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# **IMail Server for Windows NT**

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## **User's Guide**

Software Version 4

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**Ipswitch, Inc.**

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## Preface

IMail Server for Windows NT is an Internet standards based mail server system for Microsoft Windows NT 3.5 and later. IMail Server provides Simple Mail Transfer Protocol (SMTP) for sending and receiving mail over the Internet or in an internal TCP/IP network.

IMail Server for Windows NT supports any mail client that uses the Post Office Protocol, Version 3 (POP3) or Internet Message Access Protocol (IMAP4).

IMail Server for Windows NT is self-monitoring — a monitor server lets you monitor the SMTP, POP3, IMAP4 and other services, receive notification when a service is down, and automatically restart the service. The IMail Server product includes a list server for creating and managing a mail discussion group, and servers to provide LDAP, Finger and Whois information.

Remote administration utilities let the system administrator monitor the IMail Server system from a remote system and perform user and system maintenance functions.

As options, you can purchase the following software to run with IMail Server for Windows NT:

- Mail to Pager option
- Mail to Fax option
- Web Messaging option

For more information about these options, see Chapter 1.

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## In this Document

This guide describes how to install, set up, and run the IMail Server for Windows NT and its services. Each of the add-on options to IMail Server for Windows NT are documented in their own separate user's guides.

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## What This Package Includes

IMail Server for Windows NT includes the following:

- Two IMail Server for Windows NT diskettes.
- One IMail Client for Windows 3.x diskette.
- One IMail Client for Windows 95 diskette.
- License agreement.
- This manual, the IMail Server for Windows NT User's Guide.
- An IMail Client for Windows User's Guide.

See Appendix A for a list of the files installed by IMail Server for Windows NT.

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## The Ipswitch™ Family of TCP/IP Products

IMail Server for Windows NT is one of a family of TCP/IP products from Ipswitch. Other Ipswitch products include:

- WhatsUp™ Gold Network Monitoring Tool

WhatsUp Gold is an inexpensive, graphical network monitoring tool that initiates both visual and audible alarms when network elements do not respond to polling. WhatsUp Gold can also notify you of a network problem by digital beeper, alphanumeric pager, and e-mail. WhatsUp Gold runs on Windows 95 or Windows NT on the Intel, PowerPC, and DEC Alpha platforms and can monitor any device on a TCP/IP or NetBEUI network.

- WS\_FTP™ Professional FTP Client

WS\_FTP Professional provides an intuitive, powerful Windows interface for connecting to remote hosts and transferring files. WS\_FTP Professional provides drag and drop file transfer, and support for more than 20 remote file systems.

- VT320 Terminal Emulator for Windows

VT320 provides high-quality DEC VT320 terminal emulation and Telnet communications program for accessing VMS and UNIX host applications. This terminal emulator supports VT320, VT220, VT100, and VT52 terminals. VT320 provides 80- and true 132-column modes with double height and double width characters and is easily customized via keyboard mapping, definable hotspots, and changeable toolbars. It supports XMODEM, YMODEM, ZMODEM, and Kermit communications.

- TN3270 Terminal Emulator for Windows

TN3270 provides IBM 3270 Models 2, 3, 4, and 5 terminal emulation and communications programs for accessing your IBM mainframe and minicomputer hosts. Advanced features include drag-and-drop keyboard mapping and text editing, definable hotspots, customizable toolbars, scalable fonts, multiple session support, and support for EHLLAPI and Visual Basic.

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## Visit our Web Site

For more information about Ipswitch products or to purchase our products online, visit the Ipswitch web site at:

**<http://www.ipswitch.com>**

In our technical support pages, you can read answers to Frequently Asked Questions (FAQs) about our products and keep up-to-date on product news.

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## Please Send Us Your Comments

We welcome your feedback on this product. Please send the results of your evaluation and your comments and suggestions to the following e-mail address: *[feedback@ipswitch.com](mailto:feedback@ipswitch.com)*

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## Contacting Ipswitch or Your Reseller for Technical Support

Please use the following procedure to ask questions or report problems.

1. Locate your IMail Server for Windows NT serial number, which is printed on Disk 1 of your IMail Server for Windows NT kit.
2. Contact your designated IMail Server for Windows NT support provider.

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## Downloading IMail Server Software Patches

If a software patch is created to fix a bug in the currently shipping version of IMail Server, Ipswitch will make it available on our Web site. You can check our download directory on our Web site for current software patches.

To download software from the Ipswitch Web site:

1. In your Web browser, go to: **<http://www.ipswitch.com>**
2. Click on the **download directory** link.
3. Under IMail Server Patch Files (if any exist), click on the link.
4. Select **Save** to save the patch file in your directory. Run the patch file to update the software.

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# 1. Overview

This chapter introduces IMail Server for Windows NT and describes its components, capabilities, and optional add-on products.

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## What is IMail™ Server for Windows NT?

IMail Server for Windows NT is a comprehensive electronic mail solution designed for today's evolving Internet and corporate intranet messaging requirements. Easy to install and administer, IMail Server significantly reduces both the initial cost of mail implementation and the on-going cost of administration. Its built-in, easy-to-use features improve user productivity and provide a robust alternative to proprietary systems or complicated UNIX based Internet mail.

IMail Server for Windows NT consists of a series of special programs that run as services on the Windows NT system. These services enable the Windows NT system to receive mail through the Simple Mail Transfer Protocol (SMTP) and subsequently allow access to it by client systems using Post Office Protocol version 3 (POP3) or the Internet Message Access Protocol version 4 (IMAP4) .

IMail Server can be used with Ipswitch's IMail Client for Windows or any other POP3 or IMAP4 mail client. This Internet standards-based client/server architecture provides system administrators with complete flexibility in setting up a total mail solution that easily accommodates disparate and/or geographically dispersed mail clients.

IMail Server provides scalability from one to more than 15,000 users, capacity of over 200,000 messages a day, and full integration with the Windows NT user database.

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## The IMail Server for Windows NT Family

IMail Server for Windows NT is the foundation of an integrated family of Internet server software products. In addition to SMTP, POP3, and IMAP4 servers, IMail Server for Windows NT also provides the following server programs that run as services on Windows NT:

- A Lightweight Directory Access Protocol (LDAP) server which provides remote access (through an LDAP client) to IMail user information. The IMail user database has been extended to include standard LDAP information, such as the user's last name, organization, mailing address, and telephone number.
- A list server, which lets you set up automated mailing lists on the IMail Server. The List server provides many options, such as the ability to have moderated and unmoderated lists, and the ability to group messages sent to the list into a digest and send the digest as a single message.
- A Monitor server that lets you monitor services (such as SMTP, POP3, IMAP4, DNS, WWW) and receive notification when a service goes down.

You can configure a Web server that lets you access the IMail Server system remotely via a Web browser to view the status of monitored services and perform administration functions.

- Finger and Whois servers, through which you can publish and look up user information on the Internet.
- A Password server, which lets users of Eudora, IMail Client for Windows, and NuPOP mail clients change their IMail Server for Windows NT password from the mail client.

Each of the servers is described in the chapters that follow.

---

## Optional IMail Server Capabilities

You can also purchase the following add-on capabilities to run with the IMail Server for Windows NT.

- An optional Mail to Pager/Beeper capability which lets you set up an aliases on the IMail Server system that can receive mail from a mail client and forward it to preconfigured pager or beeper addresses.
- An optional Mail to Fax capability which lets you set up mail accounts on the IMail Server system that can receive mail from a mail client and forward it to preconfigured Fax phone numbers. This option also supports “dynamic aliasing.” which lets users enter the FAX phone number when they create the message.
- The Web Messaging option which lets users access their mail on the IMail Server system from any Web browser on the Internet. This option, rather than replacing the function of a standard mail client, enhances e-mail access by “Web enabling” the IMail Server. It is especially helpful to users who are away from the office and need quick and easy access to their mail messages.

The Web Messaging option is also available in an enhanced version that supports online advertising. This feature lets you display banner ads (in HTML text and/or graphics, including hyperlinks) at the top of the Web Messaging mail screens. It can cycle through up to 30 ads, changing the displayed ad every 30 seconds. This feature is very useful to Internet Service Providers (ISPs) and other mail service providers who would like to sell online advertising space on their mail server.

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## IMail Client for Windows

IMail Client for Windows is an electronic mail client application designed for use with Microsoft Windows 3.1, Windows 95, and Windows NT 3.5 or later.

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### **Note:**

A special version of IMail Client for Windows is included for use on the IMail Server for Windows NT workstation. See the IMail Client for Windows guide for information on using the mail client.

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IMail Client for Windows provides a user interface for reading and creating mail. The underlying mail transport programs allow complete interconnection with the current Internet world and any system that is based on SMTP and POP3.

IMail Client for Windows includes a POP3 client for reading mail and an SMTP Client for sending mail.

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## New in Version 4

Version 4 of IMail Server for Windows NT offers many new capabilities, including the following:

- New IMAP4 server for increased user flexibility in accessing and managing mail. IMAP4 lets users create mailboxes and leave their mail on the IMail Server, which means they can access mail from multiple machines.
- LDAP server for publishing user information in a directory that is available to any LDAP client.
- Antispamming features to help prevent unauthorized mailings and unauthorized use of your mail server as mail relay.
- New Administrator utility, which provides a Windows Explorer type tree view of the IMail user database and provides mailbox management functions for IMAP4 mailboxes.



- Extended List Server capabilities including security settings, and the ability to group messages into a digest and periodically send the digest to list users.
  - Expanded IMail Monitor application lets you configure service monitoring and view service status on the Windows NT console.
  - Expanded remote administration capabilities via the Web Remote Administration utility such as the ability to change SMTP server settings and to configure service monitoring.
  - Optimized performance (over 260,000 messages per day on a dual processor 120 Mhz Pentium with 64 Mb of RAM)
  - Web Messaging option now supports receiving MIME attachments.
- 

## User Registration and Maintenance

IMail Server for Windows NT supports an unlimited number of user accounts and user mailboxes. Users need to be registered in order to have a local mailbox and to allow remote POP or IMAP4 clients to connect to the system and retrieve mail stored in those mailboxes.

You can register users and maintain user account information by using any of the following tools:

- IMail User Manager
- IMail Administrator
- Web Remote Administration utility
- Web Messaging option
- IMail Remote Administration utility (IRADMEN)
- The command line program, *adduser.exe*, to import users from an external user database.

Users can maintain their own user account information by using the following tools:

- Web Remote Administration utility
- IMail User Utility (IMUTIL)
- Web Messaging option

Access to IMail Server functions from the Web utilities is determined by the access settings for the login userid. System administrators have access to all functions; host administrators have access to functions for a particular mail domain; and users have access to their account information.

The following sections provide an overview of each tool.

## **IMail User Manager**

The IMail User Manager (REGIST32) lets the system administrator do the following:

- Add, modify, and delete domain information (virtual hosts)
- Add, modify, and delete users
- Add, modify, and delete system aliases
- Change passwords
- Change user information (for LDAP entries)
- Change inbound mail processing rules for users
- Set up vacation processing
- Set up mail forwarding
- Update the user's *plan* file that is distributed by Finger
- Set up an automated response

Chapter 3 describes how to use the IMail User Manager.

## **IMail Administrator**

The IMail Administrator (IADMIN) provides a Windows Explorer type tree view of the IMail user database. The IMail Administrator includes all of the functionality of the IMail User Manager and provides the following additional functions:

- View, add, and delete mailbox (.mbx) files and delete messages by date (for IMAP4 mailboxes created on the server)
- Add, delete, and manage mailing lists
- Find and list orphan user mail accounts

Chapter 4 describes how to use the IMail Administrator.

## **IMail User Utility**

The IMail User Utility (IMUTIL) lets users make changes to their mail account from their own system. IMUTIL is licensed for an unlimited number of users, regardless of the mail client used. Users can use IMUTIL to do the following:

- Change their password (Conversations with the host system are encoded but not encrypted.)
- Change user information (for LDAP entries)
- Change inbound mail processing rules
- Set up vacation processing
- Set up mail forwarding
- Update their Finger protocol PLAN file

Chapter 3 describes how to use the IMail User Utility.

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## Remote Administration Tools

IMail Server for Windows NT provides two tools that system administrator's can use to access the user mail account information from a remote system.

The IMail Remote Administration utility (IRADMEN) is an executable program that can be copied to any Windows NT system. (The program is in *MAILDIR\iradmen.exe*. The IMail Remote Administration utility lets you add, modify, and delete users and aliases, change passwords, and monitor services.

The Web Remote Administration utility provides remote access to the user registration functions from any forms-capable Web browser. From a Web browser, you can perform user administration functions (add users, change passwords, etc.), configure and monitor services, change IMail Server configuration, and view log files.

For each user, the system administrator can define the level of access to the Web remote administration functions. In this way, individual users can be given remote access to their own account information.

The "Remote Administration Utilities" section in Chapter 3 describes how to enable these utilities.

---

## User Mail Functions

In addition to sending and receiving mail, the IMail Server provides the following mail functions that can be set up for each user mail account. These functions can be set up or modified by the system administrator by using either the IMail User Manager or IMail Administrator on the Windows NT console or the remote administration utilities. Or, individual users can access these functions for their account by using the IMail User Utility, the Web Remote Administration utility, or the Web Messaging option on a remote system.

## Mail Forwarding

If a file named *forward.ima* exists in a user's home directory, all of the user's incoming mail will be forwarded to the mail address specified in the file. Note this must be a complete mail address. Only the first line of the file is read and must not contain quotes, spaces or angle brackets (<>).

## Vacation Support

If a file named *vacation.ima* exists in a user's home directory, the contents of the file will be mailed *once* to each person that sends mail to the user. The people who receive these messages are listed in the *vacation.snt* file in the user's directory. Once a person's e-mail address has been added to *vacation.snt*, they will not receive the vacation notice in response to subsequent messages. (A single notification is usually sufficient.) This allows people to send many messages to someone on vacation without being flooded with notices that the recipient is away.

## Finger "Plan" Support

If the file named *plan.ima* exists in a user's home directory, the contents of that file are returned to Finger requests from other hosts.

The system administrator can disable the transmission of any information about a user through the Finger protocol by using the IMail User Manager or IMail Administrator.

## Mail Delivery Rules

If the file named *rules.ima* exists in a user's home directory, all incoming mail for that user is sorted according to the rules in the file. The rules can be used to sort mail into mailboxes based on the contents of the From:, Subject:, and Sender: headers. The *rules.ima* file is read from top to bottom until a match is found. Only incoming mail intended for the user's main mailbox is effected by the rules.

---

## Automated Mail Accounts

The Info Manager feature lets you set up an automated e-mail information system. When mail is received for a user that has enabled the Info Manager, a prepared message is sent back to the sender.

The Info Manager lets you set up subcategories of a particular user account and enter an automated response specific to each category. For example, you may want to set up an *info* user account for your organization. When someone sends mail to the *info* account, the system can return a response that describes the subcategories of the *info* account in which they can obtain further information. They could then send a message to *info-sales* and receive back a different message related to sales, or to *info-classes* and receive back a message about classes you offer. There is no limit to the number of subcategories that you can set up in the Info Manager.

---

## List Server Support

IMail Server for Windows NT includes a list server for creating and managing electronic mail discussion groups. The List server lets you set up automated mailing lists on the IMail Server. A mailing list can receive mail and resend the mail to all the users on the mailing list. Mailing lists are used widely on the Internet as a means of sharing information about a topic.

The List server for IMail Server for Windows NT is a simple list server that provides two distinct functions:

- A user interface for creating and maintaining mailing lists (from the Start menu, select Programs→IMail→IMail List Server).
- A way to process mail messages addressed to “listserv” on the IMail Server for Windows NT workstation.

The List server supports a set of commands that can be used from a mail client to subscribe or unsubscribe to a discussion group, get a list of available discussion groups, and get help on a discussion group.

The List server includes the ability to group messages into a digest and periodically send the digest to list users, and to approve or deny access to a mailing list.

---

## Monitoring and Notification Tools

IMail Server for Windows NT provides self-monitoring via a Monitor server that polls each of the IMail services and notifies you when a service has gone down. The Monitor server can monitor the IMail SMTP, POP3, IMAP4, LDAP, PServ, Whois, Finger, and Syslog services. In addition, you can monitor DNS, NNTP, WWW, Telnet, and FTP services on either the local or a remote system. The Monitor server can automatically restart a service that has gone down.

You can set up the Monitor server to send an e-mail, beeper, or pager notification when it detects a service going down or up. You can also set up the Monitor server to display the service status to a Web page that can be accessed from a forms-capable Web browser.

You can configure service monitoring and view the status of monitored services by using either of the following tools:

- Monitor server (from the Start menu, select Settings→Control Panel→IMail Server, and then select the Monitor tab)
- IMail Monitor (from the Start menu, select Programs→IMail→IMail Monitor)
- Web Remote Administration utility. You must configure the Web utility properties (from the Start menu, select Settings→Control Panel→IMail Server, and then select the Web tab).

Chapter 12 describes how to set up and use the Monitor server, the IMail Monitor, and the Web Remote Administration utility.

---

## Antispamming Features

IMail Server's built-in messaging controls can prevent unauthorized mailings from passing through IMail as a relay or gateway. You can set up the server to only accept mail that originates from local users or that is destined for local users. (IMail Server lets you define the systems or address blocks that you want to consider as local.) In addition, you can block incoming messages from specified IP addresses if those addresses have been a source of unwanted e-mail.

See the “Setting SMTP Security” section in Chapter 5 for information on setting up these security features.

If you are unfamiliar with “spamming” and “spoofing,” the following paragraphs provide some background.

The SMTP standard for Internet messaging allows electronic mail to make its way across a network in “hops” by passing from one computer system to another, repeating this process until the mail arrives at its final destination. This is part of the original design of SMTP and was necessary in the early days of the Internet in order for e-mail to travel between various networks. In the current Internet this is not necessary and mail usually is delivered directly from the sending host to the receiving host. Exceptions to this include application gateways that are used to bridge firewalls.

This inherent design of SMTP allows a host computer that needs to deliver a message to another computer (or even hundreds or thousands of recipients) to make a connection (or multiple connections) to some other SMTP server and ask that server to relay the message(s) on its behalf.

Recently there has been a lot of controversy over unwanted e-mail. Many companies and ISPs have been blocking the receipt of this mail from known sources, as it is possible to deny access to a sending machine with a firewall or some other method. Once a bulk mailer’s home mail server is known and blocked, senders of bulk e-mail — taking advantage of SMTP’s open design — may attempt to deliver their mail through someone else’s computer by asking the other computer to route that mail for them. Senders of unsolicited e-mail can also use this method to try to hide their real identity by manipulating the headers in the message in a certain way and then sending the message through your system for delivery to its final destination — making it appear as if the message originated from the relaying server. This is known as “spoofing.” (IMail Server, however, will always include the IP address of the source in the message headers.)

When a bulk mailer chooses your computer to deliver unsolicited mail to thousands of other people (known as “spamming”), your system immediately becomes busy delivering messages that didn’t originate with your users, tying up your valuable system resources.



IMail Server protects your system against this type of abuse in two ways. First, IMail Server allows administrators to configure the system to only accept mail that originates from local users or that is destined for local users. (IMail Server allows you to define the systems or address blocks that you wish to consider as local.) Second, IMail Server allows you to define the systems from which you never want to receive mail, allowing administrators to block mail from known sources of spam mail.

---

## Domain Name System MX Support

Domain Name System (DNS) Mail eXchange (MX) record support is important when using the IMail Server to create a mail message or when processing messages in the outbound queue. IMail Server for Windows NT uses the domain name server that is defined in the Windows NT TCP/IP configuration.

To check the domain name for your local network, click on the Network icon in the Control Panel, select the Protocols tab, then select TCP/IP Protocol, and then click **Properties**. The TCP/IP Configuration window appears. Click **DNS** to view the domain information.

You need to make the proper entries (MX records) in the DNS for each mail domain that you create. See your DNS documentation for more information.

---

## Multiple Domain Support

If you want to receive mail for more than one e-mail domain on the same Windows NT system, you can set up a virtual host for each domain. For example, if your mail server provides mail service for your local e-mail domain, *mail.ipswitch.com*, and you also want it to provide mail service for another e-mail domain, *mail.acme.com*, you can create a virtual host for *mail.acme.com*.

Each virtual host must have a unique IP address. You can use either a real IP address or a virtual IP address. To use a real IP address, the IP address must be set in the the Control Panel's Network applet, under Protocols->TCP/IP Advanced properties. You can add up to five IP addresses in the Network applet. If you need to add more than five, refer to the documentation for the Windows NT Resource Kit.

A virtual IP address can be assigned to the domain (virtual host) by the IMail Server system. This allows you to have a virtual host without an IP address. You can then use an MX record in your DNS to point the virtual domain to an actual IP address.

If you use a virtual IP address for a mail domain, users must log in to mail accounts in the domain by specifying their userid as: *userid@virtualhost*, where *userid* is the userid and *virtualhost* is the domain name, and entering their password. If you use an IP address that is set up on your IMail Server system, this method of login is not necessary.

For information on setting up virtual hosts, see Chapter 2.

---

## Privacy Enhanced POP Support

When used with the IMail Client for Windows software, Version 3 or later, client conversations with the POP3 server are encoded and are not in plain text. This should not be confused with security. This means that standard sniffer programs will not show the communications without additional programming.

---

## Route Inbound Mail to an External Program

To route inbound mail to an external program, IMail Server for Windows NT can use an alias to determine the program destination. Routing is handled by using an alias that starts with “|” (pipe) and contains a program name. The program must be a simple name located in a PATH directory or in the mail executables directory. The alias must not contain a path. The complete mail message is made available to the destination program as a filename argument at the end of the alias. (It is not sent in with STDIN.)

For example, the following defines the program alias named ipswitch:

```
ipswitch=| listserv send ipswitch
```

Sending mail to this alias will result in the following command:

```
listserv send ipswitch c:\mail\spool\file.tmp
```

---

## Special Unknown Local User Processing

IMail Server for Windows NT can perform special processing of mail addressed to users that are not registered on the local host. This is accomplished through a special alias, “nobody”. If the “nobody” alias exists, all incorrectly addressed mail is sent to a specified program or another user’s mailbox.

---

## System Requirements

IMail Server for Windows NT is designed for the Windows NT operating system. Installation under Windows 95 or Win32s will not work correctly and may cause problems with IMail Client for Windows.

The system requirements for IMail Server for Windows NT are:

- Intel (486/66 PC or higher)
- Microsoft Windows NT 3.51 or later
- Network interface card installed and configured to use Microsoft's TCP/IP for Windows NT
- 20 MB disk space
- At least 16 MB of memory (32 MB is recommended)

---

## IMail Server System Capacities

IMail Server provides scalability from one to more than 15,000 users, capacity of over 260,000 messages a day, and full integration with the Windows NT user database.

The practical limit for *concurrent* POP connections is 500 and for concurrent SMTP connections is 1000, based on 32 Mb of memory. Increasing memory to 64 Mb should allow a 150% increase. The practical limit for *total* users is in excess of 45,000 users.

---

## 2. Installing and Setting Up the IMail Server

This chapter describes how to install and set up IMail Server for Windows NT.

If you are doing an initial installation of IMail Server, we suggest that you create a few mail accounts as part of the installation. The installation program will ask if you want to create mail accounts. You can then perform some simple tests to check that the IMail Server is set up correctly. See “Performing an Initial Setup and Test” in this chapter for more information.

If you are upgrading an existing IMail Server installation, you need to complete some tasks to migrate existing data to the new installation. See “Notes for Upgrading to IMail Server 3.0” for more information.

---

### Installation, Upgrade, and Removal Instructions

To install IMail Server for Windows NT:

1. Read Chapter 1 of this manual to get an understanding of installation and configuration options and to learn about the capabilities of IMail Server for Windows NT.
2. Log on as System Administrator or to an account with System Administrator privileges.
3. Back up your Windows NT registry.

---

#### **Note: Upgrades**

If you are upgrading from a version prior to 3.0, the installation program will convert your existing IMail database to use the Windows NT registry. If you revert to an earlier version of IMail, you will lose any new accounts added with this version and aliases will have to be rebuilt.

---

---

### Note: Upgrades

When upgrading from a previous IMail version, as a precaution, in the Windows NT registry (regedt32), save the *SOFTWARE\Ipswitch\IMail* registry key to a file. If you need to go back to the previous IMail Server version, you can restore this registry key.

---

4. Insert the IMail Server for Windows NT diskette in a diskette drive.
5. Select **Run** from the File menu, and then enter the diskette path followed by *setup.exe*. For example:

```
a:setup.exe
```

6. Select the desired installation option:

```
Initial Installation
Update previous installation
Remove from system
```

Select “Initial Installation” if you have never installed IMail Server for Windows NT before, or if you have changed directory locations, or if the installation notes tell you that you must. An “Initial Installation” will reset program defaults for the servers.

Select “Update previous installation” if you have previously installed and do not wish to lose configuration parameters for the service. For example, you may want to save the **Service owner** or **Allow service to interact with desktop** options.

Select “Remove from system” if you want to remove the current IMail Server installation from your system. (This option does not install the new version of IMail Server.)

7. Enter the primary official host name of your system. This host name is used in greeting messages and in message headers in outgoing messages. This name *must* be registered in the Domain Name System (DNS) if you want remote hosts to be able to communicate with your system.

8. Select the user database option you prefer.

NT User Database  
IMAIL User Database

This option defines where users are registered and how user authentication takes place for the primary host.

Select “NT User Database” if you want to use the Windows NT User Database to create user mail accounts. The Windows NT user database stores userids and passwords for logging on to the Windows NT system. If you select this option, IMail Server will create a user mail account for each user listed in the NT User Database. The mail accounts for these users are created as necessary when a mail message for the user is received by the mail server or when a user accesses the mailbox through a mail client.

Select “IMAIL User Database” if you want to store user mail account information apart from the Windows NT User Database. If you select this option, userids and passwords for mail accounts will be separate from userids and passwords for logging on to the Windows NT system.

---

**Note:**

You can set up virtual hosts to support multiple e-mail domains on your mail server. For each virtual host that you create, you select whether or not to use the Windows NT User Database for that host.

---

9. Enter the directory where IMail Server for Windows NT will be installed. This must be your existing IMail directory if you already have installed IMail Server on your system. This directory name should never be changed after initial installation. In the event that you do change the directory after an initial installation, re-run the *setup* program and select “Initial Installation.”

10. If you are installing IMail Server for Windows NT on your system for the first time, you will be prompted to add a user and password. You can add users now, or exit the installation and add users using the IMail User Manager.

The userid of “root” is automatically registered.

11. (Optional.) Open the Control Panel and run the IMail Services application and verify or modify the configurations for each of the services (SMTP server, POP3 server, IMAP4 server, LDAP server, Finger server, Whois server, List server, Monitor server). If you change any parameters, stop the service, wait 5–10 seconds and then start the service or reboot the system after the completion of all changes.
12. We recommend that you reboot your system after installation.

---

## Uninstalling IMail Server for Windows NT

To uninstall IMail Server for Windows NT, run *setup* and select the “Remove from system” option. The Uninstall program deletes services, registry entries, and Control Panel application, but does not delete the mail directory or files.

---

## Notes for Upgrading to IMail Server 4

If you are upgrading an existing IMail Server installation to IMail Server 4, note the following:

- As a precaution, in the Windows NT registry (regedt32), save the *SOFTWARE\Ipswitch\IMail* registry key to a file. If you need to go back to the previous IMail Server version, you can restore this registry key.
- When updating the IMail Server for Windows NT product, we recommend rebooting the Windows NT system after installation.

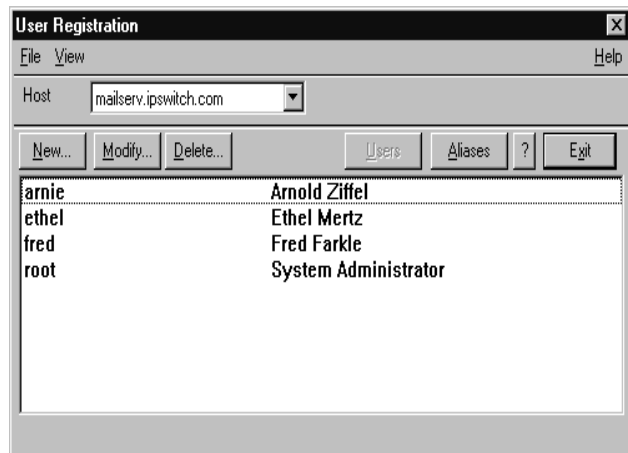


- If upgrading from an earlier version, you need to verify that any host aliases are correct in the Host Configuration. An example of a host alias is where the official host name is *imail.ipswitch.com*, and you set a host alias of *ipswitch.com* so that the IMail Server will accept mail addressed to both *imail.ipswitch.com* and *ipswitch.com*.
- 

## Performing an Initial Setup and Test

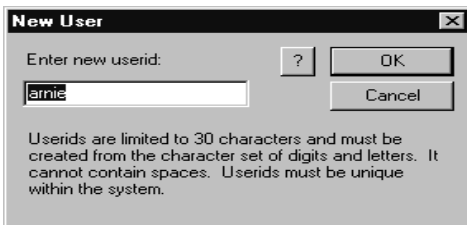
If you are installing IMail Server for the first time, we suggest that you perform a minimal initial setup and then test that you can send and receive mail.

1. In the IMail Server for Windows NT program group, click the IMail User Manager icon. The User Registration window appears.



2. Make sure that the user *root* is defined in the User Registration window. If it is not, you need to add *root* as a user.
3. Add one or two user mail accounts. (If you added some user mail accounts as part of the installation, you can skip this step.)

In the User Registration window, click the **Add** button. The New User dialog box appears.



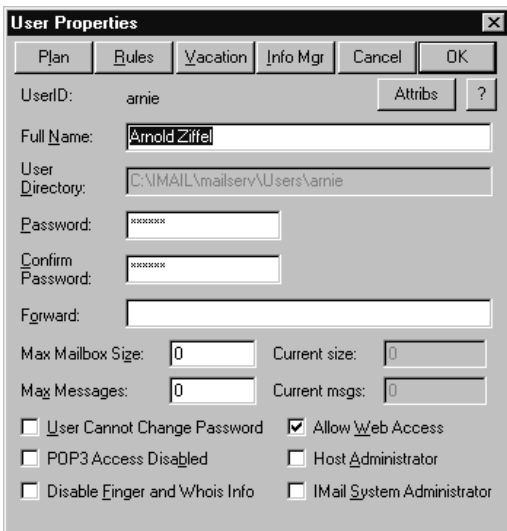
**New User**

Enter new userid:  ? OK Cancel

Userids are limited to 30 characters and must be created from the character set of digits and letters. It cannot contain spaces. Userids must be unique within the system.

Enter a user name (this will be the userid for the mail account) and click **OK**. The User Properties dialog box appears.

IMail Server will use the last hyphen in the userid to delimit a mailbox name. For example, if mail is sent to the address *mr-fred-account@ipswitch.com*, IMail Server reads *accounts* as a mailbox that belongs to *mr-fred*.



**User Properties**

Plan Rules Vacation Info Mgr Cancel OK

UserID: arnie Attrs ?

Full Name:

User Directory:

Password:

Confirm Password:

Forward:

Max Mailbox Size:  Current size:

Max Messages:  Current msgs:

☐ User Cannot Change Password ☒ Allow Web Access

☐ POP3 Access Disabled ☐ Host Administrator

☐ Disable Finger and Whois Info ☐ IMail System Administrator

In the Full Name text box, enter the user's full name.

The User Directory text box displays the directory where the user account information is stored. You cannot edit this field.

In the Password text box, enter a password for the user.

Confirm the password you entered by entering it again in the Confirm Password text box

Click **OK** to add the user. The userid is added to the list of registered users.

4. Check your e-mail domain name.

Any users you have added can now receive mail through IMail Server for Windows NT at the domain name specified in your Windows NT TCP/IP parameters.

For example, if you added the user *arnie* and the domain name is *ipswitch.com*, the user can now receive mail addressed to *arnie@ipswitch.com*.

---

**Note:**

To check the domain name for your local network, click on the Network icon in the Control Panel, select the Protocols tab, then select TCP/IP Protocol, and then click **Properties**. The TCP/IP Configuration window appears. Click **DNS** to view the domain information.

---

You need to make the proper entries (MX record) for your mail domain in your Domain Name System (DNS). See your DNS documentation for more information.

5. Check that the mail servers are running. In the Control Panel, click on the IMail Server icon. In the IMail Server window, the status of the SMTP, POP3, and IMAP4 servers should be "Service running."
6. Start the IMail Client, log on using one of the user accounts you created in IMail Server, and send mail to the userid and check that the mail appears in the user's Main mailbox.
7. If you are connected to the Internet, you can send mail to *imailtest@ipswitch.com* to test mail service to remote systems. We will reply to your mail. Or, send mail to a user on another domain and ask them to reply.

When you are satisfied that the mail server works properly, you can finish adding user mail accounts, add aliases, and add any special processing such as delivery rules, vacation processing, and a Finger PLAN. See Chapter 3 for information on completing these tasks.

---

## Setting Up Multiple Domains (Virtual Hosts)

If you want to receive mail for more than one e-mail domain on the same Windows NT system, you need to set up a virtual host for each domain. For example, if your mail server provides mail service for your local e-mail domain, *mail.ipswitch.com*, and you also want it to provide mail service for another e-mail domain, *mail.acme.com*, you need to create a virtual host for *mail.acme.com*.

Each virtual host must have a unique IP address. You can use either a real IP address or a virtual IP address. To use a real IP address, the IP address must be set in the the Control Panel's Network applet, under Protocols->TCP/IP Advanced properties. You can add up to five IP addresses in the Network applet. If you need to add more than five, refer to the documentation for the Windows NT Resource Kit.

A virtual IP address can be assigned to the domain (virtual host) by the IMail Server system. This allows you to have a virtual host without an IP address. You can then use an MX record in your DNS to point the virtual domain to an actual IP address.

If you use a virtual IP address for a mail domain, users must log in to mail accounts in the domain by specifying their userid in their mail client as: *userid@virtualhost*, where *userid* is the userid and *virtualhost* is the domain name, and entering their password. If you use an IP address that is set up on your IMail Server system, this method of login is not necessary.

---

### Note:

Whether you use a real IP address or a virtual IP address, you need to make the proper DNS entries for your mail domain(s). If you use a virtual IP address, the MX record (in DNS) for the domain should point to a real IP address. See your DNS documentation for information on creating these entries.

---

To configure a virtual host:

1. In the Control Panel, double-click the IMail Server icon. The IMail Server window appears.
2. Click the **Hosts** button.
3. The Virtual Host Configuration dialog box appears.

The Local Addresses list box shows all IP addresses set up in the Windows NT TCP/IP properties as well as any virtual IP addresses assigned by the IMail Server.

4. Select the IP address for the virtual host (in the Local Addresses list box) or click the **Add** button to assign a new virtual IP address to use for the new mail domain.
5. In the Official Host Name text box, enter the name of the mail host.

The name you enter here will be used to address mail to the users on the virtual host. For example, if you enter *mail.acme.com* as the mail host name, any users you add to the virtual host will receive mail at *user\_name@mail.acme.com*.

6. In the Aliases text box, specify alternate host names for which you want the system to accept mail. For example, if your mail hostname is *mail.acme.com*, you can set an alias of *acme.com* so that the IMail Server will accept mail addressed to *fred@mail.acme.com* and also *fred@acme.com*.
7. In the Top Directory Name text box, enter the name of the directory where the user information (userids and passwords) for this virtual host will be stored.

In most cases, you will want to use a different directory for each virtual host that you create. It is possible for virtual hosts to share a single directory but then users that have the same names will actually share the same mailbox.

Select the **Use local NT User Database** for this host option if you want IMail Server to create user mail accounts for this host by using the userids and passwords in the Windows NT User Database. The mail accounts for these users are created as necessary when a mail message for the user is received by the mail server or when a user accesses the mailbox through a POP3 mail client.

Do not select the **Use local NT User Database** option, if you want userids and passwords for mail accounts to be separate from userids and passwords for logging on to the Windows NT system.

8. Enter the parameters for mailboxes and messages. These parameters apply to all users on the virtual host. Enter zero for any of these parameters to provide an unlimited size.

#### **Default Max Mailbox Size**

The default maximum size (in bytes) for each mailbox created in a user's mail account. If a mailbox exceeds the maximum, any new mail for the mailbox is returned to the sender.

#### **Default Max Messages**

The default maximum number of messages (the total for all mailboxes created in the user's mail account). If the maximum is exceeded, any new mail for the user is returned to the sender.

### **Single Message Max Size**

The default maximum size (in bytes) for a single message sent to a user's mail account. If a message exceeds the maximum, it is returned to the sender.

### **Maximum User Count**

The default maximum number of users that can be registered for the domain. (Note that this does not apply to virtual domains that use the NT user database. The displayed counts of users for domains that use the NT user database may not be correct).

9. Click **Save** to save the new virtual host configuration. Click **Exit** to close the Virtual Host Configuration window.
10. After you've created the virtual host, you need to add user mail accounts. See Chapter 3 for information on creating and modifying user mail accounts.

---

## **Setting Up IMail Server as a Mail Gateway for a Proprietary Mail System**

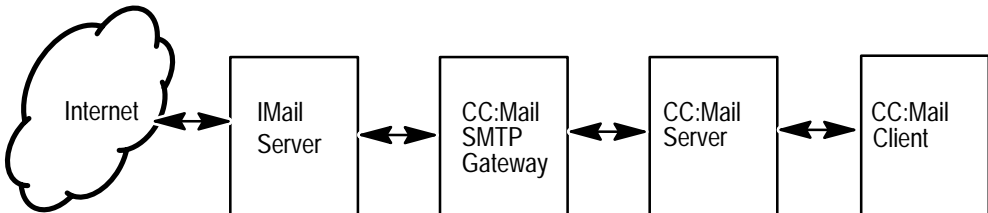
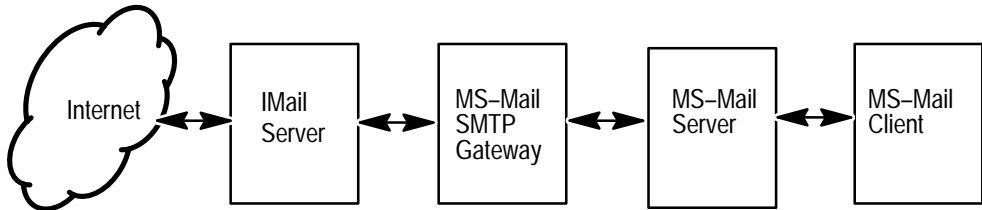
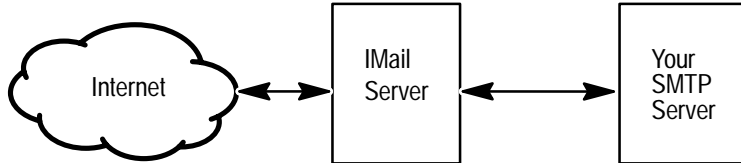
You can set up IMail Server to function as an SMTP mail gateway for proprietary mail systems such as MS-Mail or CC:Mail.

Note that IMail Server for Windows NT works over TCP/IP and uses the SMTP protocol. If your proprietary mail system does not run on TCP/IP and use the SMTP protocol, IMail Server for Windows NT will not work with your system directly. In this case, you'll need an SMTP gateway for your proprietary system to translate your mail so it will work over TCP/IP with the SMTP protocol.

IMail Server can function as the Internet mail gateway to proprietary SMTP mail gateways or servers from any e-mail systems vendor. For example, Microsoft's MS-Mail and IBM/Lotus's CC:Mail SMTP gateway products can both receive mail from the Internet and redistribute it to MS-Mail or CC:Mail users. Both products can also get mail from MS-Mail or CC:Mail users and send it to the Internet. However, these systems sometimes need an Internet mail gateway to translate between the Internet and their SMTP mail gateways. IMail Server for Windows NT can function as this mail gateway.

A common scenario for the mail gateway is to have all inbound mail (from the Internet) sent to the IMail Server, then the IMail Server forwards the mail to a different (the proprietary) SMTP mail gateway or server. For outbound mail (to the Internet), the proprietary SMTP mail gateway or server sends mail to the IMail Server, which then forwards the mail to the Internet.

The following diagrams show some different scenarios for setting up IMail Server for Windows NT with other SMTP servers.





## Setting up a gateway for a single domain

The following example shows how you set up IMail Server to accept mail for a single domain (domain1.com) and forward all mail for this domain to another SMTP server. Assume the following:

Your domain name	domain1.com
Hostname of IMail Server system:	my_imail_machine
IP address of IMail Server system:	156.21.50.10
Hostname of your SMTP server:	your_SMTP_server
IP address of your SMTP server:	156.21.50.240

You can replace “your SMTP server” hostname and IP address with your MS-Mail, or CC:Mail, or other SMTP gateway’s hostname and IP address.

When Windows NT looks up a domain name, it first searches the `\winnt35\system32\drivers\hosts` file, then, if there is no matching domain name, Windows NT asks a Domain Name Server (DNS) for the IP address for the domain name. So, in the DNS, you can point your domain name to your IMail Server system:

domain1.com	156.21.50.10 (my_imail_system)
-------------	--------------------------------

In the *hosts* file point your domain name to your SMTP server:

156.21.50.240	domain1.com (your_SMTP_server)
---------------	--------------------------------

## Setting up a gateway for multiple domains

The following example shows how you would set up IMail Server to accept mail for two domains. One mail domain will stay on the IMail Server system (domain1.com) and mail for the other mail domain will be forwarded to another SMTP server. Assume the following:

Domain name for IMail Server	domain1.com
Hostname of IMail Server system:	my_imail_machine
IP address of IMail Server system:	156.21.50.10

Domain name for your SMTP server	domain2.com
Hostname of your SMTP server:	your_SMTP_server
IP address of your SMTP server:	156.21.50.240

You can replace “your SMTP server” hostname and IP address with your MS-Mail, or CC:Mail, or other SMTP gateway’s hostname and IP address.

When Windows NT looks up a domain name, it first searches the `\winnt35\system32\drivers\hosts` file, then, if there is no matching domain name, Windows NT asks a Domain Name Server (DNS) for the IP address for the domain name. So, in the DNS, you can set up the domains as follows:

domain1.com	156.21.50.10 (my_imal_system)
domain2.com	156.21.50.10 (my_imal_system)

In the *hosts* file point your domain name to your SMTP server:

156.21.50.10	domain1.com (my_imal_system)
156.21.50.240	domain2.com (your_smtp_server)

If you need to add more domains, you just need to decide which mail server you want to receive the mail addressed to the domain. If you set up a domain and you want the mail destination to be the IMail Server system, then add that domain to the DNS and *hosts* file and point it to the IP address of the Windows NT machine running the IMail Server.

If you want mail for a domain to go through the IMail Server system and then on to another SMTP server, add the domain to the DNS and point it to the NT machine running the IMail Server. Then, add the domain to the *hosts* file and point it to the other SMTP server.

---

## Setting up a Dial-up Internet Connection

You can create a dial-up Internet connection from IMail Server for Windows NT to your Internet Service Provider (ISP), allowing you to receive mail from an account with your ISP.

IMail Server for Windows NT does not perform any dial-up functions or spawn off any dialing commands. To start your RAS/PPP connection to your ISP, you need to either use a scheduling program or manually start the connection.

IMail Server for Windows NT uses the TCP/IP transport on Windows NT; it does not configure Windows NT's TCP/IP transport. If you need to set up your RAS/PPP connection, refer to your Windows NT Online Help.

## Receiving Mail From an Internet Service Provider

IMail Server for Windows NT was designed to work on a 7-day, 24-hour Internet connection, but you can also set up IMail Server to support dial-up connections.

When using a dial-up connection, your inbound mail from the Internet has to be stored somewhere on the Internet. Usually, your ISP does this for you. Your ISP can store your mail in several ways.

Three of the more popular ways that ISP's store mail for users are:

- Method 1: The ISP sets up individual mail accounts on the ISP machines. This method can include using the popular POP3 mail protocol to read or retrieve your mail, or some other means. With this method, each user has to dial up to the ISP and either read or download their individual mail.
- Method 2: The ISP sets up individual mail accounts on the ISP machines, but the ISP forwards all the mail for your users to your mail server when your dial-up connection is up. This method uses the ISP's Internet domain name.

- **Method 3:** You have a registered Internet domain of your own, and you register your domain to point to the ISP machine. Your ISP stores your incoming mail and forwards it to your mail server when your dial-up connection is up.

To register your own domain, contact your ISP. In most cases, they will do all the work for you. All you have to do is come up with a name!

If you use Method 1, then in order to use IMail Server for Windows NT, you will have to change to either Method 2 or 3 to receive mail from your ISP. IMail Server for Windows NT cannot log into individual mail accounts on your ISP mail server, retrieve the mail and then parse the mail correctly. An Internet standard for this does not exist.

## **Setting Up the Server for Dial-up Access**

Setting up the IMail Server for Windows NT when using a dial-up connection is the same for both methods 2 and 3. Use the following procedure to set up your IMail server machine:

1. Create mail accounts for users on the IMail Server for Windows NT machine by using the IMail User Manager. See the IMail User Manager section in Chapter 3.

Note that if you are using Method 2, you need to make sure that the users' names are the same on both the ISP's machine and your IMail Server for Windows NT machine.

2. You then need to inform Windows NT about your e-mail domain name.

When Windows NT looks up a domain name, it first searches the `\WINNT35\SYSTEM32\DRIVERS\HOSTS` file, then, if there is no matching domain name, Windows NT asks a Domain Name Server (DNS) for the IP address for the domain name.

This creates a problem, as your Windows NT machine has a different IP address than your ISP's machine. When IMail Server for Windows NT looks at the incoming mail, it will look up the domain name to which the e-mail is addressed. If the domain name points to your ISP's machine (your ISP's IP address), then IMail Server for Windows NT will send the mail back to your ISP's machine (which it thinks is correct). Mail will be bounced back and forth until one of the machines sends the mail message back to the original sender.

To avoid this problem, set up the domain as a virtual host, then add the domain name to which your incoming mail is addressed (either your ISP's if Method 2, or your own if Method 3) to the Aliases text box in the Virtual Host Configuration dialog box, and make this domain name point to your NT machine's IP number.

For example, if you are using Method 2, and the machines involved have the following addresses and names:

ISP's IP address:	156.21.50.1
ISP's domain name:	isp_are_us.com
Windows NT IP address:	156.21.50.240
Windows NT Name:	my_nt_machine

you would make the following entries in the \WINNT35\SYSTEM32\DRIVERS\HOSTS file:

```
156.21.50.240 my_nt_machine
156.21.50.240 isp_domain_name.com
```

You can have multiple names pointing to the same IP address. This also helps if your machine is receiving mail for multiple domains. Just place each domain name in the hosts file pointing to your NT machine's IP address.

If you are using Method 3, and the machines involved have the following addresses and names:

ISP's IP address: 156.21.50.1  
Your Domain Name: my\_domain\_name.com  
IP address for  
my\_domain\_name.com: 156.21.50.1  
Windows NT Name: my\_nt\_machine  
Windows NT IP address: 156.21.50.240

you would make the following entries in the \WINNT35\SYSTEM32\DRIVERS\HOSTS file:

```
156.21.50.240 my_nt_machine
156.21.50.240 my_domain_name.com
```

3. Unless you plan on maintaining a 24-hour/7-day dial-up Internet connection, you need to have your ISP spool all the mail for your company. Then, have your ISP set up their mail machine to try periodically sending mail to the IMail Server for Windows NT system.

How often the ISP attempts to send mail to your server will depend on how often your dial-up connection is up. You need to consider several factors in determining queue times. The first factor is the most important.

- How long will your dial-up connection last (10, 20, 30 minutes)?
- How often will your ISP's machine try to send the spooled mail to your NT machine?
- How often will your NT machine try to send mail to the Internet?
- How much mail will you receive and send when you make your dial-up connection?

For example, if the connection time will be 20 minutes, and you will have relatively light traffic (50 received and 50 sent) and relatively short messages (no attachments, or large files), you could set up the queue times as follows:

Connection Time: 20  
ISP Queue Time: 15

IMail Queue Time: 15  
Email Quantity: 50 received/50 sent (short messages)

In this example, the Connection Time is the amount of time your IMail server is connected to the ISP's machine. The ISP Queue Time determines how often the ISP mail machine tries to send mail to the IMail. The IMail Queue Time determines how often the IMail server tries to send mail to the ISP or Internet.

To ensure that you send and receive all your mail, regardless of the connection time, make the queue times less than the connection time. If you expect to receive or send greater numbers of messages, or more lengthy mail than in the example, you should either increase the connection time, or decrease both queue times.

Remember that IMail Server for NT does not do scheduling. You need to obtain a scheduler to have the connection automatically dial, connect, and disconnect.

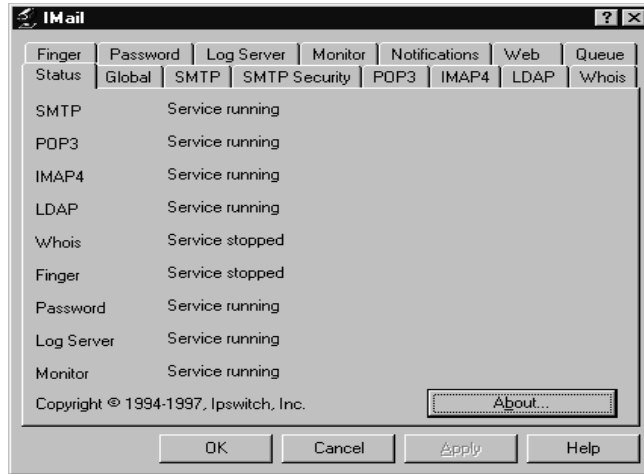
---

## IMail Services

Configuration of the various services is performed through a Windows NT Control Panel application. After installation, a new icon called "IMail Server" appears in the Control Panel.



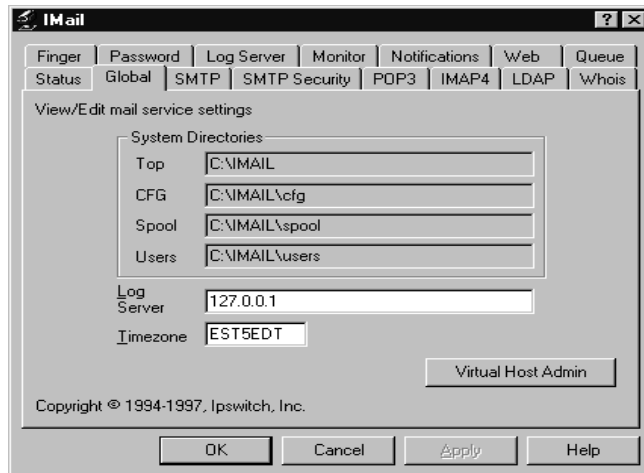
Click the **IMail Server** icon. The Status properties appear.



Current status of each of the servers is displayed. Chapters 5 through 13 describe the configuration options available for each of these servers.

## IMail Services – Global

You can click the **Global** tab to show the directory structure for the services. You cannot change the directory entries.





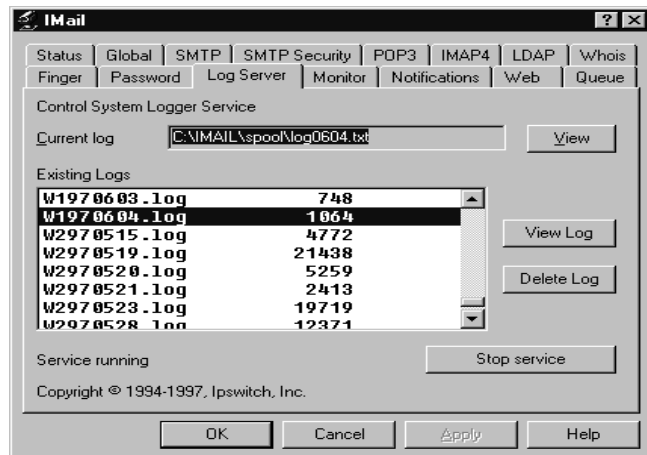
In the Log Server text box, you can enter an IP address to which any of the IMail services set up to use the log server will send messages.

In the Timezone text box, you can enter your local time zone.

Click the **Virtual Host Admin** button to display the Virtual Host Configuration dialog box. The section “Setting Up Multiple Domains” in this chapter describes how to add, modify, or delete a virtual host (mail domain).

## IMail Services – Log Server

You can click the **Log Server** tab to display the log files in the IMail spool directory. Log files are named with the format `logMMDD.txt` where *MM* is the month and *DD* is the date.



The Current log box shows the currently active log file. Click **View** next to this box to view the file in the Windows Notepad.

The Existing Logs box lists recent log files. You can select a log file in the list and click **View** to open it in the Windows Notepad. To delete a log file, select it and click **Delete**.

## **IMail Services – Queue**

You can click the **Queue** tab to display the files in the outbound mail queue.

Each of the messages waiting to be delivered will have a QHDR file. These are listed in the Filename listbox. Selecting one of these files will display information about that message. You can then remove (delete) the message from the outbound queue or force delivery of one or all of the messages. Note that you cannot modify any of the displayed information.

---

### 3. Creating and Maintaining Mail Accounts

IMail Server for Windows NT provides two interfaces that system administrators can use to create and maintain user mail accounts:

- **IMail User Manager** — provides all user and alias administration functions. The IMail User Manager is described in this chapter.
- **IMail Administrator** — provides a Windows Explorer–type tree view interface to the user and alias administration functions. This utility provides all of the functionality of the IMail User Manager plus mailbox management functions for maintaining mailboxes created on the server system for IMAP4 clients. Chapter 4 describes how to use the IMail User Administration utility.

You can use either one or both of these interfaces to add, modify, and delete users and aliases. A command line program, *adduser.exe*, is available for adding and deleting users from the command line.

A companion program, the IMail User Utility (IMUTIL) lets users modify their mail accounts from a remote system.

In addition, both the system administrator and users can have remote access to the mail account functions by using the IMail Remote Administration Utility or the Web Remote Administration utility.

This chapter describes how to use these utilities to create and maintain user mail accounts.

---

#### IMail User Manager

The IMail User Manager (REGIST32) lets the system administrator perform the following:

- Add, delete, and modify users
- Add, delete, or modify system aliases
- Change passwords

- Change user information in LDAP directory
- Change inbound mail processing rules for users
- Set up vacation processing
- Set up mail forwarding
- Update the user's PLAN file that is distributed by Finger
- Set up an automated response

The companion program, IMail User Utility (IMUTIL), is designed to be distributed to users to allow them to modify their mail accounts from their own system. See the IMail User Utility section in this chapter for more information.

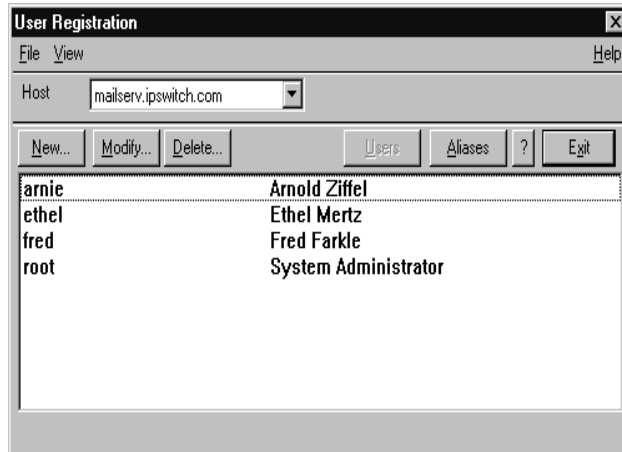
### **IMail User Manager – Main Screen**

To start the IMail User Manager, do one of the following:

- From the Start menu, select Programs->IMail->IMail User Manager.
- Run the REGIST32.EXE program.

If you have set up more than one mail domain, the Select Virtual Host dialog box appears. (For information on setting up virtual hosts, see “Setting Up Multiple Domains” in Chapter 2.) Select the host and click **OK**.

The User Registration window appears. This window shows all registered IMail users. You (the system administrator) can add new users, modify user properties, and delete users.



(If you click on the Aliases button, the window shows all registered system aliases. You can add new aliases, modify alias properties, and delete aliases.)

The sections that follow describe how to perform these functions.

---

## Adding, Modifying, and Deleting User Mail Accounts

You can add, modify, and delete user mail accounts by using the IMail User Manager.

---

### Note:

When you first install IMail Server, or when you create a virtual host, you can select to use the Windows NT User Database to generate user mail accounts. See Chapter 2 for more information.

---

### Adding a User Mail Account

For an initial installation of IMail Server for Windows NT, you need to add the user mail accounts for your domain. (If you set up virtual hosts, you need to add users for each host.) After the initial installation, you may need to add, modify, or delete user mail accounts when changes are made on your network.

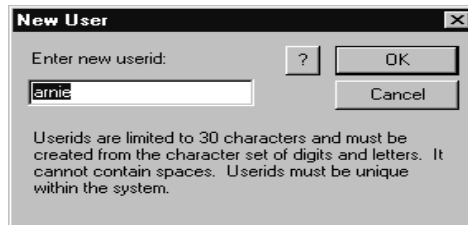
To add users using the IMail User Manager:

1. Start the IMail User Manager.

If you have created virtual hosts, you are prompted to select the Host (domain) to which you want to add user(s). Select a host and click **OK**.

The User Registration window appears.

2. Click the **New** button. The New User dialog box appears.



A userid is limited to 30 characters and must be created from the character set of digits and letters. It cannot contain spaces. The userid must be unique within the system.

IMail Server will use the last hyphen in the userid to delimit a mailbox name. For example, if mail is sent to the address *mr-fred-account@ipswitch.com*, IMail Server reads *account* as a mailbox that belongs to *mr-fred*.

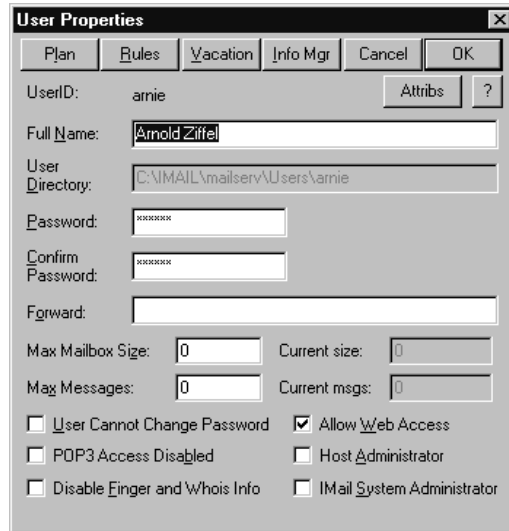
---

**Note:**

You can change the character used to delimit the mailbox name in a userid. In the Windows NT registry, add a GLOBAL IMail key of "MailBoxSplitChar" and specify the new character as the first character of the string value.

---

3. Enter a user name (this will be the userid for the mail account) and click **OK**. The User Properties dialog box appears.

The image shows the 'User Properties' dialog box from the IMAIL Server for Windows NT. It has a title bar with a close button. Below the title bar are tabs: 'Plan', 'Rules', 'Vacation', 'Info Mgr', 'Cancel', and 'OK'. The 'Info Mgr' tab is selected. The dialog contains several fields: 'UserID:' with the value 'arnie' and an 'Attrs' button; 'Full Name:' with the value 'Arnold Ziffel'; 'User Directory:' with the value 'C:\MAIL\mailserv\Users\arnie'; 'Password:' and 'Confirm Password:' both with masked text 'xxxxxx'; and a 'Forward:' field. At the bottom, there are four checkboxes: 'User Cannot Change Password' (unchecked), 'POP3 Access Disabled' (unchecked), 'Disable Finger and Whois Info' (unchecked), 'Allow Web Access' (checked), 'Host Administrator' (unchecked), and 'IMail System Administrator' (unchecked). There are also two numeric fields: 'Max Mailbox Size:' and 'Max Messages:' both set to '0', and 'Current size:' and 'Current msgs:' both set to '0'.

The User Properties dialog box lets you modify a users name, their user directory, password, vacation file, plan file, mail delivery rules, automated response, and set options for the account. You can also modify a user's LDAP directory information (such as organization name, telephone number).

4. In the Full Name text box, enter the user's full name.
5. The User Directory text box shows the directory where the user account information is stored. You cannot edit this field.
6. In the Password text box, enter a password for the user.

Confirm the password you entered by entering it again in the Confirm Password text box

7. Optionally, in the Forward text box, enter a different userid to which all of this user's mail will be sent. See "Setting Up Mail Forwarding" in this chapter for more information.

8. Enter any of the following options:

### **Max Mailbox Size**

The maximum size (in bytes) for each mailbox created in the user's mail account. If a mailbox exceeds the maximum, any new mail for the mailbox is returned to the sender. Enter 0 for unlimited size.

### **Max Messages**

The maximum number of messages (the total for all mailboxes created in the user's mail account). If the maximum is exceeded, any new mail for the user is returned to the sender. Enter 0 for unlimited size.

### **Current Size**

The current size (in bytes) of the *Main* mailbox.

### **Current Msgs**

The current total of all messages in all mailboxes in the user's account.

### **User Cannot Change Password**

This option controls whether or not the user can change their password remotely by using the IMail User Utility or the Web Remote Administration utility.

### **POP3 Access Disabled**

Prohibit the user from accessing the account remotely through POP3. Lets the system administrator disable the account without changing the user's password or removing them from the system.

### **Disable Finger Info and Whois Info**

Allows you to disable the distribution of any information about this user through Finger if you have the Finger server running and through Whois if you have the Whois server running.

### **Allow Web Access**

Allows this user access to their account via the Web Remote Administration utility (provided the utility is configured) and the Web Messaging option.



## Host Administrator

Allows this user to add, modify, or delete users in their current domain by using IRADMEN or the Web Remote Administration utility. To use the Web utility, **Allow Web Access** must also be selected.

## IMail System Administrator

Allows this user to use all user registration and services configuration provided by the IRADMEN or Web Remote Administration utilities. To use the Web utility, **Allow Web Access** must also be selected.

9. Optionally, set up any special processing for this user, such as delivery rules, a vacation message, a Finger Plan file, an automated response, or enter LDAP attribute information. See the following sections for information on setting up these options.
10. Click **OK** to add the user. The userid is added to the list of registered users.

Any users you have added can now receive mail through IMail Server for Windows NT at the specified host (domain name). For example, if you added the user *arnie* to the virtual host for the domain *ipswitch.com*, the user can now receive mail addressed to *arnie@ipswitch.com*.

## Modifying a User Mail Account

To modify a user mail account:

1. Select the user name from the list of users.
2. Click the **Modify** button. The User Properties dialog box appears.
3. Make any change to the User Properties, Vacation Processing, Rules Processing, Finger Plan, Forwarding, Information Manager, or Attributes. See the description of User Properties in “Adding User Mail Accounts” and the following sections on other mail options.
4. Click **OK** to apply the changes.

You can also click the **Modify** button when no user is selected and you will be prompted for the userid of the user that you want to modify. You can also modify a user's properties by double-clicking on the user name in the list.

## Deleting a User Mail Account

To delete a user mail account:

1. Select the user name from the list of users.
2. Click the **Delete** button.

A dialog box asks if you want to delete the user account and all subdirectories and files.

3. Click **Yes** to delete the user mail account and all related files (all of this user's mail will be deleted). Click **No** to delete just the user mail account but retain the subdirectories and files.

You can also click the **Delete** button when no user is selected and you will be prompted for the userid of the user that you want to delete.

---

## Adding and Deleting Users with the Command Line Program

You can also use the command line program, *adduser.exe*, to add and delete users. To view the syntax for the command line program, type either *adduser* or *adduser /?* at the DOS prompt. This command returns the following:

```
adduser -u userid
        [-h hostname]
        [-n "full name"]
        [-p password]
```

- u userid is the IMail user name (e.g. Maggie)
- h hostname is the name of the virtual host (e.g. mail.acme.com)
- n "full name" is the user's full name (e.g. Margaret Smith)
- p password is the user's password (e.g. magmail)
- k userid is the userid of a user account to be deleted

The *adduser* program can be used from the command line, in a batch file, or in a script file.

---

## Adding, Modifying, and Deleting Aliases

IMail Server for Windows NT supports three types of aliases:

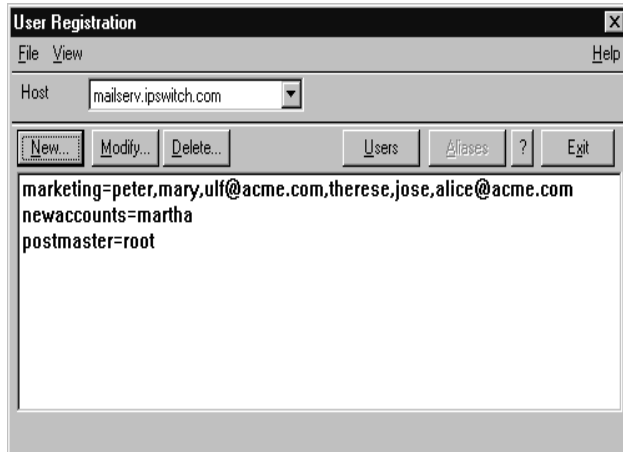
- Standard aliases that point to a mail address on the local system, a remote system, or another alias.
- List aliases that point to a file containing a list of mail addresses. This is not an automated mailing list such as those that can be set up with the List server. It is a simple distribution list with no automated subscribe, unsubscribe, or digest functions.
- Program aliases that point to an executable program on the host system.

### Adding an Alias

To add an alias:

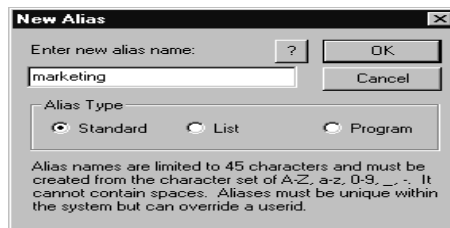
1. In the IMail User Manager, click the **Aliases** button. All registered aliases are displayed in the window.

If you are installing IMail Server for Windows NT for the first time, you will see only the `postmaster=root` alias, which was set up automatically. To comply with the Internet mail RFC specification, you need a postmaster alias so Internet mail users can send mail to `postmaster@your_domain_name`. You can change the postmaster alias to point to a different mail account.



2. Click the **New** button.

The New Alias dialog box appears.



3. Enter a name for the alias.

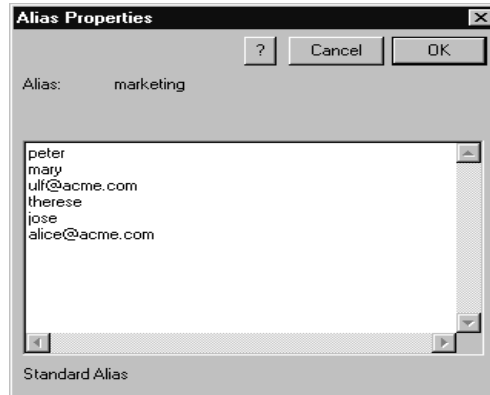
Alias names are limited to 45 characters and must be created from the character set of A–Z, a–z, 0–9, \_ (underline), and – (hyphen). The name cannot contain spaces and must be unique within the system. An alias name can be the same as a userid on the system and will override that userid (allowing mail to be forwarded in a manner that the user cannot override).

4. Select the type of Alias to add and click **OK**.

The Alias Properties dialog box appears. The information you enter in this dialog box is different depending on the type of alias you selected.

## Standard Aliases

A standard alias can point to a single userid on the same system, multiple userids on the same system, a remote mail address, multiple mail addresses, another alias, or any combination of the same. In the Alias Properties dialog box, you should place one complete mail address per line (no spaces), as shown below. If you create an alias that is longer than is allowed, the alias will be converted to a list alias.



## List Aliases

A list alias points to a file that contains a list of valid mail addresses, one per line. The dialog box allows you to define the location of the list by manually typing the name of the file or through the use of the browse button.

## Program Aliases

A program alias points to a program that can accept the mail message for further processing. The message is passed to the program by passing the full pathname of a temporary file as the last argument on the command line when the program is invoked. Other required command line parameters can be placed in the edit box that defines the program to execute.

5. After entering the alias properties, click **OK** to add the alias. The new alias is added to the list of registered aliases.

## Modifying an Alias

To modify an alias:

1. Select the alias from the list of aliases.
2. Click the **Modify** button. The Alias Properties dialog box appears.
3. Make any changes to the properties associated with the alias.
4. Click **OK** to apply the changes.

You can also click the **Modify** button when no alias is selected and you will be prompted for the alias that you want to modify. You can also modify an alias by double-clicking on the alias in the list.

## Deleting an Alias

To delete an alias:

1. Select the alias from the list of aliases.
2. Click the **Delete** button.
3. Click **OK** to apply the change.

You can also click the **Delete** button when no alias is selected and you will be prompted for the alias that you want to delete.

---

## Setting Up Mail Forwarding

You can have IMail Server for Windows NT automatically forward a user's mail to another account or system.

To set up mail forwarding for a user:

1. In the User Properties dialog box, enter a complete mail address in the Forward text box.

The address that you enter in this text box must be a complete mail address that is valid from the IMail Server for Windows NT host system.

If you want to send the user's mail to a different user on the same host, you can enter the simple userid. If you want to send the user's mail to a different system, you must enter a complete mail address including the userid and the full domain name, for example: (userid@host.domain)

You can also access the same mail forwarding function through the vacation feature.

2. Click **OK** to apply the change.

To turn mail forwarding off, make sure the text box is empty and click **OK**.

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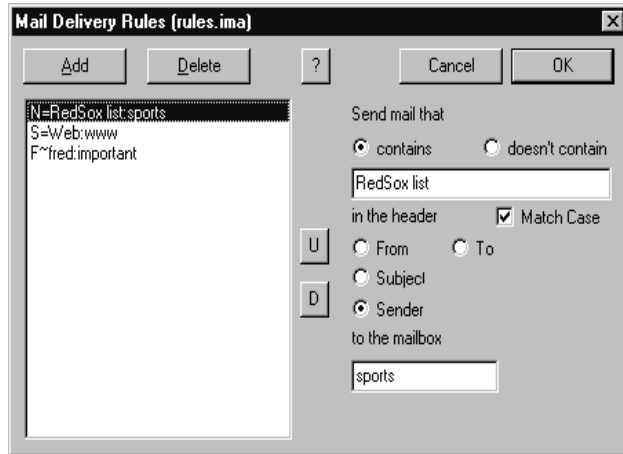
## Setting Up Delivery Rules

You can create delivery rules to direct incoming mail to different mailboxes based on the contents of the From:, Subject:, and Sender: fields in the message header. The rules effect only incoming mail sent to the user's *Main* mailbox.

When you add delivery rules, IMail creates a *rules.ima* file in the user's home directory on the IMail Server for Windows NT host system. This file is read top down until a match is found. The *rules.ima* file is a text file that can be copied to any user's home directory.

To create a delivery rule:

1. In the User Properties dialog box, click **Rules**. The Mail Delivery Rules dialog box appears.



2. Click the **Add** button.
3. Select the **Contains** option to apply the rule to messages that contain the search string, or select **Doesn't Contain** to apply the rule to those that do not contain the search string.
4. Enter a search string in the text box below the **Contains** option.

Optionally, select the **Match Case** option. When this option is enabled, the search string must match the find string in both upper and lower case.

5. Select the header field (From, Subject, Sender) that you want to search.
6. Enter the name of the mailbox to which you want to route the messages that meet the rule criteria.
7. Click **OK** to save the rule.

The list box shows the new rule, along with any other rules you have created. See the “Rule Syntax” section below for information on the syntax used to define rules.

To delete a rule:

1. In the list box, select the rule you want to delete.
2. Click the **Delete** button.



## Rule Syntax

The syntax used to define rules in the *rules.ima* file specifies the search type, the search string, and the destination mailbox. When you create a rule in the Mail Delivery Rules dialog box, it is entered in the *rules.ima* file in this format. You can use the following rules for processing mail:

```
F=string:mailbox (Case sensitive match in From: header)
F~string:mailbox (Case insensitive match in From: header)
S=string:mailbox (Case sensitive match in Subject: header)
S~string:mailbox (Case insensitive match in Subject: header)
N=string:mailbox (Case sensitive match in Sender: header)
N~string:mailbox (Case insensitive match in Sender: header)
```

where *string* is the search string and *mailbox* is the destination mailbox.

### Example *rules.ima* file:

```
F=ipswitch:internal (send mail from ipswitch to mailbox "internal")
N~53list:53list (send mail from 53listserver to mailbox "53list")
S~ftp:ftp (send mail with ftp in subject to "ftp" mailbox)
S~mail:mail (send mail with mail in subject to "mail" mailbox)
```

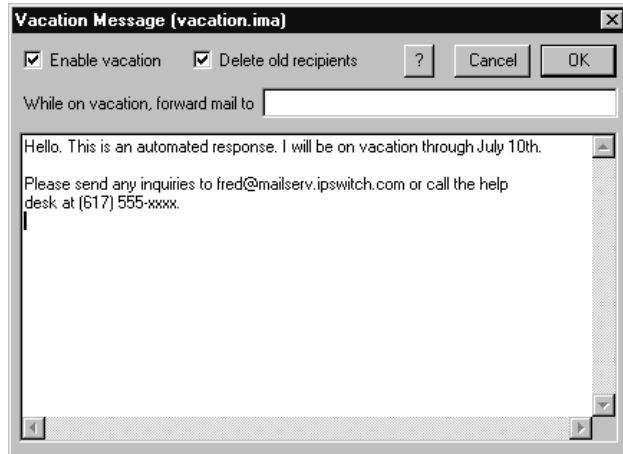
---

## Setting Up a Vacation Message

You can create a *vacation.ima* file in the user's home directory on the IMail Server for Windows NT host system that will be mailed once to each user that sends mail to the user.

To create a vacation message:

1. In the User Properties dialog box, click **Vacation**. The Vacation Message dialog box appears.



2. Enter the message that you want to send as a reply to mail while you (the user) are away.

When the vacation message is sent, IMail Server for Windows NT lists the e-mail address of the recipient in the *vacation.snt* file. The presence of the address in this file is what stops the sender from receiving a second message.

3. Select the **Enable Vacation** option.

When the you (the user) returns from vacation, you can disable the vacation message by making sure the **Enable Vacation** option is not checked.

4. Optionally, select the **Delete old recipients** option. IMail Server maintains a file (*vacation.snt*) that lists users to whom the vacation message has been sent. If you do not select this option, the vacation message will not be sent to any users in the *vacation.snt* file. If you select the option, the *vacation.snt* file is deleted when you click **OK**, thus deleting the list of old recipients.

5. Optionally, enter a mail address to which IMail will forward your mail while you are away.

The address that you enter in this text box must be a complete mail address that is valid from the IMail Server for Windows NT host system. If you want to send the user's mail to a different user on the same host, you can enter the simple userid.

If you want to send the user's mail to a different system, you must enter a complete mail address including the userid and the full domain name, for example: (userid@host.domain)

6. Click **OK**.

When the vacation message is sent, IMail Server for Windows NT lists the e-mail address of the recipient in the *vacation.snt* file. The presence of the address in this file is what stops the sender from receiving a second message.

---

## Setting Up a Finger Plan

You can create a *plan.ima* file in the user's home directory on the IMail Server for Windows NT host system to provide Finger information. The contents of the file are returned to Finger requests from other hosts, provided the system administrator enables Finger and allows the users plan to be presented. The Plan contents are displayed in addition to the login username of the user, login times, and other information displayed by the Finger server.

The system administrator can disable the transmission of any information about any user through the Finger protocol by checking the **Disable Finger Info** option in the User Properties dialog box.

To create or modify a Finger Plan:

1. In the User Properties dialog box, click **Plan**. The Finger dialog box appears.
2. Enter any information you desire to make publicly available to Finger clients.
3. Click **OK**.

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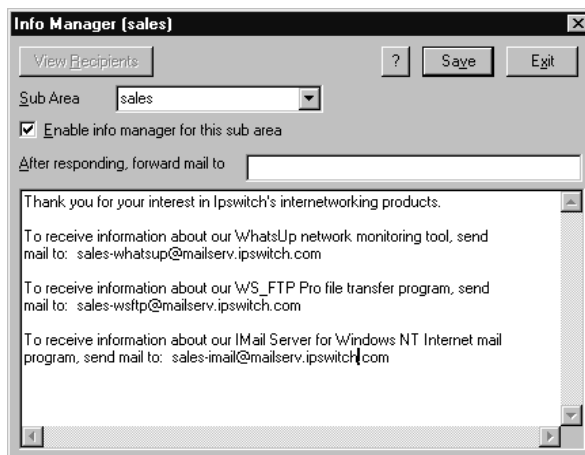
## Setting Up an Automated Response with the Info Manager

The Info Manager feature lets you set up an automated e-mail information system. When mail is received for a user that has enabled the Info Manager, a prepared message is sent back to the sender.

The Info Manager lets you set up subcategories of a particular user account and enter an automated response specific to each category. For example, you may want to set up an *info* user account for your organization. When someone sends mail to the *info* account, the system can return a response that describes the subcategories of the *info* account in which they can obtain further information. They could then send a message to *info-sales* and receive back a different message related to sales, or to *info-classes* and receive back a message about classes you offer. There is no limit to the number of subcategories that you can set up in the Info Manager.

To create an automated response for a mail account:

1. In the User Properties dialog box, click the **Info Mgr** button. The Info Manager dialog box appears.



2. Create a new subarea or select an existing subarea to which the response message will apply.

The default subarea is *main*. The message you enter for this area will be returned to users' who send mail to the account but do not specify a mailbox. For example, if a user sends mail to `info@ipswitch.com`, they will receive the response entered for the *main* subcategory. If a user sends mail to the `info-sales@ipswitch.com` mailbox, they will receive the response entered for the *sales* subcategory of the *info* mail account.

3. Enter the message to be returned to all users who send mail to this subarea.

The first line of the body of the message is used as the subject line for the automated response. It must be less than 80 characters long.

The response message is contained in the *subcategory.inf* file in the user's mail directory.

4. Select the **Enable info manager for this subarea** option.

To disable the automated response, make sure the **Enable info manager for this subarea** option is not checked.

5. Optionally, enter a mail address to which IMail will forward mail sent to the subarea (in addition to sending the response to the sender).

The address that you enter in this text box must be a complete mail address that is valid from the IMail Server for Windows NT host system. If you want to send the user's mail to a different user on the same host, you can enter the simple userid. If you want to send the user's mail to a different system, you must enter a complete mail address including the userid and the full domain name, for example: `(userid@host.domain)`

6. Click **Save** to save the message and enable the Info Manager.

When a user sends mail to a mail account with Info Manager enabled, the user's mail address is listed in the *subcategory.snt* file in the mail directory. To view this file, click the **View Recipients** button.

Info Manager messages are not returned if the original message contains the Precedence: bulk header or contains listserv in the mail address.

It is recommended that you do not send mail from an account for which the Info Manager is enabled because the recipient of the message will receive an automated response if they reply.

You can use the Info Manager and the **Rules** features together. You can use the rules processing feature to search incoming messages for a string and route the mail to a mail account for which you have set up an automated response.

The Info Manager is checked after the Rules Manager and before the Vacation Manager.

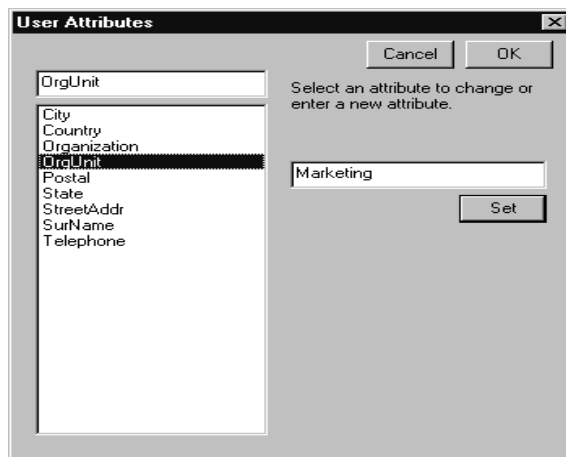
---

## Entering LDAP Directory Information (Attributes)

You can add attribute information to the user's account record for publishing via the LDAP server. IMail Server provides an LDAP interface to the IMail user database. The IMail user database is extended to include standard LDAP attributes (such as name, address, organization name, phone number). These attributes are made available (through the LDAP server) to any LDAP-enabled client. See Chapter 8 for more information on the LDAP server and LDAP data.

To enter LDAP information for a user:

1. In the User Properties dialog box, click the **Attribs** button. The User Attributes dialog box appears.



2. Select an attribute from the list or define a new attribute by entering it in the text box at the top of the list.

The list contains the most common attributes used in an LDAP entry. Other attributes can be defined by the system administrator or the user.

The text box at the top of the list shows the currently selected attribute. The text box to the right of the list shows the entry for the currently selected attribute.

3. Enter or modify the entry for the selected attribute, and then click the **Set** button to save the change.
4. Select or enter another attribute to change.
5. When you have finished making entries, click **OK**.

---

## IMail User Utility

The IMail User Utility (IMUTIL) is designed to be used only with the IMail Server for Windows NT. Any valid licensee of IMail Server for Windows NT is authorized to make an unlimited number of copies of IMUTIL for use with IMail Server for Windows NT.

The IMail User Utility lets users change their password, change inbound mail processing rules, set up vacation processing, set up mail forwarding, and update their PLAN file that is distributed by Finger. The IMUTIL (*imutil.exe*) program is designed to be distributed to any users, regardless of client.

The utilities in the IMail User Utility match those in the IMail User Manager (REGIST32) with a few exceptions. A user cannot change their name, userid or other user properties. They can change their password and enable mail forwarding.

IMUTIL is a 16-bit application and can be used on the Windows NT host, as well as on any Winsock 1.1 compliant network stack.

System administrators who want to limit these functions can elect not to distribute the IMUTIL program.

## IMail User Utility – Logging On

To start the IMail User Utility, do one of the following:

- In the IMail Server for Windows NT program group, click the IMail User Utility icon.
- Run the *imutil.exe* program.

The Login dialog box appears.

When you enter your profile/userid name and press TAB, the remainder of the dialog box will fill in from the last use. Multiple profile/userids may exist on a system. The information used to maintain this is found in the *imail.ini* file in the Windows directory.

To use the IMail User Utility on the same system that contains the POP server, you will need to use a host name of 127.0.0.1.

The password is saved in the *.ini* file provided that, in the User section of the *.ini* file, the parameter OPT\_SAVEPWD is set equal to 1. Note that the password is saved in plain text if this option is set!

## IMail User Utility – Main Screen

The main screen of IMail User Utility has a menu bar, a button bar, and a conversation window. You can access functions by either selecting from the menu or by clicking the buttons. The conversation window, below the button bar, displays a record of the “conversation,” or communications, with the server. This provides feedback to the user on the success of a function. (Note that a special mailbox called IMUTIL is used to access the remote functions of IMail Server for Windows NT.)

## IMail User Utility – Changing Your Password

You can change your password on the remote host (if the administrator allows) by selecting Change Password from the File menu, or by clicking the ChgPass button. You must enter your old password again, and then enter the desired new password twice. Note that a password can be from 4 to 30 characters and cannot contain a space, hyphen, or equal sign.



## IMail User Utility – Forwarding Mail

You can cause IMail Server for Windows NT to automatically forward your mail to another account or system by selecting Forwarding from the File menu, or by clicking the Forward button.

The address that you enter in the Forwarding field must be a complete mail address that is valid from the IMail Server for Windows NT host system. If you want to send your mail to a different user on the same host, you only have to enter the simple userid. If you want to send your mail to a different system, you must enter a complete mail address including the userid and the full domain name (*userid@host.domain*). You can also access the same mail forwarding function through the vacation feature. To turn mail forwarding off, ensure the edit box is empty and click **OK**.

## IMail User Utility – Delivery Rules

You can create a RULES.IMA file in your home directory on the IMail Server for Windows NT host system to perform rules-based processing on incoming mail. This file is read top down until a match is found when the destination mailbox is MAIN. You can use this file to direct mail to different mailboxes based on the contents of the From, Subject, Sender, and To headers.

You can use the following rules for processing mail:

```
F=string:mailbox (Case sensitive match in From: header)
F~string:mailbox (Case insensitive match in From: header)
S=string:mailbox (Case sensitive match in Subject: header)
S~string:mailbox (Case insensitive match in Subject: header)
N=string:mailbox (Case sensitive match in Sender: header)
N~string:mailbox (Case insensitive match in Sender: header)
```

### Example RULES.IMA:

```
F=ipswitch:internal (send mail from ipswitch to mailbox "internal")
N~53list:53list (send mail from 53listserver to mailbox "53list")
S~ftp:ftp (send mail with ftp in subject to "ftp" mailbox)
S~mail:mail (send mail with mail in subject to "mail" mailbox)
```

Alternate mailboxes may be accessed by any POP3 client by appending the mailbox name at the end of the userid, following a hyphen: (*userid-mailbox*)

You can have incoming mail sent directly to an alternate mailbox by addressing mail to *userid-mailbox@host.domain*. When subscribing to a mailing list, you can use the *userid-mailbox* as your userid so that mail from the list will be sent to the mailbox. The default mailbox for a user is *userid-main@host.domain*.

### IMail User Utility – Vacation Processing

You can create a VACATION.IMA file in your home directory on the IMail Server for Windows NT host system that will be mailed *once* to each user that sends mail to the user.

When the vacation message is sent, IMail Server for Windows NT lists the email address of the recipient in the VACATION.SNT file. The presence of the address in this file is what stops the sender from receiving a second message.

### IMail User Utility – Finger Plan

You can create a PLAN.IMA file in the your home directory on the IMail Server for Windows NT host system to provide Finger information. The contents of the file are returned to Finger requests from other hosts, provided the system administrator enables Finger and allows the users plan to be presented.

The system administrator can disable the transmission of any information about any user through the Finger protocol.

---

## Backup and Restore IMail Database

Whenever you exit from the IMail User Manager, it attempts to back-up the IMail Server section of the Windows NT registry to the file *imailreg*. After you complete the initial IMail Server installation, the IMail registry data is written to the file *reginit*.

You can perform a backup manually by selecting **Backup IMail Registry** from the File menu. A dialog box prompts you to specify a filename to which it will back up the IMail Server section of the registry.

You can restore these backup files to the registry by selecting **Restore IMail Registry** from the File menu. A dialog box displays a list of the backup files. If you select to restore a backup file, you will lose any changes made between the time of the backup and the time of the restore.

---

## Importing NT Users

If you did not select to use the Windows NT User Database for user mail accounts, you can use the **Import NT Users** feature (from the File menu) to add users to the IMail database. Selecting this option displays a dialog box that lists the users in the NT User Database. You can select the users you want to add to the IMail database and IMail Server will create accounts using the userid and the user's full name. You are prompted to enter a password for each user or you can specify an initial password for all users.

---

## Remote Administration Utilities

IMail Server for Windows NT provides two remote administration utilities:

- The Remote Administration utility (IRADMEN) lets you add, modify, and delete IMail Server user accounts from a remote system. You can copy the IRADMEN program to a remote machine and use it to log on to the mail server and make any changes.
- The Web Remote Administration utility lets you add, modify, and delete IMail Server user accounts from a Web browser on a remote system.

## Running the IRADMEN Utility

You can copy the IRADMEN utility (*iradmen.exe*) from the IMail product directory (default is *C:\IMail*) and put it on any remote Windows NT system.

To run the Remote Administration utility:

1. Select **Run** from the File menu, then enter *c:\imail\iradmen* and press Return. A Logon dialog box appears.
2. Make sure the Password server is running. (See Chapter 11 for more information).
3. Set the appropriate access options (Host Administrator, IMail System Administrator) in the User Properties for the userid you will use to log in to IRADMEN.

See “Adding a User Mail Account” in this chapter for information.

4. Enter your userid and password, then click **OK**. The IRADMEN window appears.

See the online help for information on using IRADMEN.

## Setting up the Web Remote Administration Utility

You can access the Web Remote Administration utility from any Web browser.

To set up the Web Remote Administration utility:

1. Configure the IMail Server Web server as described in the “Configuring the Web Server” section of Chapter 12.

---

### Note:

You should use a Web browser that supports frames as the IMail Server Web server uses frames to display service status. The most recent Netscape Navigator and Microsoft Internet Explorer browsers support frames.

---

2. Set the appropriate access options (Allow Web Access, Host Administrator, IMail System Administrator) in the User Properties for the userid you will use to login.

You must enable the **Allow Web Access** option. See “Adding a User Mail Account” in this chapter for information on these options.

3. Start a Web browser and open the URL address for the Web server. The address is:

`http://your_imal_server_system:8181`

where *your\_imal\_server\_system* is the hostname of the Windows NT system on which you installed the IMail Server and 8181 is the port number for the Web server.

---

**Note:**

Port 80 is usually used for Web access via the HTTP protocol.

---

You are prompted for your IMail Server userid and password.

4. Enter your IMail userid and password.

---

**Note:**

The IMail userid and password use base64 encoding for sending this information via the HTTP protocol.

---

## Using the Web Remote Administration Utility

The following screen shows an example of the Web page display. In addition to providing access to the user mail accounts, the Web page can display the status of services monitored by the Monitor server.



In the left panel, the Monitor shows the status of monitored services. Services shown in green are running; services shown in red are stopped.

The right panel shows the menu of administration functions. The functions that are available to the user depend on the access assigned to the userid. (Access is set in the user properties for the userid.) All users will see the functions listed under Personal Information. Host Administrators will also see the Host Administration functions. System Administrators will also see the System Administration functions.

### Personal Information

All users have access to these menu items:

- Change Password — can change and confirm the user's password.
- Change User Information — change the user information that gets published in a directory by the LDAP server.
- Change Finger Information — change the information in the user's *plan* file. This information is provided in response to a Finger request.

- **Change Mail Forwarding Information** — set a forwarding e-mail address to which all the user's mail is sent.
- **Change Vacation Message** — enter a vacation message that will be sent once to each user that send's mail to this user's account. The presence of a message in the text window activates the vacation message. If the text window is left empty, the vacation message is disabled.

## **System Administration**

Users who have **System Administrator** access enabled (in the user properties) will see these menu items:

- **Service Administration** — stop and start the IMail services and configure service monitoring.
- **Current Host Configuration** — view and modify the host configuration.
- **SMTP Settings** — change the configuration settings for the SMTP server. See Chapter 5 for a description of each setting.
- **Local Address Table** — modify the Local Address table which determines the IP addresses that the SMTP server will consider to be local hosts. See Chapter 5 for more information on the mail relay capabilities.
- **SMTP Access Table** — modify the SMTP access table which determines the IP addresses that the SMTP server will allow to connect to it. See Chapter 5 for more information on the SMTP access capabilities.
- **POP3/IMAP4 Access Table** — modify the POP3/IMAP4 access table which determines the IP addresses that the POP3 and IMAP4 servers will allow to connect to it. See Chapters 6 and 7 for more information on these access capabilities.
- **Web Access Table** — modify the Web access table which determines the IP addresses that the Web server for the Remote Administration utility will allow to connect to it. See Chapter 12 for more information on these access capabilities.
- **View Monitor Database** — shows all service monitoring events.
- **View Spool Directory** — shows all IMail Server send and receive mail transactions that are in process.

- Edit Welcome Message — enter up to 1000 characters of plain text and/or raw HTML code in this edit box. The message will be displayed in the main logon screen above the logon form. The message persists across reboots.
- Recent IMail News — displays the Web page where Ipswitch reports information on new releases, bug fixes, and workarounds.

## Host Administration

Users who have **Host Administrator** access enabled (in the user properties) will see these menu items:

- User Administration — lets you add, modify, and delete users and aliases. See the appropriate sections of this chapter for more information.
- View Monitor Access Log — shows each access attempt to the IMail Web Messaging server and to the IMonitor web server.
- View Monitor System Log — shows logons to the mail server and to the IMonitor web server and shows the status of services.
- View IMail System Log — shows IMail Server send and receive mail transactions. This shows the contents of *syslog.txt*.
- View IMail Syslog Log — records transaction and debug information when enabled in each of the servers (for example, POP3 and SMTP). This shows the contents of *lognnnn.txt*, the System Log Service file.



---

## 4. Using the IMail Administrator

IMail Server for Windows NT provides two interfaces that system administrators can use to create and maintain user mail accounts:

- IMail User Manager — provides all user and alias administration functions. The IMail User Manager is described in Chapter 3.
- IMail Administrator — provides a Windows Explorer-type tree view interface to the user and alias administration functions. This utility provides all of the functionality of the IMail User Manager plus mailbox management functions for maintaining mailboxes created on the server system for IMAP4 clients. You can also add, delete, and manage mailing lists. This chapter describes how to use the IMail Administrator.

You can use either one or both of these interfaces to add, modify, and delete users and aliases. A command line program, *adduser.exe*, is also available for adding and deleting users from the command line. See Chapter 3 for information on using the command line program.

A companion program, the IMail User Utility (IMUTIL) lets users modify their mail accounts from a remote system.

In addition, both the system administrator and users can have remote access to the mail account functions by using the IMail Remote Administration Utility or the Web Remote Administration utility.

See Chapter 3 for information about these utilities.

---

### IMail Administrator

The IMail Administrator (IADMIN) lets the system administrator perform the following:

- Add, modify, and delete mail domains
- Add, modify, and delete users
- Change passwords

- Find and delete orphan mail accounts
- Add, modify, and delete system aliases
- Add, delete, and manage mailing lists
- Change user information for the LDAP directory
- View, add, and delete mailbox (.mbx) files and delete messages by date (for IMAP4 mailboxes created on the server)
- Change inbound mail processing rules for users
- Set up vacation processing
- Set up mail forwarding
- Update the user's PLAN file that is distributed by Finger
- Set up an automated response

## IMail Administrator – Main Screen

To start the IMail Administrator, do one of the following:

- From the Start menu, select Programs→IMail→IMail Administrator.
- Run the IADMIN.EXE program.

The IMail Administrator window appears. This split window works like the Windows Explorer. The tree view in the left panel provides access to your mail domains and the user database.



To expand the tree, click the plus sign (+) next to an item. When you click on an item in the tree, its properties are displayed in the right panel.

You can expand either the left or right panel by clicking and dragging the border between them.

Click on **Local System** to display the IMail Server configuration.

Mail domains are listed by IP address under **IP Addresses** in the tree view. Mail domains are listed by domain name under **Virtual Domains** in the tree view. Users, aliases, and mailing lists are found under the virtual domain name.

The sections that follow describe how to use the IMail Administrator to add and delete mail domains, and to add, modify, and delete the users, aliases, and mailing lists in a domain.

---

## Viewing the Local System Configuration

In the tree view, click on **Local System** to display the IMail Server configuration.



You can modify only the Gate Host or the Default Host properties.

### **Host Name**

The primary official host name of the IMail Server system, This was specified during installation.

### **Default Host**

The name of the host to send mail to if only a user ID is specified in the mail message and that user ID is not found on the local system. Normally this field should be blank. This field can be useful when multiple systems are required to work as one system.

### **Gate Host**

The name of another host to send mail to for further delivery when that mail cannot be delivered directly to the destination host. This can also be used in conjunction with the **Send all remote mail through gateway** option to force delivery of mail through the gateway host. Since IMail Server for Windows NT should be able to reach all hosts directly, this field should typically be left blank. See Chapter 5, “SMTP Server,” for more information.

### **Install Date**

Date the IMail Server system was installed.

### **Top Dir**

Directory where IMail Server files are installed. This is specified during installation.

### **Spool Dir**

Temporary directory where messages are spooled while awaiting processing and where log files are kept.

---

## **Adding and Deleting Virtual Domains**

If you want to receive mail for more than one e-mail domain on the same Windows NT system, you need to set up a virtual host for each domain. For example, if your mail server provides mail service for your local e-mail domain, *mail.ipswitch.com*, and you also want it to provide mail service for another e-mail domain, *mail.acme.com*, you need to create a virtual host for *mail.acme.com*.

Each virtual host must have a unique IP address. You can use either a real IP address or a virtual IP address. To use a real IP address, the IP address must be set in the the Control Panel's Network applet, under Protocols->TCP/IP Advanced properties. You can add up to five IP addresses in the Network applet. If you need to add more than five, refer to the documentation for the Windows NT Resource Kit.

A virtual IP address can be assigned to the domain (virtual host) by the IMail Server system. This allows you to have a virtual host without an IP address. You can then use an MX record in your DNS to point the virtual domain to an actual IP address.

If you use a virtual IP address for a mail domain, users must log in to mail accounts in the domain by specifying their userid in their mail client as: *userid@virtualhost*, where *userid* is the userid and *virtual-host* is the domain name, and entering their password. If you use an IP address that is set up on your IMail Server system, this method of login is not necessary.

---

**Note:**

Whether you use a real IP address or a virtual IP address, you need to make the proper DNS entries for your mail domain(s). If you use a virtual IP address, the MX record (in DNS) for the domain should point to a real IP address. See your DNS documentation for information on creating these entries.

---

## **Adding a Mail Domain**

To add a virtual mail domain:

1. In the tree view, click on Virtual Domains. The Virtual Domains properties appear in the right panel.
2. Click the **Add Virtual Host** button. The Create New Virtual Host screen appears.

3. Click **Next**. The New Host Name screen appears.

Enter the official host name. The name you enter here will be used to address mail to the users on the virtual host. For example, if you enter *mail.acme.com* as the mail host name, any users you add to the virtual host will receive mail at *user\_name@mail.acme.com*.

4. Click **Next**. The Virtual Host Alias screen appears.

Enter other host names for which you want the system to accept mail. For example, if your mail hostname is *mail.acme.com*, you can set an alias of *acme.com* so that the IMail Server will accept mail addressed to *fred@mail.acme.com* and also *fred@acme.com*.

5. Click **Next**. The Directory screen appears.

Enter the name of the directory where the user information (userids and passwords) for this virtual host will be stored.

In most cases, you will want to use a different directory for each virtual host that you create. It is possible for virtual hosts to share a single directory but then users that have the same names will actually share the same mailbox.

6. Click **Next**. The Database screen appears.

Select the **Use local NT User Database** for this host option if you want IMail Server to create user mail accounts for this host by using the userids and passwords in the Windows NT User Database. The mail accounts for these users are created as necessary when a mail message for the user is received by the mail server or when a user accesses the mailbox through a POP3 mail client.

Do not select the **Use local NT User Database** option, if you want userids and passwords for mail accounts to be separate from userids and passwords for logging on to the Windows NT system.

7. Click **Next**. The Create New Virtual Host screen appears.
8. Click **Finish** to create the virtual host.

The new mail domain is added to the list of Virtual Domains in the tree view. The domain properties appear in the right panel.



9. Optionally, in the domain properties, enter the parameters for mailboxes and messages. These parameters apply to all users on the virtual host. Enter zero for any of these parameters to provide an unlimited size. Zero is the default value.

### **Default Max Mailbox Size**

The default maximum size (in bytes) for each mailbox created in a user's mail account. If a mailbox exceeds the maximum, any new mail for the mailbox is returned to the sender.

### **Single Message Max Size**

The default maximum size (in bytes) for a single message sent to a user's mail account. If a message exceeds the maximum, it is returned to the sender.

### **Default Max Messages**

The default maximum number of messages (the total for all mailboxes created in the user's mail account). If the maximum is exceeded, any new mail for the user is returned to the sender.

### **Max Users**

The default maximum number of users that can be registered for the domain.

10. Click **Apply** to save any changes.
11. After you've created the virtual host, you can add user mail accounts (described in the following section).

## Deleting a Mail Domain

To delete a mail domain:

1. In the tree view, select the mail domain.
2. In the tree view, right-click to display the pop-up menu, and then select **Delete Host** from the menu.

You are asked to confirm the delete request.

3. Click **Yes** to delete the host and related files.

---

## Adding, Modifying, and Deleting User Mail Accounts

You can add, modify, and delete user mail accounts by using the IMail Administrator.

---

### Note:

When you first install IMail Server, or when you create a virtual host, you can select to use the Windows NT User Database to generate user mail accounts. See Chapter 2 for more information.

---

## Setting Global User Properties

You can specify settings to be used by all user mail accounts that you create. In the tree view, click on the virtual domain name. The domain properties (such as default maximum message size, and maximum number of messages) appear in the right panel. These settings will be used by all mail accounts created in that domain. See the previous section, "Adding a Mail Domain," for a description of each property.



To set defaults for user access options, in the tree view, select the domain, and then click on the Users folder. The default user settings appear in the right panel. These settings will be used by all mail accounts created in that domain. See the following section, “Adding a User Mail Account,” for a description of each property.

## Adding a User Mail Account

For an initial installation of IMail Server for Windows NT, you need to add the user mail accounts for your domain. (If you set up virtual hosts, you need to add users for each host.) After the initial installation, you can add, modify, or delete user mail accounts when changes are made on your network.

To add users using the IMail Administrator:

1. Start the IMail Administrator. From the Start menu, select Programs→IMail→IMail Administrator.
2. In the tree view, expand the Virtual Domains list and select the domain to which you want to add users.
3. Click the **Add User** button. The New User ID dialog box appears.



Enter a userid (this will be the userid for the mail account). A userid is limited to 30 characters and must be created from the character set of digits and letters. It cannot contain spaces. You can use hyphens in the userid. The userid must be unique within the system.

IMail Server will use the last hyphen in the userid to delimit a mailbox name. For example, if mail is sent to the address *mr-fred-account@ipswitch.com*, IMail Server reads *accounts* as a mailbox that belongs to *mr-fred*.

---

**Note:**

You can change the character used to delimit the mailbox name in a userid. In the Windows NT registry, add a GLOBAL IMail key of “MailBoxSplitChar” and specify the new character as the first character of the string value.

---

4. Click **Next**. The Full Name screen appears.



In the First Name text box, enter the user’s first name. In the Last Name text box, enter the user’s last name.

Select the **Show Advanced Settings** option if you want to enter the settings (such as address, organization, telephone number) and the access flags while setting up this account. If you do not select this option, you will be prompted only for the required entries (userid, first and last name, password) needed to create the account.

5. Click **Next**. The Password screen appears.



The 'Password for New User' dialog box features the IPswitch logo on the left. On the right, it prompts the user to 'Enter the password that will be assigned to the user.' with two text input fields labeled 'Password' and 'Confirm Password'. Below these fields, a note states: 'It is recommended that the password is greater than four characters and contains at least one numeric character.' There is an unchecked checkbox labeled 'User cannot change password'. At the bottom, there are four buttons: '< Back', 'Next >', 'Cancel', and 'Help'.

In the Password text box, enter a password for the user.

Confirm the password you entered by entering it again in the Confirm Password text box. Select the **User cannot change password** option if you do not want the user to be able to change their password from the IMail User Utility, the Web Remote Administration Utility, or the Web Messaging option.

6. Click **Next**. The Detailed Information screen appears.



The 'Detailed Information' dialog box features the IPswitch logo on the left. On the right, it contains several text input fields for user information: 'Organization' (ipswitch Inc), 'Department' (marketing), 'Address' (81 Harvard Ave), 'City' (Lexington), 'State/Province' (MA), 'Postal Code' (02473), 'Country' (USA), and 'Telephone' (617.655.4000). At the bottom, there are four buttons: '< Back', 'Next >', 'Cancel', and 'Help'.

This screen lets you enter the user's LDAP directory information (such as address, organization, telephone number). The information entered here can be published via the LDAP server.

The list contains the most common attributes used in an LDAP entry. Other attributes can be defined by the system administrator or the user. These attributes are made available (through the LDAP server) to any LDAP-enabled client. See Chapter 8 for more information on the LDAP server and LDAP data.

7. Click **Next**. The Advanced Settings screen appears.



Enable any of the following advanced settings:

#### **User Cannot Change Password**

This option controls whether or not the user can change their password remotely by using the IMail User Utility or the Web Remote Administration utility.

#### **Account Access Disabled**

Prohibits the user from accessing the account remotely through POP3 or IMAP4. Lets the system administrator disable the account without changing the user's password or removing them from the system.

#### **Hide from information services**

Allows you to disable the distribution of any information about this user through Finger if you have the Finger server running and through Whois if you have the Whois server running and through LDAP if you have the LDAP server running.

#### **User can't modify LDAP attributes**

Prohibits the user from modifying their LDAP attributes (name, address, organization, etc).

## Allow Web access

Allows this user to access their account via the Web Remote Administration utility (provided the utility is configured) and the Web Messaging option.

## Host administrator

Allows this user to add, modify, or delete users in their current domain by using IMail Remote Administration utility, the Web Remote Administration utility, or the Web Messaging option. To use the Web utilities, **Allow Web Access** must also be selected.

## IMail system administrator

Allows this user to use all user registration and services configuration provided by the IMail Remote Administration utility, the Web Remote Administration utility, or the Web Messaging option. To use the Web utilities, **Allow Web Access** must also be selected.

8. Click **Finish** to add the user. The userid is added to the list of registered users for the domain. The user record appears in the right panel.



Any users you have added can now receive mail through IMail Server for Windows NT at the specified host (domain name). For example, if you added the user *fred* to the virtual host for the domain *ipswitch.com*, the user can now receive mail addressed to *fred@ipswitch.com*.

9. Optionally, set up any special processing for this user, such as mail forwarding, mailbox directory limits, a Finger Plan file, delivery rules, a vacation message, an automated response, or enter new LDAP attribute information. See the following sections for information on setting up these options.

## Modifying a User Mail Account

To modify a user mail account:

1. In the tree view, select the mail domain, and then select the user name from the list of users.
2. Make any change to the user properties, mail forwarding, mailbox directory limits, Finger plan, delivery rules, a vacation message, an automated response, or LDAP attribute information.. See the description of the user properties in “Adding User Mail Accounts” and the following sections on other mail options.
3. Click **Apply** to apply the changes.

## Deleting a User Mail Account

To delete a user mail account:

1. In the tree view, select the mail domain, and then select the user name from the list of users.
2. In the tree view, right-click to display the pop-up menu, and then select **Delete Users**.

A dialog box asks if you want to delete the user account and all subdirectories and files.

3. Click **Yes** to delete the user mail account and all related files (which means all of this user’s mail will be deleted). Click **No** to cancel the delete request.

## Finding Orphan Mail Accounts

An orphan mail account is one for which there is a directory structure in the IMail users directory but the user has been deleted from the list of users.

To find orphans:

1. In the tree view, select the virtual domain name, and then click on the Users folder. The Users properties appear in the right panel.
2. Click the **Find Orphans** button.

The Orphans dialog box lists any orphan user mail accounts.

To delete an orphan account, click on a user name to select it, and then click **Delete**.

To delete all orphan accounts, click **Delete All**.

3. Click **Close** to close the dialog box.

---

## Adding, Modifying, and Deleting Aliases

IMail Server for Windows NT supports three types of aliases:

- Standard aliases that point to a mail address on the local system, a remote system, or another alias.
- List aliases that point to a file containing a list of mail addresses. This is not an automated mailing list such as those that can be set up with the List server. It is a simple distribution list with no automated subscribe, unsubscribe, or digest functions.
- Program aliases that point to an executable program on the host system.

The postmaster=root alias is set up automatically by the IMail Server installation. To comply with the Internet mail RFC specification, you need a postmaster alias so Internet mail users can send mail to postmaster@your\_domain\_name. You can change the postmaster alias to point to a different mail account.

## Adding an Alias

To add an alias:

1. Start the IMail Administrator. From the Start menu, select Programs→IMail→IMail Administrator.
2. In the tree view, expand the Virtual Domains list and select the domain to which you want to add aliases.
3. Click the **Add Alias** button. The New Alias ID screen appears.



Enter a name for the alias.

Alias names are limited to 45 characters and must be created from the character set of A–Z, a–z, 0–9, \_ (underline), and – (hyphen). The name cannot contain spaces and must be unique within the system. An alias name can be the same as a userid on the system and will override that userid (allowing mail to be forwarded in a manner that the user cannot override).

4. Click the **Next** button. The Type of Alias screen appears.





Select the type of Alias to add.

### Standard Aliases

A standard alias can point to a single userid on the same system, multiple userids on the same system, a remote mail address, multiple mail addresses, another alias, or any combination of the same. In the Alias Properties dialog box, you should place one complete mail address per line (no spaces), as shown below. If you create an alias that is longer than is allowed, the alias will be converted to a list alias.

### List Aliases

A list alias points to a file that contains a list of valid mail addresses, one per line. The dialog box allows you to define the location of the list by manually typing the name of the file or through the use of the browse button.

### Program Aliases

A program alias points to a program that can accept the mail message for further processing. The message is passed to the program by passing the full pathname of a temporary file as the last argument on the command line when the program is invoked. Other required command line parameters can be placed in the edit box that defines the program to execute.

5. Click **Next**. A text entry box appears. If you selected the List or Program types, you enter a filename. If you selected the Standard type, you enter one or more mail addresses, as shown in the example below.



6. After entering the alias properties, click **Next**, and then click **Finish** to add the alias. The new alias is added to the list of registered aliases. The Alias properties appear in the right panel.

## Modifying an Alias

To modify an alias:

1. In the tree view, select the domain name, and then select the alias from the list of aliases. The Alias Properties appear in the right panel.
2. Make any changes to the properties associated with the alias.
3. Click **Apply** to apply the changes.

## Deleting an Alias

To delete an alias:

1. In the tree view, select the domain name, and then select the alias from the list of aliases.
2. In the tree view, right-click to display the pop-up menu., and then select **Delete**.

You are prompted to confirm the delete request.

3. Click **Yes** to apply the change.

---

## Setting Up Mail Forwarding

You can have IMail Server for Windows NT automatically forward a user's mail to another account or system.

To set up mail forwarding for a user:

1. In the tree view, select the mail domain, and then select a user from the list of users. The user properties appear in the right panel. Enter a complete mail address in the Forward text box.

The address that you enter in this text box must be a complete mail address that is valid from the IMail Server for Windows NT host system. If you want to send the user's mail to a different user on the same host, you can enter the simple userid. If you want to send the user's mail to a different system, you must enter a complete mail address including the userid and the full domain name, for example: (userid@host.domain)

You can also access the same mail forwarding function through the vacation feature.

2. Click **Apply** to apply the change.

To turn mail forwarding off, make sure the text box is empty and click **Apply**.

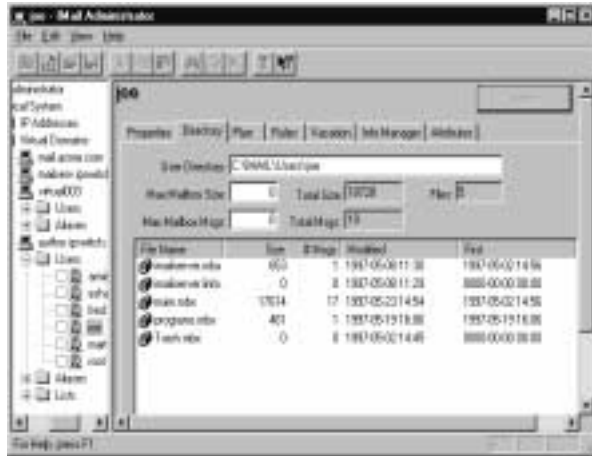
---

## Setting Mailbox Directory Limits

You can manage the user's mailboxes by setting limits on mailbox size and message count, and deleting messages older than a specified date.

To view mailbox directories and set limits:

1. In the tree view, select a mail domain, and then select a user from the list of users. The user properties appear in the right panel.
2. Click the **Directory** tab to display the mailboxes and mailbox properties.



3. You can change the following settings:

### User Directory

The user's directory name in the IMA user database.

### Max Mailbox Size

The maximum size (in bytes) for each mailbox created in the user's mail account. If a mailbox exceeds the maximum, any new mail for the mailbox is returned to the sender. Enter 0 for unlimited size.

### Max Messages

The maximum number of messages (the total for all mailboxes created in the user's mail account). If the maximum is exceeded, any new mail for the user is returned to the sender. Enter 0 for unlimited size.

The following text boxes are informational only, you cannot change them.

### Total Size

The current total size (in bytes) of the all mailboxes in the user's account.

### Total Msgs

The current total number of messages in all mailboxes in the user's account.

## **Files**

The current total number of files in the user's account.

4. Click **Apply** to save any changes.

The Directory properties also list all mailboxes (*.mbx*) in the user's directory. For each mailbox, the list shows the *.mbx* file name, the size (in bytes), the number of messages it contains, and the last modified and first modified dates. You can delete or rename mailboxes, delete messages by date, or refresh the mailbox list information. To use the mailbox functions:

1. Select a mailbox in the list.
2. Right-click to display the pop-up menu.
3. Select one of the pop-up menu items:

### **Delete Mailbox**

Deletes the currently selected mailbox.

### **Delete Msg's by Date**

Automatically deletes message from the mailbox according to a specified date or number of days old. Displays a dialog box in which you can either enter the number of days old or a specific date. Any messages older than the specified days or date are deleted.

### **Rename Mailbox**

Displays a dialog box in which you can enter a new name for the mailbox.

### **Refresh**

Refreshes the list of mailbox and the mailbox information.

---

## Setting Up a Finger Plan

You can create a *plan.ima* file in the user's home directory on the IMail Server for Windows NT host system to provide Finger information. The contents of the file are returned to Finger requests from other hosts, provided the system administrator enables Finger and allows the users plan to be presented. The Plan contents are displayed in addition to the login username of the user, login times, and other information displayed by the Finger server.

The system administrator can disable the transmission of any information about any user through the Finger protocol by checking the **Disable Finger Info** option in the User Properties dialog box.

To create or modify a Finger Plan:

1. In the tree view, select a mail domain, and then select a user from the list of users. The user properties appear in the right panel.
2. Click the **Plan** tab. The Finger properties appear.
3. Enter any information you desire to make publicly available to Finger clients.
4. Click **Apply**.

---

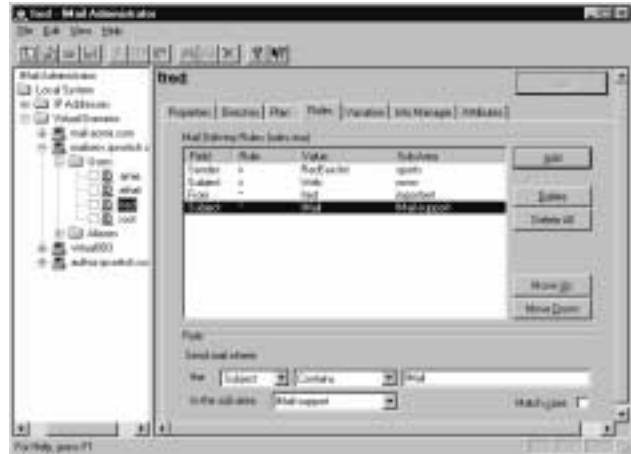
## Setting Up Delivery Rules

You can create delivery rules to direct incoming mail to different mailboxes based on the contents of the From:, Subject:, and Sender: fields in the message header. The rules effect only incoming mail sent to the user's *Main* mailbox.

When you add delivery rules, IMail creates a *rules.ima* file in the user's home directory on the IMail Server for Windows NT host system. This file is read top down until a match is found. The *rules.ima* file is a text file that can be copied to any user's home directory.

To create a delivery rule:

1. In the tree view, select a mail domain, and then select a user from the list of users. The user properties appear in the right panel.
2. Click the **Rules** tab. The Mail Delivery Rules properties appear.



3. Click the **Add** button.
4. In the Rule section at the bottom of the screen, select the header field (From, Subject, Sender, To) that you want to search.
5. Select the **Contains** option to apply the rule to messages that contain the search string, or select **Doesn't Contain** to apply the rule to those that do not contain the search string.
6. In the sub-area text box, enter a search string in the text box to the right of the **Contains/Doesn't Contain** option.

Optionally, select the **Match Case** option. When this option is enabled, the search string must match the find string in both upper and lower case.

7. Enter the name of the mailbox to which you want to route the messages that meet the rule criteria.
8. Click **Apply** to save the rule.

The list box shows the new rule, along with any other rules you have created. See the “Rule Syntax” section below for information on the syntax used to define rules.

To delete a rule, select it in the list, and click **Delete**. To delete all rules click Delete All.

To move a rule up or down in the list, select it and click **Move Up** or **Move Down**.

## Rule Syntax

The syntax used to define rules in the *rules.ima* file specifies the search type, the search string, and the destination mailbox. When you create a rule in the Mail Delivery Rules dialog box, it is entered in the *rules.ima* file in this format. You can use the following rules for processing mail:

```
F=string:mailbox (Case sensitive match in From: header)
F~string:mailbox (Case insensitive match in From: header)
S=string:mailbox (Case sensitive match in Subject: header)
S~string:mailbox (Case insensitive match in Subject: header)
N=string:mailbox (Case sensitive match in Sender: header)
N~string:mailbox (Case insensitive match in Sender: header)
```

where *string* is the search string and *mailbox* is the destination mailbox.

### Example *rules.ima* file:

```
F=ipswitch:internal (send mail from ipswitch to mailbox "internal")
N~53list:53list (send mail from 53listserver to mailbox "53list")
S~ftp:ftp (send mail with ftp in subject to "ftp" mailbox)
S~mail:mail (send mail with mail in subject to "mail" mailbox)
```

---

## Setting Up a Vacation Message

You can create a *vacation.ima* file in the user's home directory on the IMail Server for Windows NT host system that will be mailed once to each user that sends mail to the user.

To create a vacation message:

1. In the tree view, select a mail domain, and then select a user from the list of users. The user properties appear in the right panel.
2. Click the **Vacation** tab. The Vacation Message properties appear.





3. Enter the message that you want to send as a reply to mail while you (the user) are away.

When the vacation message is sent, IMail Server for Windows NT lists the e-mail address of the recipient in the *vacation.snt* file. The presence of the address in this file is what stops the sender from receiving a second message.

4. Select the **Enable Vacation** option.

When the you (the user) returns from vacation, you can disable the vacation message by making sure the **Enable Vacation** option is not checked.

5. Optionally, select the **Delete old recipients** option. IMail Server maintains a file (*vacation.snt*) that lists users to whom the vacation message has been sent. If you do not select this option, the vacation message will not be sent to any users in the *vacation.snt* file. If you select the option, the *vacation.snt* file is deleted when you click **OK**, thus deleting the list of old recipients.
6. Optionally, enter a mail address to which IMail will forward your mail while you are away.

The address that you enter in this text box must be a complete mail address that is valid from the IMail Server for Windows NT host system. If you want to send the user's mail to a different user on the same host, you can enter the simple userid.

If you want to send the user's mail to a different system, you must enter a complete mail address including the userid and the full domain name, for example: (userid@host.domain)

7. Click **Apply**.

When the vacation message is sent, IMail Server for Windows NT lists the e-mail address of the recipient in the *vacation.snt* file. The presence of the address in this file is what stops the sender from receiving a second message.

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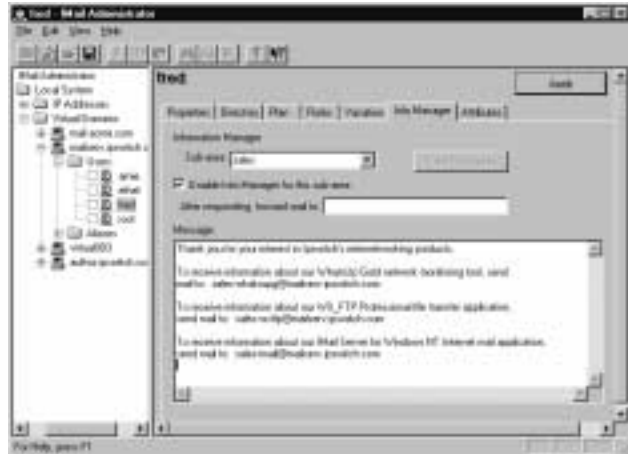
## Setting Up an Automated Response with the Info Manager

The Info Manager feature lets you set up an automated e-mail information system. When mail is received for a user that has enabled the Info Manager, a prepared message is sent back to the sender.

The Info Manager lets you set up subcategories of a particular user account and enter an automated response specific to each category. For example, you may want to set up an *info* user account for your organization. When someone sends mail to the *info* account, the system can return a response that describes the subcategories of the *info* account in which they can obtain further information. They could then send a message to *info-sales* and receive back a different message related to sales, or to *info-classes* and receive back a message about classes you offer. There is no limit to the number of subcategories that you can set up in the Info Manager.

To create an automated response for a mail account:

1. In the tree view, select a mail domain, and then select a user from the list of users. The user properties appear in the right panel.
2. Click the **Info Manager** tab. The Information Manager properties appear.



3. Create a new subarea or select an existing subarea to which the response message will apply.

The default subarea is *main*. The message you enter for this area will be returned to users' who send mail to the account but do not specify a mailbox. For example, if a user sends mail to info@ips-switch.com, they will receive the response entered for the *main* subcategory. If a user sends mail to the info-sales@ipswitch.com mailbox, they will receive the response entered for the *sales* subcategory of the *info* mail account.

4. Enter the message to be returned to all users who send mail to this subarea.

The first line of the body of the message is used as the subject line for the automated response. It must be less than 80 characters long.

The response message is contained in the *subcategory.inf* file in the user's mail directory.

5. Select the **Enable info manager for this subarea** option.

To disable the automated response, make sure the **Enable info manager for this subarea** option is not checked.

6. Optionally, enter a mail address to which IMail will forward mail sent to the subarea (in addition to sending the response to the sender).

The address that you enter in this text box must be a complete mail address that is valid from the IMail Server for Windows NT host system. If you want to send the user's mail to a different user on the same host, you can enter the simple userid. If you want to send the user's mail to a different system, you must enter a complete mail address including the userid and the full domain name, for example: (userid@host.domain)

7. Click **Apply** to save the message and enable the Info Manager.

When a user sends mail to a mail account with Info Manager enabled, the user's mail address is listed in the *subcategory.snt* file in the mail directory. To view this file, click the **View Recipients** button.

Info Manager messages are not returned if the original message contains the Precedence: bulk header or contains listserv in the mail address.

It is recommended that you do not send mail from an account for which the Info Manager is enabled because the recipient of the message will receive an automated response if they reply.

You can use the Info Manager and the **Rules** features together. You can use the rules processing feature to search incoming messages for a string and route the mail to a mail account for which you have set up an automated response.

The Info Manager is checked after the Rules Manager and before the Vacation Manager.

---

## Entering LDAP Directory Information (Attributes)

To enter LDAP information for a user:

1. In the tree view, select a mail domain, and then select a user from the list of users. The user properties appear in the right panel.
2. Click the **Attribute** tab. The Attributes properties appear.



3. Select an attribute from the list or define a new attribute by clicking **Add** and entering it in the text box that appears.

The Name box at the bottom of the list shows the currently selected attribute. The Value box shows the entry for the currently selected attribute.

4. Enter or modify the entry for the selected attribute, and then click **Apply** to save the change.
5. Select or enter another attribute to change.
6. When you have finished making entries, click **Apply**.

To delete an attribute, select it, and then click **Delete**.

## Adding, Deleting, and Managing Mailing Lists

You can add, delete, and manage mailing lists using the IMail Administrator. The same functionality is also available by using the IMail List Server (from the Start menu, select Programs->IMail->IMail List Server).

To add a mailing list:

1. In the tree view, select a mail domain. The mail domain properties appear in the right panel.

2. Click the **Add List** button. The Add List screen appears.

Enter a name for the list. The name must be from 3 to 23 characters in length, with no spaces between characters. This is the name used to send mail to the list. For example, if you enter the name "IMail-info," users will send mail to the list by specifying the To address: IMail-info@ipswitch.com.

3. Click **Next**. The Title screen appears.

Enter the title to appear on the mailing list.

4. Click **Next**. The Names screen appears.

Enter the mail account that the list runs under. You must enter the full mail address.

Enter the local mail userid that is allowed access to the mail account that the list runs under.

5. Click **Next**. The Security screen appears.

Select any of the security options to determine who can post mail to the list.

You can let any user post mail, let only the subscribers post mail, or let only the list owner post mail.

Select **Let only the list owner post mail**, if you want the list to be moderated. The list owner can review all messages before they are posted to the list.

Select **Disallow subscriptions** if you want the mailing list to be private. A Subscribe request to the mailing list will be refused. The owner or administrator must add new users either by editing the Users file, or through the Web Remote Administration utility. Note that Unsubscribe requests are always enabled.

6. Click **Next**. The Create New List screen appears.

Click **Finish** to create the mailing list. The mailing list name is added to the Lists folder for the domain (in the tree view). The mailing list properties appear in the right panel.



7. You can enter or modify any of the settings in the mailing list properties. See Chapter 13 for a description of all mailing list properties.





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## 5. SMTP Server

The SMTP server sends and receives mail from other Internet hosts using the Simple Mail Transfer Protocol (SMTP). The SMTP server processes all incoming and outgoing mail. Outgoing mail is spooled until the SMTP server can confirm it has arrived at its destination; incoming mail is spooled until users access it by using a POP3 or IMAP4 mail client. Spooling allows the transfer from client and server to occur in the background.

This chapter describes how to configure the SMTP server and how you can set options to provide security for the SMTP server.

See Request for Comments (RFCs) 821 and 822 for information on SMTP.

---

### SMTP Service

As a Windows NT service, the SMTP server program will continue to run when you log off the Windows NT system. This service can run completely hidden or with some feedback.

The SMTP server uses the *smtpd32.exe* program and gets most of its settings, including the directories it needs to work in, from the NT Registry. Registry values can be modified by using the IMail Services application in the Control Panel.

---

### SMTP Service Security

By default, the SMTP service runs from the System account and starts automatically. You can change these settings by using the Control Panel's Services application.

Windows NT allows you to specify a user ID for the service to run under. In this way, you can limit access to the service. To select this option:

1. In the Control Panel, select the Services application.

The Services dialog box appears and displays each service, its operating status, and whether it uses automatic or manual startup.

2. Select the IMail SMTP Server service and click the **Startup** button.

3. Enter the settings and click **OK**.

Make sure the specified user has full control of the *users* directory tree in the IMail directory and any mailboxes that will receive mail.

Note that if you set the **Allow service to interact with desktop** option, the SMTP service will run under the current logged on user account. (Refer to the Windows NT documentation for more information.)

Make sure you send two or three test messages after installation and look in the *syslog* file and in the *event log*. If the SMTP service cannot create the lock file, the permissions are probably set incorrectly.

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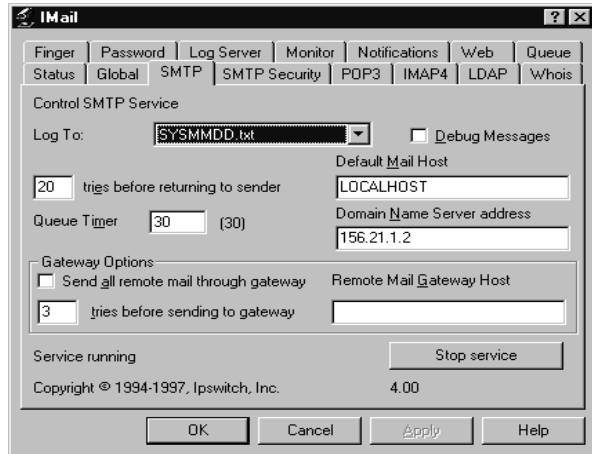
## Configuring the SMTP Server

To configure the SMTP server:

1. In the Control Panel, double-click the IMail Server icon.

The IMail services dialog box appears.

2. Click the **SMTP** tab. The SMTP Service properties appear.



3. Enter the options you want to use to configure the SMTP server.

Each option is described in the “SMTP Options” section at the end of this procedure.

4. After making changes, stop the SMTP service, wait 5–10 seconds and restart the service. Any changes that you make are saved automatically as soon as you press the **Stop/Start Service** button.
5. Click **OK** to exit the dialog box.

## SMTP Options

You can use the following options to configure the SMTP server.

### Logging Options

In the **Log To** box, select the file that you want to use for logging SMTP events.

The default setting, *SYSMMDD.TXT*, causes all inbound and outbound mail to be logged in the file: *MAILDIR/spool/sysmmdd.txt*, where *mm* is the month and *dd* is the day the log was written.

Logging can be disabled by selecting *No Log*. If *App Log* is selected, inbound mail is logged in the Application Log, which is viewed with Windows NT's Event Viewer. If *Log Server* is selected, messages are sent to the Log Server IP address specified in the Control Panel->IMail Server->Global configuration.

### **Debug Messages**

When enabled, writes debug messages to the log file.

### **Default Mail Host**

The name of the host to send mail to if only a user ID is specified in the mail message and that user ID is not found on the local system. Normally this field should be blank. This field can be useful when multiple systems are required to work as one system.

### **Domain Name Server address**

The IP address of the system that provides domain name service for your network.

### **Tries before returning to sender**

Defines the number of times that delivery is attempted before giving up and returning the mail to the sender. Each time the **Queue Timer** reaches 0, a delivery attempt is made. Thus, if the **Queue Timer** is set to 30 (minutes) and you want to attempt delivery for up to 3 days, this field should contain 144. The default value of 20 with the default **Queue Timer** value of 30 will cause the message to be returned after about 10 hours.

### **Queue Timer**

How often, in minutes, the SMTP server will check the outbound queue for queued mail. (See also the **Tries before returning to sender** option.)

### **Server Status**

A status message to the left of the **Start/Stop Service** button shows whether or not the service is running.

### **Start/Stop Service**

This button toggles between Start service and Stop service depending on whether the service is running.

## Using a Remote Mail Gateway

You can use the Gateway Options to configure your mail server to use a remote mail gateway.

### Remote Mail Gateway Host

The name of another host to send mail to for further delivery when that mail cannot be delivered directly to the destination host. This can also be used in conjunction with the **Send all remote mail through gateway** option to force delivery of mail through the gateway host. Since IMail Server for Windows NT should be able to reach all hosts directly, this field should typically be left blank.

### Send all remote mail through gateway

Causes all mail to be sent to the **Remote Mail Gateway Host**, which will forward it on to the addressee's mail host. If this option is not selected, mail is sent directly to the addressee's mail host.

### Tries before sending to gateway

The number of times that delivery directly to a remote host should be attempted before giving up and delivering to the gateway host. Proper function of this value is dependent on the validity of the **Remote Mail Gateway Host** name and the **Send all remote mail through gateway** option.

---

## Setting SMTP Security

You can set who has access to your mail server and control SMTP security in several ways:

- Set Mail Relay Options that determine how your server can be used by other Internet mailers and protect your server from mass mailings (spam mail).  
  
See “Antispamming Features” in Chapter 1 for background information on how bulk mailers use SMTP to send mail.
- Set access to your local mailing lists.
- Validate incoming mail to check that it was sent from a valid user mail account or to deny access to specified mail addresses.

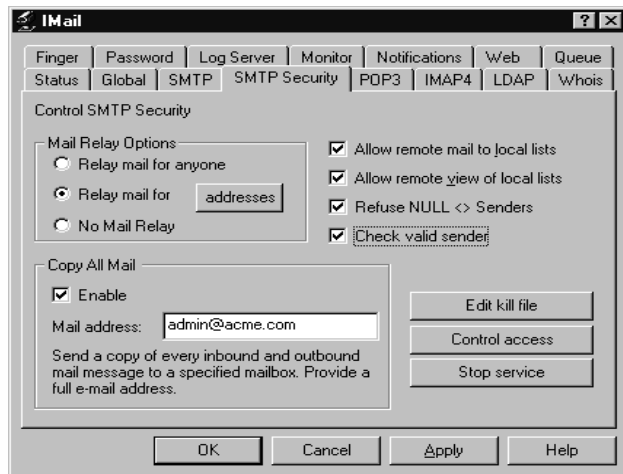
- Specify an IP address or set of IP addresses that are either granted access to the mail server or denied access.
- Send a copy of every inbound and outbound message to a specified mailbox.

To set any of these options for the SMTP server:

1. In the Control Panel, double-click the IMail Server icon.

The IMail services dialog box appears.

2. Click the **SMTP Security** tab. The SMTP Security properties appear.



3. Enter any of the options (described in the following sections) you want to use to set security for the SMTP server.
4. Click **Apply** to save your changes. Click **OK** to save your changes and exit the dialog box.

---

#### Note:

If you make changes to the IP addresses that can use the SMTP server, you must stop and restart the SMTP service for changes to take affect.

---

## Setting Mail Relay Options

You can use the Mail Relay Options to prevent unauthorized mailings, such as mass promotional mailings (known on the Internet as spam mail) from passing through the IMail Server as a relay or gateway. The **Relay mail for** option lets you configure IMail Server to only accept mail that originates from local users or that is destined for local users. You can define the systems or address blocks that you want to consider local.

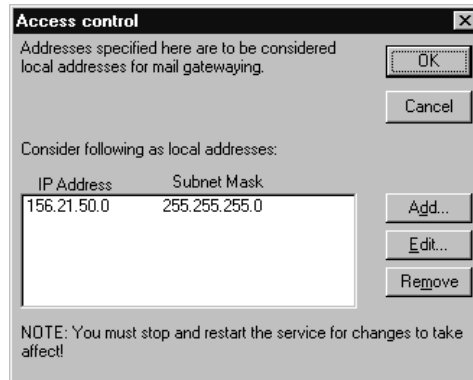
### Relay mail for anyone

Allows the SMTP server to accept mail destined for other hosts and redeliver that mail to the proper host (i.e, become a mail gateway). This is the default setting.

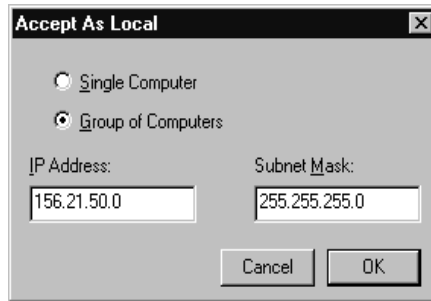
### Relay mail for

Allows the SMTP server to accept mail destined for other hosts only if the mail is received from the specified IP addresses (which the mail server will consider to be local addresses).

To specify the valid IP addresses, click the **addresses** button. The Access Control dialog box appears.



1. Click the **Add** button. The Accept as Local dialog box appears.



2. In the IP Address box, enter the IP address of the computer to be considered local to the IMail Server.

To add a group of computers, select the **Group of Computers** option. In the IP Address and Subnet Mask boxes, enter the IP address and subnet mask for the group to be considered local.

For example, if you have a class C address space of 156.21.50.0, enter a group address of 156.21.50.0 and a subnet mask of 255.255.255.0. This will allow those 254 systems to be considered the same as the local system and they can use the mail server to send mail to the outside world.

3. Click **OK** to add the IP address(es) to the list.

IMail Server will relay mail for all the computers listed.

4. Click **OK** to save the changes. Note that you must stop and restart the service for the changes to take affect.

A “non-local” system that attempts to send mail through the IMail Server system will receive the following message:

```
550 unknown local host %s, not a gateway
```

### No Mail Relay

The SMTP server will refuse to accept mail destined for other hosts.



## Setting List Access Options

You can use the following options to set access to mailing lists on your mail server.

### Allow remote mail to local lists

When selected, the SMTP server will accept mail addressed to local mailing lists and will resend the message to the list contents.

### Allow remote view of local lists

When selected, the SMTP server will reveal the contents of a list server list in response to an EXPN SMTP command.

## Validating Incoming Mail

You can use the following options to check that incoming mail was sent from a valid user mail account or to deny access to specified mail addresses. IMail Server will always include the IP address of the source of a message in the message header.

### Refuse NULL <> Senders

If enabled, refuses to accept mail if the null address (<>) is specified in the MAIL FROM line of an incoming message. Note that Microsoft Exchange uses the null address for messages from the postmaster.

### Check valid sender

If enabled, requires that the user mail address (`user@host`) is specified in the MAIL FROM line of an incoming mail message. Note that a null address (< >) in the MAIL FROM line is handled separately by enabling or disabling the **Refuse NULL <> Senders** option.

### Edit kill file

The kill file lets you specify a mail address or a particular mail host that you do not want to accept mail from. To specify a mail address or host in the kill file, click the **Edit kill file** button. The file *kill.lst* appears in the Windows Notepad. In the *kill.lst* file, enter one entry per line in either of the following formats:

```
userid@host
@host
```

For example, to deny access from a user mail account, you could enter: `fred@widget.com` To deny access to all users from the mail host `widget.com`, you can enter: `@widget.com`.

IMail Server checks the incoming message's MAIL FROM: `<user@host>` line. When it receives mail from an address listed in the kill file, IMail Server returns the message:

```
501 unacceptable mail address
```

---

**Note:**

The kill file is also used by the List server to deny access to local mailing lists.

---

## Setting Access to the SMTP Server

You can specify an IP address or set of IP addresses that are either granted access to the SMTP server or denied access. Systems that do not have access to the SMTP server system will not be allowed to create a connection. This is useful when you know the IP address(es) of a mail sender that is making unauthorized use of your mail server.

### To deny access to a specific computer or group of computers:

1. Click the **Control access** button. The Access Control properties appear.
2. Select the Granted Access option.
3. Click the **Add** button. The Deny Access On dialog box is displayed.
4. In the IP Address box, enter the IP address of the computer to be denied access to the SMTP server.

To deny access to a group of computers, select the **Group of Computers** option. In the IP Address and Subnet Mask boxes, enter the IP address and subnet mask for the group to be denied access. For example, if you have a class C address space of 156.21.50.0, enter a group address of 156.21.50.0 and a subnet mask of 255.255.255.0. This will deny access to those 254 systems.

5. Click **OK** to add the IP address(es) to the list.

Access will be granted to all computers except those listed.

6. Click **OK** to save the changes. Note that you must stop and restart the service for the changes to take affect.

#### **To grant access to a specific computer or group of computers:**

1. Click the **Control access** button. The Access Control properties appear.
2. Select the **Denied Access** option.
3. Click the **Add** button. The Grant Access On dialog box is displayed.
4. In the IP Address box, enter the IP address of the computer to be granted access to the SMTP server.

To grant access to a group of computers, select the **Group of Computers** option. In the IP Address and Subnet Mask boxes, enter the IP address and subnet mask for the group to be granted access. For example, if you have a class C address space of 156.21.50.0, enter a group address of 156.21.50.0 and a subnet mask of 255.255.255.0. This will grant access to those 254 systems.

5. Click **OK** to add the IP address(es) to the list.

Access will be denied to all computers except those listed.

6. Click **OK** to save the changes. Note that you must stop and restart the service for the changes to take affect.

---

## **Copying Inbound and Outbound Mail**

You can send a copy of every inbound and outbound message to a specified mailbox as follows:

1. In the Copy All Mail options, in the Mail address box, enter a full e-mail address where you want to send a copy of each message.

2. Click the **Enable** option (make sure it is checked) to enable copying of all mail.

If you want to turn off the Copy All Mail feature, uncheck the **Enable** option.

3. Click **Apply** to save your changes.
- 

## Notes

If you want to see the icon for the service, in the Control Panel's Services application, you can enable the **Allow service to interact with desktop** option. (See the Security section in this chapter for how to access the Services options.) We suggest enabling this option for the first week, or until you are familiar with the service. This way you know if the service is running. If **Allow service to interact with the desktop** is enabled, you can enable the **Show Windows** option from the service's File menu and see each conversation with remote hosts.

The SMTP service will continue to run even if you log off. The icon will disappear but will reappear the next time you log on as the same user.

Note that you *must* remove and re-install the SMTP server if you move it to a new location! This is because the full path to the application is stored in the NT Registry.

---

## Registry Values

The following SMTP server entries in the Windows NT registry are included for the benefit of system administrators.

```
HKEY_LOCAL_MACHINE
SOFTWARE
  Ipswitch
    IMail
      Global
        TopDir      REG_EXPAND_SZ  \IMAIL
        CfgDir      REG_EXPAND_SZ  \IMAIL\Cfg
        SpoolDir    REG_EXPAND_SZ  \IMAIL\Spool
        UsersDir    REG_EXPAND_SZ  \IMAIL\Users
        HostName    REG_EXPAND_SZ  (full workstation name)
        SendName    REG_EXPAND_SZ  \IMAIL\SMTP32.EXE

SYSTEM
  CurrentControlSet
    Services
      EventLog
        Application
          SMTPD32
            EventMessageFile  REG_EXPAND_SZ  C:\IMail\mailmsg.dll
            TypesSupported    REG_DWORD        0x7

      SMTPD32
        DisplayName  REG_SZ          IMail SMTP Server
        ErrorControl  REG_DWORD       0x1
        ImagePath     REG_EXPAND_SZ  C:\IMail\SMTPD32.exe
        ObjectName    REG_SZ          LocalSystem
        Start         REG_DWORD       0x2
        Type          REG_DWORD       0x10
        Parameters
          AcceptAny    REG_DWORD
          CheckValidFrom REG_DWORD
          CopyAddress  REG_DWORD
          CopyAllMail  REG_DWORD
          CurrentWnd   REG_DWORD
          Debug        REG_DWORD
          Direct       REG_DWORD
          LogLevel     REG_DWORD       0x1
          NoRelayLocal REG_DWORD
          QCheck       REG_DWORD       0x1e          (30 min)
          RefuseNullFrom REG_DWORD
          RemoteLists  REG_DWORD
          SMTPFlags    REG_DWORD       0x06
          TryBeforeGate REG_DWORD       0x03
          TryBeforeReturn REG_DWORD     0x14
          Version      REG_EXPAND_SZ  (set only)
        Security
          Security     REG_BINARY      ??
```

---

## SMTP Deliver Program for Windows NT

The *smtp32.exe* program is the 32-bit SMTP send program for use with SMTPD32 SMTP Service for Windows NT. This program contains the DNS Mail Exchanger (MX) support as well as the support for list servers, etc. *smtp32.exe* is the program actually responsible for delivery of the mail.

*smtp32.exe* is responsible for processing messages left in the *spool* directory by other processes and attempting final delivery both to local addresses and remote addresses by way of SMTP.

*smtp32.exe* does not parse any headers that are contained in the message itself and expects to find properly formatted information in the queue control file, thus there are no size restrictions on line lengths. Whatever is passed to it, *smtp32.exe* passes along to the final system. (No input checking.) Recipients are sorted by hostname and are sent as a single message to multiple recipients to a single system.

*smtp32.exe* supports the following command line options:

SMTP32	With no options, SMTP32 will attempt to deliver all messages in the mail queue.
SMTP32 queue_filename	Cause SMTP32 to process the single messages pointed to by the queue_filename.
SMTP32-qr -x	Cause SMTP32 to attempt to deliver all messages in the mail queue.
SMTP32-v	Activate full display of the conversation (verbose).

---

## 6. POP3 Server

The POP3 Server lets any POP3 (Post Office Protocol, Version3) mail client communicate with IMail Server for Windows NT. Supported POP3 clients include Internet Explorer, Netscape Navigator or Communicator, Eudora, Pegasus, NuPOP, Z-Mail, and UNIX mail.

POP3 clients use the “offline” method of accessing the mail server. Mail messages are delivered to the IMail Server system and the mail client periodically connects to the server and downloads the user’s mail to the client system. Mail messages are automatically deleted from the server system. Thus, mail messages are stored only temporarily on the mail server. This method of access is best suited to users who always read their mail from the same client system.

IMail Server offers an alternative client access method via the IMAP4 (Internet Message Access Protocol version 4). The IMAP4 server provides both the “offline” method of access used by POP3 clients and an “online” method of access whereby mail messages are left on the mail server system and users can read mail on the server without downloading. This method allows users to access their mail from a mail clients on different systems — from a laptop on the road or from a workstation in the office. See Chapter 6 for more information on the IMAP4 server.

See Request for Comments (RFC) 1725 for a description of the POP3 protocol.

---

### POP3 Service

As a Windows NT service, the POP3 server will continue to run when you log off the Windows NT system. This service can run completely hidden or with some feedback.

The POP3 server gets most of its settings from the Windows NT Registry. Registry values can be modified by using the IMail Services application in the Control Panel.

---

## POP3 Service Security

By default, the POP3 service runs from the System account and starts automatically. You can change these settings by using the Control Panel's Services application.

Windows NT allows you to specify a user ID for the service to run under. To select this option:

---

### Note:

If you are using the Windows NT User Database option to define where users are registered and how user authentication takes place, this service must run as a system service.

---

1. In the Control Panel, select the Services application.

The Services dialog box appears and displays each service, its operating status, and whether it uses automatic or manual startup.

2. Select the IMail POP3 Server service and click the **Startup** button.
3. Enter the settings and click **OK**.

Make sure the specified user has full control of the *users* directory tree in the IMail directory and any mailboxes that will receive mail.

Note that if you set the **Allow service to interact with desktop** option, the POP3 service will run under the current logged on user account. (Refer to the Windows NT documentation for more information.)



---

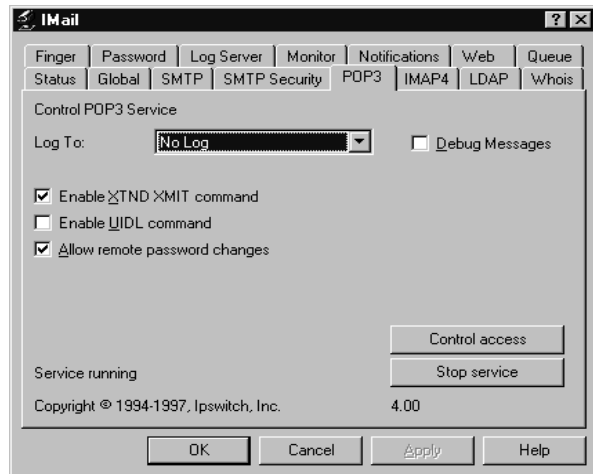
## Configuring the POP3 Server

To configure the POP3 server:

1. In the Control Panel, double-click the IMail Server icon.

The IMail Server for Windows NT services dialog box appears.

2. Click the **POP3** tab. The POP3 Service properties appear.



3. Enter the options you want to use to configure the POP3 server.

Each option is described in the POP3 Options section at the end of this procedure.

4. After making changes, stop the service, wait 5–10 seconds and restart the service. Any changes that you make are saved automatically as soon as you press the **Stop/Start Service** button.
5. Click **OK** to exit the dialog box.

## POP3 Options

You can use the following options to configure the POP3 server.

### Logging Options

In the **Log To** box, select the file that you want to use for logging POP3 events.

If *SYSMMDD.TXT* is selected, POP3 information is logged in the file: MAILDIR/spool/sysmmdd.txt, where *mm* is the month and *dd* is the day the log was written.

Logging can be disabled by selecting *No Log*. If *App Log* is selected, information is logged in the Application Log, which is viewed with Windows NT's Event Viewer. If *Log Server* is selected, messages are sent to the Log Server IP address specified in the Control Panel→IMail Server→Global configuration.

### Debug Messages

When enabled, writes debug messages to the log file.

### Enable XTND XMIT command

Causes the server to accept outbound mail sent via XTND XMIT. Clients such as WinQVT/Net require this functionality.

### Enable UIDL Command

Causes the server to accept outbound mail sent via UIDL to support Netscape Navigator or any other POP3 client that uses UIDL.

### Allow remote password changes

Enable the use of internal commands that allow the remote changing of passwords. The IMUTIL Windows client program or the Web Remote Administration program (both included with IMail Server for Windows NT) or a Eudora client in conjunction with IMail Server for Windows NT's PSERVE program is required to actually change passwords remotely.

### Server Status

A status message to the left of the **Start/Stop Service** button shows whether or not the service is running.

## Start/Stop Service

This button toggles between Start service and Stop service depending on whether the service is running.

## Setting Access to the POP3 Server

You can specify an IP address or set of IP addresses that are either granted access to the SMTP server or denied access. Systems that do not have access to the SMTP server system will not be allowed to create a connection.

### To deny access to a specific computer or group of computers:

1. Click the **Control access** button. The Access Control properties appear.
2. Select the Granted Access option.
3. Click the **Add** button. The Deny Access On dialog box is displayed.
4. In the IP Address box, enter the IP address of the computer to be denied access to the POP3 server.

To deny access to a group of computers, select the **Group of Computers** option. In the IP Address and Subnet Mask boxes, enter the IP address and subnet mask for the group to be denied access. For example, if you have a class C address space of 156.21.50.0, enter a group address of 156.21.50.0 and a subnet mask of 255.255.255.0. This will deny access to those 254 systems.

5. Click **OK** to add the IP address(es) to the list.

Access will be granted to all computers except those listed.

6. Click **OK** to save the changes. Note that you must stop and restart the service for the changes to take affect.

### To grant access to a specific computer or group of computers:

1. Click the **Control access** button. The Access Control properties appear.

2. Select the Denied Access option.
3. Click the **Add** button. The Grant Access On dialog box is displayed.
4. In the IP Address box, enter the IP address of the computer to be granted access to the POP3 server.

To grant access to a group of computers, select the **Group of Computers** option. In the IP Address and Subnet Mask boxes, enter the IP address and subnet mask for the group to be granted access. For example, if you have a class C address space of 156.21.50.0, enter a group address of 156.21.50.0 and a subnet mask of 255.255.255.0. This will grant access to those 254 systems.

5. Click **OK** to add the IP address(es) to the list.

Access will be denied to all computers except those listed.

6. Click **OK** to save the changes. Note that you must stop and restart the service for the changes to take affect.

---

## Notes

If you want to see the icon for the service, in the Control Panel's Services application you can enable the **Allow service to interact with desktop** option. (See the Security section in this chapter for how to access the Services options.) We suggest enabling this option for the first week, or until you are familiar with the service. This way you know if the service is running. If **Allow service to interact with the desktop** is enabled, you can enable the Show Windows option in the service's file menu and see each conversation with remote hosts.

The POP3 service will continue to run even if you log off. The icon will disappear but will reappear the next time you logon as the same user.

Note that you *must* remove and re-install the program if you move it to a new location! This is because the full path to the application is stored in the NT Registry.

---

## Registry Values

The following POP3 server entries in the Windows NT registry are included for the benefit of system administrators.

```
HKEY_LOCAL_MACHINE
  SOFTWARE
    Ipswitch
      IMail
        Global
          TopDir      REG_EXPAND_SZ  \IMAIL
          CfgDir      REG_EXPAND_SZ  \IMAIL\Cfg
          SpoolDir    REG_EXPAND_SZ  \IMAIL\Spool
          UsersDir    REG_EXPAND_SZ  \IMAIL\Users
          HostName    REG_EXPAND_SZ  (full workstation name)
          SendName    REG_EXPAND_SZ  \IMAIL\SMTP32.EXE

SYSTEM
  CurrentControlSet
    Services
      EventLog
        Application
          POP3D32
            EventMessageFile  REG_EXPAND_SZ  C:\IMail\mailmsg.dll
            TypesSupported    REG_DWORD       0x7
          POP3D32
            DisplayName      REG_SZ          POP3 Server
            ErrorControl      REG_DWORD       0x1
            ImagePath        REG_EXPAND_SZ  C:\IMail\POP3D32.exe
            ObjectName       REG_SZ          LocalSystem
            Start            REG_DWORD       0x2
            Type             REG_DWORD       0x10
            Parameters
              IdleTime      REG_DWORD       0x3a2          (930 sec. = 15 min.)
              LogLevel      REG_DWORD       0x0
              POP3Flags     REG_DWORD       0x3
              Port          REG_DWORD       0x6e          (110)
              Version       REG_EXPAND_SZ    (set only)
```



---

## 7. IMAP4 Server

With more and more users finding they need access to their mail from multiple computers, IMAP4 (Internet Message Access Protocol, Version 4) is rapidly becoming a mandatory feature for Internet–standards–based mail servers. By incorporating IMAP4, IMail Server provides mail users with the added flexibility of being able to access and manipulate their mail folders — anytime, anywhere. Now, whether in the office, at home, or on the road, mail users can refer to messages in all of their folders regardless of when or where they were originally read or saved. This translates to increased efficiency for those working from a “virtual office.”

---

### The IMail Server IMAP4 Implementation

The IMAP4 Server lets any IMAP4 mail client communicate with IMail Server for Windows NT. Supported IMAP4 clients include Netscape Communicator and Internet Explorer 4.0. Many mail client vendors are adding IMAP4 support.

### IMAP4 Server Support

Like POP3, IMAP4 handles mail access only, and relies on SMTP for sending and receiving mail over the Internet. The IMAP4 server allows an IMAP4 client to do the following:

- Access remote mailboxes as if they were local
- Read mail from more than one computer because mail is stored on the server system
- Access mail “offline” or “online”

“Offline” access is the same as using POP3 to access mail on the server. Mail messages are delivered to the IMail Server system and the mail client periodically connects to the server and downloads the user’s mail to the client system, and deletes the mail from the server system.

---

**Note:**

If your users will access mail from a single system, the “offline” method of access may be sufficient. IMail Server’s POP3 server provides offline access. See Chapter 5 for more information.

---

In “online” access, messages are left on the mail server. This method maintains an interactive session between the server and client systems. Using an IMAP4 mail client, users can read their mail, move or delete mail, create mailboxes — all on the server system.

The IMAP4 “online” method of access lets users access and manage their mail messages from more than one computer. Also, if mailbox size is large or links are slow, IMAP4 can be faster than the “offline” (POP3) method of access.

IMail Server does not support the “disconnected” method of access used by protocols such as PCMAIL.

The mail client may support switching between IMAP4 and POP3 methods, both of which are supported by IMail Server.

### **Full IMAP4 Client Support**

The IMAP4 client can access remote message stores (on the mail server) as if they were local. Users can:

- View message headers before downloading
- Select a message or part of a message for downloading
- Leave messages on the server for archiving and sharing
- Send and receive MIME–based attachments
- Manipulate remote mailboxes other than the MAIN (or INBOX) mailbox



## Mailbox Management

When a user creates a mailbox using an IMAP4 client, the mailbox is created on the IMail Server system. As the IMail Server will be the permanent store for IMAP4 users mail, you will want to configure the server with appropriate disk space and you will want to manage the disk space by monitoring mailbox disk usage.

You (the system administrator) can view, delete, or rename the mailbox directories (*.mbx* files) by using the new IMail Administrator (*IMAdmin.exe*), which provides an alternate interface to the IMail User Manager.

You can also set maximum mailbox size and maximum number of messages for each user, or on a global basis. Mail messages can also be automatically deleted by specifying a date or number of days for which messages older than the date will be deleted. See Chapter 4 for information on using the IMail Administrator to maintain user mailboxes.

Administrators can set an option that determines whether users must subscribe to a private mailbox before they can read it. See “Configuring the IMAP4 Server” section in this chapter for more information.

## Public Mailboxes

The IMAP4 server provides a means of creating a public mailbox in which you can post messages for reading by IMAP4 clients. To create a public mailbox, use the IMail User Manager (or IMail Administrator) to create a userid named “public”. Any mailboxes in this user’s directory will be available for reading by IMAP4 clients.

Administrators can use the “public” userid to post messages. Users other than “public” can only read the public mailboxes. Administrators can set an option that determines whether users must subscribe to a public mailbox before they can read it. See “Configuring the IMAP4 Server” section in this chapter for more information.

---

## IMAP4 Service

As a Windows NT service, the IMAP4 server will continue to run when you log off the Windows NT system. This service can run completely hidden or with some feedback.

The IMAP4 server gets most of its settings from the Windows NT Registry. Registry values can be modified by using the IMail Server application in the Control Panel.

---

## IMAP4 Service Security

By default, the IMAP4 service runs from the System account and starts automatically. You can change these settings by using the Control Panel's Services application.

Windows NT allows you to specify a user ID for the service to run under. To select this option:

---

### Note:

If you are using the Windows NT User Database option to define where users are registered and how user authentication takes place, this service must run as a system service.

---

1. In the Control Panel, select the Services application.

The Services dialog box appears and displays each service, its operating status, and whether it uses automatic or manual startup.

2. Select the IMail IMAP4 Server service and click the **Startup** button.
3. Enter the settings and click **OK**.

Make sure the specified user has full control of the *users* directory tree in the IMail directory and any mailboxes that will receive mail.

Note that if you set the **Allow service to interact with desktop** option, the IMAP4 service will run under the current logged on user account. (Refer to the Windows NT documentation for more information.)

---

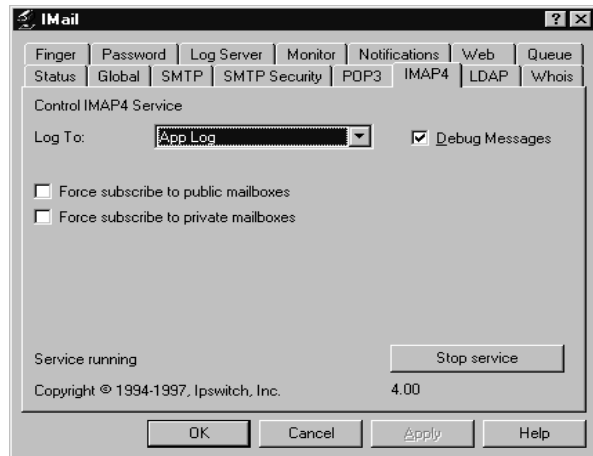
## Configuring the IMAP4 Server

To configure the IMAP4 server:

1. In the Control Panel, double-click the IMail Server icon.

The IMail services dialog box appears.

2. Click the **IMAP4** tab. The IMAP4 Service properties appear.



3. Enter the options you want to use to configure the IMAP4 server.

Each option is described at the end of this procedure.

4. After making changes, stop the service, wait 5–10 seconds and restart the service. Any changes that you make are saved automatically as soon as you press the **Stop/Start Service** button.
5. Click **OK** to exit the dialog box.

## Logging Options

In the **Log To** box, select the file that you want to use for logging IMAP4 events.

If *SYSMDD.TXT* is selected, IMAP4 information is logged in the file: MAILDIR/spool/sysmdd.txt, where *mm* is the month and *dd* is the day the log was written.

Logging can be disabled by selecting *No Log*. If *App Log* is selected, information is logged in the Application Log, which is viewed with Windows NT's Event Viewer. If *Log Server* is selected, messages are sent to the Log Server IP address specified in the Control Panel->IMail Server->Global configuration.

## Debug Messages

When enabled, writes debug messages to the log file.

## Force subscribe to public mailboxes

When enabled, requires that the IMAP4 client is subscribed to use a public mailbox. If the user is not a subscriber, they are refused access.

## Force subscribe to private mailboxes

When enabled, requires that the IMAP4 client is subscribed to use a private mailbox. If the user is not a subscriber, they are refused access.

## Server Status

A status message to the left of the **Start/Stop Service** button shows whether or not the service is running.

## Start/Stop Service

This button toggles between Start service and Stop service depending on whether the service is running.

---

## Configuring an IMAP4 Client

You need an IMAP4 enabled client to communicate with IMail Server's IMAP4 server. Supported IMAP4 enabled clients include:

- Netscape Communicator Pre-release 2
- Internet Explorer 4.0

You may need to select IMAP4 in your mail client's setup options. See your mail client's documentation for information on setting up and using the client.

---

## Notes

If you want to see the icon for the service in the Control Panel's Services application you can enable the **Allow service to interact with desktop** option. (See the Security section in this chapter for how to access the Services options.) We suggest enabling this option for the first week, or until you are familiar with the service. This way you know if the service is running. If **Allow service to interact with the desktop** is enabled, you can enable the Show Windows option in the service's File menu and see each conversation with remote hosts.

The IMAP4 service will continue to run even if you log off. The icon will disappear but will reappear the next time you log on as the same user.

Note that you *must* remove and re-install the program if you move it to a new location! This is because the full path to the application is stored in the NT Registry.

---

## Registry Values

The following IMAP4 server entries in the Windows NT registry are included for the benefit of system administrators.

```
HKEY_LOCAL_MACHINE
  SOFTWARE
    Ipswitch
      IMail
        Global
          TopDir      REG_EXPAND_SZ  \IMAIL
          CfgDir      REG_EXPAND_SZ  \IMAIL\Cfg
          SpoolDir    REG_EXPAND_SZ  \IMAIL\Spool
          UsersDir    REG_EXPAND_SZ  \IMAIL\Users
          HostName    REG_EXPAND_SZ  (full workstation name)
          SendName    REG_EXPAND_SZ  \IMAIL\SMTP32.EXE

SYSTEM
  CurrentControlSet
    Services
      EventLog
        Application
          IMAP4D32
            EventMessageFile  REG_EXPAND_SZ  C:\IMail\mailmsg.dll
            TypesSupported    REG_DWORD      0x7
          IMAP4D32
            DisplayName      REG_SZ          IMail IMAP4 Server
            ErrorControl      REG_DWORD      0x1
            ImagePath        REG_EXPAND_SZ  C:\IMail\IMAP4D32.exe
            ObjectName       REG_SZ          LocalSystem
            Start            REG_DWORD      0x2
            Type             REG_DWORD      0x10
            Parameters
              IdleTime      REG_DWORD      0x3a2          (930 sec. = 15 min.)
              LogLevel      REG_DWORD      0x0
              IMAP4Flags    REG_DWORD      0x3
              Version       REG_EXPAND_SZ          (set only)
```

---

## 8. LDAP Server

By creating a standard way for applications to request and manage directory information, LDAP (or Lightweight Directory Access Protocol) has become another popular feature for standards-based mail servers. A simplified subset of the much more elaborate X.500 Directory Access Protocol, LDAP is more appropriate for many of today's applications — on both the client and server sides — since it makes fewer demands on system resources.

LDAP implementations use a client/server architecture to publish directory information (such as address books) on the server and provide access to that directory information from LDAP enabled clients.

For more information about LDAP, see the Internet Requests for Comments (RFCs) that describe the protocol. The IMail Server for Windows NT implementation of LDAP is based on RFC-1777.

---

### The IMail Server LDAP Implementation

IMail Server provides an LDAP interface to the IMail user database. The IMail user database is extended to include standard LDAP attributes (such as name, address, organization name, phone number) and any other attributes that a site defines. The user database is flat; it does not support a tree hierarchy of users.

Each user with an account on the IMail Server system has an LDAP entry. When a user is added to the IMail user database, an LDAP entry is defined with the following attributes:

ObjectClass	The type of entry. The value would be "Person."
CN CommonName	The full name of the user.
Mail	The IMail Server e-mail address for the user. This is constructed from the user ID and the hostname.
UID	The IMail Server user ID.

When a user receives mail on the IMail Server system, their LDAP entry is activated.

Using an LDAP enabled client, the user can add, delete, and modify information in their own LDAP entry. A user cannot modify another user's entry. The following table describes several additional attributes that the user can add (by using an LDAP client that supports the Modify function):

SurName	The surname, or last name, of the user.
Organization	The company that the user works for.
OrgUnit	The department within the company that the user works for.
Street	The street address of the user.
City	The city in which the user is located.
ST	The state or province in which the user is located.
Postal	The ZIP or postal code of the user.
C	The country name of the user.
Telephone	The telephone number of the user.

These are the most common attributes used in the LDAP entry. Other attributes can be defined by the system administrator or the user.

The system administrator can add and delete users, add LDAP attributes, and modify LDAP attribute values through any of the following applications:

- IMail User Manager — See Chapter 3 of this guide for more information.
- IMail Administrator — See Chapter 4 of this guide for more information.
- An LDAP enabled client — Refer to the documentation for your client for information on accessing and using an LDAP directory.
- The IMail Server remote administration utilities: Web Remote Administration Utility or IMail Remote Administration Utility. See the “Remote Administration Utilities” section of Chapter 3.



## Full LDAP Directory Support

IMail Server supports LDAP version 2, which provides the following capabilities:

- Allows users of LDAP enabled clients such as Netscape's Communicator to:
    - Locate LDAP directory information that may include name, phone number, e-mail address, organization, department, and address.
    - List all users at a site.
    - Browse for users who meet certain criteria.
    - Modify their own user information in the LDAP directory.
  - Authenticates LDAP login by using the IMail userid and password.
  - Host Administrators and System Administrators can use an LDAP enabled client to add, delete, and modify user accounts, including any LDAP directory information.
  - System administrators can use the IMail Server application in the Control Panel to set up referral to other LDAP servers.
  - You can monitor the LDAP server and receive notification when it goes down. See Chapter 12 for more information.
- 

## LDAP Service

As a Windows NT service, the LDAP server will continue to run when you log off the Windows NT system. This service can run completely hidden or with some feedback.

The LDAP server gets most of its settings from the Windows NT Registry. Registry values can be modified by using the IMail Server application in the Control Panel.

---

## LDAP Service Security

By default, the LDAP service runs from the System account and starts automatically. You can change these settings by using the Control Panel's Services application.

Windows NT allows you to specify a user ID for the service to run under. To select this option:

---

### Note:

If you are using the Windows NT User Database option to define where users are registered and how user authentication takes place, this service must run as a system service.

---

1. In the Control Panel, select the Services application.

The Services dialog box appears and displays each service, its operating status, and whether it uses automatic or manual startup.

2. Select the IMail LDAP Server service and click the **Startup** button.
3. Enter the settings and click **OK**.

Make sure the specified user has full control of the *users* directory tree in the IMail directory and any mailboxes that will receive mail.

Note that if you set the **Allow service to interact with desktop** option, the LDAP service will run under the current logged on user account. (Refer to the Windows NT documentation for more information.)

---

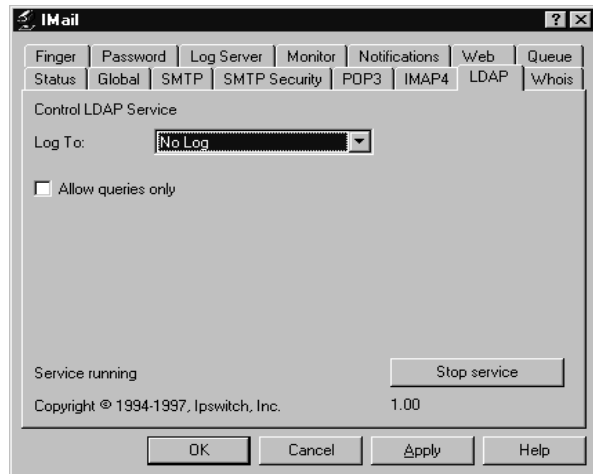
## Configuring the LDAP Server

To configure the LDAP server:

1. In the Control Panel, double-click the IMail Server icon.

The IMail services dialog box appears.

2. Click the **LDAP** tab. The LDAP Service properties appear.



3. Enter the options you want to use to configure the LDAP server.

Each option is described at the end of this procedure.

4. After making changes, stop the service, wait 5–10 seconds and restart the service. Any changes that you make are saved automatically as soon as you press the **Stop/Start Service** button.
5. Click **OK** to exit the dialog box.

## Logging Options

In the **Log To** box, select the file that you want to use for logging LDAP events.

If *SYSMMDD.TXT* is selected, LDAP information is logged in the file: MAILDIR/spool/sysmmdd.txt, where *mm* is the month and *dd* is the day the log was written.

Logging can be disabled by selecting *No Log*. If *App Log* is selected, information is logged in the Application Log, which is viewed with Windows NT's Event Viewer. If *Log Server* is selected, messages are sent to the Log Server IP address specified in the Control Panel->IMail Server->Global configuration.

## Allow queries only

When enabled, an LDAP client can query the server for LDAP information and read the results, but cannot enter or modify LDAP information.

## Server Status

A status message to the left of the **Start/Stop Service** button shows whether or not the service is running.

## Start/Stop Service

This button toggles between Start service and Stop service depending on whether the service is running.

---

## Configuring the LDAP Client

You need an LDAP enabled client to communicate with IMail Server's LDAP server. Supported LDAP enabled clients include:

- Netscape Communicator Pre-release 2

Communicator supports the LDAP URL format from the main browser window and simple LDAP queries from the Address Book. Communicator is available from: [www.netscape.com](http://www.netscape.com)

To configure Communicator to use IMail Server's LDAP server:

In the main browser window, in the Location edit box, enter

LDAP://*your\_mailserver\_name*/  
(for example, LDAP://mail.acme.com/ )

This command will add your LDAP server to the internal list that Communicator maintains.

- SWIX

This is a Windows-based LDAP client application which can be obtained from: [ftp.umu.se/pub/pc/swix](http://ftp.umu.se/pub/pc/swix)

Refer to the SWIX documentation for information on setting up and using the LDAP client.

---

## Notes

If you want to see the icon for the service in the Control Panel's Services application you can enable the **Allow service to interact with desktop** option. (See the Security section in this chapter for how to access the Services options.) We suggest enabling this option for the first week, or until you are familiar with the service. This way you know if the service is running. If **Allow service to interact with the desktop** is enabled, you can enable the Show Windows option in the service's File menu and see each conversation with remote hosts.

The LDAP service will continue to run even if you log off. The icon will disappear but will reappear the next time you log on as the same user.

Note that you *must* remove and re-install the program if you move it to a new location! This is because the full path to the application is stored in the NT Registry.

---

## Registry Values

The following LDAP server entries in the Windows NT registry are included for the benefit of system administrators.

```
HKEY_LOCAL_MACHINE
  SOFTWARE
    Ipmid
      IMail
        Global
          TopDir      REG_EXPAND_SZ  \IMAIL
          CfgDir      REG_EXPAND_SZ  \IMAIL\Cfg
          SpoolDir    REG_EXPAND_SZ  \IMAIL\Spool
          UsersDir    REG_EXPAND_SZ  \IMAIL\Users
          HostName    REG_EXPAND_SZ  (full workstation name)
          SendName    REG_EXPAND_SZ  \IMAIL\SMTP32.EXE

SYSTEM
  CurrentControlSet
    Services
      EventLog
        Application
          ILDAP
            EventMessageFile  REG_EXPAND_SZ  C:\IMail\mailmsg.dll
            TypesSupported    REG_DWORD       0x7
          ILDAP
            DisplayName      REG_SZ          IMail LDAP Server
            ErrorControl      REG_DWORD       0x1
            ImagePath        REG_EXPAND_SZ  C:\IMail\ILDAP.exe
            ObjectName       REG_SZ          LocalSystem
            Start            REG_DWORD       0x2
            Type             REG_DWORD       0x10
            Parameters
              IdleTime        REG_DWORD       0x3a2          (930 sec. = 15 min.)
              LogLevel        REG_DWORD       0x0
              QueriesOnly    REG_DWORD       0x3
              Port            REG_DWORD       0x6e          (389)
              Version         REG_EXPAND_SZ    (set only)
```





---

## 9. Whois Server

The Whois server lets a Whois client look up information about IMail Server users. Whois information can include the user's full name, mailing address, telephone number, and a network mailbox. When the Whois server receives a lookup request about a particular user, it will send the information about the user that it finds in the IMail database.

---

### Whois Service

As a Windows NT service, the Whois server will continue to run when you log off the Windows NT system. This service can run completely hidden or with some feedback.

The Whois server gets most of its settings from the Windows NT Registry. Registry values can be modified by using the IMail Server application in the Control Panel.

---

### Whois Service Security

By default, the Whois service runs from the System account and must be started manually. You can change these settings by using the Control Panel's Services application.

Windows NT allows you to specify a user ID for the service to run under. To select this option:

1. In the Control Panel, select the Services application.

The Services dialog box appears and displays each service, its operating status, and whether it uses automatic or manual startup.

2. Select the IMail Whois Server and click the **Startup** button.
3. Enter the settings and click **OK**.

Note that if you set the **Allow service to interact with desktop** option, the Whois service will run under the current logged on user account. (Refer to the Windows NT documentation for more information.)

---

## Configuring the Whois Server

To configure the Whois server:

1. In the Control Panel, double-click the IMail Server icon.

The IMail Server for Windows NT services dialog box appears.

2. Click the **Whois** tab. The Whois Service properties appear.
3. Enter the options you want to use to configure the Whois server.

Each option is described at the end of this procedure.

4. After making changes, stop the service, wait 5–10 seconds and restart the service. Any changes that you make are saved automatically as soon as you press the **Stop/Start Service** button.
5. Click **OK** to exit the dialog box.

The version date of the Whois server is displayed in the upper right corner of the screen.

### Logging Options

In the **Log To** box, select the file that you want to use for logging Whois events.

If *SYSMDD.TXT* is selected, Whois information is logged in the file: MAILDIR/spool/sysmdd.txt, where *mm* is the month and *dd* is the day the log was written.

Logging can be disabled by selecting *No Log*. If *App Log* is selected, information is logged in the Application Log, which is viewed with Windows NT's Event Viewer. If *Log Server* is selected, messages are sent to the Log Server IP address specified in the Control Panel->IMail Server->Global configuration.

## Database

The full pathname of the Whois database file.

## Server Status

A status message to the left of the **Start/Stop Service** button shows whether or not the service is running.

## Start/Stop Service

This button toggles between Start service and Stop service depending on whether the service is running.

---

## Notes

If you want to see the icon for the service, in the Control Panel's Services application, you can enable the **Allow service to interact with desktop** option. (See the Security section in this chapter for how to access the Services options.) We suggest enabling this option for the first week, or until you are familiar with the service. This way you know if the service is running. If **Allow service to interact with the desktop** is enabled, you can enable the **Show Windows** option in the service's File menu and see each conversation with remote hosts.

Note that you *must* remove and re-install the Whois server if you move it to a new location! This is because the full path to the application is stored in the NT Registry.

---

## Registry Values

The following Whois server entries in the Windows NT registry are included for the benefit of system administrators.

```
HKEY_LOCAL_MACHINE
  SYSTEM
    CurrentControlSet
      Services
        EventLog
          Application
            WHOISD32
              EventMessageFile  REG_EXPAND_SZ  C:\IMail\mailmsg.dll
              TypesSupported    REG_DWORD      0x7
        WHOISD32
          DisplayName REG_SZ      WHOIS Server
          ErrorControl REG_DWORD  0x1
          ImagePath   REG_EXPAND_SZ C:\IMail\WHOISD32.exe
          ObjectName  REG_SZ      LocalSystem
          Start       REG_DWORD  0x2
          Type        REG_DWORD  0x10
          Parameters
            Database REG_EXPAND_SZ C:\IMAIL\cfg\whois.db
            LogLevel REG_DWORD  0x0
            Port     REG_DWORD  0x2b          (43)
            Version  REG_EXPAND_SZ (set only)
```

---

## 10. Finger Server

In response to Finger requests from other hosts, the Finger server returns the full name of the specified user, their complete e-mail address and the date and time that they last read their mail. If there is a *plan.ima* file in the user's home directory or a "PLAN=*file name*" line defined in the user's configuration, the information in the Plan file is returned as well.

If an alias is specified in a Finger request from another host, the Finger server returns the expansion of that alias.

In response to Finger requests that do not specify a user, the Finger server reports that it will not display the current logged in user. To do otherwise is considered by many to be a security breach.

---

### Finger Service

As a Windows NT service, this program will continue to run when you log off the Windows NT system. This service can run completely hidden or with some feedback.

The Finger server gets most of its settings from the Windows NT Registry. Registry values can be modified by using the IMail Server application in the Control Panel.

---

### Finger Service Security

By default, the Finger service runs from the System account and must be started manually. You can change these settings by using the Control Panel's Services application.

Windows NT allows you to specify a user ID for the service to run under. To select this option:

1. In the Control Panel, select the Services application.

The Services dialog box appears and displays each service, its operating status, and whether it uses automatic or manual startup.

2. Select the IMail Finger Server service and click the **Startup** button.
3. Enter the settings and click **OK**.

Make sure the specified user has read access to the user directories.

Note that if you set the **Allow service to interact with desktop** option, the Finger service will run under the current logged on user account. (Refer to the Windows NT documentation for more information.)

---

## Configuring the Finger Server

To configure the Finger server:

1. In the Control Panel, double-click the IMail Server icon.

The IMail Server for Windows NT services dialog box appears.

2. Click the **Finger** tab. The Finger Service properties appear.
3. Enter the options you want to use to configure the Finger server.

Each option is described at the end of this procedure.

4. After making changes, stop the service, wait 5–10 seconds and restart the service. Any changes that you make are saved automatically as soon as you press the **Stop/Start Service** button.
5. Click **OK** to exit the dialog box.

The version date of the Finger server is displayed in the upper right corner of the screen.

## Logging Options

In the **Log To** box, select the file that you want to use for logging Finger events.

If *SYSMMDD.TXT* is selected, Finger information is logged in the file: MAILDIR/spool/sysmmdd.txt, where *mm* is the month and *dd* is the day the log was written.

Logging can be disabled by selecting *No Log*. If *App Log* is selected, information is logged in the Application Log, which is viewed with Windows NT's Event Viewer. If *Log Server* is selected, messages are sent to the Log Server IP address specified in the Control Panel->IMail Server->Global configuration.

## Server Status

A status message to the left of the **Start/Stop Service** button shows whether or not the service is running.

## Start/Stop Service

This button toggles between Start service and Stop service depending on whether the service is running.

---

## Notes

If you want to see the icon for the service, in the Control Panel's Services application, you can enable the **Allow service to interact with desktop** option. (See the Security section in this chapter for how to access the Services options.) We suggest enabling this option for the first week, or until you are familiar with the service. This way you know if the service is running. If **Allow service to interact with the desktop** is enabled, you can enable the **Show Windows** option in the service's File menu and see each conversation with remote hosts.

Note that you *must* remove and re-install the Finger server if you move it to a new location! This is because the full path to the application is stored in the NT Registry.

---

## Registry Values

The following Finger server entries in the Windows NT registry are included for the benefit of system administrators.

```
HKEY_LOCAL_MACHINE
  SYSTEM
    CurrentControlSet
      Services
        EventLog
          Application
            FINGERD32
              EventMessageFile  REG_EXPAND_SZ  C:\IMail\mailmsg.dll
              TypesSupported    REG_DWORD    0x7
        FINGERD32
          DisplayName REG_SZ          FINGER Server
          ErrorControl REG_DWORD      0x1
          ImagePath    REG_EXPAND_SZ  C:\IMail\FINGERD32.exe
          ObjectName    REG_SZ          LocalSystem
          Start         REG_DWORD      0x2
          Type REG_DWORD  0x10
          Parameters
            LogLevel REG_DWORD  0x0
            Port      REG_DWORD  0x4f          ( 79 )
            Version   REG_EXPAND_SZ (set only)
```



---

## 11. Password Server

The Password server allows Eudora and NuPOP mail clients to change their IMail Server for Windows NT password without logging in to the NT server. It also allows the system administrator to change any users password through the IMail Remote Administration utility (IRADMEN).

---

### Password Service

As a service, the Password server program will continue to run when you log off the Windows NT system. This service can run completely hidden or with some feedback. IMail Server for Windows NT does not require the Password server to be running for normal operations.

The Password server gets most of its settings, including the directories it needs to work in, from the Windows NT Registry. Registry values can be modified by using the IMail Services application in the Control Panel.

---

### Password Service Security

By default, the Password service runs from the System account and starts automatically. You can change these settings by using the Control Panel's Services application.

Windows NT allows you to specify a user ID for the service to run under. To select this option:

1. In the Control Panel, select the Services application.

The Services dialog box appears and displays each service, its operating status, and whether it uses automatic or manual startup.

2. Select the IMail Password Server service and click the **Startup** button.

3. Enter the settings and click **OK**.

Make sure the specified user has full control of the *cfg* directory.

Note that if you set the **Allow service to interact with desktop** option, the Password service will run under the current logged on user account. (Refer to the Windows NT documentation for more information.)

---

## Configuring the Password Server

To configure the Password server:

1. In the Control Panel, double-click the IMail Server icon.

The IMail NT Mail Services dialog box appears.

2. Click the **Password** tab. The Password Service properties appear.
3. Enter the options you want to use to configure the Password server.

Each option is described at the end of this procedure.

4. After making changes, stop the service, wait 5–10 seconds and restart the service. Any changes that you make are saved automatically as soon as you press the Stop/Start Service button.
5. Click **OK** to exit the dialog box.

The version date of the Password server is displayed in the upper right corner of the screen.

### Logging Options

In the **Log To** box, select the file that you want to use for logging Password server events.

If *SYSMMDD.TXT* is selected, Password information is logged in the file: MAILDIR/spool/sysmdd.txt, where *mm* is the month and *dd* is the day the log was written.

Logging can be disabled by selecting *No Log*. If *App Log* is selected, information is logged in the Application Log, which is viewed with Windows NT's Event Viewer. If *Log Server* is selected, messages are sent to the Log Server IP address specified in the Control Panel->IMail Server->Global configuration.

### Server Status

A status message to the left of the **Start/Stop Service** button shows whether or not the service is running.

### Start/Stop Service

This button toggles between Start service and Stop service depending on whether the service is running.

---

## Notes

If you want to see the icon for the service, in the Control Panel's Services application, you can enable the **Allow service to interact with desktop** option. (See the Security section in this chapter for how to access the Services options.) We suggest enabling this option for the first week, or until you are familiar with the service. This way you know if the service is running. If **Allow service to interact with the desktop** is enabled, you can enable the Show Windows option in the service's File menu and see each conversation with remote hosts.

Note that you *must* remove and re-install the Password server if you move it to a new location! This is because the full path to the application is stored in the NT Registry.

---

## Registry Values

The following password server entries in the Windows NT registry are included for the benefit of system administrators.

```
HKEY_LOCAL_MACHINE
  SOFTWARE
    Ipswitch
      IMail
        Global
          TopDir      REG_EXPAND_SZ  \IMAIL
          CfgDir      REG_EXPAND_SZ  \IMAIL\Cfg
          SpoolDir     REG_EXPAND_SZ  \IMAIL\Spool
          UsersDir     REG_EXPAND_SZ  \IMAIL\Users
          HostName     REG_EXPAND_SZ  (full PC name)
          SendName     REG_EXPAND_SZ  \IMAIL\SMTP32.EXE

SYSTEM
  CurrentControlSet
    Services
      EventLog
        Application
          PSERVE
            EventMessageFile  REG_EXPAND_SZ  C:\IMail\mailmsg.dll
            TypesSupported    REG_DWORD      0x7
          PSERVE
            DisplayName      REG_SZ          Password Server
            ErrorControl      REG_DWORD      0x1
            ImagePath         REG_EXPAND_SZ  C:\IMail\PSERVE.exe
            ObjectName        REG_SZ          LocalSystem
            Start             REG_DWORD      0x2
            Type              REG_DWORD      0x10
            Parameters
              LogLevel        REG_DWORD      0x1              (1)
              Port            REG_DWORD      0x6a             (106)
              Version         REG_EXPAND_SZ  (set only)
```

---

## 12. Monitor Server

IMail Server for Windows NT provides several tools for monitoring the SMTP, POP3, and IMAP4 mail servers and other services on your IMail Server system. The Monitor service lets you:

- Monitor IMail services (such as SMTP, POP3, IMAP4, LDAP, PServ, Whois, Finger, Syslog) and disk space on the IMail Server system and display the status of services.
- Monitor DNS, NNTP, WWW, FTP, and Telnet services on either the local or a remote system, and monitor your default gateway system.
- Set up notifications for the monitored services and have the monitor program send e-mail to a user, or send notification to a pager, or beeper when a service is down.
- Configure a Web server to provide remote access via a Web browser to IMail Server functions (such as viewing service status, adding or deleting users, or changing a password).

---

### Monitor Service

As a Windows NT service, the Monitor server will continue to run when you log off the Windows NT system. This service can run completely hidden or with some feedback.

The Monitor server gets its settings from the Windows NT Registry and two *.ini* files found in the *winnt* directory: *imonitor.ini* and *ipnotify.ini*. These *.ini* files are used to maintain compatibility with Ipswitch's WhatsUp network monitoring tool, which may be installed on your system.

Registry values can be modified by using the IMail Server application in the Control Panel.

---

## Monitor Service Security

By default, the Monitor service runs from the System account and starts automatically. You can change these settings by using the Control Panel's Services application.

---

### Note:

We recommend that you run the Monitor service under the System account. If you use an account other than the System account, all functions may not work properly.

---

---

### Note:

If you are using the Windows NT User Database option to define where users are registered and how user authentication takes place, this service must run as a system service.

---

Windows NT allows you to specify a user ID for the service to run under. To select this option:

1. In the Control Panel, select the Services application.

The Services dialog box appears and displays each service, its operating status, and whether it uses automatic or manual startup.

2. Select the IMail Monitor Service and click the **Startup** button.
3. Enter the settings and click **OK**.

Note that if you set the **Allow service to interact with desktop** option, the Monitor service will run under the current logged on user account. (Refer to the Windows NT documentation for more information.)

---

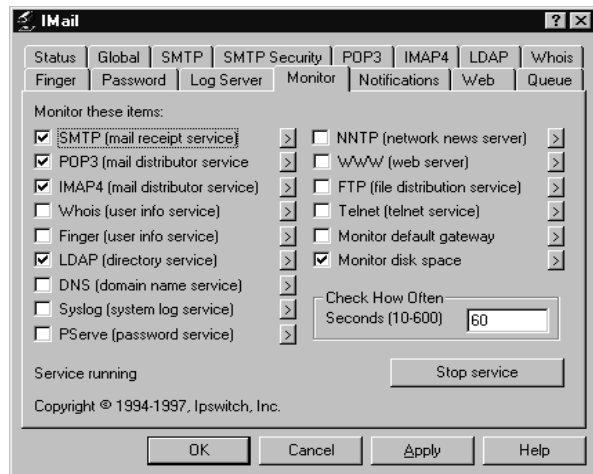
## Configuring the Monitor Server

To configure the Monitor server:

1. In the Control Panel, double-click the IMail Server icon.

The IMail Server for Windows NT services dialog box appears.

2. Click the **Monitor** tab. The Monitor properties appear.



3. Configure the Monitor, Notifications, and Web server capabilities that you want to use.

Click the **Notifications** tab to display the Notifications properties.

Click the **Web** tab to display the Web server properties.

The following sections describe the configuration of each of the capabilities.

4. After making changes, stop the service, wait 5–10 seconds and restart the service. Any changes that you make are saved automatically as soon as you press the **Stop/Start Service** button.
5. Click **OK** to exit the dialog box.

---

## Monitoring Services

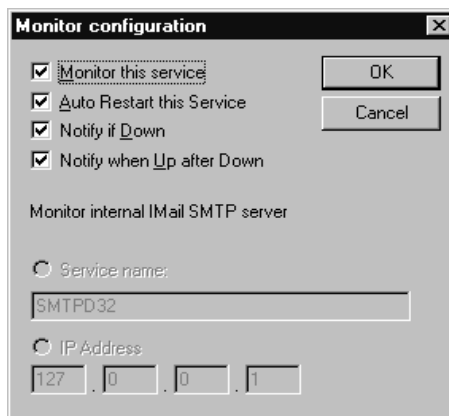
You can select to monitor services on the IMail Server system, and have the Monitor program notify you when a service is down. You can also select to monitor some services on other systems, such as the status of a router. You can view the status of monitored services by using the IMail Monitor (Programs→IMail→IMail Monitor) from the Windows NT console, or by using a Web browser (the IMail Web server must be configured and running). Services displayed in green are up and running; services displayed in red are down. You can also set up a notification for the monitored services to receive an e-mail, pager, or beeper notification if the service goes down.

To monitor services:

1. In the IMail Services dialog box, click the **Monitor** tab. The Monitor properties appear.
2. Select the services that you want to monitor.

Click the check box next to a service to select it (make sure it is checked).

For each service that you select, you can click the associated arrow button to access configuration options. For example, if you click the arrow button for the SMTP service, the following dialog box appears.





Make sure the **Monitor this service** option is selected. If you want the service to automatically restart after going down, select the **Auto Restart this Service** option.

You do not need to set the service name and IP address for the services that are part of the IMail Server for Windows NT. These services are SMTP, POP3, IMAP4, Whois, Finger, LDAP, DNS, Syslog, and PServe.

For services that are not part of the IMail Server for Windows NT system, you can enter a service name if it is local or an IP address if the service is on a remote system.

3. By default, monitored services will be displayed in green (service is up) or red (service is down). In addition to this visual alarm, you can define and enable e-mail, pager, and beeper notifications to alert you when a service is down, or comes back up. See the “Setting Up Notifications” section in this chapter for more information.

In the Monitor configuration properties, the **Notify if Down** and the **Notify when Up after Down** options apply to any e-mail, pager, and beeper notifications that you have enabled. See the “Enabling Notifications” section for more information.

4. You can select to monitor the default gateway or disk space on the IMail Server system.

For the default gateway, click the arrow button to display configuration options and then enter an IP address.

To monitor disk space on the IMail Server system, click the arrow button to display configuration options and then enter the amount of free disk space (in Megabytes) below which you want to be notified.

5. In the Check How Often section, specify how often (in seconds) the monitor program should poll the services.
6. Click **OK**. Your changes are applied immediately.

## Viewing Service Status from a Web Browser

You can view the status of the monitored services from any Web browser. To set up this capability, you need to:

1. Configure the IMail Server Web server as described in the “Configuring the Web Server” section of this chapter.

---

### Note:

You should use a Web browser that supports frames as the IMail Server Web server uses frames to display service status. The most recent Netscape Navigator and Microsoft Internet Explorer browsers support frames.

---

2. Set the appropriate access options (Allow Web Access, Host Administrator, IMail System Administrator) in the User Properties for the userid you will use to login. This determines which Remote Administration functions will be available to you.

You must enable the **Allow Web Access** option. See “Adding a User Mail Account” in Chapter 3 for information on these options.

3. Start a Web browser and open the URL address for the Web server. The address is:

`http://your_imal_server_system:8181`

where *your\_imal\_server\_system* is the hostname of the Windows NT system on which you installed the IMail Server and 8181 is the port number for the Web server.

---

### Note:

Port 80 is usually used for Web access via the HTTP protocol.

---

You are prompted for your IMail Server userid and password.

4. Enter your IMail userid and password.

The Remote Administration web page appears.

The Monitor application (in the left side frame) shows the status of services that you selected to monitor. Monitored services that are running appear in green. Monitored services that are down appear in red. A status message (such as “Service running”) appears next to the service name.

The Remote Administration functions available to you are determined by your login userid. If your userid has System Administrator or Host Administrator enabled, you can perform many of the functions that are available in the Control Panel→IMail Server application.

You can configure service monitoring from the Web Remote Administration utility. For information on the configuration options, see the “Monitoring Services” section in this chapter.

## Viewing Service Status with the IMail Monitor

You can view the status of the monitored services from the IMail Monitor application. To start the IMail Monitor:

From the Start menu, select **Programs→IMail→IMail Monitor**. The IMail Monitor appears.



Monitored services that are running appear in green. Monitored services that are down appear in red. A status message (such as “Service running”) appears next to the service name.

You can configure service monitoring, set up notifications, and configure the Web server from the IMail Monitor. Click the **Config** button to display these configurations options. For information on the configuration options, see the following sections in this chapter: “Monitoring Services,” “Setting Up Notifications,” “Configuring the Web server.”

Click the **View** button to display IMail Monitor debug log. The debug log shows each service, its IP address, and a status message.

Click the **Quiet** button to turn off a sound alarm triggered by a monitored service going down, or coming back up after being down.

---

## Setting Up Notifications

When a service does not respond to polling, the Monitor program can send notification via a beeper, a pager message, or an e-mail message. This is in addition to the visual (red, green) status and the optional sound alarm. Setting up notification for services involves two steps:

1. You first need to define the notification actions that you will want to use, such as activating a network administrator’s beeper or sending e-mail to an individual.
2. Then, you can enable notification actions for services, which is just a matter of selecting from the defined notifications.

See the section “Enabling Notifications” for information on enabling notification actions for a service.

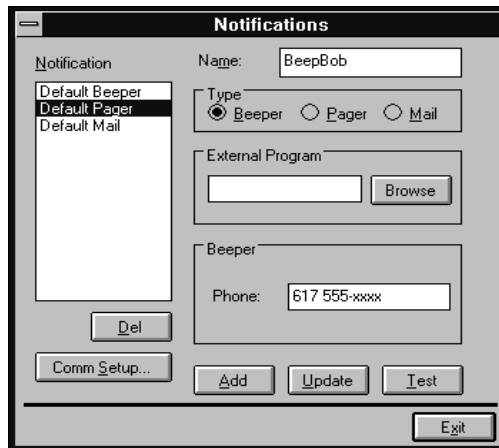
To define a Notification action:

1. In the IMail Services dialog box, click the **Notification** tab. The Notification properties appear.
2. Click the **New** button. The Add Notification dialog box appears.

3. Click **Configure Notifications**. The Notifications dialog box appears.
4. Define a notification. The following sections describe how to set up the different types of notification.

## Defining Beeper Notification

You can define a notification to activate a beeper when the service does not respond to polling.



1. Enter a unique name to identify the beeper notification, for example “BeepBob.”
2. Select the **Beeper** notification type.
3. To use an external program to connect to the beeper, see the section “Using an External Beeper Program.”
4. In the **Phone** text box, enter the phone number to dial.
5. Click **Comm Setup**. The Communications Setup dialog box appears.



Enter the information in the Beeper section of the dialog box::

### Dial String

The default dial string is: ATDT%*s* , , , , %*s* #

The first %*s* is replaced by the phone number and the second %*s* is replaced by the beeper code. Most modems and beepers support the use of '#' to terminate the message and '\*' to print out a dash. You may find a need to increase the number of commas in the dial string if it dials the code too soon or decrease the number of commas if it waits too long.

### Baud Rate

Select the speed (measured in bits per second) at which the serial port will communicate with the modem.

### COM Port

Select the port to which your modem is attached.

### Modem Init String

The default string is ATEOQOV1X4. What is expected in this string are the modem commands for “Command Echo Off” (EO), “Result Codes On” (QO), “Verbal Results” (V1), and “Result Codes Displayed” (X4). The recommended string to use is:  
ATEO QO V1 X4

### Timeout

The timeout value determines how long the system waits after sending the last character before it hangs up the phone, if a transition is not recognized.

When you have entered the information, click **OK**.

6. Click the **Add** button to add the new beeper notification.
7. The beeper notification appears in the list of Notifications.

Click the **Test** button to test the notification.

## Using an External Beeper Program

You can also use an external program of your own to handle beeper notification. The presence of an external program name in the External Program text box enables the external program.

The following information is made available to the external program via the command line.

- arg 1: either DN or UP
- arg 2: the phone number entered in the Notification options
- arg 3: the beeper code as specified in the Notification options
- arg 4: the IP address of the host

External program example arguments:

0: beeper.exe 1: DN 2: 8694297 3: 3333 4: 127.0.0.1

0: beeper.exe 1: DN 2: 8694297 3: 2222 4: 127.0.0.1

0: beeper.exe 1: UP 2: 8694297 3: 2222 4: 127.0.0.1

The external program is executed with `SW_SHOWMINNOACTIVE`.

The external beeper program will not be activated if someone silenced the alarm before the system check is reached.

The UP message will only be sent if the packets lost is greater than system checks when the service comes back up.

## Defining Pager Notification

You can define pager notification to send a message to a pager when a service does not respond to polling. The notification message sent to the pager is predefined. It is a simple message, such as: SMTP down, SMTP up. IMail Server supports Motorola PageNet and other TAP (Telocator Alphanumeric Protocol) pagers.



To define a pager notification action:

1. Enter a unique name to identify the pager notification, for example “PageFred.”
2. Select the **Pager** notification type.
3. Enter the following information:

### Terminal

Enter the phone number to dial.

### Password

Enter the pager password, if required.

### Pager ID

Enter the pager identification number.

4. Click **Comm Setup**. The Communications Setup dialog box appears.





Enter the information in the Alpha Pager section of the dialog box:

### Modem Initialization String (ATEO)

The default string is ATEO. What is expected in this string are the modem commands for “Command Echo Off” (EO), “Result Codes On” (QO), “Verbal Results” (V1), “Result Codes Displayed” (X4), and “Local Echo OFF” (F1). The recommended string to use is: ATEO QO V1 X4 F1

### Baud Rate

Select the speed (measured in bits per second) at which the serial port will communicate with the modem.

### COM Port

Select the port to which your modem is attached.

When you have entered the information, click **OK**.

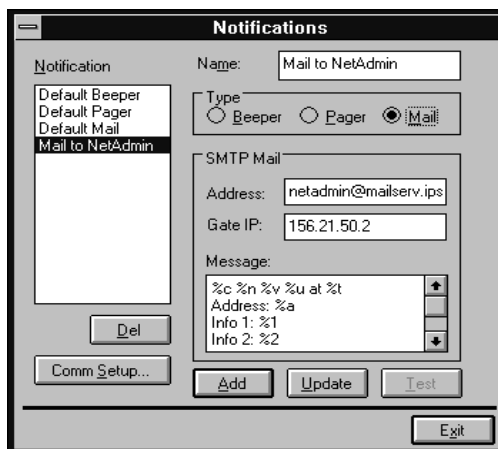
5. Click the **Add** button to add the new pager notification.

The pager notification appears in the list of Notifications.

Click the **Test** button to test the notification.

## Defining E-mail Notification

You can define e-mail notification to send a message to an e-mail address when a service does not respond to polling. The notification message sent to the mail recipient is predefined. It is a simple message, such as: SMTP down, SMTP up. To define an e-mail notification action:



1. Enter a unique name to identify the e-mail notification, for example “Mail to Netadmin.”
2. Select the **Mail** notification type.

Enter the following information:

### Address

Enter an e-mail address that is accepted by the Gate IP. (This can be a simple name.) The Address should not contain brackets, braces, quotes, or parentheses.

### Gate IP

Enter an IP address of a host running SMTP.

3. If you need to change the Mail From Address, click **Comm Setup**. The Communications Setup dialog box appears.



The Mail From Address defines the sender of an e-mail notification as: <imonitor@%s>, where %s is the local hostname. In most cases, you will not need to change this address. If you do change the address, be sure to keep the angle brackets (< >) in place.

When you have entered the information, click **OK**.

4. Click the **Add** button to add the new mail notification.

The mail notification appears in the list of Notifications.

Click the **Test** button to test the notification.

## Updating Notification

To update an existing notification action, select it in the list of Notifications, edit any of the options, and then click the **Update** button.

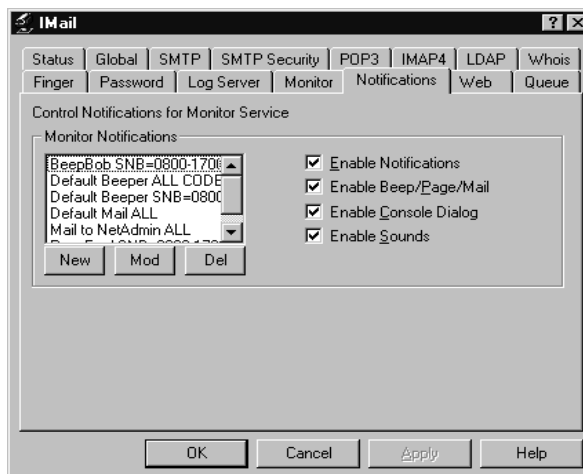
## Testing Notification

You can test a notification action by selecting it in the list of Notifications and clicking the **Test** button. The test results are displayed in the right side of the Notifications page. To return to the original display, click on a Notification Type.

## Enabling Notifications

After you define notification actions, you can enable them in the Notifications properties. These notifications can activate a beeper, send a message to a pager, or send an e-mail message when a service is down or up. For each service that you select to monitor, you can set whether you want to be notified when the service goes down, comes back up after being down, or both.

1. Select the **Notifications** tab. The Notifications properties appear.



2. In the Monitor Notifications section, enable any of the notifications that you have created. (See “Setting Up Notifications” for information on creating notifications.)

To enable a notification action, click the **New** button. The Add Notification dialog box appears. All notification actions that have been defined are available from the Notify drop-down list. Select an action, such as Default Beeper or Default Pager, from this list. You can select to receive notification 24 hours a day, or between certain hours. Click **OK** to enable the notification action. Any notifications you add are displayed in the Monitor Notifications list box.

To edit an existing notification action, select it and click the **Modify** button. To delete a notification action so that it is not applied for the services, select it and click the **Del** button.

3. Make sure the **Enable Notifications** option is checked. This enables any beeper, pager, or e-mail notifications, console, and sound notifications. You can un-check this option to disable all notifications.

Check the **Enable Beeper/Pager/Mail** option if you want to use any of the beeper, pager, or e-mail notifications defined in the list box.

Check the **Enable Console Dialog** option to display the notification in a message box on the console (the IMail Server system).

Check the **Enable Sounds** option to play a .wav file when a monitored service goes up or down. (Your system must have a sound card installed.)

4. In the Notifications properties, click **Apply** to save your changes.
5. In the Monitor properties (click the **Monitor** tab), for each service that you selected to monitor, specify when you want to be notified by checking the appropriate options. (You can use this option to enable and disable notification on a per service basis.)

To display the configuration options, click the arrow button to the right of the monitored service. A dialog box appears. Select either **Notify if down**, **Notify when Up after Down**, or both. Click **OK** to exit the dialog box.

6. In the Monitor properties, click **Apply** to save your changes.

---

## Configuring the Web Server

The Web server lets you use the Web Remote Administration utility to view the status of monitored services, modify IMail Server user registration data, and view log data.

To configure the Web server:

1. Click the **Web** tab. The Web Access properties appear.
2. Make sure the **Enable Web Server** option is checked.

3. Enter the following information:

**Port**

The port number for the Web server. The default is 8181.

**Title**

Enter the title that you want to appear on the Web page when accessed from a Web browser.

**Web Dir**

The directory where the IMail Server Web files will be stored.

**Hide User List Button**

When enabled, the Web server will not display a list of users in response to a query from an LDAP client.

**Start/Stop Service**

This button toggles between Start service and Stop service depending on whether the Monitor service is running.

4. Click **OK** to apply the settings. The Monitor server must be stopped and restarted for changes to take affect.

## **Setting Access to the Web Server**

You can specify an IP address or set of IP addresses that are either granted access to the Web server or denied access. Systems that do not have access to the Web server system will not be allowed to create a connection.

### **To deny access to a specific computer or group of computers:**

1. Click the **Control access** button. The Access Control properties appear.
2. Select the **Granted Access** option.
3. Click the **Add** button. The Deny Access On dialog box is displayed.
4. In the IP Address box, enter the IP address of the computer to be denied access to the Web server.

To deny access to a group of computers, select the **Group of Computers** option. In the IP Address and Subnet Mask boxes, enter the IP address and subnet mask for the group to be denied access. For example, if you have a class C address space of 156.21.50.0, enter a group address of 156.21.50.0 and a subnet mask of 255.255.255.0. This will deny access to those 254 systems.

5. Click **OK** to add the IP address(es) to the list.

Access will be granted to all computers except those listed.

6. Click **OK** to save the changes. Note that you must stop and restart the service for the changes to take affect.

#### **To grant access to a specific computer or group of computers:**

1. Click the **Control access** button. The Access Control properties appear.
2. Select the **Denied Access** option.
3. Click the **Add** button. The Grant Access On dialog box is displayed.
4. In the IP Address box, enter the IP address of the computer to be granted access to the Web server.

To grant access to a group of computers, select the **Group of Computers** option. In the IP Address and Subnet Mask boxes, enter the IP address and subnet mask for the group to be granted access. For example, if you have a class C address space of 156.21.50.0, enter a group address of 156.21.50.0 and a subnet mask of 255.255.255.0. This will grant access to those 254 systems.

5. Click **OK** to add the IP address(es) to the list.

Access will be denied to all computers except those listed.

6. Click **OK** to save the changes. Note that you must stop and restart the service for the changes to take affect.





---

## 13. List Server

The List server lets you set up automated mailing lists on the IMail Server. A mailing list can receive mail and resend the mail to all the users on the mailing list. Mailing lists are used widely on the Internet as a means of sharing information about a topic.

This chapter describes how to set up and maintain mailing lists.

---

### List Server Implementation

The List server for IMail Server for Windows NT is a simple list server that provides two distinct functions:

- A user interface for creating and maintaining mailing lists (from the Start menu, select Programs→IMail→IMail List Server).
- A way to process mail messages addressed to “listserv” on the IMail Server for Windows NT workstation.

The List server provides the following mailing list functions:

- User subscribe and unsubscribe requests are handled automatically by the list server.
- Mailing lists can be unmoderated (any message sent to the list is immediately posted to all users on the list) or moderated (all messages are viewed by a human moderator before being posted to the list).
- Mailing lists can be public or private. A private list will not accept a Subscribe command.
- Messages to the mailing list can be accumulated and regularly posted as a digest. (A digest contains a group of messages sent to the list.) Mailing lists that receive a large volume of messages can give subscribers the option of periodically receiving a digest rather than being interrupted every few minutes with a new message sent to a list.

- You can enter an identifying text string to appear on the Subject line of all messages (or a digest) posted to the mailing list.
  - You can enter header or trailer text (with information such as the subscribe and unsubscribe instructions) to appear with all messages (or a digest) posted to the mailing list.
  - Supports the standard mailing list commands, including: Subscribe, Unsubscribe, Help, List.
  - You can use some of the list server functions (such as adding or removing a list) from the command line.
- 

## Installation

To install the List Server, simply execute *listsrv.exe*. It will automatically install itself and create the following files, directories, and aliases:

- The directory *lists* under the main mail directory.
- The files *lists.txt*, *nolist.txt* and *syntax.txt* in the *lists* directory. The *lists.txt* file is maintained by the *listsrv.exe* program. You can tailor *syntax.txt* and *nolist.txt* for your use. Note that you can edit these files through the File menu in the *listsrv.exe* program.
- The alias “listserv” that points to “| LISTSRV.EXE *hostname*” where *hostname* is the name for your IMail Server system, for example:

```
listserv=| listsrv mailserv.acme.com
```

---

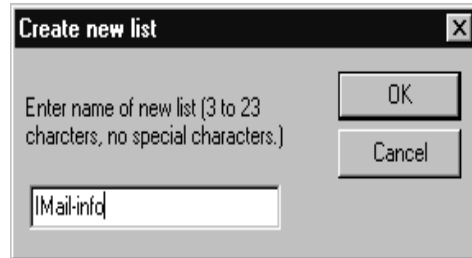
## Creating a List

To create a list after installing the List server:

1. From the Start menu, select Programs->IMail->IMail List Server.

The List Server window appears and displays each list name, if any lists were yet created.

2. If you have created virtual hosts to support multiple domains, in the Host drop-down list, select the host (domain) to which you want to add a mail list.
3. From the Lists menu, select **New** or click the **New** button. The Create New List dialog box appears.



4. Enter a name for the list and click **OK**.

The name must be from 3 to 23 characters in length, with no spaces between characters. This is the name used to send mail to the list. For example, if you enter the name “IMail-info,” users will send mail to the list by specifying the To address: IMail-info@ipswitch.com.

The List Settings dialog box appears.



5. Complete the entries in the dialog box and click **OK**.

## Title

Enter the title to appear on the mailing list.

## Owner

This is the mail account that the list runs under. You must enter the full mail address.

## Local administrator

This is a local mail userid that is allowed access to the mail account that the list runs under.

## Related Files

You can edit the Help or Subscription files by clicking on the **Help** or **Subscribe** buttons. The Help file displays a prepared message that the List server sends in reply to a help request. The Subscription file contains a prepared message that the List server sends in reply to successful completion of a subscribe request. See the “List Server Commands” section of this chapter for more information on the commands accepted by the List server.

Click **Addresses** to show the mail addresses of subscribers. Click **Users** to show the user names of subscribers. You should not modify the Addresses and Users files as they are maintained automatically.

6. From a different system, send a test mail message to “list-serv@your\_IMail\_server\_hostname”. In the body of the message, place the lines:

```
subscribe list_name your_full_name
help
help list_name
list
list list_name
```

See the “List Server Commands” section of this chapter for a description of the commands accepted by the List server.

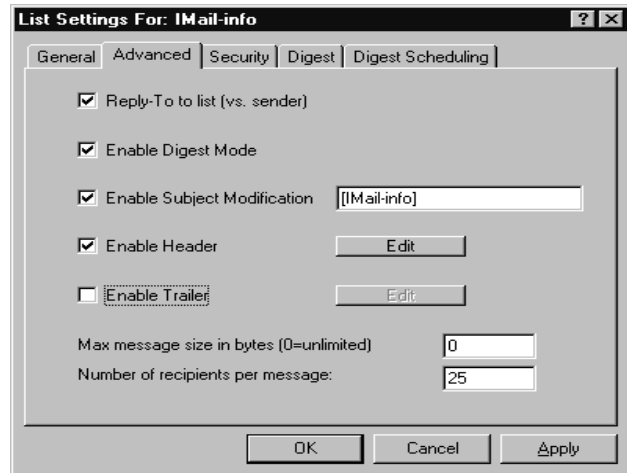
7. You should get five messages back from the system.
8. To send mail to the list, make sure the **Allow remote mail to local lists** option is enabled in the **SMTP Security** options (from the Start menu, select Settings->Control Panel->IMail Server). Then, send mail to “list\_name@your\_IMail\_server\_hostname”.

The List server support directory is the directory *lists* created under your main *imail* directory. Make sure you have an *imail.ini* file in your *winnt* directory and that the [\_GLOBAL] MAILDIR variable points to the top level *imail* directory. Each list is created as a separate directory under that directory and there is an alias created in the *imail.ini* [\_ALIASES] section.

## Setting Advanced Options

You can use the Advanced options to further define the operation of a mailing list. To set Advanced options:

1. In the List Settings dialog box, click the **Advanced** tab. The Advanced options appear.



2. Select the options you want to use. Each option is described below.

### Reply-To list (vs. sender)

Have replies sent from the list server account go to the list rather than to the sender of the original message.

## Enable Digest Mode

When enabled, the list server will group the messages sent to the list into a digest, which is then sent to digest subscribers as a single message. You schedule the digest to be sent on a particular time-basis (for example daily or weekly). When list users receive a digest, it will contain all the messages sent to the list for the specified period.

When you select **Enable Digest Mode**, the Digest and Digest Scheduling tabs appear in the List Settings dialog box. You need to define how the digest will operate by setting the options under these tabs. See “Setting Up Digest Mode” in this chapter for more information.

## Enable Subject Modification

When enabled, displays the text string (entered in the Edit box) at the beginning of the subject line of every message sent to the list. For example, if you enter [IMail-info] as the defined text string, the subject line of messages will appear as follows:

```
Subject: re:[IMail-info] How do you receive  
mail?
```

The default string is the name of the mailing list.

## Enable Header/Enable Trailer

When enabled, displays text information (entered in the **Edit** function) at the beginning or end of every message sent to the list. To enter the header information, select the **Enable Header** option, click **Edit**, and then enter the text information. This information is entered in the *header.txt* file. To enter the trailer info, select the **Enable Trailer** option, click **Edit**, and then enter the text information. This information is entered in the *trailer.txt* file.

For example, you can enter the subscribe/unsubscribe information for the list and have it appear at the beginning or end of every message.

## Max message size in bytes (0 = unlimited)

The maximum size (in bytes) of a message that can be sent to the list. Enter 0 if you want the size to be unlimited.

## Number of recipients per message

The maximum number of recipients per message.

3. Click **OK** to save your changes.

## Setting Mailing List Security

You can use the Security options to determine whether you want the mailing list to be moderated or unmoderated, and to set access to the list.

1. In the List Settings dialog box, click the **Security** tab. The Security options appear.



2. Select the options you want to use. Each option is described below.

### Allow posting by

Determines who can post mail to the list. Select *Anyone* to let any user post mail. Select *Subscribers* to let only the subscribers post mail. Select *Moderator* to let only the list owner post mail. Moderator is used when you want the list owner to review all messages before they are posted to the list.

## Allow List Unsubscribes based on Subject line

When a user wants to unsubscribe from the mailing list, most list servers expect the Unsubscribe command to be specified in the body of mail message. If you want the mailing list to also accept an Unsubscribe command specified in the Subject line of the message, select this option.

When enabled, the list will accept the following commands in the Subject line to unsubscribe: unsubscribe, remove, signoff

---

### Note:

We recommend enabling this command, but do not advertise that the list server supports it because these messages are sent to the list address and will go out to the list if the command is misspelled.

---

## Disallow Subscriptions

When enabled, refuses a Subscribe request to the mailing list. The owner or administrator must add new users either by editing the Users file, or through the Web Remote Administration utility. Note that Unsubscribe requests are always enabled.

## Disable List Command

A user can obtain a list of the users subscribed to a mailing list by addressing a message to the list server (for example, list-serv@ipswitch.com) and entering the `List listname` command in the body of the message. If you do not want users to receive a list of the subscribers to your mailing list, select this option.

If the list is set to Subscribers or Moderated, subscribers can still send the help/list command to obtain a list of subscribers.

## Edit Kill File

The kill file lets you specify a mail address or a particular mail host that you do not want to accept mail from. To specify a mail address or host in the kill file, click the **Edit kill file** button. The file *kill.lst* appears in the Windows Notepad. In the *kill.lst* file, enter one entry per line in either of the following formats:

```
userid@host
@host
```



For example, to deny access from a user mail account, you could enter: `fred@widget.com` To deny access to all users from the mail host `widget.com`, you can enter: `@widget.com`.

IMail Server checks the incoming message's MAIL FROM: <user@host> line. When it receives mail from an address listed in the kill file, IMail Server returns the message:

---

**Note:**

The *kill.lst* file is also used by the SMTP server to deny access to the mail server.

---

3. Click **OK** to save your changes.

Security for mailing lists is also determined by two setting in the **SMTP Security** options (from the Start menu, select Settings->Control Panel->IMail Server->SMTP Security). The options that affect mailing lists are:

**Allow remote mail to local lists**

When selected, the SMTP server will accept mail addressed to local mailing lists and will resend the message to the list contents.

**Allow remote view of local lists**

When selected, the SMTP server will reveal the contents of a list server list in response to an EXPN SMTP command.

## Setting Up Digest Mode

You can offer your mailing list subscribers a digest of messages sent to the mailing list. The list server will “archive” messages sent to the list to a digest mailbox. The accumulated messages are then sent to digest subscribers as a single message. You schedule the digest to be sent on a time-basis (for example daily or weekly) or when the size of the digest reaches a specified number of bytes. When list users receive a digest, it will contain all the messages sent to the list since the last digest was sent.

The digest is written to a special mailbox that you define. List users can choose between receiving a digest and receiving all messages as they are sent. To receive the digest, list users must send mail to the List server (*listserv@your\_IMail\_server\_hostname*) and enter the following command in the body of the message:

```
set mode digest listname
```

where *listname* is the mailing list name. A confirmation message will be sent to the user. To cancel digest mode, users can enter the following command in the body of the message:

```
set mode standard listname
```

where *listname* is the mailing list name.

To set up digest mode for a mailing list:

1. In the List Settings dialog box, click the **Advanced** tab. The Advanced options appear.
2. Enable the **Enable Digest Mode** option (make sure it is checked).

When Enable Digest Mode is enabled, the **Digest** and **Digest Schedule** tabs appear in the List Settings dialog box.

3. Click the **Digest** tab. The options appear.
4. Select the options you want to use. Each option is described below.

### **Digest Mailbox**

Enter the name of the mailbox where postings get stored before the digest mailing is sent out.

A copy of all postings will be sent to:

```
list_administrator-mailboxname@yourdomain.com
```

After a posting is sent to the digest list, the Digest Mailbox is emptied and a copy is made in the format:

```
digestmailboxMMDD.mbx
```

where *digestmailbox* is the name of the Digest Mailbox, MM is the month, and DD is the day of the posting.

The list owner/moderator can view the mailbox by using the Web Remote Administration utility and can delete or add messages before the posting is sent. The list owner/moderator can also view posted digests by the MMDD format.

### **Subject Line for Digest Postings**

Enter the text that you want to appear as the Subject line on digest postings.

### **Include Headers/Trailers When Posting to Digest Mailbox**

When enabled, the messages posted in the digest will include the header and or trailer messages. We recommend enabling this option as it will make the digest larger and the digest has its own header and trailer.

### **Strip Non-Text Attachments before Posting**

When enabled, strips non-text attachments from messages when the digest posting is sent.

### **Enable Message Separators**

Lets you enter lines or characters to automatically separate messages in the digest posting. When you select this option, the Edit button is enabled. Click the **Edit** button and then enter the lines or characters that you want to use as a separator.

### **Enable Digest Header/Enable Digest Trailer**

When enabled, displays text information (entered in the **Edit** function) at the beginning or end of every digest posting. To enter the header information, select the **Enable Digest Header** option, click **Edit**, and then enter the text information. This information is entered in the *digest\_header.txt* file. To enter the trailer info, select the **Enable Digest Trailer** option, click **Edit**, and then enter the text information. This information is entered in the *digest\_trailer.txt* file.

For example, you can enter the subscribe/unsubscribe information for the digest and have it appear at the beginning or end of every message.

### **Digest Subscribers**

Click this button to edit the list of users (*digest.lst*) subscribed to the digest.

5. Click **Apply** to save your changes.
6. Set the scheduling method (and date/time, if necessary) to determine how often and when the digest will be posted.

Click the **Digest Scheduling** tab. The scheduling options appear.

From the **Periodicity** drop-down list, select how often you want to post the digest. If you select *Daily*, *Weekly*, *Bi-Weekly* (every 2 weeks), or *Monthly*, you can then set the date and time to post the digest. For example, if you select *Daily* and set the **Next Processing Date/Time** to 07/10/1997 3:00 AM, then the digest will initially be posted on that date and time, and then every week thereafter at the same time.

Select *User-Defined* and enter the number of days if you want to post the digest every *nn* days. This controls both how often the digest is posted and how it is rescheduled for the next posting.

Select *Size-Exceeds* and enter the number of Kilobytes to specify a size limit that when reached causes the digest to be published. This controls both how often the digest is posted and how it is rescheduled for the next posting.

Select *Manual* if you want the digest to be posted only when you click the **Process/Send Now** button.

The **Last Processing Date/Time** shows the date and time of the last digest posting.

You can click the **Process/Send Now** button at any time to post the digest now and reschedule according to the selected periodicity.

7. Click **Apply** to save your settings. Click **OK** to save the setting and exit the dialog box.

---

## List Server Commands

The List server will accept the following commands from the body of an email message:

- Subscribe *listname your\_name*
- Unsubscribe *listname your\_name*
- Help
- Help *listname*
- List
- List *listname*
- Set mode digest *listname*
- Set mode standard *listname*

When sending email to the List server to perform any of these commands, you must always address the email to “listserv@*your\_IMail\_server\_hostname*”.

The following examples assume there is a list called “beer” on the IMail Server for Windows NT server:

To subscribe to the “beer” list located on *ipswitch.com*, you send mail to the listserver and enter the Subscribe command in the body of the message, as follows:

```
TO: listserv@ipswitch.com
Subject:

Subscribe beer Fred Farkle
```

To unsubscribe from the list:

```
TO: listserv@ipswitch.com
Subject:

Unsubscribe beer Fred Farkle
```

To get general help from the List server:

```
TO: listserv@ipswitch.com
Subject:

help
```

To get help for a specific list:

```
TO: listserv@ipswitch.com
Subject:

help beer
```

To display all of the “lists” on the IMail server:

```
TO: listserv@ipswitch.com
Subject:

list
```

To get a list of users subscribed to a specific list:

```
TO: listserv@ipswitch.com
Subject:

list beer
```

To receive a digest of messages sent to the list (the user must already be a subscriber to the list):

```
TO: listserv@ipswitch.com
Subject:

set mode digest beer
```

To cancel digest mode and receive messages as they are sent to the list (the user must already be a subscriber to the list):

```
TO: listserv@ipswitch.com
Subject:

set mode standard beer
```

Also, you can subscribe another user by forwarding a message from that user to the listserver.

---

## 14. Technical Information

This chapter describes the programs and files that comprise IMail Server for Windows NT.

---

### Programs and Files

The following files make up the executable and information files:

<b>imail</b>	This is the main user interface for reading mail and for interfacing with the IMail system.
<b>imail1</b>	This is the main user interface for creating mail and is normally invoked from a button or menu option in <i>imail.exe</i> .
<b>smtp32</b>	This is the Simple Mail Transfer Protocol delivery program. This program is called by <b>smtpd32</b> to do the final delivery of any received messages and to perform queue runs to clear the outbound mail queues.
<b>smtpd32</b>	This is the Simple Mail Transfer Protocol Daemon. This daemon also checks the queue to see if any messages need to be sent. If it finds messages, it sends them using SMTP.

## File Locks

IMail employs a built-in locking system to eliminate concurrency problems. Locks are created by modifying the first character of a file name and creating a special file in the same directory as the locked file. Files are only locked while critical reads or writes are being performed on the file. Old locks are removed if they are more than one hour old. This means a user may be locked out of accessing a file or a service for up to one hour as a result of a system crash during a critical time period.

It is possible to manually remove a lock file if you are *positive* that no process is actually accessing that file. One reason for the long time period is to allow for the time required to transmit large files over slow links. For example, the timeout should be long enough to transmit a 2+ megabyte file across a 2400 baud dial-up connection with processing delays caused by the remote end.

## IMAIL.EXE

**imail** includes a POP3 client that operates either in one of two modes.

- It retrieves and deletes all mail from the remote host and closes the connection.
- It retrieves headers only and then retrieves the body on demand and deletes messages on demand, leaving the connection open for the duration of the client session.

**imail** will not retrieve a message if there is not enough available disk space for that message.

**imail** limits are based on the physical memory available on a system, the number of processes running on the system, and available disk space. Other limits in **imail** are caused by limitations in the Windows operating environment or the MS-DOS operating system. In most cases, innovative methods were used to extend these limitations.

**imail** can hold 900 messages on a system configured with 8 Mb of memory, and 1550 on a system configured with 16 Mb of memory.



**imail** is designed to be used by multiple users on a single system or by a single user on multiple systems. When **imail** is used as a POP3 client leaving mail on the host system, it does not read any local mailboxes or store any non-temporary information on the local system unless specifically told to do so. It is assumed that a user operating the system in this manner is using multiple systems, thus mail information retained on the host is intentionally not saved on the local system.

**imail** currently requires that a user be registered through ICONF (or the IMail Server program in Windows 95) before they can use the system. It is possible to work around this, but you probably will have problems. Three things must be present for a user to be valid on the system:

- The user must be entered in the *users.sys* file.
- The user must have a directory under the *users* directory
- The users must have a return mail address in *imail.ini* (or in the Windows 95 registry).

One of the most likely problems to occur with **imail** is caused by some other process modifying a mailbox (*.mbx*) (doing something other than appending to the end of the mailbox) without removing the index (*.idx*) file. If it is necessary to change the contents of a mailbox, delete the index.

**imail** can display multiple messages at the same time. Power users should have no problem working with multiple windows. One potential problem with this is in holding a message window open and subsequently changing the mailbox that you are in.

**imail** currently understands all the defined Content-types from RFC 1521 and currently treats text as a US-ASCII character set and ignores external references. As per RFC 1521, **imail** treats all types except text as application/octet-stream. **imail** currently understands the encoding method defined for MIME, base64. Base 64 encoded text is decoded to the display. Headers, etc. are treated in accordance with RFC 1521.

## IMAIL1.EXE

**imail1** is the primary user interface for creating mail messages and is also responsible for final delivery of the created message either to a local mailbox or to the remote host(s) by way of SMTP. (SMTP delivery is covered under ISMTP1.EXE as it is a subset of **imail1**.)

**imail1** currently has a limitation of the body size of a created message (in the editor only) of 32K or less depending on available memory. Final message size (including attachments) is limited only by available disk space.

**imail1** can currently create multi-part MIME messages with Content-transfer-encoding of binary and base64 and Content-types of text, multi-part and application.

**imail1** supports the following command line options:

- imail1** -a *filename* Specify the name of a file to attach ( in MIME format) to a mail message.
- imail1** -f *filename* Specify the name of a file to send without editing (provided a recipient is also specified on the command line).
- imail1** -i *filename* Specify the name of a file to send with editing. Displays a Create Mail window.
- imail1** -s "*subject*" Specify a subject line.
- imail1** -t "*recipient1[,recipient2][,...]*"  
Specify primary recipients (the TO: field)
- imail1** -c "*recipient1[,recipient2][,...]*"  
Specify carbon copy recipients (the CC: field)
- imail1** -b "*recipient1[,recipient1][,...]*"  
Specify blind carbon copy recipients (the BCC: field)
- imail1** -u *user* Specify the registered user to send the message from.
- imail1** -r Add an Army "Registered:" header.

## SMTPD32.EXE

**smtpd32** duplicates the functions contained within **imail1** without any user interface nor the ability to create a message. **smtpd32** is responsible for processing of messages left in the SPOOL directory by other processes and attempting final delivery both to local addresses as well as remote addresses by way of SMTP.

**smtpd32** will only deliver mail to addresses found in the *users.sys* and *aliases.sys* file. Aliases are expanded, though aliases that resolve to filenames are considered invalid and were/are the responsibility of the program that placed the message in the SPOOL directory. (**smtpd32.exe** will expand lists on receipt of the message and **imail1** will expand lists on creation of a new message. Thus it is not possible to dump a message into the queue that references a list without doing the expansion yourself.)

**smtpd32** (and **imail1**) has a probable limitation of 100 recipients in a message but is determined by length of the recipient addresses, number of duplicates, etc.. This is in accordance with RFC 821 section 4.5.3. (It has actually been tested with much more than this.)

**smtpd32** does not parse any headers that are contained in the message itself and expects to find properly formatted information in the queue control file, thus there are no size restrictions on line lengths, etc. Whatever is passed to it is passed along to the final system with no input checking. Recipients are sorted by hostname and are sent as a single message to multiple recipients to a single system.

Processing rules for **smtpd32** (and **imail1**):

1. Check to see if recipient host is the local host.
  - a. If so, strip host name if present and add a host of LOCALHOST.
  - b. If no host is specified and the user is listed in *users.sys*, set the hostname to LOCALHOST.
  - c. If the user is not listed in *users.sys*, set the host to the "Default host name".
2. Sort all recipients by hostname.

3. Deliver to all local recipients.
4. If any recipients left in the list, if the send direct option is enabled, for each of the hosts, connect to that host and deliver the mail to all recipients located on that host.
  - a. If the delivery succeeds, remove from the list.
  - b. If the connection fails, leave in the list.
5. If any recipients left in the list, connect to the “Smart gateway” and deliver to all remaining addresses
  - a. If the delivery succeeds, remove from the list.
  - b. If the connection fails, leave it in the queue.
6. Return any invalid recipients to sender.

**smtpd32** supports the following command line options:

**smtpd32**                      With no options, **smtpd32** attempts to deliver all messages in the mail queue.

**smtpd32** *queue\_filename*                      Cause **smtpd32** to process the single messages pointed to by the *queue\_filename*.

**smtpd32** -qr -x                      Cause **smtpd32** to attempt to deliver all messages in the mail queue.

---

## Appendix A – Files and Directories

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### Distributed Programs

MAILDIR\fingrd32.exe	Finger server program, 32 bit. (optional)
MAILDIR\jadmin.exe	IMail Administrator, 32-bit
MAILDIR\imail.exe	IMail message reading user interface, 16 bit. (optional)
MAILDIR\imail1.exe	IMail message creation user interface, 32 bit. (optional)
MAILDIR\imap4d32.exe	IMAP4 server program, 32 bit.
MAILDIR\imonitor.exe	IMail monitor server, 32 bit. (optional)
MAILDIR\imutil.exe	IMail user utility, 16 bit. (optional)
MAILDIR\iradmen.exe	IMail remote administration utility
MAILDIR\listsrv.exe	IMail List server, 32 bit. (optional)
MAILDIR\pop3d32.exe	POP3 server program, 32 bit.
MAILDIR\pserve.exe	Eudora Password server program, 32 bit.
MAILDIR\regist32.exe	IMail user manager, 32 bit.
MAILDIR\smtp32.exe	IMail delivery program, 32 bit.
MAILDIR\smtpd32.exe	IMail SMTP server program, 32 bit.
MAILDIR\syslogd.exe	IMail log server
MAILDIR\whoisd32.exe	Whois server, 32 bit. (optional)
WINNT\SYSTEM\imail.cpl	IMAIL control panel applet, 32 bit.

## Distributed Files

MAILDIR\mailmsg.dll	Event log messages
MAILDIR\iadmin.hlp	IMail Administrator help file
MAILDIR\imutil.hlp	IMUTIL help file
MAILDIR\regist32.hlp	REGIST32 help file
MAILDIR\svccpl.hlp	Control Panel Application help file

## Directories

MAILDIR\cfg	Configuration directory where databases are stored
MAILDIR\lists	List server working directory
MAILDIR\spool	Temporary directory where messages are spooled while awaiting delivery and where the log file is kept.
MAILDIR\users	Users directories parent directory
MAILDIR\Web	Web server working directory

## Created Files

MAILDIR\spool\syslog.txt	System log file (this file SHOULD be manually removed as required)
MAILDIR\spool\d*.*	Body file
MAILDIR\spool\q*.*	Queue header file, contains 4 lines: Qfilename_of_body_file Tnumber_of_delivery_attempts (digit) S<sender_email_address> R<recipient_email_address> (lines)

MAILDIR\spool\t*.*	Queue header file created during receipt of a message, renamed to q*.* after complete receipt
MAILDIR\spool\*.tmp	Temporary file

---

## Installing and Removing Services

You can manually remove or install any of the services provided by IMail Server for Windows NT by using the `-install` and `-remove` switches from the DOS command prompt.

For example to remove the POP3 service, run the following program:

```
pop3d32 -remove
```

To install the POP3 service, run the following program:

```
pop3d32 -install
```

After installation, you must either restart the system or manually start the server through the Control Panel's Services application. You must remember to remove IPOP3D from your Startup group. We recommend renaming *ipop3d.exe* or removing it from your *mail* directory.





---

## Glossary

### aliases

An alias is another name assigned to a hostname that can be used in place of the hostname (plus domain name). Aliases are often used to shorten long hostnames for convenience.

### cache

Each time a Domain Name Server processes a lookup request for a host not in its domain, it must query another name server for the information. When a reply is received, the Domain Name Server saves this address information in a cache. The next time it receives a query for the same information, it does not have to query another name server for the information. Because address data in the Domain Name System changes frequently, the system administrator assigns a Time to Live (**TTL**), usually a number of days, after which the cache is cleared.

### client

A client is a program running on a networked computer that requests services from a **server** program, which is usually running on another networked computer. The client communicates with the server using a protocol. For example, an FTP client communicates with an FTP server using the FTP protocol.

### domain

A term used to refer to the subdivisions of the Internet network. Domain can mean the major subdivision of which your network is a part (for example, .com, .edu, .gov, .net, .us, .uk,) or it can refer to your part of the network (for example, ipswitch.com). See also **Domain Name System**.

## Domain Name System

A distributed database system that translates hostnames (for example, tortoise.ipswitch.com) to IP addresses (for example, 156.21.50.10). All hosts on the Internet are named using the conventions specified by the Domain Name System. Hostnames are used because they are easier to remember than numerical addresses (IP addresses). An example host and domain name is tortoise.ipswitch.com, where tortoise is the hostname, and ipswitch.com is the domain name. The domain represents the network where the host is located.

### domain name server

A host that keeps a table of hostnames and IP addresses and provides the lookup service for client programs. A domain name server is used by client programs to look up the IP address of a given host. A domain name server provides hostname to IP address mapping for the local network and provides access to the Domain Name System to look up hosts in other domains.

A *primary* name server contains all the information for the domain in its database files. If you add a second name server for backup or to offload the primary server, you can set it up as a *secondary* server. A secondary name server obtains its domain information by copying the database files from the name server that is primary for that domain. The advantage of using secondary servers is that you can maintain the domain information on one name server (the primary). You can specify how often any secondary servers should “refresh” their data.

### electronic mail

Electronic mail is a term used to describe the process that allows information to be passed electronically from one person to one or more other persons on a network.

See also **POP3** and **SMTP**.

## **Finger**

The Finger protocol is a common Internet language that allows remote users to see information about users registered on a system. This includes the last time a user read their mail and a “plan” file provided by the user that contains any additional information the user wishes to provide in response to Finger requests.

## **FAQ**

A document that lists and answers Frequently Asked Questions about a Web site, newsgroup, or other Internet resource. A good source of information for new users.

## **FTP**

FTP stands for File Transfer Protocol. This is one of the standard protocols defined for use on a TCP/IP network and used to transfer files between systems.

## **IMAP4**

Internet Message Access Protocol version 4 (IMAP4) is a method of accessing electronic mail messages that are kept on a (possibly shared) mail server. It permits a client e-mail application to access remote message stores as if they were local.

## **in-addr.arpa domain**

A special domain on the Internet that maps IP addresses to domain names. This domain is used to do reverse lookups, where the IP address is known and the application is querying for the hostname.

## **Internet**

A distributed network of computer systems that uses a set of rules based on the TCP/IP protocol to handle communications between systems.

## **IP**

Internet Protocol; the protocol that determines how packets (bundles of data) traverse the Internet network to find their destination. See also TCP.

## **IP address**

All hosts on the Internet are identified by a unique numeric code, called the IP address. 156.21.50.1 is an IP address. The Domain Name System is used to map the IP address to a name.

## **LDAP**

Lightweight Directory Access Protocol (LDAP) is a method of accessing directory information stored on a server. It permits an LDAP-enabled client to search for and view user information stored in an LDAP directory.

## **list server**

A List server provides an automated way to manage mail discussion groups. All messages for a mail discussion group received by a List server are sent to all the members of that mail discussion group.

The List server manages the adding and removing of users from the subscriber list as well as the distribution of messages to all subscribed users. Users subscribe to a list by mailing a subscription request to the List server, which automatically adds them to the list.

List servers are popular for running customer technical support forums and many other kinds of discussion groups.

## **name server**

See domain name server.

## **namespace**

Synonymous with domain.

## **POP3**

Post Office Protocol version 3 (POP3) is the most common protocol for communicating with a mail server (otherwise known as a post office) to retrieve messages for a user. Since POP3 servers are always available to receive incoming mail, individual users do not have to have their PCs turned on at all times. POP3 servers hold mail for users until they connect to download their messages. IMail Server for Windows NT is a POP3 mail server.

## **protocol**

A set of rules that define how computers will exchange information.

## **Request for Comments (RFC)**

A set of documents that define the Internet standards. RFCs are also used to propose new standards, or extensions to existing standards.

## **reverse Lookups**

When the client program requests the hostname of a given IP address, the DNS server does a reverse lookup. This is the reverse of the normal DNS lookup procedure, where the IP address for a given hostname is sought. Reverse lookups use a special domain, the **in-addr.arpa** domain, which maps IP addresses to domain names.

## **server**

A server is a program running on a networked computer that processes requests for services from a **client** program, which is usually running on another networked computer. The client and server communicate using a protocol. For example, an FTP client communicates with an FTP server using the FTP protocol.

## **service**

“Service” is a formal Windows NT term for an executable object that is installed in a registry database maintained by NT’s Service Control Manager. A service is a program that can be automatically started when the system is booted and will continue to run until the system is shut down. The service will continue to run even when no one is logged on the system.

## **SMTP**

Simple Mail Transfer Protocol (SMTP) is designed to efficiently and reliably transfer mail across TCP/IP networks, including the Internet. SMTP defines the interaction between mail systems to facilitate the transfer of electronic mail even when the mail systems are on different types of computers or running different operating systems. SMTP is required to send or receive mail over the Internet. IMail Server for Windows NT is an SMTP server.

## **Spamming**

When a bulk mailer sends unsolicited mail to thousands of other people, it is known as “spamming.” Spam mailers may try to use your system to relay their messages to other Internet mail users, tying up your valuable system resources. IMail Server provides antispamming features.

## **TCP**

Transmission Control Protocol; the protocol that controls how data is assembled and disassembled in packets. See also IP.

## **TTL**

The Time to Live (TTL) specifies an amount of time (usually in seconds) for which a secondary name server can use the DNS database files that it copied from the primary server before it needs to refresh the data.

## **UDP**

User Datagram Protocol; a transmission protocol for uses that do not require the control and error checking of TCP.

## **Whois**

The Whois protocol is a common Internet language that allows remote users to search for mail addresses of users.

## **Winsock**

WinSock is a specification that developers of TCP/IP network software for Microsoft Windows use as a guideline for the standard application programming interface to their network software.

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