FAX SOFTWARE
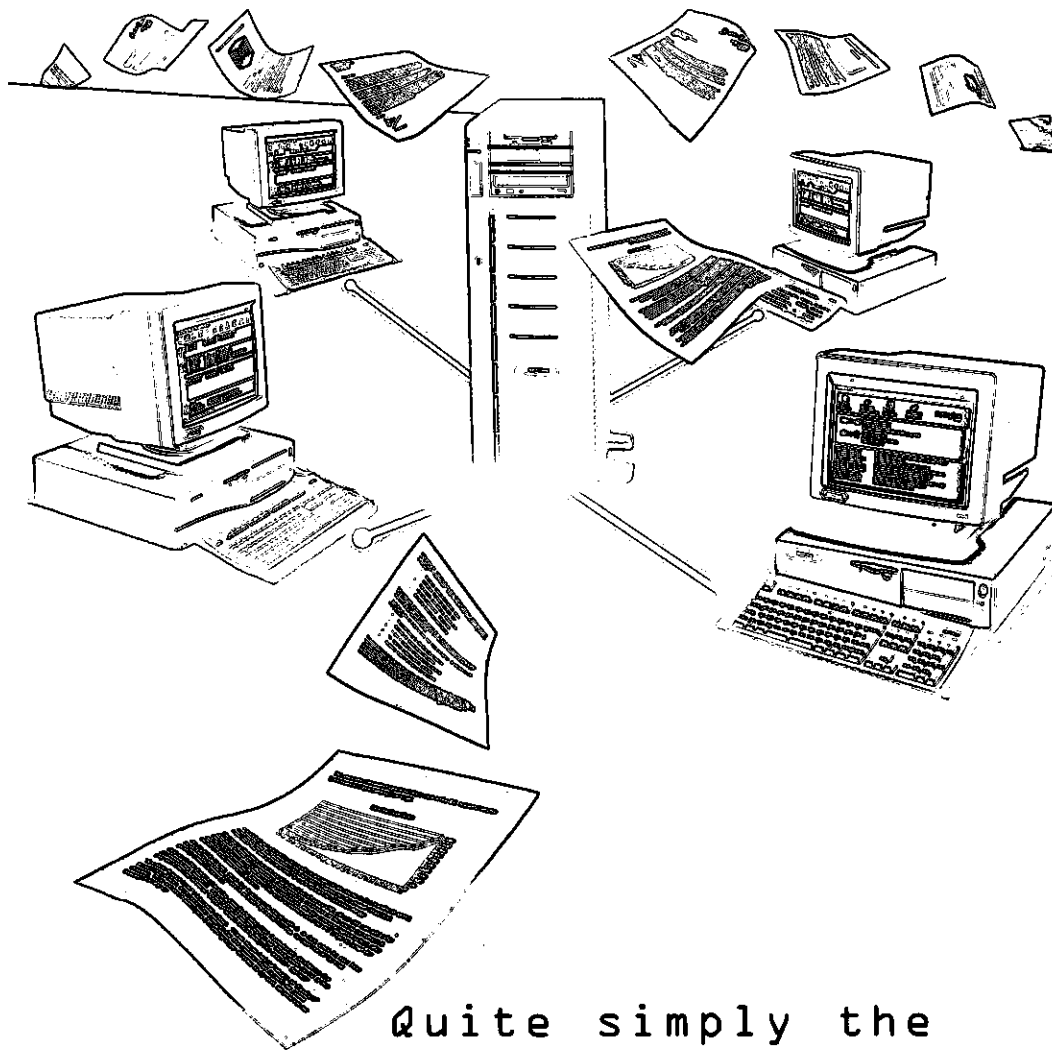
FOR PC NETWORKS

For Windows, Windows 95 and Windows NT

Quite simply the
most advanced fax
software for your
PC network

ZETA*f*AX

The most advanced fax software for your PC network

Zetafax has proven itself as <u>the reliable</u> corporate fax server over the past five years and at thousands of customer sites. Now sold in 25 countries and available in seven languages, this is the world's favorite LAN fax software for Windows NT.

Zetafax is both scalable and adaptable. It supports Windows NT 4.0, as well as Windows 95, Windows 3.1, 3.11 and Windows NT 3.51. It runs on Windows NT Server, Novell NetWare and just about every other PC network. The e-mail gateway option integrates with Microsoft Exchange, Microsoft Mail, Lotus cc:Mail, Lotus Notes and Groupwise.

*"Installation is straightforward and telephone support good" (PC Plus)*

Simple to use

Point to a file and send it to any Group III fax machine - or fax it directly from your word processor. *Zetafax* will prepare a coversheet for you. The fax can be sent on your company stationery and include your signature. It is easier than using a fax machine and the faxes you send will be sharper, presenting a better corporate image.
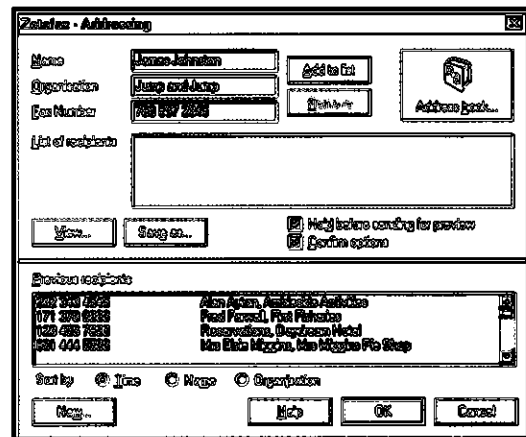
Scalable

Extra fax lines can be added as needed. A standard system can be upgraded to support multiple fax lines and hundreds of users.
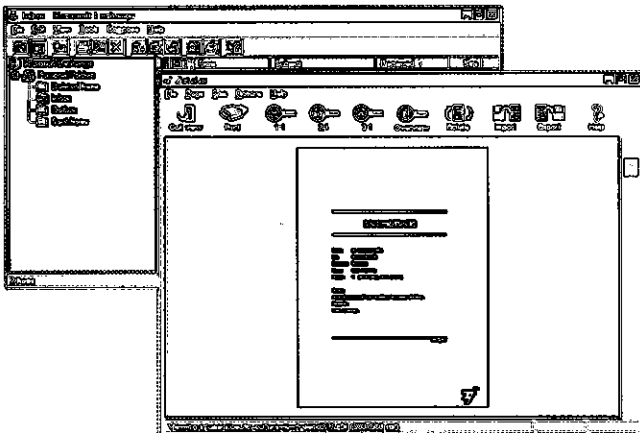
*"... an easy to use Windows fax program"*
*(PC Magazine)*

Microsoft BackOffice integration

Zetafax has been designed for Microsoft BackOffice. The 32-bit fax server can run as a Windows NT 4.0 or 3.51 service on a BackOffice server.

The *Zetafax* e-mail gateway option (due Summer 1997) integrates with Microsoft Exchange as a fax connector. Users can address faxes by taking contact details directly from any SQL Server database.

Saves time and money

There will be no more waiting by the fax machine. **Zetafax** queues faxes for sending and will redial automatically if the line is busy. Should poor line quality cause a break in transmission, it will reconnect to send the remaining pages.
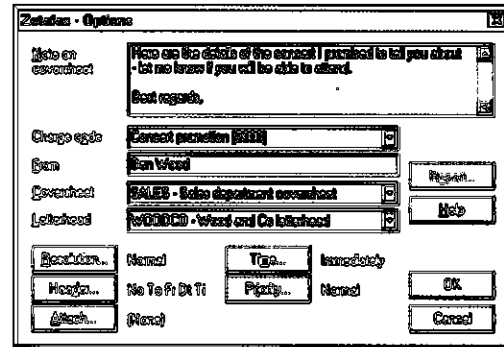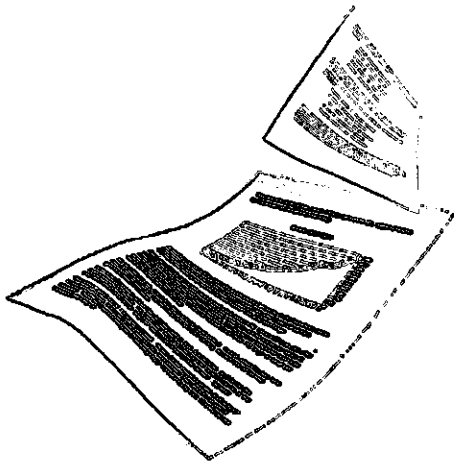
The fax client

The fax client for Windows, Windows 95 and Windows NT lets users monitor faxes sent and received. Detailed logs for each fax indicate where and when it was sent, and explain the cause of any transmission problems. You can view or print received faxes, and faxes originating on paper may be sent using a scanner.

*"Mixing networks with comms could be a recipe for disaster, but not with **Zetafax**"*
(PC Magazine)

The fax server

The **Zetafax** server software handles the transmission and receipt of faxes.
Available for Windows, Windows 95 or Windows NT, it can run in the background of a workstation, on the fileserver or on a PC of its own.

Efficient

The fax server maintains a single queue of messages to be sent for all users and all fax modems. Messages may be marked as urgent or rushed through the queue. Long or non-urgent faxes may be submitted for sending at lower priority, or at off-peak rates.
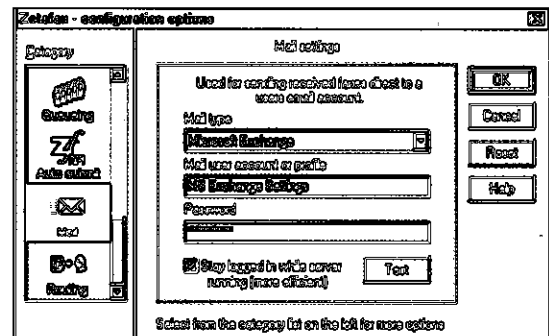
## API for programmers

The **Zetafax** Application Programmers' Interface (API) allows faxes to be sent without using the fax client software. It makes it straightforward to add fax to existing mainframe, minicomputer or PC programs.

A text file can be faxed by adding destination details and copying it to a given directory. Addressing information can be embedded in a printed file for use with word processor mail merge. DDE support allows most Windows applications to fax directly. Finally, an extensive set of DLL functions can be used by Visual Basic and C/C++ programs.

Automatic inbound routing

Zetafax can distribute received faxes automatically. It uses direct dial telephone numbers (DID or DDI) to route each fax immediately to the right person's fax client or e-mail in-box. It's quicker than distributing bits of paper and a lot less effort, too. Confidential faxes are kept from prying eyes and faxes won't get lost.
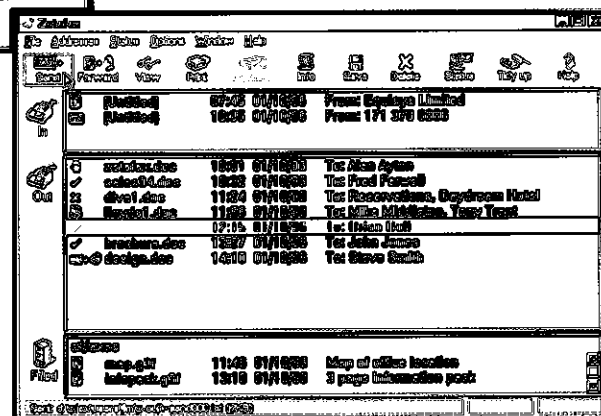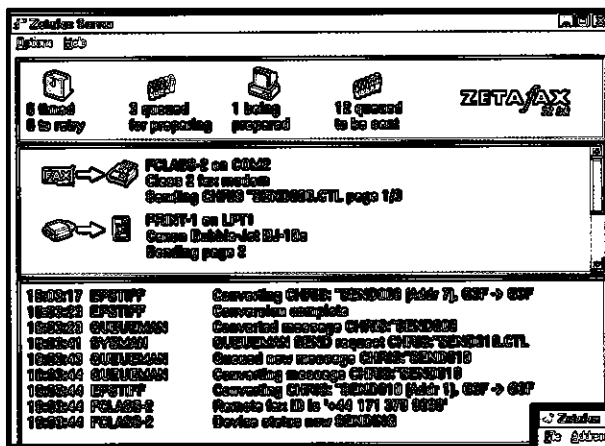
Administration

The network manager's administration program configures the system, and controls how users may send and receive faxes. It defines inbound routing rules, automatic printing and archiving procedures, off-peak faxing times and types of call (local, national, international).

For each user it controls when faxes may be sent and what types of call may be made. It sets users' privilege levels and determines which users receive incoming faxes and how they do so.

ZETA*f*AX

Managing the use of fax

Monitoring and controlling the use of fax used to be almost impossible. **Zetafax** makes it easy. Audit trails for each fax indicate who sent it, along with full details of when and where. These, together with a copy of the fax itself, can be archived to disk or paper. Charge codes may also be used in the itemized billing accounts that **Zetafax** generates.
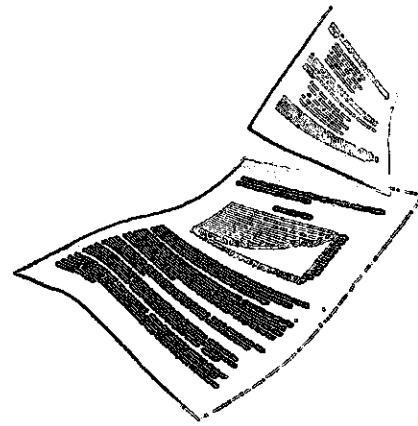
◆ Supports Class 2 and Class 2.0 fax modems and intelligent fax boards

◆ Automatic inbound routing option distributes received faxes automatically

◆ Handles most graphics file formats

◆ True client server-system compatible with all leading PC networks

◆ Detailed logs are kept for every fax sent and received

◆ Incorporates a powerful fax viewer

◆ **Zetafax** e-mail gateway option integrates with Microsoft Exchange and other mail systems
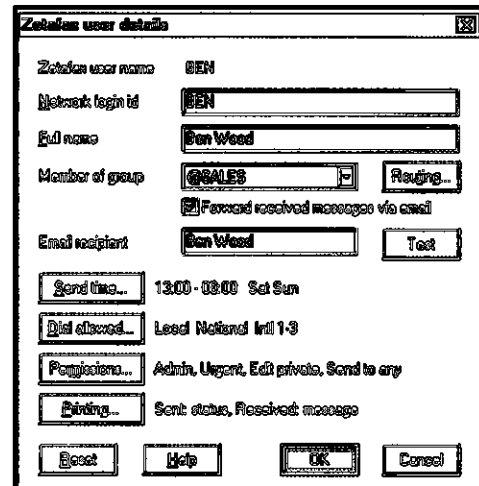
"...all the control and management options you are likely to need" (PC Plus)

Permissions

A sophisticated permissioning system allows you to restrict any user from sending faxes to specific countries, or before lower call rate times. You can specify which users are allowed to edit the system address book or see details of other users' messages. File system security is used to protect users' signature files.

User control

Users can monitor the status of faxes queued for sending. They receive confirmation that a fax has been sent or they are warned if problems arise. Incoming faxes can be viewed on screen and forwarded across the network or by fax. All received faxes may also be printed automatically and archived to optical disk. Users with sufficient permissions can mark messages as urgent, or rush them through the queue.

Flexibility and growth

Designed as a true client-server application, **Zetafax** is available in a range of configurations to suit small workgroups and large sites alike. A Windows or Windows 95 fax server with a low cost fax modem can be expanded to a multi-line Windows NT fax gateway with intelligent fax boards for hundreds of users.

Fax server
Single prioritized queue of faxes for all users
Automatic redial on busy line
Automatic reconnection after communications failure
(sending remaining pages only)
Delayed and off-peak transmission
Up to 32 fax lines for send and receive
Each fax line may be reserved for receive only or
send only
Import and export of address books
Export of billing log to spreadsheets, databases and accounting
software
Automatic coversheet generation (fully configurable)
Documents overprinted onto letterheads and
continuation sheets
Graphics file attachments
Automatic archiving of faxes sent and received
Automatic printing of faxes per user with purge facility
Full use of fileserver permissions to protect fax
messages and signature graphics files
Single user mode option when disconnected from the LAN
Automatic recovery after a power failure
32-bit and 16-bit versions, also RISC option

Fax client
Automatic logon
Verification that faxes have been sent
Warning that faxes have failed
Notification that a fax has been received
Quick tidy up of sent and received faxes
Shared and private address books
Use of comma delimited (CSV) files for fax broadcast
ODBC client compatibility for accessing fax numbers in SQL
databases
Mail merge by fax using embedded addressing information
Use of MAPI address books
Distribution lists (address book groups)
Handles graphics and TrueType fonts
Signatures and graphics may be placed in documents at any
position
Logs of usage and errors for a given message, fax modem or
user
Long term transmission history for a given file
Barred fax numbers (per user)
Ability to submit urgent messages (per user)
Limited transmission times (per user) eg off-peak only
Ability to edit the shared address book (per user)
System administrator privileges (per user)
Viewing of faxes at four resolutions
On-screen rotation of faxes when being viewed
Import and export of faxes as graphics files
32-bit and 16-bit versions of client program and printer drivers,
also RISC option

E-mail gateway option (due Summer 1997)
Outbound faxing of e-mail messages
Server Based Rendering (SBR) of attachments
Delivery of inbound faxes to e-mail universal in-boxes
Microsoft Exchange connector
Microsoft Mail gateway
Lotus cc:Mail gateway
Lotus Notes gateway
Novell Groupwise gateway

Automatic inbound routing
Direct dial fax numbers option using DID telephone lines,
DDI-compatible PBX, ISDN fax router or ISDN fax board
DTMF extension numbers option
T.30 sub-addressing option
CSID suffix sub-address routing from fax software
Routing based on sender ID
Line based routing
Group receipt of faxes and Departmental DID

API toolkit option
DDE addressing
Embedded addressing
'C' language libraries and DLLs (16 and 32-bit)
Automatic submission program for DOS, mini and
mainframe applications

LANs
Artisoft LANtastic
Banyan Vines
IBM LAN Server
Microsoft LAN Manager (OS/2 and Unix servers)
Microsoft Windows NT Server
Microsoft Windows for Workgroups
NETBIOS
Novell NetWare
Performance Technology POWERLan
Sun PC NFS
All other leading networks

Fax
Group III fax
Standard mode (200x100 dpi)
Fine mode (200 dpi)
Brooktrout intelligent fax boards (NT fax server only)
Gammafax intelligent fax boards (NT fax server only)
Most EIA Class 2 and Class 2.0 fax modems

Scanners
TWAIN compatible scanners

Printers
Windows compatible graphics printers

File formats
ASCII, BMP, DCX, EPS bitmaps, Epson FX and LQ series, GIF,
JPEG, PCX, PICT, Targa, TIFF and others
*Any other format file may be sent as a fax by printing from the
application that created it*

Minimum hardware requirements
Windows 3.1 or 3.11 fax server: 486 PC or faster, 6MB RAM,
fax modem
Windows 95 fax server: 486 PC or faster, 12MB RAM, fax
modem
Windows NT (Intel) 3.51 or 4.0 fax server: 486 PC or faster,
16MB RAM, fax modem or intelligent fax board
Windows NT 3.51 (RISC) fax server: Alpha AXP or PowerPC
computer, 32MB RAM, fax modem
Fax client: Microsoft Windows 3.x, Windows 95,
Windows NT (Intel or RISC) 3.51 or 4.0
*A Windows NT or dedicated fax server is recommended for
over 25 users or multiple fax lines*

Free evaluation copy
You can give **Zetafax** a test run before you purchase. Contact
Zetafax USA or your local reseller for a free working copy to
evaluate. Alternatively download it from the **Zetafax** web site
at **HTTP:// WWW.ZETAFAX.COM**

Features marked due for Summer 1997 will be available free
of charge to purchasers of **Zetafax 5** once released. Features
marked as options normally incur extra charges.

ZETA*f*AX

Introduction

This brochure introduces some of the advanced features of Zetafax.

If you would like to try **Zetafax**, both 16-bit and 32-bit five user evaluation systems are available free of charge from your local **Zetafax** supplier or **Zetafax** USA. Alternatively, they can be downloaded from the **Zetafax** web site at http://www.zetafax.com. Evaluation systems allow you to try most of the features introduced in this brochure with the exception of the **Zetafax** e-mail gateway and the C language libraries.

Many of the features are available in the standard package. Others are available as optional upgrades - please contact your local **Zetafax** supplier or **Zetafax** USA for further details.
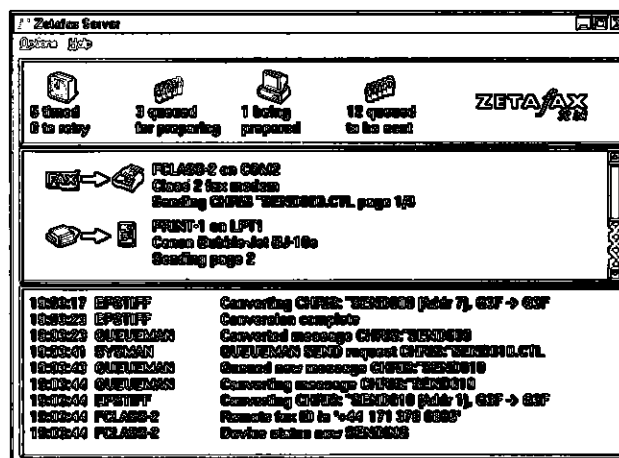
Portable and scalable

Zetafax can be used with a mixture of operating systems, ensuring that you are not tied to any one platform by your choice of fax software. All versions of Zetafax now include both 32-bit and 16-bit server and client software.

Windows NT

The fax server can operate as a service under Windows NT with low CPU overhead. This is ideal for running in the background of a fileserver or on a Microsoft BackOffice server. It runs on either Windows NT Server or NT Workstation, versions 3.51 and 4.0. The fax client is supplied with Windows NT 3.51 and 4.0 printer drivers. RISC server versions for Windows NT 3.51 on Alpha AXP and PowerPC are available as an option.

Windows 95

The fax server also runs on Windows 95-- ideal for users who want the power of 32-bit software without going to Windows NT. The fax client has a Windows 95 printer driver.

Windows 3.x

The 16-bit fax server is designed for smaller sites with Windows 3.1, 3.11 or Windows for Workgroups. There is a Windows 3.x printer driver for the Windows fax client.

Any combination of Windows NT, Windows 95 and Windows 3.x fax servers and fax clients may be used together.

Other operating systems

The **Zetafax** API allows you to submit faxes from any computer, whatever operating system it is using, provided it can create files in a shared directory on a fileserver. More details about the automatic submission program are given in the API section of this brochure.

Fax modems or fax boards

Zetafax can be used with intelligent fax boards or fax modems. So which is best?

Fax modems

Class 2 and Class 2.0 fax modems are ideal for fax lines which need to handle both data and fax traffic. You can combine **Zetafax**, Spartacom SAPS and Microsoft RAS to build a versatile communications server. When used in multi-line fax servers, modems should be used with intelligent multi-port serial cards to reduce processor load.

Intelligent fax boards

As the number of fax lines increases, so does the need to reduce CPU loading. Therefore under Windows NT, **Zetafax** supports intelligent fax boards. These are less demanding on processor time, particularly when receiving calls. Call times can be reduced compared to fax modems as on-line "handshaking" is often faster and data compression may be greater on calls where the remote fax supports it. Downloadable firmware helps ensure that compatibility with different makes of fax machines is excellent.

Although more expensive than fax modems, the call savings and improved compatibility make intelligent fax boards a good choice for systems handling a high volume of fax traffic or many fax lines.

Address books

Zetafax is truly flexible when it comes to addressing faxes. Faxing to one person or a thousand is a quick and simple operation.

Network, private and e-mail address books

Zetafax has its own address books-- a network one shared by all users, and a private one for each user. If you use a MAPI compliant e-mail system, you can also use the e-mail address books for addressing faxes in the same way as you address e-mail messages.

Comma delimited files

When names and fax numbers are in simple comma delimited (CSV) ASCII files, the **Zetafax** client can use them as address books, without any need for importing.

ODBC databases

The fax client can retrieve names and fax numbers directly from ODBC compliant databases such as Microsoft SQL Server or Access. This saves having to produce fax lists from your corporate database, with the inevitability that such lists are not synchronized with the database. Links to SQL and other databases appear just like additional address books.

ZETA*f*AX

Manageability

Traditionally, fax has been a major office expense barely controlled and without audit. In contrast, **Zetafax** has centralized logs and utilities to control, track and report the use of fax.

Billing log and charge codes

A central billing log is maintained with an entry for each fax sent. The details recorded include the sender, recipient, number of pages and transmission time. A charge code (or cost center) can be specified by the user when sending a fax. This information is also included in the billing log. A utility program (LOGCVT.EXE) allows you to extract and process the log information into any required format -- for example, to read it into a call charging program or a spreadsheet such as Excel.

Security and permissioning

Zetafax was specifically designed for networks and because of this includes a wide range of security and permissioning features. Full use is made of the file system security to protect private files such as received faxes and signatures from other users. **Zetafax** accounts are linked to the network login names, with the network administrator controlling:

◆ Who can submit urgent priority messages

◆ What information users can find out about each other's use of fax

◆ Who can edit network address book entries

◆ When each user may fax (for example off-peak only)

◆ Where each user may fax (by area codes and countries)

Automatic archiving

Zetafax can store copies of all faxes sent or received to disk or optical drive. Each day's faxes are stored in a separate directory, with a full transmission history, allowing them to be stored and retrieved easily.

E-mail integration

The **Zetafax** e-mail gateway is an option which integrates **Zetafax** with Microsoft Exchange, Microsoft Mail, Lotus cc:Mail, Lotus Notes and Novell Groupwise. It lets users of these systems send and receive faxes just like e-mail.

Faxing e-mail

Send mail to a fax recipient in your mail address book and the **Zetafax** e-mail gateway will fax it on for you -- notifying you back by mail of success or failure. The software has been designed to integrate seamlessly with Microsoft Exchange as a fax connector and with the other leading e-mail systems as a gateway.

Zetafax uses Server Based Rendering (SBR) technology to convert e-mail attachments such as word processor or spreadsheet files into attached fax pages. It achieves this by running the appropriate application (such as Word or Excel) at the fax server and instructing the application to "print" the attachment using the **Zetafax** printer driver. This technique helps prevent file format incompatibility problems inherent in other approaches.

E-mail address books

All address book entries for both e-mail and fax recipients can be stored together in MAPI address books. This way, the e-mail and fax client software are fully integrated and each user can select which front end to use for any message.
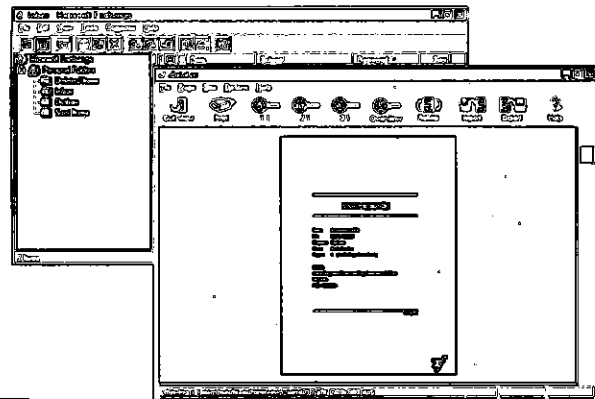
Universal in-box

Faxes can be delivered alongside other messages into users' e-mail in-boxes. The **Zetafax** e-mail gateway option integrates in this way with Microsoft Exchange, Microsoft Mail, Lotus cc:Mail, Lotus Notes and Novell Groupwise. Even without the e-mail gateway, **Zetafax** can deliver received faxes as attachments to e-mail messages for MAPI compliant systems. The **Zetafax** client software acts as a viewer for any such faxes.

This integration with e-mail can be used in conjunction with the **Zetafax** direct dial routing upgrade to route inbound faxes straight to users' e-mail in-boxes.

Operating systems

The **Zetafax** e-mail gateway is available for Windows NT (Intel) and Windows 95 fax servers.

Receiving a fax message to the universal in-box

Direct Inward Dialing (DID)

Many companies already have a phone system (PBX) where each extension can be dialed directly from outside the company, rather than having to go via the switchboard. The technology behind this is called Direct Inward Dialing (DID or DDI). It is as applicable to fax as it is to voice calls.

DID routing

Using the *Zetafax* direct dial routing upgrade, each user can be given their own fax number -- not a separate physical fax line, just their own DID number. Faxes sent to that direct dial telephone number are routed immediately to the right person. Everyone can choose how to receive his or her own faxes -- using the *Zetafax* client software, to a nearby network printer or as e-mail.

Using DID routing in conjunction with the Zetafax e-mail gateway you can receive fax messages to a Universal In-box.
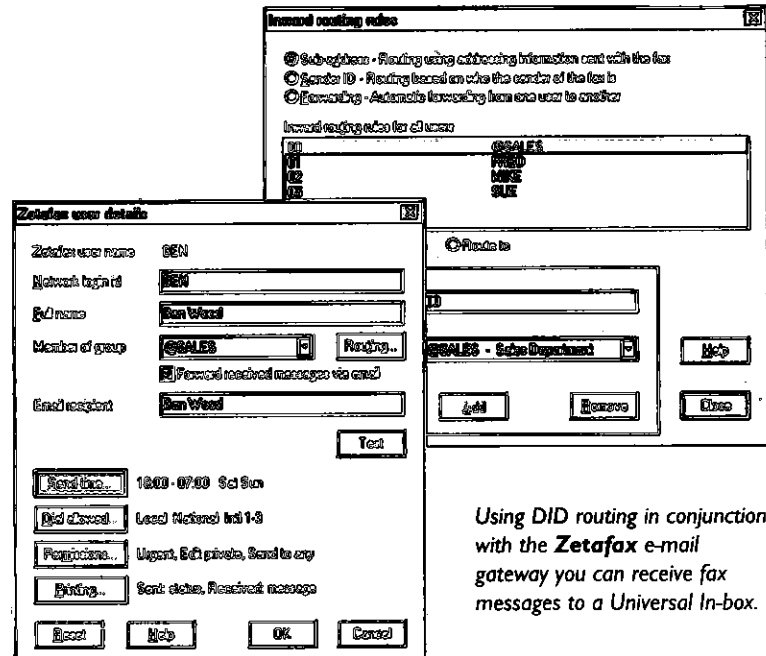
Departmental DID

The *Zetafax* client also supports group receipt of faxes. This saves having one direct dial number per user and ,therefore, saves costs. Everyone in a workgroup or department shares one fax number (just as they may now be using a fax machine). Any fax sent to that number will appear on the screens of everyone in the group. It may also be printed on a nearby network printer. This approach mimics the way that many companies already use inbound fax, but brings the benefits of receiving faxes on screen, the management of inbound fax traffic and the opportunity of keeping central audit copies of every fax received.

Installing DID

The number of fax numbers allocated for direct dial faxing is independent of the number of fax lines on your *Zetafax* system -- all you do is define a table of fax numbers, giving the *Zetafax* user or group account corresponding to each one. If your phone system supports DID for telephone calls already, it can usually be configured simply to allow direct dialing for fax. Alternatively, install an ISDN or DID line just for fax.

Using direct dial with ISDN

In most European countries, direct dial calls are supplied via a digital (ISDN) line. The simplest way to configure direct dial faxing is to install a separate ISDN line for faxing, and connect this to a *Zetafax* server. Many ISDN operators offer two direct dial options: Multiple Subscriber Numbering (MSN) where only ten or fewer separate numbers are required, and Direct Dialling Inwards (DDI) for more numbers. *Zetafax* can be used with both options.

Supported hardware

There are three types of hardware for connecting *Zetafax* to an ISDN line: ISDN intelligent fax boards, ISDN fax modems and ISDN fax routers. All use a basic rate interface (BRI) ISDN-2 connection. It is also possible to use primary rate (PRI) ISDN in bigger sites - contact EQUISYS for more details.

ISDN intelligent fax board

The easiest way to install direct dial routing is to use an ISDN version of an intelligent fax board, installing a separate basic rate ISDN line for direct dial fax calls.

ISDN fax router

A fax router is a digital to analogue converter box which sits between the ISDN line and an intelligent fax board designed for analogue telephone lines. When an incoming call is answered, it identifies the fax number dialed by sending the last few digits to the fax board (using DTMF tones) before connecting the call. The fax board you use must be able to recognize these DTMF tones. Some models of fax router now incorporate fax modems to save having a separate fax board.

ISDN fax modem

An ISDN fax modem behaves like a standard Class 2 fax modem, but connects to an ISDN line rather than a conventional (analogue) phone line. Some models report the number which was dialed when an incoming call is received and can be used with *Zetafax* for direct dial routing. You can combine an ISDN fax modem with *Zetafax*, the SAPS modem sharing upgrade and RAS to create an impressive general purpose communications server. More details on how *Zetafax* works with SAPS and RAS are given elsewhere in this brochure.

DID analogue lines

In the US, Japan and some other countries, direct dial calls are available over analogue lines rather than ISDN. Special versions of intelligent fax boards are available in these countries to connect to the DID line directly. Typically, DID lines are for incoming calls only. When more lines are required a T1 connection can be used -- call for details.
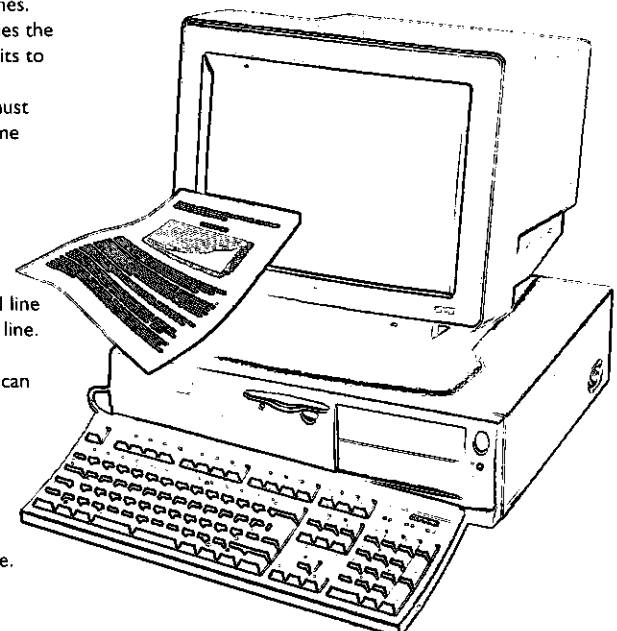
Other routing methods

Direct dial routing using DID or DDI is the most powerful way to distribute the faxes you receive automatically. However, *Zetafax* also supports a number of other inbound routing techniques. Each type of routing may be configured and used independently.

DTMF routing

The method *Zetafax* uses for direct dial routing with a PBX is to recognize DTMF tones sent by the PBX just after the fax server answers the call, so that it knows what number was dialed. These are the musical tones generated by phones when the number keys are pressed. Even without giving each user their own fax number, you can still get the same effect by getting the sender to key in extra digits after *Zetafax* answers the call. This is normally done by adding them to the fax number, after a few "pause" characters. You will need a fax modem or intelligent fax board which can recognize these DTMF tones. DTMF routing requires the *Zetafax* direct dial routing upgrade.
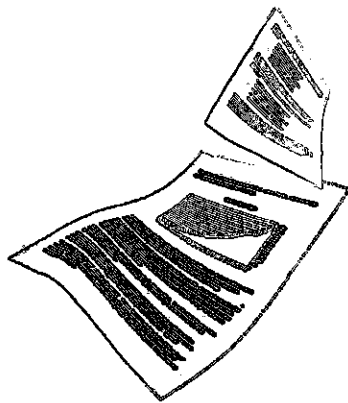
T.30 sub-addresses

The Group III fax standard has recently been extended to allow sub-addressing. Although not in widespread use yet, *Zetafax* can already support this new feature with appropriate hardware.

CSID suffix sub-addresses

When faxing between *Zetafax* systems, you can specify the recipient's user name to route the fax directly to that user. Just add the user name to the end of the destination fax number, separated by a colon (for example, "770 378 6886:CHRIS"). Other routing names eg "SALES", or extension numbers) can also be set up.

The user name or parameter is sent to the remote fax system by adding it to the end of the station identifier, or CSID. This is the "signature" programmed into all fax machines and printed on the top line of faxes they send, and is usually set to the sender's own fax number. Sometimes called "colon routing," this routing method is also supported for faxes sent to and from other PC fax systems.

Sender ID routing

Often only one person in your company deals with a particular sender, and so wants all faxes from that company to be routed directly to him or her. *Zetafax* allows you to set up a list of sender IDs and where faxes from those companies should be routed. The sender ID can be either the sender's fax machine CSID or the Calling Line Identification (CLI). CLI is a service being introduced by most phone companies which identifies the telephone number of the sender --; it needs appropriate hardware.

Line based routing

On a multi-line fax server it is possible to configure a different *Zetafax* user or group account to receive faxes for each line. This way, you can give a number of departments different fax numbers, achieving the benefits of **Departmental DID** without having to use DID or DDI fax numbers.

Automatic forwarding

If you are going away on vacation, you can tell *Zetafax* to forward all faxes sent to you to another user. You can even choose whether to keep your own copy of the faxes for when you return. This can work repeatedly in a chain if necessary -- for example, if the person looking after your faxes then also goes away!

Manual routing

Zetafax also supports manual routing of received faxes. Each fax line has a *Zetafax* user designated to receive faxes which are not addressed to any particular person. This administrator can view the new faxes on screen and forward them to the appropriate users, using the fax client's "File/Forward" or "File/Send mail" menu options. Whatever methods of routing you use, each user can choose to receive faxes using *Zetafax* or e-mail, having them printed automatically if required.

Using direct dial with a phone system (PBX)

Most phone systems which already support Direct Inward Dialing (DID or DDI) can be used to add direct dial routing for fax. Incoming fax calls come through the main PBX -- this routes them to the phone extensions used by the *Zetafax* server.

It is usually simplest to install a separate ISDN line for direct dial fax, as already described. However, provided there are enough spare direct dial numbers on the PBX, it may be cheaper to use this method instead. Using an existing PBX can save any charges for allocating additional numbers and installing new lines. As the PBX is acting in the same way as an ISDN fax router, you do not need a separate router. Some phone systems require an additional upgrade to perform this function.

The fax board you use must be able to recognize the tones which are sent by the PBX at the start of the call.

Configuring the PBX
The *Zetafax* server PC is installed with a fax board which is connected to one or more analogue extensions on the PBX. An intelligent fax board is recommended.

When a call is received for any of the direct dial fax numbers, the PBX connects it to the *Zetafax* server's extension. The PBX needs to be configured to tell *Zetafax* the number which was

originally dialed, acting like the ISDN fax router described opposite. Just after the *Zetafax* server answers the call, the PBX reports the phone number which was dialed (by sending DTMF tones) before it connects the call. *Zetafax* then uses this information to route the call to the correct user. This is the method used for connecting a PBX to a separate voice mail system, and is supported by most PBXs which support direct dialing.

Note that the number of DID fax numbers is independent of the number of fax lines. On fax servers with more than one line, the extensions need to be configured so that if one is engaged the PBX tries the next (sometimes called divert on busy, hunt groups or rotary).

Some PBXs (such as GPT's iSDX exchange) will only give tone information for calls diverted from other extensions; these can still be used by creating a "virtual" (or imaginary) extension for each direct dial number, and diverting each of these extensions to the *Zetafax* server's extension. The number which is then reported and used for routing will be the virtual extension number instead of the original direct dial phone number.

Your PBX supplier should be able to advise you about the configuration required. For more information, contact your local *Zetafax* supplier.

Building a communications server

Zetafax can be used with SpartaCom SAPS modem sharing software and Microsoft RAS remote access software to build a powerful communications server.

SpartaCom SAPS

SAPS is a COM port sharing package which answers the long-standing problem of modem sharing. It lets users on a network access pools of modems for connecting the Internet and on-line services.

Microsoft RAS

RAS is Microsoft's remote access server software, and is included with Windows NT Server. It allows remote users to connect to a network by dialing into the server.

Sharing modems for fax and data calls

In the past, separate modems have been needed for faxing, Internet and remote access. Now *Zetafax*, SAPS and RAS work together sharing these modems. Modems that used to be dedicated to incoming RAS

Windows 3.x, Windows 95 and Windows NT workstations

call, can now be pooled by SAPS for outbound data and fax. Modems connected directly to a single user's workstation which sit idle for most of the day can now be put to work in multiple ways for many users.

Resources are used better and there are savings to be made on modems and telephone lines -- what used to require several modems and lines can now be achieved with just one.

Configuration

With *Zetafax*, SAPS and RAS together, each modem can handle any type of outgoing call -- fax or data. If a modem is also to answer incoming calls, it is configured either to receive faxes or answer RAS calls, but not both.

The exact configuration you choose may depend on the relative amounts and priorities of fax and data traffic, and those needs can change with time. For example, you may want to add additional lines for outgoing data or fax calls as the traffic levels rise, or reserve lines solely for incoming RAS calls.

With SAPS' modem pooling feature and the *Zetafax* server's single managed queue, users on the network need not worry about the exact configuration used, or even be aware when changes are made by the network administrator.

Windows 3.x, Windows 95 and Windows NT workstations

Incoming fax lines on a Windows NT server

When a modem is used for incoming fax calls, *Zetafax* "owns" it and is continually checking for an incoming call. With the Windows NT version of the *Zetafax* and SAPS servers, this modem can also be made available to network users for outgoing data calls.

Windows 3.x, Windows 95 and Windows NT workstations

When a SAPS workstation asks to connect to the modem, SAPS tells *Zetafax* to release it. Provided it is not currently being used to send or receive a fax, *Zetafax* hands the modem to SAPS. When the data call is completed, SAPS returns the modem to *Zetafax*.
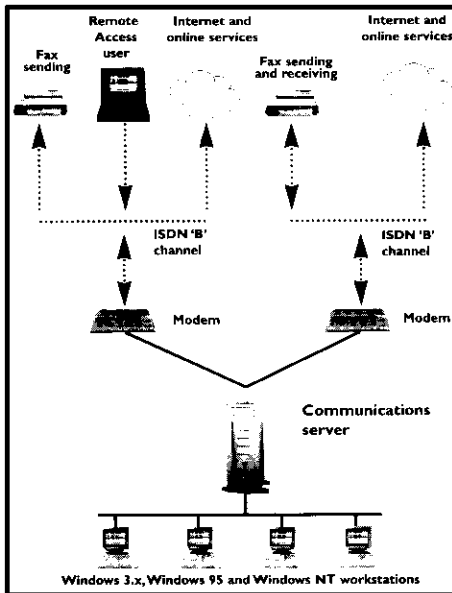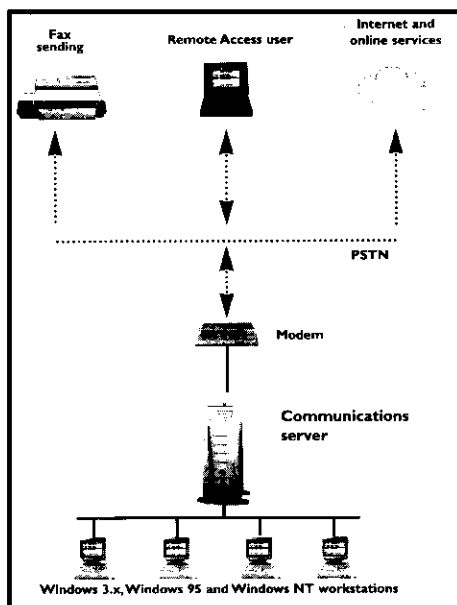
Incoming Microsoft RAS lines

When awaiting incoming calls, RAS takes hold of a modem, keeping the COM port "open" to check for ringing. SAPS asks RAS to release the modem whenever it is required for an outgoing call, returning it to RAS when the call is over.

If you want to send faxes with the modem, then *Zetafax* uses it via SAPS in the same way as other applications. Normally the modem is physically connected to the computer running the *Zetafax* server software, but can be on a different computer if required.

Outgoing only lines

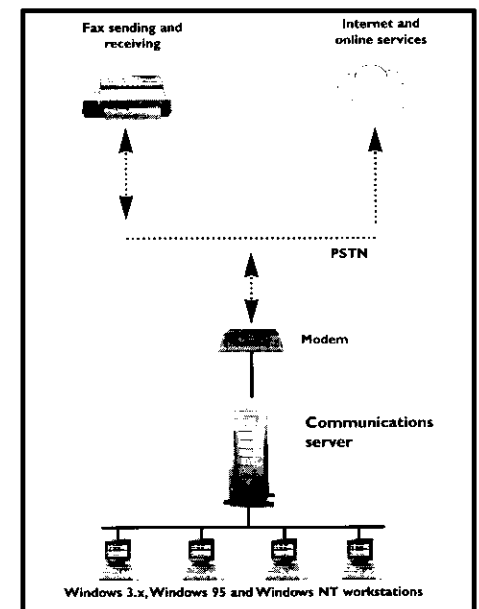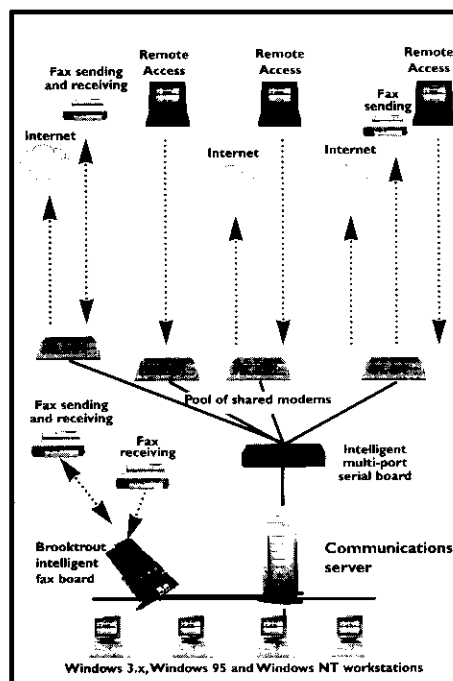When a modem is configured for outgoing calls only, *Zetafax* releases it when it is not being used. It can therefore, be shared with other applications using SAPS.

Zetafax can be configured to use the modem directly or through SAPS. This is useful if the modem is physically connected to another computer. SAPS' password and access logging features help manage how the modem is used.

Windows 3.x, Windows 95 and Windows NT workstations

Server platforms

The full range of features is available on Windows NT based communications servers. The Windows 95 and Windows 3.1, 3.11 versions of the *Zetafax* and SAPS servers allow modems to be shared for outgoing fax and data calls, but not incoming calls.

Application Programmers Interface

Zetafax has an API toolkit which makes it simple to automate the sending of faxes from other applications. It is designed for use with Windows, Windows 95, Windows NT, DOS programs, minis, mainframes and other non-PC based systems.

Automatic submission program

The API's ZSUBMIT program lets DOS, mini and mainframe programs send faxes by creating text files in a shared directory on a fileserver. For example, faxing purchase orders or invoices usually only requires adjusting an accounts package's report writer.

A text file needs a few lines added to give the fax number and message options. Logos and signatures can be included and the text may be merged onto a multi-page form using the letterhead feature in Zetafax. This approach gives rapid results.

Embedded addressing

Like many fax packages, Zetafax has a Windows printer driver. Print from a Windows application, and a dialog box will pop-up asking you where the fax is to be sent. With the API this can be automated by including options such as the fax number in the document being printed. Zetafax will pick out the embedded addressing information and act upon it.

You can use embedded addressing to broadcast faxes from a database or using a word processor mail-merge. Each recipient's copy will be personalised.

Addressing options controlled by embedded addressing or by DDE:

◆ *Name, organisation and fax number (available without the API upgrade)*
◆ *Sender's name and charge code*
◆ *Coversheet and letterhead to use*
◆ *Time to send and priority*
◆ *Attachment files such as product literature or maps*
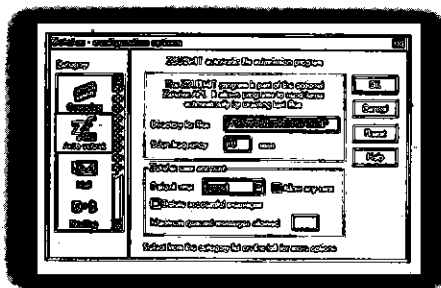
Dynamic Data Exchange (DDE)

An alternative way of passing addressing information to the Zetafax client is by sending DDE messages.

C language callable functions

For the greatest degree of control, the API includes a library of functions callable from Windows, Window 95, Windows NT and DOS C/C++ programs.

16 and 32-bit DLLs are also supplied for use with Visual Basic and macro languages. Application programs can submit new faxes for sending, and monitor/control faxes already in the central queue.

◆ *Specify the Zetafax user account to use*
◆ *Submit a new message for sending*
◆ *Abort a message already in the queue*
◆ *Get a list of all messages queued for the user*
◆ *Check the current status of a given message*
◆ *Retrieve the transmission history for a message*

Using the automatic submission program

Any program can submit a fax automatically by creating a file in a specific format, termed the SUBMIT file format. This is an ASCII text file which contains details of the options to use in preparing the message and the recipients of the message, as well as the message text itself.

The ZSUBMIT program is part of the Zetafax API. It runs on the Zetafax server, regularly checking a particular directory for SUBMIT files. When one is found, it is interpreted and submitted to the fax server for sending - its progress may then be monitored using the fax client program as normal.

The ZSUBMIT program will monitor progress of the messages, limiting the number of outstanding messages at any one time or removing any entries which have been sent without errors. A file for sending via the ZSUBMIT program may contain more than one fax for sending.

Submit file format

The SUBMIT file is a standard ASCII text file (multiple lines, each terminated with <CR><LF>) usually with .SUB as its filename extension. The file contains information about the options to be used in preparing a given message, the recipients, and the message text itself.
The format is:

```
%%[MESSAGE]
(message option lines)
(message addressing lines)
%%[TEXT]
(text + message text commands)
```

or, if a separate file contains the message to be sent (eg to send a graphics file)

```
%%[MESSAGE]
(message option lines)
(message addressing lines)
%%[FILE]
(filename, including path)
```

Each message can have multiple %%[TEXT] and %%[FILE] sections if required. Files submitted using the ZSUBMIT program may contain information about one or more messages by simply concatenating the files (ie the %%[MESSAGE] section for the second message follows the end of the last %%[TEXT] or %%[FILE] section for the first message, etc). The ZSUBMIT program splits the file into separate messages before submitting them to the server.

Configuring the ZSUBMIT program

Message option lines
These lines appear at the start of the %%[MESSAGE] section, before the addressing lines (ie before the first "To:" line):

AFTER	Time to send (or "OFFPEAK")
ATTACH	List of attachment files
CHARGE	Chargecode to use
COMMENT	Description for workstation display
COVERSHEET	Coversheet to use
COVERTEXT	Note for coversheet
DELETE	Delete on completion
FORMAT	Message file format (TIFF, ASCII, etc)
FROM	Sender name
HEADER	Fax header line options
HOLD	Hold message in queue
LETTERHEAD	Letterhead to use
PREVIEW	Create a preview file for a workstation
PRIORITY	Priority to use (eg URGENT)
QUALITY	Fax resolution to use
USER	Zetafax user account to use

If omitted, all the message option lines (except the "Comment," "Attach" and "Charge" lines) default to the values specified for the given user. These may be set by that user using the fax client software.

Message addressing lines
These lines appear in the %%[MESSAGE] section, after the message options lines detailed above:

TO	Recipient's name
ORGANIZATION	Recipient's organization
FAX	Fax number to send to
LAN	Zetafax user to send to (for testing)
FIELD	Variable field definition (for use on the coversheet or in the message text)

Note that a "To:" line must be the first line specified (after the last message option line), before any other message addressing lines. The lines may be repeated if the message is to be sent to more than one person, with each repeated set starting with a "To:" line.

Message text commands
These commands appear in the %%[TEXT] section and may be freely mixed with the message text:

DOWN	Move distance down the page
LMARGIN	Set left margin
PAGE	Force page break
RIGHT	Move distance to right
XPOS	Set position on line (moving to left or right)
XPOSR	Set position on line (moving to right only)
LANDSCAPE	Select landscape orientation (at start of any page)
PORTRAIT	Select portrait orientation (at start of any page)
FONT	Select font type and size
BOLD	Switch bold text on or off
UNDERLINE	Switch text underlining on or off
APPEND	Add a graphics file to the end of the message
INSERT	Insert a graphics image (eg a signature) at this position
DATE	Replaced with current date
TIME	Replaced with current time
<fieldname>	Replaced with given field (eg recipient's name)

Example SUBMIT file
Here is an example SUBMIT format file called TEST.SUB. It sends a simple message with a signature inserted, over-printed onto a letterhead. There is a coversheet and two attachments are added.

```
%%[MESSAGE]
From: Jim Jones
Coversheet: COVSHEET
Letterhead: JONESLH
To: Sam Smith
Organisation: Smith and Sons
Fax: 770 378 6886

%%[TEXT]
Dear Sam

Please find attached our latest price
lists

Yours
%%[INSERT:JIMSIG]
Jim Jones
%%[APPEND:PRICES1]
%%[APPEND:PRICES2]
```