template, turn to the chapter 'Designing Coverpages & Templates'.

2. Click 'Add' and select the RTF file you created.

3. If you wish to set this RTF file as the default, click 'Set Default'.

Voice mail

For the latest configuration details on voice mail, please check our web site on http://www.gfifax.com.

The Fax Server

Introduction

The Fax server program is the core of FAXmaker. It is fully multi tasking and can handle sending and receiving of faxes simultaneously (If you have multiple fax modems). The Fax Server can run as an application or as a service. Setup of the Fax server is performed from the FAXmaker 'Fax Server Configuration' applet.
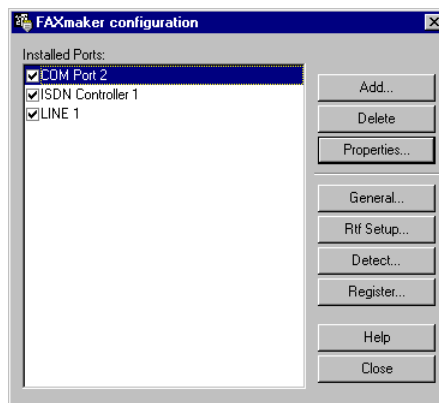
The fax server configuration applet

Registration

Before you setup the fax server, enter your registration number in the register dialog. This registration number will also allow you to upgrade to more users or add additional modules. To read more about the upgrade options of FAXmaker, please visit our web site at http://www.gfifax.com.

To enter the registration number;

1. Click on 'Register '.

2. Enter your company name and registration number Click 'OK' to continue.

 If you are evaluating FAXmaker for Exchange, leave this field empty

and test FAXmaker with a maximum of two-users.

 Please take some time to register your product using the WWW form on our site: **http://www.gfifax.com/pages/regfrm.htm**. This will also allow you to request support.

Configuring the Fax Server

Before you start the Fax Server, you must configure the 'Ports' that you will be using in the Fax server. A port is a COM port with a modem attached or a fax line on a fax/ISDN board. To configure a port:

1. Start up FAXmaker's 'Fax Server Configuration' applet.

The first time you start it, it will automatically scan your PC for an available port. You can cancel this process by clicking 'Cancel'.
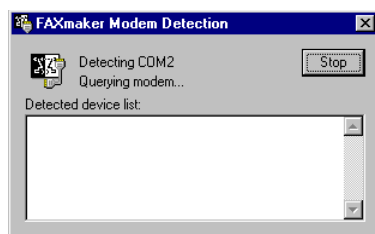
FAXmaker detecting a fax device

FAXmaker will try to detect a modem installed on your PC. After it finds a modem, it will ask you whether you wish to install it. Select Yes. You can now cancel the auto-detect process, unless you wish FAXmaker to scan for more modems.

If you are using an ISDN or Gammalink card, cancel the autodetect process. The 'Fax Server Configuration' utility will automatically be displayed. Now select 'Add'. You will be able to select from a list of compatible fax devices. If you are using an ISDN card, select ISDN controller. If you are using a Gammalink card, select 'Line 1'. The setup for the cards will appear automatically.

 If you have cancelled the scanning of ports earlier, or have installed an additional modem or board, you can select 'Add' to restart the scanning process. You will be able to choose from a list of fax devices.

 You can change the port settings by double-clicking on a port or selecting a port and clicking 'Properties'.

2. A tabbed dialog will appear, which allows you to specify modem, fax, printing, routing and archive options for that port. If you have OCR installed, an OCR tab will also appear.
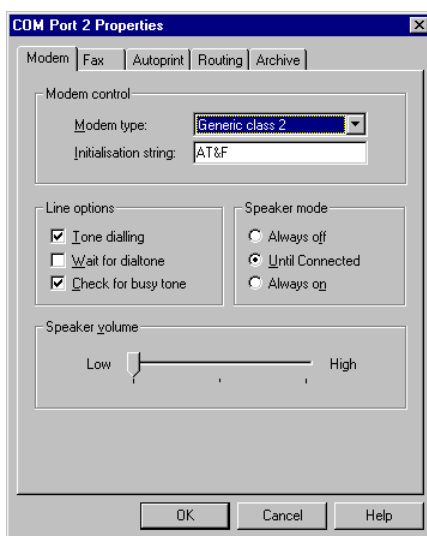
The modem properties   tab

Modem Properties

This tab allows you to configure your modem.

Modem control

Modem type - Select your modem from the drop down list box.

Initialisation string - Although the initialisation string does usually not need to be changed, you can edit the string in this field.

Line options

Tone dialling - Activate this check box if you can use tone dialling. If you deactivate it, the Fax server will use pulse dialling.

Wait for dial tone - If you activate this option, the fax server will only send the fax if the modem detects a dial tone.

 Some export modems do not recognise the dial tone, so you must first test whether your modem recognises a dial tone. If it does not, deactivate this option.

Check for busy tone - Activate this option if you want the modem to check for a busy tone.

Speaker mode - Select whether you want the speaker to be 'Always Off', or 'On until connected' or 'Always On'.

Speaker volume - Select the appropriate volume.
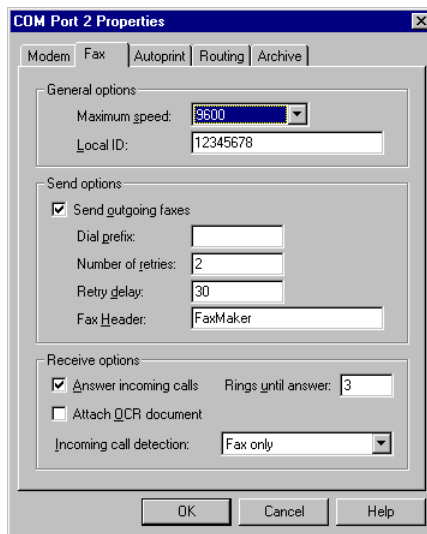
The fax setup tab

Fax Setup

General options

Maximum Speed - Select the send and   receive speed according to your modem's capabilities. Remember that not all modems are able to negotiate "down" well, so choose 9600 if in doubt.

Local ID- Enter the fax ID. The recipient will see this as the identification code of the fax.

Send options

Send outgoing faxes - This radio box allows you to determine whether this port/modem should send faxes. This is useful when you want to use one port or modem for receiving faxes only.

Dial prefix - If your lines are located behind a PBX, you can specify a dial prefix here.

Number of retries - Sets the number of times FAXmaker will try to re-send a fax.

Retry delay - This option allows you to set a delay between retries in seconds.

Fax header - The fax header is a word or company name which will appear on top of each fax.

Receive options

Answer incoming calls - For the fax server to be able to receive faxes, this option must be checked. Specify after how many rings you want FAXmaker to answer in the 'Rings until answer field'.

Attach OCR document - If you have the OCR module installed, you

can select this option to have the OCR text output attached to the incoming fax.

Incoming call detection - By default the fax server will answer all incoming calls as fax only. However, if you have installed the voice mail or Fax on demand module (optional module), you can have the fax server detect between fax/voice or voice only calls.

The routing setup tab

Routing

Inbound routing of faxes is set up in the 'User Configuration' applet, however you must activate the various routing methods in the server in the 'Routing properties' tab. Activate a routing method by clicking on the appropriate radio box.

 Do not enable DTMF/DID routing unless you have a compatible voice modem or a compatible ISDN card correctly setup. Compatible voice modems are Zyxel or modems that have a Rockwell voice chipset. You must also select the corresponding driver in Modem properties as either Voice modem (Rockwell) or Zyxel. If you enable DTMF routing without having a voice modem or an ISDN card, the fax server will generate an error whilst receiving.

DTMF/DID options

Generate beep - you can instruct the Fax server to generate a beep when it picks up the line. This will alert the caller or PBX to enter the DTMF string.

Number of digits - Length of DTMF string/number that caller or PBX must generate.
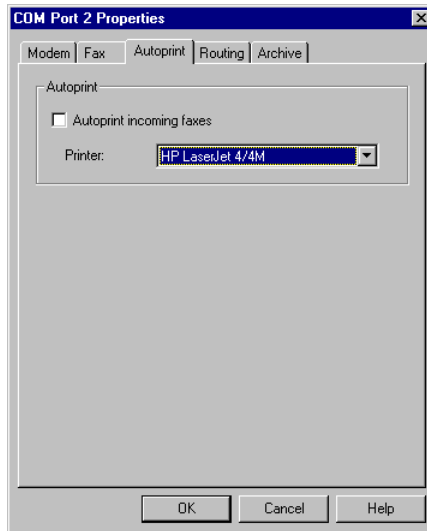
Autoprint properties

Autoprint incoming faxes

The printing options dialog allows you to configure automatic printing per port. That is, you can select either the same or different printers to service the printing requests from various ports. Both incoming and outgoing faxes can be printed automatically. Printing of outgoing faxes is configured in the general setup because it is not port specific.
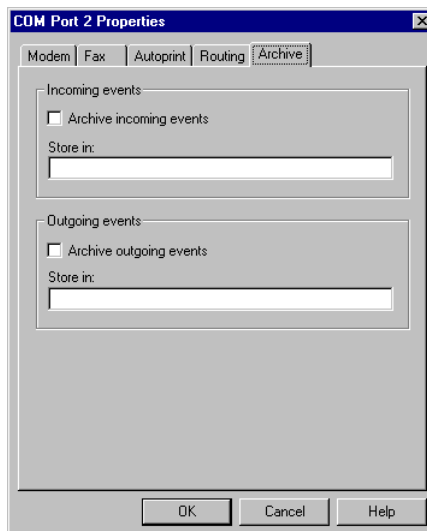
Archiving properties

Archive

This tab allows you to specify the archive options. Archiving allows you to create a backup of all incoming and outgoing faxes.

If you have the OCR module installed, FAXmaker will store the OCR text output in the same directory, using the same file name as the corresponding fax file, but using extension *.txt instead of *.fax.

Archive incoming - Archives all incoming faxes in a directory of your choice.

Archive outgoing - Archives all outgoing faxes in a directory of your choice.

Configuring an ISDN card

Skip this paragraph if you do not have an ISDN CAPI 2.0 card.

The setup of the ISDN card is quite similar to the setup of a modem.

ISDN card send receive options

First of all select the appropriate ISDN card from the list of available ISDN card drivers. Because the currently available cards differ in their specifications, some send and receive options may not be applicable to your card. For the latest information regarding ISDN cards and FAXmaker, please check our web site http://www.gfifax.com.
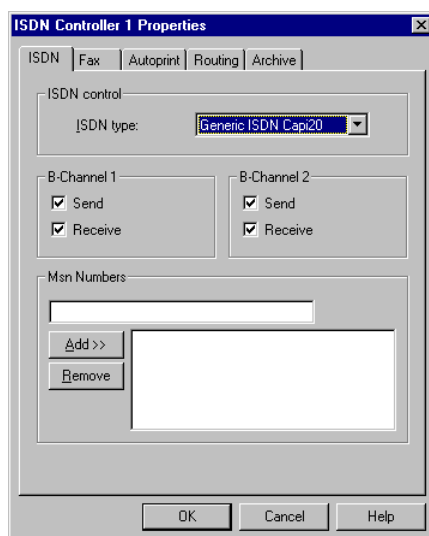
The ISDN card properties   tab

MSN number setup

You must specify which MSN numbers FAXmaker must answer. For example, if you wish that FAXmaker only answers the number 040-306810-10, then you must enter it here.

 If you do not enter any number here at all, FAXmaker will not answer incoming calls!

If you wish that FAXmaker answers a whole range of numbers (for example if you are using DID routing), just enter the starting number of the range of numbers. For example: to instruct FAXmaker to answer all numbers 306810-10 up to 306810-19, enter '306810-1' in the MSN number setup dialog.

Configuring routing with ISDN

After configuring the MSN numbers, you can setup automatic routing of faxes. This is done using the DID routing feature. (In the UK, DID is referred to as DDI). To configure routing with ISDN;

1. Make sure the MSN numbers have been entered.

2. Switch on DTMF/DID routing in the routing tab.

3. Specify the number of digits that FAXmaker should use. For example if your DID numbers are 306810-10 to 306810-19, then specify 2 digits. This means that FAXmaker will only 'analyse' the last two digits of the number and try to match it with a user's DTMF/DID routing number. This number is entered in the 'User Configuration' utility, in the routing tab.

Configuring a Gammalink card

Skip this paragraph if you are not using a Gammalink card.

To use a Gammalink card, you must install the correct drivers and run the special FAXmaker Gammalink setup program which can be found on our website. We have chosen to publish this setup program on our web site only so that we can be assured that you have the latest setup program. To download the setup program please check the Support section on the GFI web site.

To add a Gammalink card, simply select 'Line 1' from the list of compatible fax devices. This will automatically add the Gammalink driver. A tabbed dialog will appear in which you have the same fax, OCR, routing, call blocking and archiving options as for modems. For more information on these settings please see the first part of this chapter.
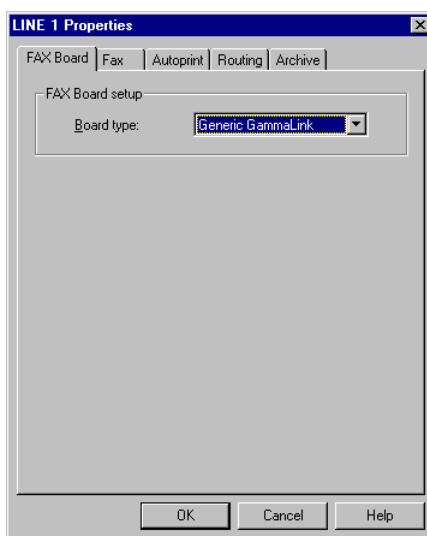
The FAX board properties   tab

RTF converter setup

The RTF converter converts coverpages and e-mail messages to fax, using a customisable RTF file as a template. The converter options are changed from the 'Fax Server Configuration' applet.
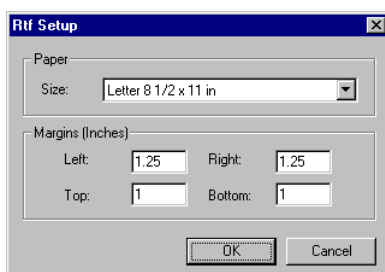
RTF converter setup

To change RTF conversion options:

1. Click the RTF setup button at the bottom of the list of ports.

2. A dialog appears which allows you to specify the margins that you wish to use. It is important to take these margins into account when designing your cover page.

3. The default page size cannot be changed. The list box has been included to indicate that you must set the page size of your RTF template to 81/2 by 11 inches. (Standard US size) This will in no way effect your fax transmissions.

General options

The general setup contains general options which are not specific to a port. To change general options;

1. Click the general button next to the list of ports.

2. A dialog appears which allows you to specify general options;
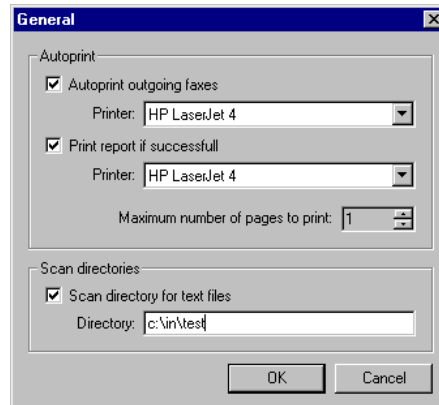
The general options dialog

Autoprint outgoing faxes

Autoprint outgoing faxes - This option automatically prints all faxes that are sent successfully. You can select a printer on which all faxes from the list box will be automatically printed.

Print report if successful - If this option is activated, FAXmaker will print a transmission report and a miniature of the fax after successfully sending a fax. You can also specify how many pages you wish FAXmaker to include in the miniature print out (maximum of 4 pages).

Scan directory for text files

This option allows you to send faxes programmatically, by posting a correctly formatted text file in the 'scan directory'. In this way you can integrate FAXmaker with a Web server, and allow a custom CGI script to send a fax automatically.

To send out a text file automatically:

1. Create a text file with your message text in it.

2. Add a line at the top of the text, starting with a double colon ::, specifying the recipients name (optional) and company and the fax number. For example:

::Mr Johnson, GFI, 661072

3. You can add additional send options by adding a second line,

preceded by a double colon, specifying valid send options as described in the 'Sending and Receiving Faxes' chapter.

If the fax is transmitted successfully, the extension of the fax file name will be changed to *.suc. If the fax has failed, the extension will be changed to *.err. This allows you to give feedback to the user of your program.

Text files are formatted using an rtf file as a template. This way you can add your company logo and address details etc. to the text file. The rtf file is called txttmpl.rtf and is located in the coverpage directory. To change this template, simply edit txttmpl.rtf and save it with the same name in the same directory.

Configuring the ActiveX document converter

FAXmaker is able to convert Office 95/97 and other attachments such, using its document converter interface.

Requirements of the document converter

- FAXmaker must be running on Windows NT 4.
- Microsoft Office 97/95 must be installed on the Exchange/Fax server computer.
- The FAX server must be run either as a desktop application, or the service must be allowed to interact with the desktop. This is required because the fax service must be able to interact with Office 97/95. To do this, run the FAXmaker fax server with the -desktop option from the FAXmaker program group. If you want to run the fax server as a service you must enable ' Allow service to interact with Desktop' from the Startup dialog of the fax service. (Control panel)

Adding additional formats

To add additional formats, you must write a script that interfaces with the active X objects of the custom application that you wish to add. For more information on how to do this, consult GFI or check the GFI FAX & VOICE website for more sample scripts.

US date format in fax header

The FAXmaker fax header is as default set to the European date format.

To make the FAX header appear in US date format;

Open the fgwmserv.ini file (located in the Windows NT directory) with notepad, and search for;

UsaDateFormat=0/1

To switch on US date format, set the value to one. This setting should be

changed for each COM port.

The FAX Server Monitor

The 'Fax server monitor' allows you to monitor the status of the fax server. The top pane shows the activity on each of the ports, and the bottom pane displays a detailed error log.
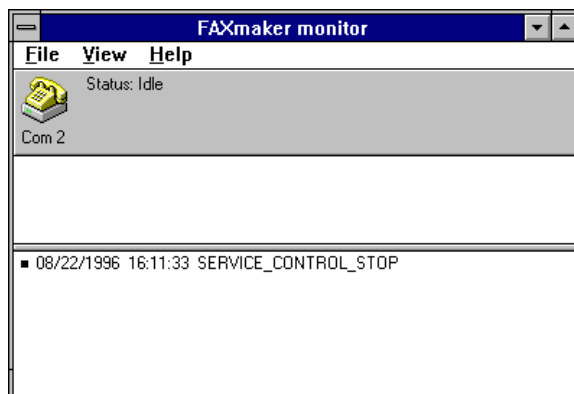
The Fax server monitor

The 'Fax server monitor' can be started from another PC as well, however the error log will not be listed.

Aborting a fax

To abort a fax, select the appropriate port and choose 'Abort' from the port menu.

The Queue view utility

FAXmaker includes a queue view utility which allows you to see which faxes are queued to be sent at the server level. When a fax has been submitted to be sent, the only way to delete it is using this queue view utility! The queue view utility can be started from the FAXmaker program group.
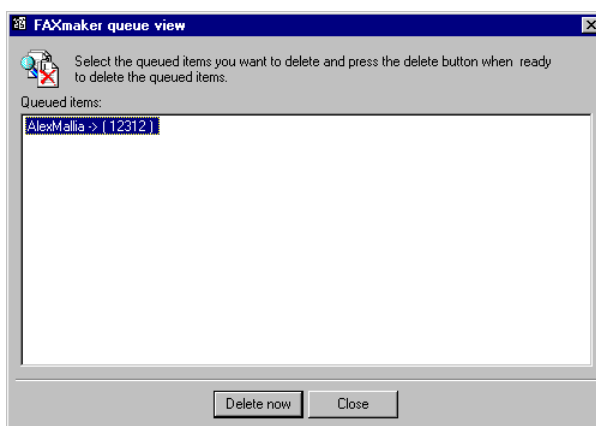
The queue view utility

Running the fax server as an application

The FAXmaker fax server can be run as an application from the FAXmaker program group or as a service from the services applet.

The FAXmaker fax server can also be run from the console/command prompt by specifying <-desktop>. For example;

fgwmserv -desktop

This will start the FAXmaker fax server as an application and allow you to quickly start and stop the fax server.

Running the fax service on another machine than exchange server

The PC's workload can be decreased by separating FAXmaker for Exchange onto two servers; The Exchange gateway service running on the Exchange server and the fax service running on a separate NT machine, the fax server. Separating the workload is normally not necessary, but can be done if the customer wishes to do so.

Network

Windows NT server
running MS Exchange server and
the FAXmaker gateway service

Windows NT server or Workstation
running the FAXmaker fax service
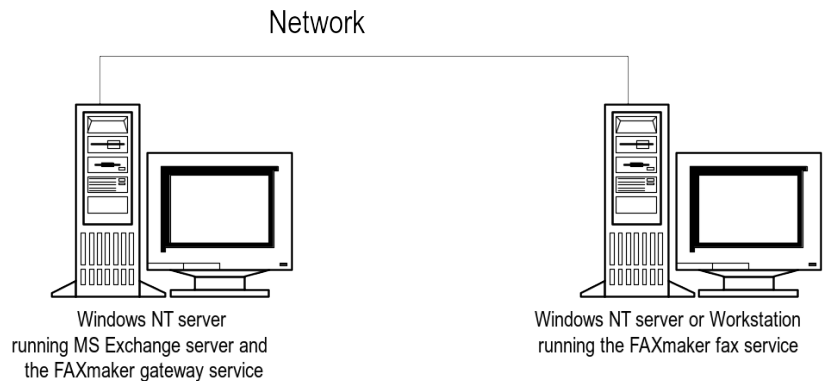
Steps to separate workload;

1. Ensure you have a second NT machine, effectively the fax server, which will be running the fax service. This fax server must be running Windows NT workstation 3.51 or 4, or NT server 3.51 or 4. For NT workstation, a minimum of 16 MB must be installed, for NT server a minimum of 32 MB memory. The modems must be installed on this machine.

2. Install and configure FAXmaker for Exchange as described in the manual on the Exchange server machine. When FAXmaker is running satisfactorily, start the "separation process".

3. Stop the fax and gateway service on the exchange server machine if it is still running.

4. Install the fax client on the fax server machine. Afterwards, install the FAXmaker printer driver on the client machine.

5. Copy the entire FAXmaker directory to the fax server machine that will be running the fax service. DO NOT USE A DIRECTORY NAME ON THE FAX SERVER MACHINE DIFFERENT THAN THE ONE USED ON THE EXCHANGE SERVER (eg. C:\FAXMAKER on both Exchange and fax servers).

6. Share the entire FAXmaker directory on the fax server machine (ie. share C:\FAXMAKER).

7. On the Exchange server machine, make a drive mapping to the FAXmaker directory located on the fax server machine. This drive mapping will be used to tell the exchange service where to store the in-going and outgoing faxes. |(eg. Map fax server machine F:\ on exchange server)

8. Now install the FAXmaker fax service on the fax server machine. This is the way it should be done:

9. If you are using the same version of Windows NT (eg. both version 3.51 or both version 4.0)

a)	start up the registry on exchange server (by running the command REGEDT32.

b)	Select the 'HKEY_CURRENT_MACHINE on local machine ' window.

c)	Select and open 'HKEY_CURRENT_MACHINE' , then select and open 'SYSTEM', select and open 'CURRENTCONTROLSET', select and open 'SERVICES', and finally select 'FAXmaker FAX service' and high light it.

d)	Open Registry menu (by mouse or ALT-R) and choose 'Save Key..'. Name and save under the drive which is mapping fax server (eg. save as F:\FAXMAKER\fax.).

e)	go to the fax server and run registry as in (a).

f)	Select and open the same options as above 'HKEY_CURRENT_MACHINE' ,'SYSTEM', 'CURRENTCONTROLSET', 'SERVICES' and then select Edit Menu (ALT-E) and choose 'Add Key..' name key 'FAXmaker FAX service' .

g)	Select the newly created key (FAXmaker FAX service) and choose Registry menu (ALT-R).

h) Select 'Restore..' and write name of file you saved before, this time in the server drive (eg. c:\FAXMAKER\fax).

I) Reboot the computer. The FAXmaker fax service is now installed on the fax server.

If you are NOT using the same version of Windows NT (eg. one version 3.51 and the other version 4.0) save the registry file from a same version of Windows NT of the fax server. Then continue from   procedure (e) above.

10. From the Windows NT directory of the exchange server copy **FGWADDR.INI** to the Windows NT directory on the fax server. Furthermore, you must copy **FGWMSERV.INI** from Windows\ FAXmaker directory to Windows\FAXmaker on server machine.

11. Now install the FAXmaker printer driver on the fax server machine also as described in the readme

12. Configure FAXmaker on the fax server (eg. modems), by starting fgwconfg.exe on the fax server machine (located in the FAXmaker directory)

13. Start up the Exchange administrator on the Exchange server machine and go to the FAXmaker connector

14. Go to the options tab and change the location of the in and out directories to the directories on the fax server machine (You made a mapping earlier to this directories, eg. F:\FAXMAKER\IN and F:\ FAXMAKER\OUT)

15. Start the FAXmaker fax service on the fax server machine. Restart the gateway service on the Exchange server machine.

You should now be able to send and receive faxes using the second fax server machine.

NOTE: Any changes to the user setup will require that you copy the all FGWADDR.INI and FGWMSERV.INI to the fax server machine. If you make any changes to the fax server setup, make sure you do it on the fax server machine.

Installing the Client software

Introduction

After installing the Fax server, you can already send faxes by typing the message in the e-mail program. However if users wish to send faxes directly from their Windows applications, or wish to view their incoming faxes using the FAXmaker viewer, they must run a setup program from their machine first. This installation procedure is described below.

The setup program installs the printer driver and the viewer on the user's machine.

Installing Windows 3.1 or 3.11 clients

1. Run <setup.exe>, located in the install\win 3.1 directory located under the install directory, by using the 'Run' command from the 'File' menu in Program Manager. The exact location of the client setup programs was determined by the administrator during initial FAXmaker setup. (If in doubt, contact your administrator to find out from where to install the FAXmaker client).

2. Follow the installation instructions displayed in the installation dialogs. Setup will copy a number of files to the directory Faxmaker, located under your Windows directory.

3. Reboot your machine after completing the installation.

Installing Windows 95 clients

1. Run <setup.exe> located in install\win95 directory by using the 'Run' command from the 'File' menu in Program Manager.

2. Follow the installation instructions displayed in the installation dialogs. Setup will copy a number of files to the directory Faxmaker, located under your Windows directory.

3. FAXmaker setup will ask you which viewer you wish to use to view faxes. FAXmaker includes a standard fax viewer, but if you have WANG imaging installed on Windows 95, FAXmaker can offer advanced viewing facilities such as Annotation.
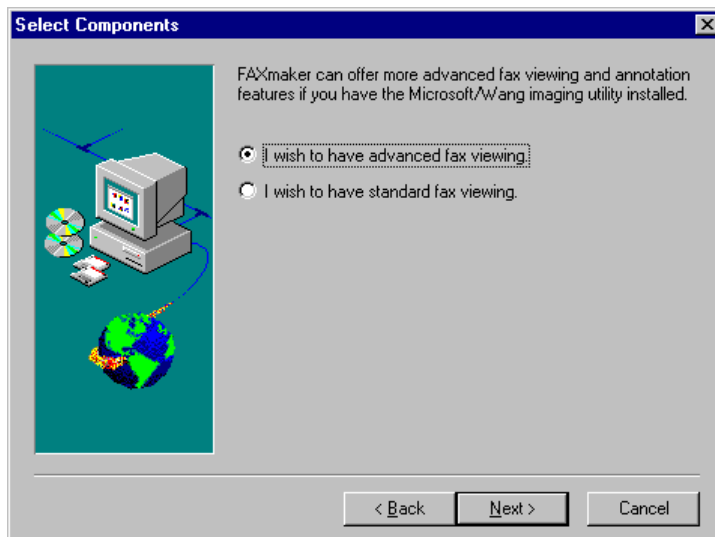
Setup asks which fax-viewer you would like to install.

The WANG imaging viewer is available for Windows 95 & NT4. It can be downloaded free of charge from http://www.wang.com and http://www.microsoft.com.

In later versions of Windows 95 and in Windows NT 4, the Wang imaging viewer is an installation option. Before selecting the advanced viewer check whether you have Wang imaging installed.

4. Reboot your machine after completing the installation.

Installing Windows NT 3.51 clients

1. Run <setup.exe> located in the \install\winNT35 directory by using the 'Run' command from the 'File' menu in Program Manager.

2. Follow the installation instructions displayed in the installation dialogs. Setup will copy a number of files to the directory Faxmaker, located under your Windows directory.

3. Reboot your machine after completing the installation.

Installing the Windows NT 3.51 fax printer driver

After running the FAXmaker Windows NT Install program & rebooting your machine, you must install the fax printer driver from the Print Manager.

To create a printer, you must be logged on as a member of the Administrators, Server Operators, Print Operators, or Power Users group.

1. Start the Print Manager from the Control Panel or Main group.

2. From the Printer menu, choose 'Create Printer'.

3. In the Printer Name box, type **FAXmaker**.
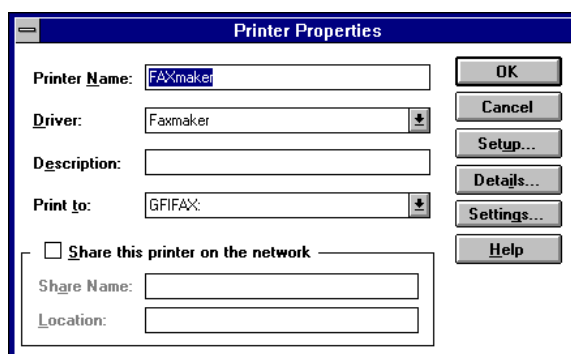
The Windows NT create printer dialog

4. Install the FAXmaker printer driver: in the 'Printer Properties' dialog box, select 'Other' in the Driver box.

5. In the 'Install Driver' dialog box, specify the drive and path where the FAXmaker\install\client\winnt\winnt35 directory is located, for example:

FAXmaker\install\client\winnt**winnt35** and choose the 'OK' button.

6. In the Select Driver dialog box, select the FAXmaker driver. Then choose the 'OK' button.

7. The driver will now be installed by FAXmaker.

8. In the Driver box, select the FAXmaker printer driver 'FAXmaker'.

9. In the 'Print To' box, select 'GFIFAX:'. (This port should have been automatically added after you rebooted the system).

10. In the 'Create Printer' dialog box, choose the 'OK' button.

11. This completes a basic printer installation. Once a driver is installed, Print Manager automatically displays a dialog box allowing you to set up the features of your printer. There is no need to change any of these options.

## Installing the Windows NT 4.0 clients

1. Run <setup.exe> located in the \install\winNT40 directory by using

the 'Run' command from the 'File' menu in Program Manager.

2.   Follow the installation instructions displayed in the installation dialogs. Setup will copy a number of files to the directory Faxmaker, located under your Windows directory.

3. FAXmaker setup will ask you which viewer you wish to use to view faxes. FAXmaker includes a standard fax viewer, but if you have WANG imaging installed on Windows NT4 (This is part of the Windows NT 4 CD ROM, check Windows Setup to see if you have it installed), FAXmaker can offer advanced viewing facilities such as Annotation.

Setup asks which fax-viewer you would like to install.

 In Windows NT 4, the Wang imaging viewer is an installation option. Before selecting the advanced viewer check whether you have Wang imaging installed.

4. Reboot your machine after completing the installation.

Installing the Windows NT 4 fax printer driver

After running the FAXmaker Windows NT Install program, you must install the fax printer driver from the Print Manager.

To create a printer, you must be logged on as a member of the Administrators, Server Operators, Print Operators, or Power Users group.

Go to the 'Add printer' wizard located in the 'Printers folder' in the control panel.

You may need your Windows NT 4 install disks at hand.

1. Start 'Add Printer'

2. Select 'My Computer'
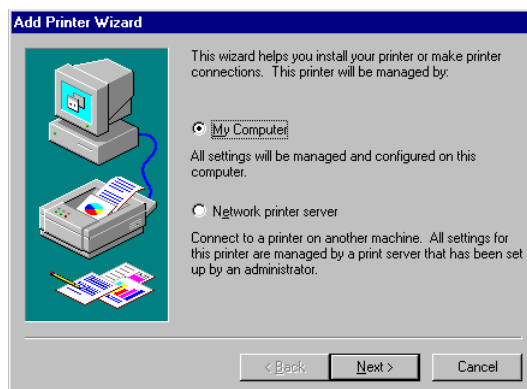
Selecting the 'My Computer' option

3. Select 'Next'

4. Select 'GFIFAX' from available ports list. This port will only appear after running the client installation and rebooting your machine after installation.
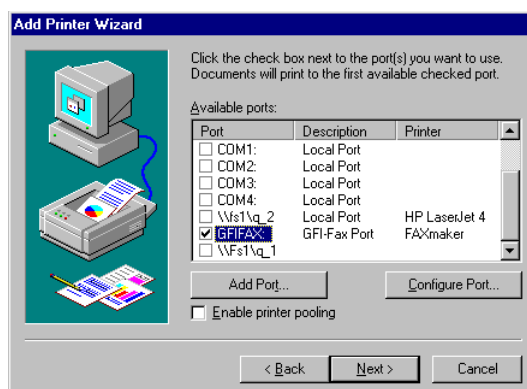
Selecting the GFIFAX port

5. Select 'Next'.

6. The printer selection dialog will appear. Select 'Have Disk'

7. Enter the path to the FAXmaker NT driver directory; namely FAXmaker\client\winnt**winnt4**.

8. Choose 'OK'

9. Verify FAXmaker printer driver appears in Printer dialog.

10. Choose 'Next'.

11. The 'Add Printer' wizard will prompt you to insert the Windows NT 4 CD ROM. However, if you have an English installation, you can simply delete i386 from the path that is prompted' and use the files supplied by the FAXmaker install. (NOT RECOMMENDED, USE NT INSTALLATION DISKS IF POSSIBLE.)

Click 'OK' to continue.

12. You may choose to use FAXmaker as your default printer driver.

13. Click 'Next'.

14. Choose 'Not shared'.

15. Click 'Next'.

16. Do not print a test page.

17. Choose 'Finish'.

Advanced Use

Introduction

This chapter is meant for users of FAXmaker who wish to tune their FAXmaker installation and get to know all its features.

Personalised Fax broadcasting (fax mail-merge)

FAXmaker is able to send out personalised fax broadcasts using the Mail merge feature of Microsoft Word 95 and 97.

To use this feature, you must prepare a data file which includes the recipient details and their fax number formatted in a particular way.

Preparing the data source

The data source (the list of recipients) that you are going to use (since Word can use ODBC you can access almost any datasource), must contain a field for each record with the fax/email address. The email address must be a one-off FAXmaker address, written in the following way; [FAXmaker:23456]. There is no need to display this field in the word document, but it must be present in the datasource, so you can instruct Word to merge to the faxserver email address.

If you wish to add a coverpage to the fax which must include recipient name and company name, you must include this information in the FAXmaker address as well. To do this format the address in the following way;

[FAXmaker:name@company@number]

for example;

[FAXmaker:support@gfifax@011356340760]

Performing the mailmerge

To perform the fax mail merge;

1. Start up Microsoft Word and select 'Mail merge' from the tools menu. Create the mail merge as you normally would in Word. If you are not sure how to use Word mail merge, check the Microsoft Word help.
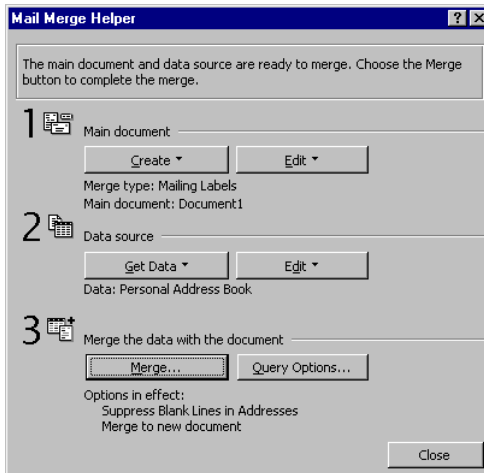
The MS Word mail merge helper

2. After you have created your main document and accessed the data, you can proceed to perform the mail merge. Instead of printing it to a printer, the mail merge must be merged to 'Electronic Mail'. To do this, click on 'Merge', and in the 'Merge to' dialog box, select 'Electronic mail'.
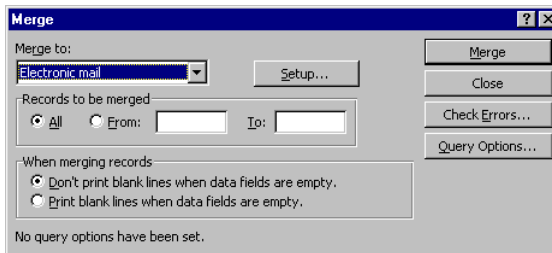
Merge to Electronic mail

3 Now click on 'Setup'. Here you must set a number of options for the mail merge.
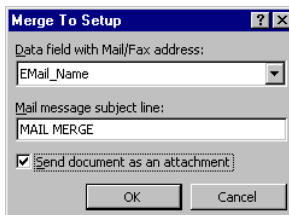
Mail merge setup dialog.

In this dialog you must select the field that includes the email/fax address. In addition, one must select 'Send document as attachment', which creates an individual Word document for each attachment. The

subject line setting can be ignored.

Click 'OK' and perform the merge. Word will send a personalised document to the FAXmaker gateway. FAXmaker will convert the document to fax and send it out to the specified fax number.

Fax server error messages

2000: Error 2000 means: look in Windows NT Event Log for a description. You can also see the description in the FAXmaker Monitor application.

RTF2FAX Errors

Errors relating to the rtf/text/document to fax conversion;

1600 Open File Failed

1601 File not found

1602 Read file failed

1603 Conversion failed

1604 Fax recovery/conversion failed

1605 Already initialised (should never happen!)

1606 Initialisation failed

1607 Coverpage does not exist

1608 The specified Rich text file is not valid

1609 An Unknown error occurred

FAX Server errors

Errors relating to the fax server;

2000 Unable to start the FAX Service. Complete description of the error is given in the Event-Log

3000L   Invalid window parameter in Open Line

3001L   Memory allocation failed

3002L   Driver module not found

3003L   Driver does not support required functions

3004L   Invalid window parameter in Open Line

3030L   Invalid line ID

3031L   Function not supported by the driver

3032L   Another task still active on the line

3033L   PostThreadMessage failed

3100L   Task was aborted with AbortTask

3101L   ERROR response from device

3102L	No response from device
3210L	Unable to find CAPI2032.DLL
3211L	ISDN controller not found
3212L	CAPI Register failed
3213L	Board initialisation failed
3214L	Line not available
3215L	Invalid line
3510L	Board initialisation failed
3610L	Board initialisation failed
3710L	Class 1 only
3711L	No fax on demand
3910L	Board initialisation failed
3911L	Board Submit receive failed
3912L	Unable to listen for a connection

Sending errors

4110L	Invalid format
4111L	Open file failed
4112L	Read file failed
4113L	Creation of tempfile failed
4114L	Call Failed
4115L	No dial tone
4116L	Busy tone
4117L	No Answer
4118L	Voice detected
4119L	Handshake failed
4120L	uWaitDigits or uMaxDuration timed out
4121L	Unable to retry a page because page could not be found
4122L	AT+FET error
4123L	Disconnection failed
4140L	CAPI failed
4141L	CAPI call setup error
4142L	CAPI call failed
4143L	CAPI call broken
4160L	Board initialisation failed
4161L	Board submit sending failed

Receiving errors

4210L	File Creation failed
4211L	No carrier. Happens during receive fax when remote caller is voice or when remote caller disconnects immediately. No carrier occurs only at the beginning, before 'FCON' is received
4212L	Handshake failed
4213L	Write file failed
4214L	AT+FET error
4215L	uWaitDigits or uMaxDuration timed out
4230L	Unable to receive fax if no connection has been established
4231L	CAPI call failed

Voice play errors

4310L	Maximum digits
4311L	Term digit
4320L	Data/fax/voice mode is not properly set
4321L	Open file failed
4322L	Invalid file format
4323L	Read file failed
4324L	Busy tone
4325L	Fax calling tone detected
4326L	Modem carrier detected
4327L	Handset/line hang-up

Voice record errors

4410L	Maximum silence
4411L	Maximum duration
4420L	Data/fax/voice mode is not properly set
4421L	Invalid file format
4422L	Create file failed
4423L	Handset/line hang-up
4424L	Transmission error
4425L	Busy tone
4426L	Write file failed

Call accounting

Call costing can easily be done using Excel, Access or any other application that can read 'CSV' (comma separated values) files. FAXmaker logs all incoming and outgoing faxes in the following two files: Sendlog.txt and Rcvlog.txt. The files are located in the FAXmaker

'System' directory. Using the information in those files, a detailed report can be made.

Send log file

The following information is stored for each outgoing fax;

Date,Time,SenderEmail,SenderName,BillingCode,RemoteId,Recipient Name,RecipientCompany,RecipientNumber,CallDuration,PagesTransfer red,Result,Info,Port,FilesInArchiveDir.

For example:

"22/12/96","22:18:16","nick@gfitest","nick","","88888888","nick","gfi ","nick_gfi_23 <fax@gfitest>","00:30","1","SUCCESS","Fax has been sent successfully","COM2",""

Receive log file

The following information is stored for each incoming fax:

Date,Time,RemoteID,CallDuration,PagesReceived,Result,Info,Port,File InArchiveDir,RoutedTo.

For example;

"21/12/96","20:14:03","88888888","00:39","1","SUCCESS","Fax received","COM2","","nick@gfitest,alexm@gfitest,bart@gfitest"

Access database app to analyse log file

Registered users will be able to download an MS Access application from our website. This application will analyse the FAXmaker send and receive logs. They are scheduled to be available by Autumn 1997. Please check our web site for availability. The application will only be available to registered users.

Internet site http://www.gfifax.com

Tips for using FAXmaker and further information regarding technical support can be found on our web site:

http://www.gfifax.com.

The web site will always have the most up to date listing of tips and support questions.

If you have a technical question, please send an e-mail to support@gfifax.com.

Designing CoverPages & Templates

Introduction

FAXmaker allows you to customize your coverpages and templates.

A coverpage is inserted in front of a fax, and a template is the format or lay-out of the actual fax message. This means that by designing a template with a letter head and fields, you could eliminate the use of a coverpage. Both can be used by all FAXmaker users.

You can design your cover page or template to include your company logo, sender and recipient fields, message fields and any bitmap images. You could also use or customize the existing templates included in FAXmaker.

The administrator, but also the users themselves can store coverpages and templates, and set them either as defaults or use them for a particular fax. For more information see the chapter 'Remote administration', and 'Sending and Receiving Faxes'.

Designing a coverpage or template

FAXmaker uses a standard rich text format file as a template to create cover pages.

The rich text format (RTF) is a standard amongst word processors and is supported by virtually any word processor, including MS Word, Amipro and Wordpad (included in Windows 95). This means that you can create your template in your favourite word processor, and just include the merge fields such as the recipient name, company and message text by inserting a field where you wish to have the actual names/information inserted. For example, to have a field recipient name filled in, include a text <R_name> in the coverpage template.

For example a very simple coverpage with recipient name and company could be created as follows;

To: **<R_Name>**

Company: **<R_Company>**

Supposing you want to send a fax to Pete Johnson at York computers, the fax would be sent out as follows:

To:	**Pete Johnson**
Company:	**York Computers**

The merge fields in the RTF file are replaced by the recipient information and then the coverpage is converted to fax format.

 Merge field information is taken from the Exchange global address book. If you use a recipient stored in the personal address book or in the Outlook contacts database, you must observe certain procedures for the information to be filled in your cover page. This is because the information in the personal address book or Outlook contacts database is not available to Exchange server and the FAXmaker Gateway.

To get around this, you can do either of the following;

1.   Install the FAXmaker fax form. This form will retrieve the information from the address books. The form is scheduled to be available by the end of August 97 and will be downloadable from the GFI website.

OR

2.   Use the following notation in the fax number field;

Error: Reference source not found

For example;

Error: Reference source not found

This will tell FAXmaker which information to use in the name and company field.

The easiest way to design a cover page is to adjust one of the samples included with FAXmaker in the coverpage directory. To do this simply open up one of the coverpages in your word processor, for example Wordpad, and move around, add or delete merge-fields and/or text as you wish.

After you have finished designing your cover page, save the template as an RTF file and assign it to a user.   If you wish to make a default template for the entire company, modify the file template.rtf in the Faxmaker\coverpge directory.   If you use these default files, you don't need to configure a coverpage or template for each user individually. If you wish to make a default coverpage for the entire company, modify the file coverpge.rtf in the Faxmaker\coverpge directory.

TIP: Use Wordpad or MS Word to design your coverpages/templates. FAXmaker uses conversion technology used by these applications also, and therefore it will give you "what you see is what you get" (WYSIWYG).
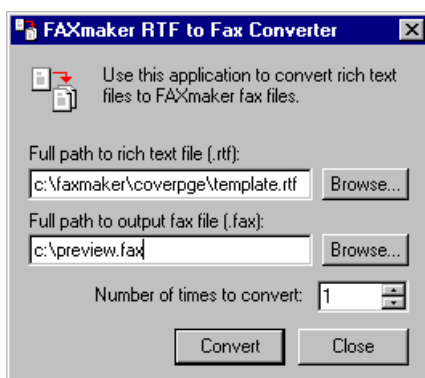
The rtfcvt32 utility lets you quickly convert your coverpage/template and preview the result of your artistic efforts.

TIP: use the rtfcvt32.exe program located in the FAXmaker directory to preview your template/coverpage as a fax file.

Supported merge-fields

The following merge-fields may be used in the RTF file.

Sender fields:

These fields are replaced by the sender information, typed in the e-mail message box:

Address Fields	Merge code
Last name	<S_Last_name>
First name	<S_First_name>
Name	<S_Name>
Company	<S_Company>
Department	<S_Department>
E-mail	<S_E-mail>
Fax	<S_Fax>
Voice	<S_Voice>

Recipient fields

These fields are replaced by the recipient information typed in the e-mail message box:

Address Fields	Merge code
Company	<R_Company>
Name	<R_Name>

Fax   <R_Fax>

General fields

These fields are replaced by general information:

Message text: **<message>**

This field inserts the text of the coverpage as entered in the e-mail message. Be sure to leave enough space in the RTF file.

Current time: **<time>**

Current date: **<date>**

Long date format: **<Longdate>**

These fields insert the date and time of the fax. Please note that the date and time of the server machine will be used.

Subject: **<subject>**

This field inserts the subject line of the message

Tips on designing a cover page

When designing your cover page in RTF format, please take note of the following:

 To preview your coverpage as a fax, use the rtf2fax program located in the FAXmaker directory.

 Remember that RTF does not support tables and/or headers/footers.

 Remember that merge fields are replaced by the actual field values. Therefore, if you do not leave sufficient space, long names can mix up your formatting.
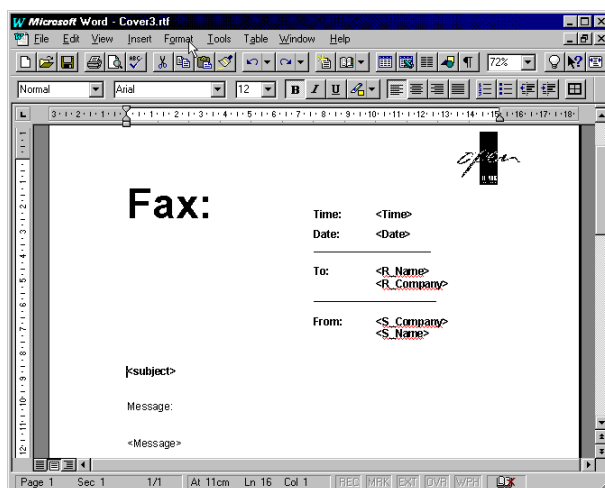
Example of a coverpage with merge- fields

Sending Faxes with FAXmaker

Benefits of sending faxes with FAXmaker

FAXmaker allows you to send and receive faxes from your PC, without having to print the document first, walk to the fax machine, key in the fax number and reschedule at a later stage if the number is busy.

Instead, FAXmaker uses a FAX server computer, located on your network, which is assigned all Fax related jobs, and also allows you to send and receive faxes at the same time!

The benefits

- You no longer need to print out a document prior to faxing it.
- FAXmaker will automatically retry fax numbers if they are busy.
- Your faxes are more legible and of a better quality, since they are sent directly from your PC, using high resolution techniques.
- Incoming faxes can be automatically routed to you as soon as they are received.
- Only you can view your outgoing and incoming faxes.
- You can easily send faxes to groups of people.

Ways to send a fax

There are two ways to send a fax with FAXmaker:

1. Create or open a document in any Windows application and print it to the 'FAXmaker printer'. This automatically activates Exchange from which you can send the fax.

 OR:

2. Type in the text in Exchange, and send it from there.

Sending a Fax from an Application

Sending a fax from a Windows application is a simple process. You can

make a document in your word processor or any Windows application, and then fax it using FAXmaker's printer driver. If you can print the document in Windows, you will be able to fax it with FAXmaker.

To fax from a Windows application, follow the following steps:

1.   Start Write/Wordpad.

2.   Enter some text or open and existing document.

3.   Choose the FAXmaker printer driver as your current printer. The FAXmaker printer driver is a mechanism which stores your document as a fax file.

a.   From Write's 'File' menu, choose 'Printer Setup'. Select the FAXmaker printer driver and choose 'OK'.
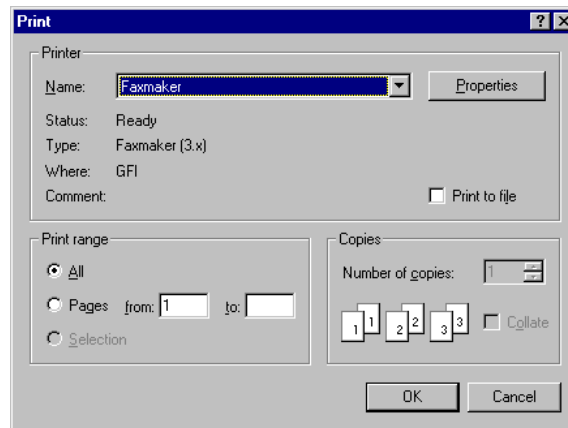
Selected FAXmaker printer driver

4.   Print your letter.

a.   From Wordpad/Write's 'File' menu, choose 'Print'. In the 'Print' dialog box, click on 'OK'.

b.   Immediately after the printer driver has printed your document, The Exchange client starts with the 'Message Send Dialog'.

5.   Click on the 'To' field to start the Exchange address book.
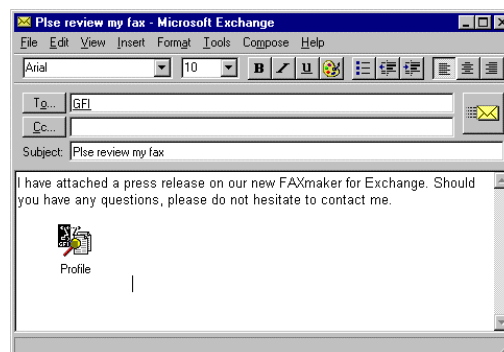
If you are using Microsoft OUTLOOK

FAXmaker supports the Outlook address book . This means that you can select a recipient from the Outlook address book rather than creating a new FAXmaker address for each recipient. (FAXmaker for Exchange version 5 only)

6.   Click 'New; to create a new address. Select FAXmaker address. A dialog will pop up for a name and a fax number. Enter GFI FAX & VOICE and the fax number; 00,356-661072.
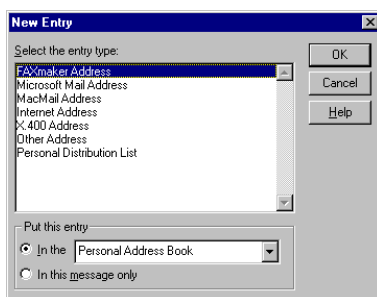

Creating a new FAXmaker address

Note: IF YOU ARE USING THE PERSONAL ADDRESS BOOK AND YOU WISH THE COMPANY NAME AND CONTACT NAME TO APPEAR IN THE COVERPAGE, YOU MUST USE THE FOLLOWING NOTATION IN THE IN FAX NUMBER FIELD;

Error: Reference source not found

For example;

Error: Reference source not found

The reason for this is that Exchange server does not have access to your personal phonebook, which means it can not retrieve the contact name and company to pass to FAXmaker. Therefore you need to indicate this information in the fax address itself.

7.   You can attach files to your message using the attach file function.

 When attaching files other than FAXmaker fax files, make sure that all fonts and objects that you included in your document are also available to the server. Furthermore the document type you use must be supported by the fax server machine. Contact your administrator if in doubt.

8.   Click on the 'Send' button, when you are ready. The fax will be sent by FAXmaker, and it will notify you on the status of the fax.

Sending a fax from Exchange/Outlook directly

To send a fax from an e-mail package, follow the following steps:

 As administrator you could try it out by faxing your registration form as an attachment in the e-mail message to GFI FAX & VOICE.

1. Start Exchange.

2. Create a new message in Exchange.

3. Click on the 'To' field to start the Exchange address book.
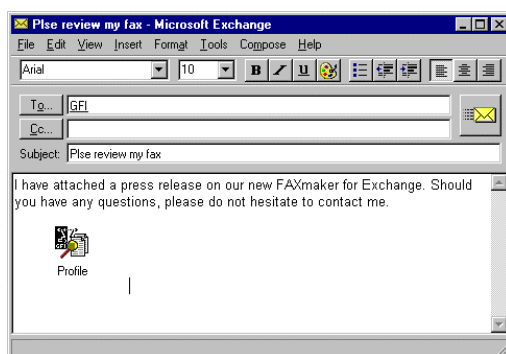
Exchange send message dialog with FAXmaker attachment

If you are using Microsoft OUTLOOK

FAXmaker support the Outlook address book . This means that you can select a recipient from the Outlook address book rather than creating a new FAXmaker address for each recipient. (FAXmaker for Exchange version 5 only)

4.   Click 'New; to create a new address. Select FAXmaker address. A dialog will pop up for a name and a fax number. Enter GFI FAX & VOICE and the fax number; 00,356-661072.
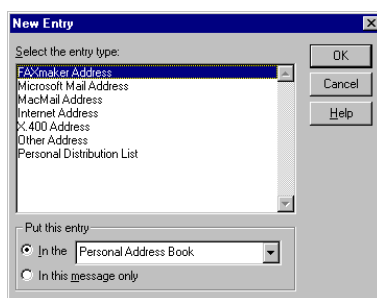
Creating a new FAXmaker addres

IF YOU ARE USING THE PERSONAL ADDRESS BOOK AND YOU WISH THE COMPANY NAME AND CONTACT NAME TO APPEAR IN THE COVERPAGE, YOU MUST USE THE

FOLLOWING NOTATION IN THE IN FAX NUMBER FIELD;

Error: Reference source not found

For example;

Error: Reference source not found

The reason for this is that Exchange server does not have access to your personal phonebook, which means it can not retrieve the contact name and company to pass to FAXmaker. Therefore you need to indicate this information in the fax address itself.

5.   You can attach files to your message using the attach file function.

 When attaching files other than FAXmaker fax files, make sure that all fonts and objects that you included in your document are also available to the server. Furthermore the document type you use must be supported by the fax server machine. Contact your administrator if in doubt.

6.   When you are ready, click on the 'Send' button. The fax will be sent by FAXmaker, and it will notify you on the status of the fax.

Specifying additional recipients for the fax

You can specify multiple recipients using your e-mail package, but a list of additional recipients can also be added using an extra options line in the body of the message.

To add an additional recipient, simply type a double colon :: followed by name (optional), company (optional) and number, separated by commas at the top of the body of the e-mail message. For example;

::Registration, GFI FAX & VOICE, 00,356661072

You can add a whole series of recipients in this manner.

FAX Options

If you want to send a particular fax using settings which differ from the default settings set by either your administrator or yourself, you can do this by using the Fax options described in this paragraph. If you want to change your own Fax default settings, please turn to the next chapter 'Remote Administration'.

When sending a fax you can enter send options such as high or normal resolution, schedule time, cover page to be used etc. The options mentioned below should be typed in at the top of the body of the e-mail message, preceded by a double colon <::>. Please note that the recipients of the fax will not be able to see these specifications in the received text.

 You only need to specify fax options in this way, if the defaults which you or your administrator have set, need to be overridden.

 FAXmaker for Exchange version 5 allows you to install a form

which presents the options below as 'user friendly' check box options. Ask you administrator for more information if you do not have this form.

The following options can be used:

To specify a cover page

::C=cover page name

For example: **::C=cover1**

'Cover page name' stands for the name of your cover page. If you do not want to send a coverpage, but by default a coverpage is added, you can override this option temporarily by specifying 'none' instead of a cover page name. This will cause FAXmaker not to add a coverpage.

 Remember that the cover page must be stored on the server first, as explained in the chapter 'Remote Administration'.

To specify high or low resolution

::'H' or 'N'

For example: **::H**

'H' stands for high resolution (200 * 200 dpi) and 'N' for normal resolution (200 * 100 dpi).

To specify a template

::T=template name

For example: **::T=template2**

'Template name' stands for the name of the template.

 Remember that the template must be stored on the server first, as explained in the chapter 'Remote Administration'.

To schedule a fax

::nn:mm

For example: **::23:15**

'nn' equals hours and 'mm' equals minutes. If you want to send   a fax at a scheduled date or time, this option can be used.

To specify a billing code

::Bnnnn

For example: **::B5**

'nnn' can be replaced by any number. This number will be added in the log file and can then be used to apportion costs.

To attach a file to your fax

::A=name

For example: **::A=brochure**

'Name' stands for the name of a fax attachment. Multiple attachments can be added to the fax.

 Remember that the fax attachment must be stored previously on the server, as explained in the chapter 'Remote Administration'.

Skip Queue

::S

For example: **::S**

'S' stands for skip queue. This option is handy when you have submitted a large fax mailing and you wish to send out this fax immediately.

Multiple options

When you are using multiple options in a message, you must type them on the same line, separated by a comma.

For example;

:: c=cover1, 23:15, B5
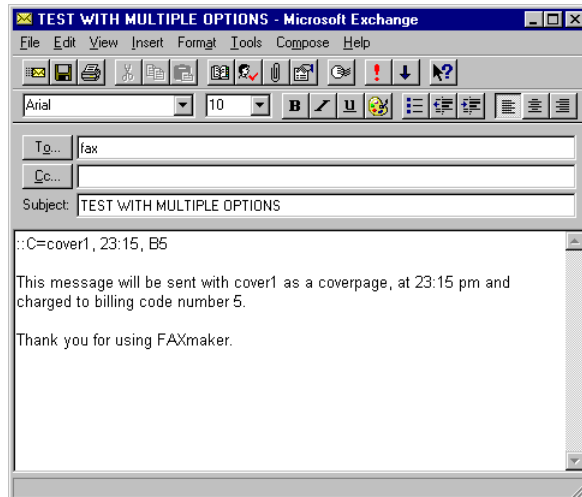
Send a fax using multiple options

This example sends a fax with 'cover1' as a cover page, scheduled for 23:15 hours, and will be charged to billing code 5.

 Remember that prior to using fax options, you must ensure that you have actually stored the attachments, templates and coverpages that you are using.

FAXmaker is insensitive to case. This means that it does not matter whether you type your text in capitals or not.

Creating a Fax Attachment

Attachments can be useful when certain information is frequently faxed, such as product brochures. As these can be graphics intensive, it makes sense to convert them only once to fax format and store them as fax attachments on your computer. If you want to store an attachment on your Fax server so that other users can also send it out, see the next chapter 'Remote Administration'.

To create a fax attachment on your own computer:

1.   Start the application in which the document is saved.

a.   From the application menu, choose 'Print Setup'

b.   Select the FAXmaker printer driver and click 'OK'. The e-mail package will pop up.

c. Double-click on the attachment. The viewer will convert and load the fax.

d. To save the fax as an attachment, simply use the 'Save As' function in the viewer.

e. You can either choose to send this attachment immediately, or cancel the send fax process and return to the application.

TIP: You can also use the remote administration feature to create an attachment:

1. Print your document to the FAXmaker printer driver

2. Specify FAXadmin as the recipient. (use **faxadmin** as the fax number)

3. Specify the name of the attachment in the subject field of the mail message, using the following command:

A=Attachment name

For example: **A=brochure**

4. Send the message. You will receive a notification that your fax has been stored. The notification will include the ready converted fax file!

Receiving a Fax

Incoming faxes are logged in your mailbox. The message will read 'FAX from', followed by the FAX ID (CSID). To view the fax, double-click on the message, and then double-click on the attachment. The FAXmaker viewer will load and display your fax.
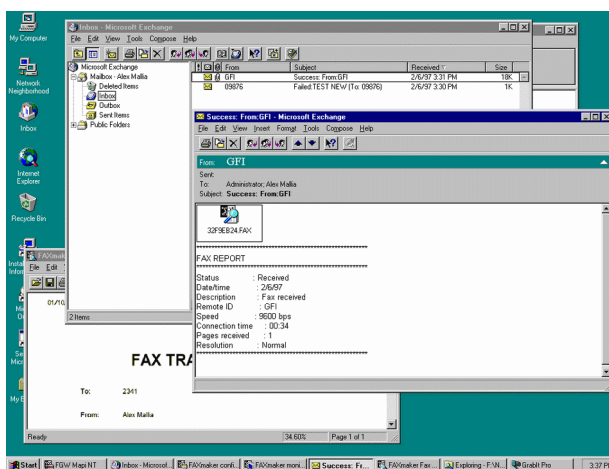
Exchange with a received fax message. The mail message shows the fax report, and the inbox shows the sender's fax ID

Remote administration

Introduction

FAXmaker has a set of options or defaults which specify how a fax must be sent. These options include which coverpage to use, template, fax attachments if any, and even the resolution at which the faxes must be sent.

The options can be changed by the administrator (from the User Configuration utility on the Fax server, see chapter 'User settings'), but also by the users themselves. In this chapter it is explained how a user can change his or her defaults. This can be done by sending a message to the faxadministrator. The process is called 'Remote administration'.

 If you just want to change the options for sending one particular fax, please turn to the chapter 'Sending and Receiving Faxes'. You may also choose not to change the options at all and use the default settings your administrator has chosen

FAX admin

Remote administration is done by sending messages to the 'Fax administrator'. The Fax administrator is simply a FAXmaker address, which, instead of a number has "faxadmin" as the fax number. This way the FAXmaker server will know that this message concerns an administration option.
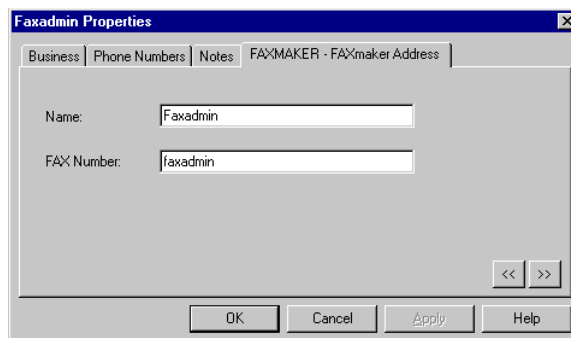
Creating a Faxadmin address in Exchange phone book

It is best to create an entry faxadmin so that the users can send their fax administration messages to this recipient.

Coverpage administration options

FAXmaker allows users to add multiple coverpages which can be used interchangeably, and to set a particular coverpage as default.

Before a coverpage can be used, the coverpage file (RTF format) must be stored on the server and must be given a name.
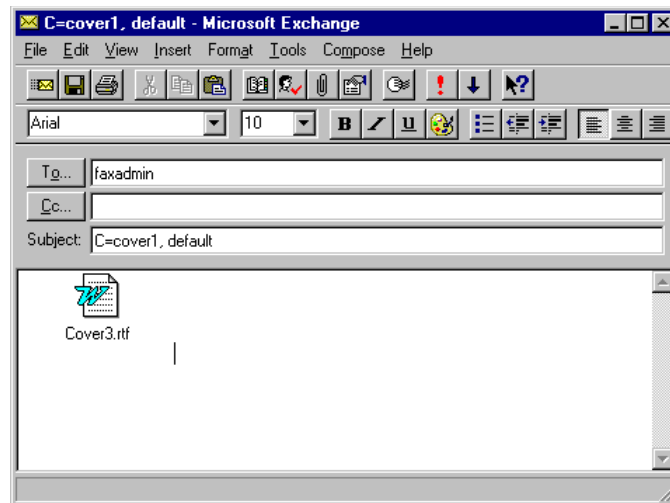
To store a coverpage:

To:	**faxadmin**
Subject:	**C=coverpage name {,default }{ ,delete }**
Attachment:	**attach your coverpage**

 Do not add multiple attachments. To insert an attachment in your e-mail package, use the 'Attach file' command from the message menu.

If you wish this cover page to be the default coverpage, add ', default' in the subject line.

If you wish to delete this coverpage file and name, add ', delete' in the subject line and do not attach a file.

Setting a coverpage as default from your client

Template administration options

FAXmaker allows users to add multiple templates which can be used interchangeably, and to set a particular template as default.

Before a template can be used, the template file (RTF format) must be stored on the server and it must be given a name.

To store a template:

To:	**faxadmin**
Subject:	**T=template name{ ,default }{ ,delete**
Attachment:	**attach your template**

 Do not add multiple attachments. To insert an attachment in your e-mail package, use the 'Attach file' command from the message menu.

If you wish this template to be the default template, add ", default" in the subject line.

If you wish to delete this template file and name, add ", delete" in the subject line and do not attach a file.

Attachment administration options

FAXmaker allows users to store attachments, for example a price list or product brochure. The advantage of this is that you do not need to resend the physical file each time you want to attach it to your fax.

Before an attachment can be used, the attachment (in FAXmaker fax format) must be stored on the server and it must be given a name.

To store a fax attachment:

To:	**faxadmin**
Subject:	**A=attachment name{ ,delete }**
Attachment:	**attach your attachment**

Do not add multiple attachments. To insert an attachment in your e-mail package, use the Attach file command from the message menu.

If you wish to delete this attachment file and name, add ", delete" in the subject line and do not attach a file.

Setting the default fax resolution

Each user can specify the default resolution with which a fax must be sent. A fax can be sent at high resolution, which results in a sharper looking fax, but also in longer transmission times. It can also be sent in normal resolution, which cuts transmission time roughly in half.

To change the default resolution setting:

To:	**faxadmin**
Subject:	**defaults**

In the Message-body:

Resolution = {high} or {normal}

Setting the FAX header

Each user can specify a personal fax header, to be displayed on top of each fax he or she sends.

To enter a personal fax header:

> To: **faxadmin**
>
> Subject: **defaults**

In the Message-body:

> **FAX header = fax   header**

Where fax   header is the word or number which will appear on top of the fax.

Setting multiple options at a time

You can specify multiple default settings in one go by adding several command lines.

For example:

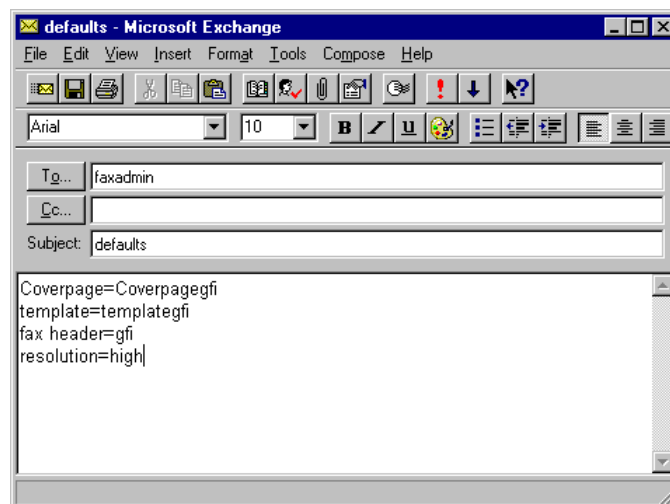> To: **faxadmin**
>
> Subject: **defaults**

In the Message-body:

> **Coverpage = coverpagegfi**
>
> **Template = templategfi**
>
> **FAX header = GFI**
>
> **Resolution = high**

Setting multiple options as defaults

This will set coverpagegfi as the default coverpage, templategfi as the default template, GFI as the personal fax header and high as the default fax resolution.

Retrieving the defaults

To retrieve all your personal default settings at any one time, simply send a message to faxadmin with defaults as the subject of the message.

To retrieve the defaults:

 To: **faxadmin**

Subject: **defaults**

Leave the Message-body empty

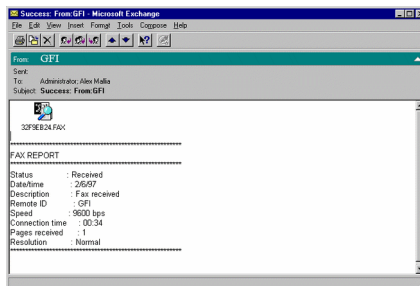 FAXmaker is insensitive to case. This means that it does not matter whether you type your text in capitals or not.

The Viewer

Introduction

With the FAXmaker Viewer, you can view, print and save fax files. The FAXmaker Viewer can be activated by double-clicking on the FAXmaker attachment displayed in the message dialog of the incoming or outgoing fax.

Click on the fax attachment to view a received fax

Viewing Faxes

The viewer can be used to:

1. View incoming or outgoing faxes by double-clicking on the fax attachment in the Message dialog of Exchange. The FAXmaker Viewer is automatically activated and will display the fax on your screen.

2. Preview outgoing faxes by double-clicking on the fax attachment in the Message dialog of Exchange. The FAXmaker Viewer is automatically activated and will display the fax as it will be sent.

In the Viewer itself you can:

a. Preview pages one by one, using the 'Next' or 'Previous' command from the 'Page' menu. When your document is made up of one page, these functions will be dimmed.

b. Re-size the document on your screen by choosing either the 'Horizontal Fit' or the 'Vertical Fit' from the 'View' menu.

c. Zoom in or out whilst viewing the document from a number of

viewpoints by choosing an appropriate zoom value from the 'View' menu.

d. Invert the image by choosing the Invert command from the 'View' menu.

e. Flip the image if the fax was received upside down.

f. Print the document to your local printer by choosing the 'Print' command from the 'File' menu.

g . Save the fax on your hard disk. Choose the 'Save as' function from the 'File' menu (or click on the 'Save as' icon) and type the file name in the 'Save as' dialog. You can save documents in '*.fax', '*.tiff' or '*.dcx' file format. Choose 'Exit' from the 'File' menu.

Scale to Grey

The advanced fax viewer, available for Windows 95 and NT 4, includes a scale to grey option (located in the view menu), which allows you to view the fax at a much higher resolution.

Fax annotation

In Windows 95 or NT 4, you can annotate faxes using the advanced FAXmaker viewer. The following annotation tools are at your disposal:

Annotation tools

1. Select 'Annotation'.
2. Draw freehand line.
3. Highlight a particular section of a fax.
4. Draw a straight line.
5. Draw a rectangle.
6. Draw filled rectangle.
7. Add text to a fax.
8. Attach a note.
9. Add text stored in a file.
10. Add a stamp.

To change any of the defaults the tools, right click your mouse above a tool and select properties. The default stamp texts can for instance be changed in this way.

 Save your annotations! Your annotations are only made permanent if you select save from the menu.

The FAXmaker viewer

Windows NT 4/95 only, other platforms do not include annotation.

Troubleshooting

Modem problems

"The modem does not dial out."

In some cases your modem may not dial out, returning the error message "No dial tone". The problem could be caused by the fact that not all export modems recognise the dial tone. To solve this, disable "Wait for Dial Tone" in the Fax setup window of the server, as explained in the Chapter 'The Fax server'.

"Many faxes fail - can I adjust any settings in FAXmaker to improve this?"

Most of the modem problems are due to modem-command delay-time problems. On-line, this delay is very critical for a few modems.

There are two indications that delay might be a problem:

1. The modem does not respond to a command (error -3102).

2. The carrier is dropped, i.e. the connection is lost. You can see this from the modem lights: the Carrier Detect light will turn off.

You can alter this delay-time that FAXmaker uses, so that you can improve the performance of FAXmaker.

 The TIA/EIA class 2 specification states that: "the DCE may fail to recognise a command line if the start element of the first character of the command line begins within one millisecond of one half-bit time into the stop element of the terminating character of the final result code character issued in response to the preceding command line".

 The TIA/EIA class 2.0 specification states that: "the DTE shall not issue a new command line until the DCE has finished delivering the complete final result code to the previous command line, including any following <cr> and <lf> characters".

There is no mathematical rule to calculate the delay-time. When a modem is offline, FAXmaker uses a long delay before it releases a new command (60ms) and in between two characters (20ms). These delays are definitely long enough for all modems. The problem is not when the modem is offline. The problem is when the modem is on-line. When on-line, the delay has to be long enough so that next command will be

accepted, but not too long because the modem might drop the carrier because it does not receive a command. This behaviour is different amongst the modems on the market. Also, some commands require a longer delay than others on the same modem.

There are a lot of differences between modems. The behaviour not only depends on the modem-type, but also on the EPROM-version of the modem. Because GFI cannot test all different modems/EPROM versions, you can change the delay and see if it solves your problem.

Setting delay time

First of all before you make any changes it is better to obtain the 'modem debug utility' from GFI. With this utility, you can easily test different delay times. After obtaining the utility from the GFI website (http://www.gfifax.com), you can try the following;

The default pre-command delay (/X) is 20ms, the default delay between two characters (/Y) is 10ms. If you use /X and /Y, please try the following combinations:

/X 0   /Y 0

/X 5   /Y 0

/X 20 /Y 5

If you notice a difference using any of these three combinations, most probably your problems will be solved.

You can make this change into FAXmaker by adding another line into the <FAXMAKER>\MODEMS.INF file. The syntax of a line is Name,type,initstring,precommanddelay,interchardelay,voiceformat,voicebitspersample,voicesamplefreq

Let's say you have problems with your class-2 modem 'XYZ' and you got it to work with params /X 20 /Y 5, then add the following line:

XYZ=class232,AT&F,20,5,0,0,0

Modem Debug Utility

To assist you in debugging modem problems, GFI FAX & VOICE have created a "debug" utility which allows you to easily send and receive faxes from the command line/console. This application also creates a so called debug file, which you can send to GFI FAX & VOICE via email. This debug file will then include valuable information which would allow us to assist you in getting the modem to perform better.

This utility can be found on GFI FAX & VOICE's web site, by going to the support area on http://www.gfifax.com (follow the link support).

FAQ on http://www.gfifax.com

A FAQ is a list of frequently asked questions. GFI FAX & VOICE

maintain a support FAQ, which lists answers to most common problems. If you have a problem with FAXmaker and have access to the INTERNET, please read this FAQ first.

The FAQ's website URL is http://www.gfifax.com/pages/fnfaq.htm. The

The web site will always have the most up to date listing of support questions and patches.

How to request for support

If, after using the FAQ and this manual, you have any problems which you cannot solve yourself, please send an e-mail to support@gfifax.com. We will send you a reply as soon as possible.

Be sure however to register your product on the web site first, at http://www.gfifax.com/pages/regfrm.htm.

You can also contact your dealer or distributor or contact one of GFI's offices.

Index

A

B

C

D

E

F

fax gateway 2
FAX header 15, 24, 58
Fax ID 16, 54
fax on demand 25
FAX options 15, 50–53
Fax server 2, 17, 21, 35, 39
Fax server program 11, 21
FAXmaker Intranet MTA 10–11

G

Groups 47

I

Inbound 17, 25
Inbound router dialog 17, 25
Incoming call detection 25
installation 35–37, 39

K

keywords 18

M

Mailbox 11, 18, 54
Monitor 30

O

OCR routing 11

P

Password 6
Pop up 49, 50, 53
port 22–24, 26–28, 37
Preview 44, 61

R

registration 21, 49, 51
Remote administration 51, 55
resolution 51–53, 55, 57–58, 62
Route 11, 15–16
rtf 19, 27–29, 43–46, 56

S

Server configuration 21, 27
Setup 16–17, 18, 24–25, 26–28, 35, 53, 65

T

templates 43–44, 53, 56

U

user accounts 10

V

Viewer 35, 53, 61
voice mail 25

W

Windows NT 2, 35–37