

---

# IMail Server

---

## Getting Started Guide

Software Version 8

---

**Ipswitch, Inc.**

Ipswitch, Inc. Website: <http://www.ipswitch.com>  
10 Maguire Road Phone: 781-676-5700  
Suite 220 Fax: 781-676-5710  
Lexington, MA 02421-3110

©1995-2003 Ipswitch, Inc. All rights reserved.

## IMail Server for Windows NT/2000 8.0 User's Guide

This manual, as well as the software described in it, is furnished under license and may be used or copied only in accordance with the terms of such license. Except as permitted by such license, no part of this publication may be reproduced, photocopied, stored on a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, recording, or otherwise, without the expressed prior written consent of Ipswitch, Inc.

The content of this manual is furnished for informational use only, is subject to change without notice, and should not be construed as a commitment by Ipswitch, Inc. While every effort has been made to assure the accuracy of the information contained herein, Ipswitch, Inc. assumes no responsibility for errors or omissions. Ipswitch, Inc. also assumes no liability for damages resulting from the use of the information contained in this document.

IMail, the IMail logo, WhatsUp, the WhatsUp logo, WS\_FTP, the WS\_FTP logos, Ipswitch Instant Messenger (IM), the Ipswitch Instant Messenger (IM) logo, Ipswitch, and the Ipswitch logo are trademarks of Ipswitch, Inc. Other products and their brands or company names, are or may be trademarks or registered trademarks, and are the property of their respective companies.

The following are copyrights of their respective companies or organizations: The spelling portions of this product are the property of WinterTree Software, Dictionary Copyright © 1999 Wintertree Software Inc.; code derived from RSA Data Security, Inc. MD5 Message-Digest Algorithm, All rights reserved Copyright 1991-2 RSA Data Security, Inc.; SSL implementation in this product is based on the SSLeay libraries written and copyrighted by Eric Young (eay@cryptsoft.com) crypto/cryptlib.c Copyright 1995-1998. Portions of the implementation are copyrighted by RSA Data Security, Inc. All rights reserved. This product also includes software written by Tim Hudson(tjh@cryptsoft.com).

## Printing History

May 2001	First edition
February 2003	Second edition

# Contents

About this Guide . . . . .	1
Other IMail Server Information . . . . .	1
Components of an Internet Mail System . . . . .	1
Planning Your Installation . . . . .	3
Step 1: What Do You Need? . . . . .	3
Step 2: How Many Users Will You Support? . . . . .	4
Step 3: Create DNS Entries for Your Mail Server . . . . .	4
Step 4: Choose the Type of User Database . . . . .	6
Step 5: What E-Mail Services Do You Want to Provide? . . . . .	7
Step 6: Determine Security Levels and Access Control . . . . .	8
Step 7: One Mail Host or Multiple Hosts? . . . . .	10
Installing IMail Server . . . . .	11
Step 1: Start the Installation Procedure . . . . .	11
Step 2: Set the Official Host Name for Your Server . . . . .	11
Step 3: Select the User Database . . . . .	12
Step 4: Select the Location for Installed Files and Folders . . . . .	12
Step 5: Set Security Options . . . . .	12
Step 6: Select the Template Set to Use for Web Messaging . . . . .	13
Step 7: Select the Dictionaries for Web Messaging . . . . .	13
Step 8: Select the IMail Services You Want to Offer . . . . .	13
Step 9: Add a Test User . . . . .	14
Step 10: Restart your system . . . . .	14
Testing Your IMail Server Installation . . . . .	15
Step 1: Confirm your DNS Settings . . . . .	15
Step 2: Confirm Your IMail Server Installation . . . . .	17
Step 3: Confirm User Database Setup . . . . .	18
Step 4: Sending and Receiving Mail in a Test Account . . . . .	19
Upgrading . . . . .	20
Upgrading Using External Databases . . . . .	21
Upgrading Web Messaging . . . . .	21
Upgrading Anti-Spam Features . . . . .	22
Re-Installing IMail Server to a Different Location . . . . .	22
Removing IMail Server . . . . .	23
Enabling Wizards . . . . .	23
Technical Support . . . . .	24
<b>Appendix A: Mail Servers and the DNS . . . . .</b>	<b>25</b>
What is DNS? . . . . .	25
How the Mail Server Uses DNS . . . . .	26
Setting Up Mail Server Records in the DNS . . . . .	27
Your Local Network's DNS server . . . . .	27

Example of a Basic Configuration.....	28
Sample DNS Records .....	30
Other Configurations .....	30
<b>Index .....</b>	<b>31</b>

---

## About this Guide

This **Getting Started Guide** provides you with step-by-step instructions on planning, installing, and testing your IMail Server system.

### Other IMail Server Information

- The *IMail Server User's Guide* provides a complete reference for user registration, advanced configuration, services options, mailing lists, and more.
- IMail Server provides help on all screens and dialogs.
- IMail Server product pages and a Knowledge Base of technical articles and updates can be found at:

<http://www.ipswitch.com/Support/IMail>

---

## Components of an Internet Mail System

IMail Server provides the following basic services required to implement an Internet-based mail system. (The illustration on the next page shows these components.)

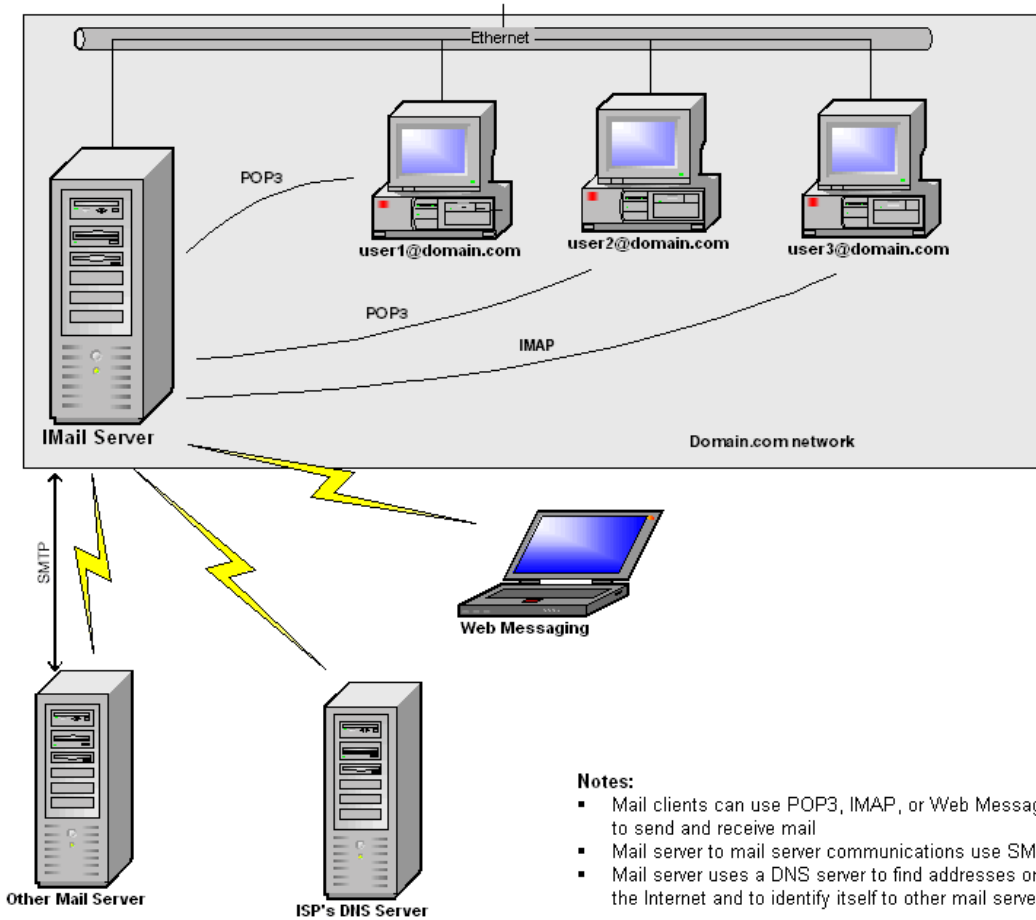
- An SMTP server which lets IMail Server communicate with other mail servers on the Internet.
- A POP3 server which lets an e-mail client retrieve mail from the mail server.
- An IMAP server which provides another method whereby an e-mail client can access mail on the mail server.

This guide focuses on setting up the mail server; however, you also need the following software components to connect your mail system to the Internet and to provide mail capabilities for your users:

- A Domain Name System (DNS) server. The DNS server can be on your network or hosted by your Internet Service Provider.
- For each mail user, e-mail client software, such as Microsoft's Outlook Express<sup>®</sup> or Qualcomm's Eudora<sup>®</sup>, is needed.

Alternatively, mail users can use IMail Server's Web Messaging to read and send mail through any web browser.

## Components of a Mail System



---

## Planning Your Installation

If you possess a working knowledge of Windows-based applications and operating systems, you will find that installing IMail Server is as quick and easy as installing some of our other popular software products. We do, however, recommend that you plan the installation to ensure an IMail Server configuration that works for your organization.

This section describes what you need to know about the primary host (the system on which you install IMail Server), and what decisions you need to make before running the installation.

### Step 1: What Do You Need?

To get the best performance and the ability to expand your mail service, we recommend that you designate a computer to function as your e-mail server and you do not run other servers on the computer.

System requirements are:

- An Intel Pentium processor or higher
- Microsoft Windows 2000 or NT 4.0 or later with Service Pack 6; Windows 2000 Server or Advanced Server, and Windows XP.

---

#### Note

IMail Server is *not* compatible with Windows 95, Windows ME, Windows 98, or Win32s.

---

It is recommended that the NTFS (rather than FAT) file system be used for increased operability and security.

- Network interface card installed and configured to use Microsoft's TCP/IP for Windows NT or Windows 2000; OR a dial-up TCP/IP connection
- A full-time or dial-up connection to the Internet
- Modem (optional, but needed for mail-to-pager, mail-to-fax, and notifications).
- A static IP address.

## Step 2: How Many Users Will You Support?

Determine how many active users you plan to have and the hardware system needed to support them. The following table depicts minimum system requirements based on the number of users:

			Hard Drive Space	
Active Users	Processor	RAM	POP <sup>1</sup>	IMAP <sup>2</sup>
250 or less	Pentium 100 MHz	64 MB	2 GB	6 GB
250 - 1000	Pentium 200 MHz	128 MB	4 GB	12 GB
1000 - 10,000	Pentium II 300 MHz	256 MB	8 GB	24 GB
10, 000 - 100,000	Pentium II 400 MHz	512 MB	16 GB	48 GB
100, 000+	Dual Pentium II+	1 GB	32 GB+	96 GB+
1. POP retrieves mail from the server and deletes it from the server.				
2. IMAP leaves mail on the server.				

## Step 3: Create DNS Entries for Your Mail Server

Determine the Domain Name System (DNS) settings required for the system on which you will install IMail Server. Before you create DNS entries, you will need the following information from your Windows TCP/IP settings:

- **Primary Host.** The primary host is the system on which you install IMail Server.
- **Host Name** (of Primary Host). The host name for your e-mail server; for example, *imailbox*.
- **IP Address** (of Primary Host). The IP Address is a numerical address for the e-mail server host (i.e. *156.21.50.15*)
- **Domain Name.** The domain name identifies the network that the host is on (i.e. *domain.com*).

To identify your mail host in the DNS, you will use the Host Name plus the Domain name; for example, *imailbox.domain.com*. This is also known as the Fully Qualified Domain Name (FQDN).

To get the DNS information on Windows NT system, double-click the **Network** icon in the Control Panel, select the **Protocols** tab, select **TCP/IP Protocol**, and then click **Properties**. The TCP/IP window appears. Click **DNS** to view the domain information.

To get the DNS information on a Windows 2000 system, click the **System** icon in the Control Panel, select the **Network Identification** tab, then click **Properties**. The **Identification Changes** dialog box shows the domain information.

The Host Name and Domain must be registered in the DNS (Domain Name System) if you want remote hosts (hosts not on your local network) to be able to communicate with your system.

To properly send and receive e-mail, the following records should be added to your DNS server. If an Internet Service Provider (ISP) is hosting your DNS server, contact your ISP to have the appropriate records added to the DNS server.

- **MX Records.** A Mail eXchanger (MX) record is used to identify the computer that processes mail for a domain. If you will host multiple domains, you'll need an MX record for each domain. The MX record points to the (fully qualified) host name of the IMail Server (the Primary Host). For example:  
*domain.com IN MX 10 mailbox.domain.com*
- **A Records.** You will need an Address (A) record for the IMail Server that has the IP address of the IMail Server (the Primary Host). Ex: *mailbox.domain.com IN A 156.21.50.15*
- **PTR Records.** A pointer (PTR) record is used for reverse lookups. You will need a PTR record that resolves the IP address of your IMail Server (the Primary Host) to the Official Host Name of your IMail domain. Ex: *156.21.50.15 in-addr.arpa. host=mailbox.domain.com*

If you need more information about setting up the DNS entries, see:

- A primer with examples in “Appendix A: Mail Servers and the DNS” on page 25.
- DNS tutorials in the IMail Support Center at:  
<http://www.ipswitch.com/Support/IMail/dns.html>
- Our Knowledge Base in the IMail Support Center at:  
<http://www.ipswitch.com/Support/IMail>

---

### Note

You can use Ipswitch's WS\_Ping ProPack to look up DNS information. An evaluation version is included on the IMail Server CD. For more information about looking up DNS information using WS\_Ping ProPack, see "Step 1: Confirm your DNS Settings" on page 15.

---

## Step 4: Choose the Type of User Database

Identify the database used by the Primary Host to register and authenticate users. The Primary Host can use one of the following databases for registration and authentication: (Registration is the process by which user mail accounts are created. Authentication is the process by which user IDs and passwords are verified.)

- **IMail Database.** All user IDs and passwords for mail accounts are stored, separately from either the Windows NT or 2000 user database or any external database, in a proprietary database in the Windows registry.

You can also import Windows NT or 2000 users into an IMail user database, without having them linked to the Windows NT or 2000 user database. For details on importing Windows NT or 2000 users, refer to the *IMail Server Users Guide* "Importing NT Users" section in Chapter 4.

- **Windows NT Database.** This database provides automatic creation of user mail accounts for any user listed in the Windows NT or Windows 2000 user database on your host machine.

Please note that the Primary Mail Host needs access to the Windows NT or 2000 user database for your network.

In order to have access to the user databases, IMail Server must be installed on a Primary Domain Controller (PDC) or a Backup Domain Controller (BDC).

To view a current listing of users in your Windows NT or 2000 user database, use the appropriate administrative tool as described in your Windows documentation.

You will not be able to add or delete users using IMail Administrator. Instead, you must use the appropriate Windows administrative tool (these are different for Windows NT and Windows 2000).

---

**Note**

A mailbox and other user files are created for a user when the mail server receives a message for that user, or when a user first accesses the IMail Server through a mail client.

---

- **External Database.** IMail Server can use an external database to register and authenticate users. This option lets you specify an existing ODBC-compliant user database and lets you add and delete users either from the IMail Administrator or the external database. IMail Server supports Microsoft SQL Server or Microsoft Access.

If you will use an external database, make sure you have set up the database connection in the Windows ODBC Data Source Administrator. Before you start the IMail Server installation, you will need the ODBC System DSN name for the database and the User ID and password for logging on to the database.

**Notes:**

- If you want to use a different ODBC database, you can modify IMail Server's ODBCUser.dll file to support it. For more information, read the ODBC topics in our Knowledge Base at: <http://support.ipswitch.com/kb>

To display the topics, enter **ODBC** in the **Search for** box, select *IMail Server* from the product list, then click **Search**.

- You can download the source code for the ODBCUser.dll from: [ftp://ftp.ipswitch.com/Ipswitch/Product\\_Support/IMail/odbcuser7.zip](ftp://ftp.ipswitch.com/Ipswitch/Product_Support/IMail/odbcuser7.zip)

### **Step 5: What E-Mail Services Do You Want to Provide?**

Besides the basic SMTP service, identify the other services you would like your e-mail server to provide. For example:

- Service Monitoring (IMail Monitor Service) lets the mail administrator monitor the status of all IMail Services (SMTP, POP3, IMAP, Web Messaging).

- Web Messaging lets users read mail from the server and send mail using a web browser.
- POP3 service lets users retrieve mail and send mail using clients like Qualcomm's Eudora Pro and Microsoft's Outlook. With POP3, user mail is usually stored on the user's PC.
- IMAP4 service lets users read mail from the server and send mail using clients like Qualcomm's Eudora Pro and Microsoft's Outlook. With IMAP4, mail is usually stored on the mail server.

---

#### Note

You will have the opportunity to specify these services and more during installation.

---

### Step 6: Determine Security Levels and Access Control

Identify the levels of security and access control needed to ensure the integrity of your mail server. IMail Server provides several ways to secure your e-mail server; for example:

#### SMTP Mail Relay options

The mail relay options allow you to set appropriate security that determines who can use your mail server and who cannot. IMail Server provides five options for mail relay:

---

#### Note

During installation, you can select from four options: **Relay for select addresses**, **No mail relay**, **Relay mail for anyone**, and when upgrading: **Do not change my existing local mail relay settings**. After installation, you can change the relay setting in the **SMTP Security** tab in IMail Administrator.

---

- **Relay for Select Addresses**

This option allows you to enter the IP addresses of "trusted" hosts and subnets, for which you will relay mail. IMail Server will consider these addresses to be local. If mail is received from any of the specified IP addresses, IMail Server will accept the mail that is destined for other hosts. The IMail SMTP server will also accept mail from other hosts that is destined for the specified IP addresses.

- **Relay Mail For Anyone** (not recommended)

Selecting this option will cause the SMTP server to accept mail from any host that is destined for any other host. This option is the least secure; it allows your server to be used by anyone to send mail to anyone.

If you select this option your server may be blacklisted for running an open relay. To prevent this you should choose the previous option of “Relay for Select Addresses”.

- **Relay For Local Hosts Only**

This option checks to make sure the "From" address of incoming mail contains a valid IMail Server host name.

This option is more secure than the previous one, but it is possible to forge the "From" address and circumvent this security.

- **Relay For Local Users Only**

This option checks to make sure the "From" header of incoming mail contains a valid IMail Server host name and that the user is a user on that host. It does not check user aliases. If the host name or User ID is not valid, the server does not relay mail.

As with the previous option, it is possible to circumvent this security option by forging the "From" header. You cannot use this option if you are using a “store and forward” setup to relay mail for another server.

- **No Mail Relay**

The server will refuse to accept mail destined for other hosts (any host not on the IMail Server machine). If all of your users send and receive mail from the same host that IMail Server is on, or if they use Web Messaging to access mail, you can select this option.

“No Mail Relay” is the best option if you are unable to “Relay for select Addresses” because your users dial up using dynamic IP addresses, or if you are concerned that “Relay Mail for Local User” and “Relay Mail for Local Hosts” can be easily spoofed.

For more information on Mail Relay options and other security features, see Chapter 8 in the *IMail Server User's Guide*.

### **SMTP Authentication**

SMTP Authentication lets you verify each user who attempts to send mail through your mail server. SMTP Authentication is always enabled on the IMail Server. Users need to set their mail clients to do an SMTP login; for example, in Microsoft's Outlook, select the option **My outgoing mail server requires authentication**.

SMTP Authentication is used in the following cases:

- If you use the **No Mail Relay** option for SMTP relay.
- If you use the **Relay for select Addresses** option, SMTP Authentication enables users who send from IP addresses that you do not list; for example, users who are travelling and do not have a static IP address.

### **Secure Sockets Layer (SSL)**

SSL provides user authentication and encryption for your Web Messaging and Web Calendaring communications.

For more information about SSL, see the help file for the IMail SSL Configuration Utility (available from **Start->Programs->IMail** menu). The Introduction topic provides background information on SSL and how it works.

### **Step 7: One Mail Host or Multiple Hosts?**

You can have multiple hosts on one IMail Server system, with each host handling the mail for a single domain. This feature lets you provide separate mail services for separate organizations.

Hosts can be added to the IMail Server after you have completed the installation of the primary host.

For information about setting up additional hosts and information about other advanced configuration options, see Chapter 3 in the *IMail Server User's Guide*.

---

## Installing IMail Server

This section walks you through the steps to get IMail Server up and running. This is followed by a quick test of your installation. The last two sections cover upgrading and removing IMail Server.

To install IMail Server, complete the following steps:

### Step 1: Start the Installation Procedure

- 1 Log on to Windows NT or Windows 2000 as a System Administrator, or to an account with System Administrator privileges.
- 2 Back up your Windows registry. (Run *regedit.exe* and select **Export Registry File** from the **Registry** menu.)
- 3 Do one of the following:
  - If you purchased an IMail Server CD-ROM, insert it in the CD-ROM drive. If the installation program does not automatically start, select **Run** from the **File** menu, and then enter the CD-ROM drive path followed by *install\setup.exe*, (for example: *d:\install\setup.exe*).
  - If you downloaded IMail from the Internet, run the downloaded *imailec.exe* application.

The installation program starts.

---

#### Note

As you proceed through the installation questions, note that you can get help on any installation screen by pressing F1.

---

### Step 2: Set the Official Host Name for Your Server

The first installation screen (**Official Host Name**) asks you to confirm (or enter) the official host name of your primary system. This will be the “primary host” for your IMail Server installation.

If you don’t know the Official Host Name, see “Step 3: Create DNS Entries for Your Mail Server” on page 4.

If needed, you can add other “virtual hosts” after completing installation of the primary host.

### Step 3: Select the User Database

The next screen (**Database Options**) asks you to select the user database option you prefer. See “Step 4: Choose the Type of User Database” on page 6. Select from the following database options:

- IMail Database
- Windows NT Database
- External Database

If you selected **External Database**, you must specify the ODBC **System DSN** for the database, along with the user ID and password to log on to the database server. IMAILSECDB is the default name that the IMail ODBC link uses. For example, for the **System DSN**, you would enter: `imailsecdb;UID=imailuser;PWD=password`

---

#### Note

Before you use IMail Server to associate an external database with a host, use the Windows Control Panel to make sure there is a System DSN (Data Source Name) that points to a valid database name. See your Windows NT and database documentation for information on the System DSN.

---

### Step 4: Select the Location for Installed Files and Folders

In the next screen (**Choose Destination Location**), enter the directory where IMail Server will be installed. This directory must *not* be moved or renamed after installation, and the path and directory must *not* contain spaces.

In the **Select Program Folder** screen, confirm or enter the Program Group in which IMail Server will appear (on the **Start** menu).

### Step 5: Set Security Options

The next two screens ask whether you want to install SSL keys, and what SMTP security you want to set. After you complete the installation, you can change either of these settings using the IMail Administrator. In the *IMail Server User's Guide*, see Chapter 6: Web Messaging and Chapter 8: SMTP Security.

SSL applies only to Web Messaging. In the **SSL Keys** dialog box, select one of the following options:

- If you already have a third-party SSL certificate, click **No**. After installing IMail Server, run the IMail SSL utility by selecting **Programs -> IMail Server -> IMail SSL Configuration Utility** from the **Start** menu, and then follow the instructions in Help.
- If you do NOT already have a third-party SSL certificate, but want to run the IMail web server using a “self-signed” SSL certificate, click **Yes**.
- If you would like to read more about SSL before making a decision, click **No**. (You can always install default keys later.)

In the **SMTP Security** screen, you can select the mail relay option you want to use. See “Step 6: Determine Security Levels and Access Control” on page 8. This setting is important as it determines who can and cannot use your e-mail server (meaning your users vs. spammers).

### **Step 6: Select the Template Set to Use for Web Messaging**

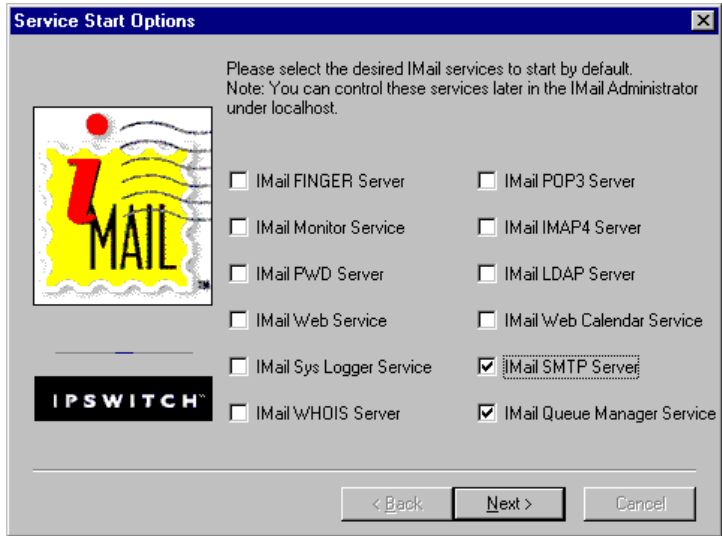
Select the set of web templates that you want to install by default. You can add additional templates (i.e. to virtual hosts) later by manually copying them from the CD.

### **Step 7: Select the Dictionaries for Web Messaging**

Select the dictionaries that you want to install by default for Web Messaging. Note that dictionaries can be installed later. For explanations of each dictionary, press F1 on this screen during the installation process.

### **Step 8: Select the IMail Services You Want to Offer**

The install program displays a list of IMail services (**Service Start Options**) already running on your system. (If you have never installed IMail Server before, these services are **IMail SMTP Server**, and **IMail Queue Manager** service). Select any others you want to start by default.



---

### Note

You can also specify default services at any time after the installation. However, to send and receive e-mail, as a minimum, the **IMail SMTP Server** box must be checked.

---

### Step 9: Add a Test User

If you selected the IMail Database option, the **Add User** screen appears. We recommend you add a few “stand-in” users now so you can test the installation. (Note that you can also add users at any time after the installation.)

### Step 10: Restart your system

If you are prompted to restart your system, it is because the installation could not properly set up a file. A Dynamic Link Library (DLL) is most likely to cause this problem. To ensure that IMail Server runs properly, restart as soon as possible.

---

## Testing Your IMail Server Installation

This section provides some quick tests to ensure that you have a working IMail Server configuration. See “Appendix A: Mail Servers and the DNS” on page 25 for detailed DNS information.

### Step 1: Confirm your DNS Settings

To check the DNS records for your IMail Server installation, you can use either of the following tools:

- If you selected to install an evaluation copy of WS\_Ping ProPack, you can use the Lookup tool that is a part of this suite of diagnostic tools.
- The “nslookup” command in Windows NT or 2000 operating system.

To check your DNS settings using WS\_Ping ProPack:

- 1 From the **Start** menu, select **Programs->WS\_Ping ProPack->WS\_Ping ProPack**, and then click the **Lookup** tab.
- 2 View the **MX record** to verify that the domain name is pointing to the correct host name. To do this, enter the following:
  - **Name or IP address:** Enter the domain name (for example, *domain.com*).
  - **DNS Server:** Enter the host name or IP address of the domain name server you want to use or, select **stack** from the drop-down list to use your operating system’s network stack.
  - **Query Type:** Select **MX** from the list.

Click **Start**. You will get information like the following:

```
>domain.com
 10,imailbox.domain.com
```

- 3 View the **A record** and verify that host name is pointing to the correct IP address. To do this, enter the following:
  - **Name or IP address:** Enter the Official Host Name of the IMail Server host (for example, *imailbox.domain.com*).
  - **DNS Server:** Enter the host name or IP address of the domain name server you want to use; or, select **stack** from the drop-down list to use your operating systems’s network stack.

- **Query Type:** Select **A** from the list.

Click **Start**. You will get information like the following:

```
>imailbox.domain.com
 156.21.50.10
```

- 4 View the **PTR Record** and verify that the IP Address points to the official host name. To do this, enter the following:
  - **Name or IP address:** Enter the IP address of the IMail Server host (for example, *156.21.50.10*).
  - **DNS Server:** Enter the host name or IP address of the domain name server you want to use; or, select **stack** from the drop-down list to use your operating system's network stack.
  - **Query Type:** Select *PTR* from the list.

Click **Start**. You will get information like the following:

```
>10.50.21.156.in-addr.arpa.
  host = imailbox.domain.com.
```

- 5 Record any errors. If you host your own DNS server, correct the entries. If your DNS service is hosted by an ISP, contact them and request the changes.

To check your DNS settings using the “nslookup” tool:

- 1 Run the Windows “nslookup” command to view the **MX record**. View the **MX record** to verify that the domain name is pointing to the correct host name. For example, enter:

```
nslookup
>ls -t MX domain.com
```

The command returns information like the following:

```
>domain      MX 10   imailbox.domain.com
```

- 2 Under the Windows “nslookup” command, view the **A record** and verify that host name is pointing to the correct IP address.

```
nslookup
>ls -t A imailbox.domain.com
```

The command returns information like the following:

```
>imailbox.domain.com  A  156.21.50.10
```

- 3 Under the Windows “nslookup” command, view the **PTR Record** and verify that the IP Address points to the official host name.

```
nslookup
>ls -t PTR 156.21.50.10
```

The command should return information like the following:

```
>mailbox.domain.com PTR 156.21.50.10
```

- 4 Record any errors and, if you host your own DNS server, correct the entries. If your DNS service is hosted by an ISP, contact them and request the changes.

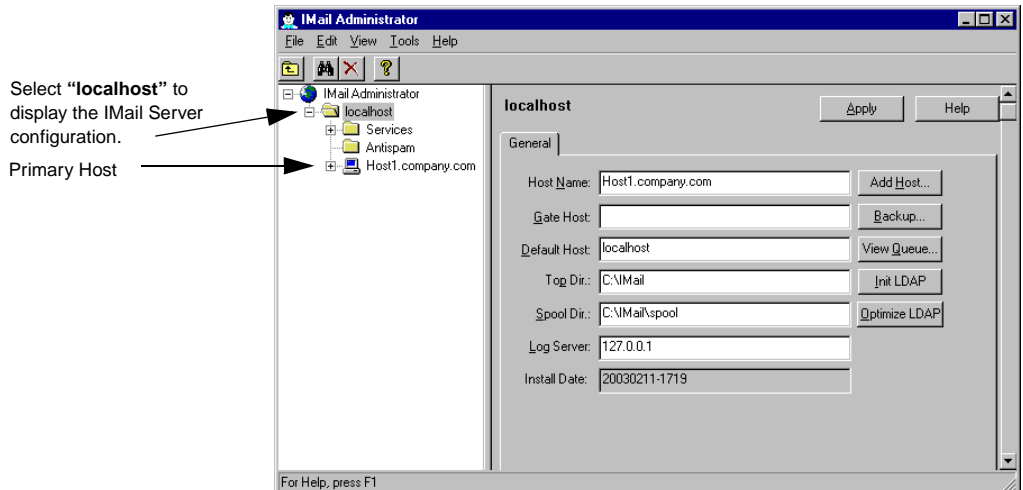
## Step 2: Confirm Your IMail Server Installation

To confirm your IMail Server installation, do the following:

- 1 From the **Start** menu, select **Programs > IMail > IMail Administrator**.

The IMail Administrator appears. The left panel provides access to system defaults, services, and to primary and virtual host settings. For each host, there is access to users, aliases, and list-server mailing lists.

Select an item in the left panel to view its properties in the right panel.



- 2 In IMail Administrator, expand the **localhost** folder, and then select the **primary host**. The right panel shows the **General** properties for your primary host. Check the following:
  - **Official Host Name.** Make sure this matches the host name, as entered in the Windows TCP settings, for the machine on which you installed IMail Server.
  - **Host Aliases.** If you want users on the primary host to get messages addressed to the domain name, create an alias for the host. For example, mail to the user *elena* is addressed as *elena@emmitt.company1.com*. If you create a host alias of *company1.com*, the user (*elena*) can also receive mail addressed to *elena@company1.com*.

For more information about configuring IMail Server, see “Chapter 2: Configuration” in the *IMail Server User’s Guide*.

### Step 3: Confirm User Database Setup

To verify that you can send and receive mail, you should have at least one user for your primary host.

If your primary host uses the IMail user database, you may have created a user during the installation. Check whether users were created: in the left panel of IMail Administrator, expand the **localhost** folder, select the **primary host**, and then expand the **Users** folder. If you see only the “root” user, perform these steps to add a test user:

- 1 Select the primary host and click the **General** tab.
- 2 In the right panel, click **Add User**, and then follow the instructions. A user ID must be 3 to 30 characters with no hyphens or spaces. For now, leave **Show Advanced Settings** turned off.
- 3 Click **Next** and then **Finish** to add the user. The user ID is added to the list of registered users for the primary host. When the user ID is selected in the left panel, the user’s properties appear in the right panel.

If your primary host uses the Windows NT or Windows 2000 user database, you should have two default accounts: Administrator and Guest. If you need to add a user for test purposes, add the account in the appropriate Windows administrative tool.

If your primary host is based on an external database and the external database is not populated, perform these steps:

- 1 In IMail Administrator, in the left panel, expand the primary host and the **Users** folder.
- 2 Select the user named **root**.
- 3 On the **General** tab, turn off **Account Access Disabled**.
- 4 Add a few users.

Any users you have added can now receive mail through IMail Server at the host name specified in your Windows TCP/IP parameters. For example, if you added the user *elena*, and the host name is *emmitt.company1.com*, the user can now receive mail addressed to *elena@emmitt.company1.com*.

---

#### Note

If you want users on the primary host to get messages addressed to just the domain name, create an alias for the virtual host. For example, if you want the user shown above to get mail addressed to *elena@company1.com*, create a host alias of *company1.com* for *jemmit.company.com*. For more information, see “Chapter 2: Configuration” in the IMail Server User’s Guide.

---

### Step 4: Sending and Receiving Mail in a Test Account

To send and receive mail in a test account, complete the following steps:

- 1 Check to make sure the mail servers are running. To do this, from the left panel, expand the **localhost** folder and select the **Services** folder to see if the SMTP, POP3, and IMAP4 servers are running. The status of SMTP should be “running;” this is automatically started. If the POP3 and IMAP4 are not “running,” you must start them.
- 2 Start your e-mail client.

If you are using IMail Client (**Start > Programs > IMail > IMail Client**), the users you added will appear in a drop-down list. Log on using one of the user accounts you created, and send mail to another user. Then check that the mail appears in the second user’s *Main* mailbox.

---

### Note

A special version of IMail Client for Windows is automatically installed on the IMail system. This is provided for those who are administering IMail Server on the NT workstation on which IMail Server is installed; it is useful for reading the “root” mailbox, working with seldom-used accounts, and testing. The IMail Client application should *not* be used on the IMail Server system to view end-user mailboxes, as this may cause problems with remote access to the same mailboxes (depending on the remote clients being used).

---

- 3 Next, you need to send a test message to test mail service to remote systems. To do this, if you are connected to the Internet, send mail to *imailtest@ipswitch.com*. We will reply to your mail. You can also test by sending mail to a user on another host and ask them to reply.
  - 4 When you are satisfied that the mail server works properly, you can add more hosts and users.
- 

## Upgrading

This section is for users who are upgrading from a previous version of IMail Server. IMail Server is automatically installed in the same directory where you had the previous version or evaluation version. This directory should *not* be changed, moved, or renamed.

- 1 Back up the Windows NT/2000 registry key,  
`H_KEY_LOCAL_MACHINE\Software\Ipswitch\IMail\`  
(Start *regedit.exe*, locate this key and select **Export Registry File** from the **Registry** menu.)
- 2 Follow the same instructions as for new installs.

---

### Note

You must stop all IMail services and close the IMail Administrator interface before upgrading.

---

## Upgrading Using External Databases

When reinstalling IMail Server over an earlier version, in which one or more hosts use an external user database, new columns must be added to the database tables. This is due to additional user-level data which must be stored for use with the new Web Messaging and Web Calendaring features. The new columns must be added to the user table for each IMail Server host that uses an external database.

During the install, IMail Server will determine whether your system currently uses an external database. If the answer is yes, then a dialog is displayed giving you the three following options:

- Click **Yes** to have this install program automatically add the columns to all external database tables used to store IMail Server user settings.
- Click **No** to continue installation without updating the tables.
- Click **Cancel** if you want to manually add the necessary columns. The required columns can be found in the release notes. You will need to restart this install program when ready.

---

### Note

If you click **No** and install anyway, be advised that IMail Server may not function correctly.

---

If a custom ODBC driver was used with a previous version of IMail Server, the driver must be modified to use the new columns. Source code for the basic ODBCUser.dll driver (tailored for SQL Server and Access) can be downloaded from the IMail Support Center at:

[ftp://ftp.ipswitch.com/Ipswitch/Product\\_Support/IMail/obdcuser.dll](ftp://ftp.ipswitch.com/Ipswitch/Product_Support/IMail/obdcuser.dll)

## Upgrading Web Messaging

If the installation program detects that you have previously installed web templates for web messaging, an additional dialog will be displayed allowing you to choose how to upgrade the templates. This dialog box, gives you the following options:

- Overwriting the existing files
- Installing the new files in a separate folder
- Not installing the new files at all.

If you have customized your existing templates, you should choose option 2, and then check to see which templates have changed. For a list of web messaging files that have changes, see the IMail Server release notes (*ntimsv.txt*).

If you have customized templates you want to continue using, refer to the “Upgrading Customized Templates Document”(Upgrade6to8.txt) for procedures to upgrade the old templates for use with IMail Server. This file is located in the *[IMail Top Directory]\Web\New* directory.

### **Upgrading Anti-Spam Features**

If you have previously installed IMail Anti-Spam, you will need to decide whether to overwrite the *antispam-table.txt* and *spamblk.txt* files. By default, to preserve any customizations you have made, these files are not overwritten. If these files are found on your system, new files will be created called *antispam-table.ini.txt* and *spamblk.ini.txt*, which contain the updated spam word counts and black list configurations. If you want to use these updated word counts and black lists, you must manually copy the contents as follows:

- To update the word counts, copy the contents of the *antispam-table.ini.txt* file to the *antispam-table.txt* file.
- To update the black list configuration information, copy the contents of the *spamblk.ini.txt* file to the *spamblk.txt* file.

### **Re-Installing IMail Server to a Different Location**

When re-installing IMail Server to a different location, the WEBDOCS value in *imonitor.ini* is not updated. This causes the *up.gif* and *down.gif* files in IMonitor to be missing on the Service Status page. IMonitor produces the WEBDOCS value, but does not know when a reinstall has occurred, or when a web directory has been moved. If you change the install location of IMail Server, you MUST update the WEBDOCS field in the *imonitor.ini* file to point to the new location so the GIFs will be loaded properly.

---

## Removing IMail Server

To remove IMail Server, use the **Add/Remove Programs** applet in the Windows Control Panel. The following happens:

- IMail services are removed from the Control Panel Services.
- Everything is deleted in the Windows registry under HKEY\_LOCAL\_MACHINE/Software/Ipswitch/IMail (but does not remove the Ipswitch key).
- Directories and files created by *setup.exe* are removed if nothing has been added to them. For instance, if you haven't added any users (and *root* never gets mail), the *Users* directory is removed.

---

### Note

Removing IMail Server as described above does not delete the IMail directory or the subdirectories and files it contains. To remove these, you must delete them manually.

---

IMail Server's uninstall does not remove the following files: *iwebmsg.ini*, *imonitor.ini*, and *iwebcal.ini*. This can cause problems with future installations. An example is if an administrator installs IMail Server in a location other than the standard C:\IMail, settings such as the web dir, ports, etc... are retained. If the administrator then installs IMail Server in the standard location, some values point to the wrong location by default.

If you are reinstalling IMail Server to a new location, these three files (*iwebmsg.ini*, *imonitor.ini*, *iwebcal.ini*) need to be deleted or updated.

---

## Enabling Wizards

The IMail Administrator provides several wizards that help you enter information. For example, the New User wizard steps you through the creation of an account for a new user. If you enable wizards, a wizard will start when you do the following:

- Add host
- Add user
- Add alias
- Add list

To enable wizards, from the **Tools** menu, select **Use Wizards**. To disable wizards, select it again.

---

## **Technical Support**

For more information about Ipswitch Technical Support, visit our Support Center at:

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

---

## Appendix A: Mail Servers and the DNS

This appendix provides some background information on the Domain Name System (DNS) and how mail servers use the DNS. The section briefly describes the DNS, but the focus is on mail servers and the DNS records that mail servers use to find other mail servers.

If you are not familiar with how DNS operates, we recommend the book “DNS and Bind” published by O’Reilly and Associates, for general DNS information. Refer to your DNS server’s documentation for information about making entries in your DNS server.

---

### What is DNS?

DNS is the mechanism by a program running on your host computer can locate the address of other hosts on the Internet, and by which other hosts on the Internet can locate you. The DNS essentially provides a map of the structure of the Internet.

To participate in the Internet, organizations must register a domain name with the InterNIC and obtain addresses to use for the hosts in their domain. For example, *ipswitch.com* is a registered domain name, and some addresses assigned to *ipswitch.com* are 156.21.50.1 through 156.21.50.255. For information about registering a domain name, see the InterNIC’s web site at <http://www.internic.net>.

All hosts on the Internet must have a host name and an IP (Internet Protocol) address. You can give a host any host name you want, as long as it is unique within your domain. For example, some host names and addresses in the *ipswitch.com* network are:

```
test1.ipswitch.com  156.21.50.1
test2.ipswitch.com  156.21.50.2
test3.ipswitch.com  156.21.50.3
```

DNS servers provide the mapping of host names to their addresses. The DNS server for *ipswitch.com* lists each Ipswitch host and its corresponding address. Thus, any host outside of *ipswitch.com* can query the DNS server for *ipswitch.com* to find the address of a particular host. Once it has the address, the requesting application can communicate directly with the host.

Note that querying a DNS server is also called a “DNS lookup” or a “lookup.”

When a host outside *ipswitch.com* wants to send mail to a user on the *ipswitch.com* network, it queries the DNS server for *ipswitch.com* to find the mail server for users on *ipswitch.com*. The host can then send mail to the mail server, which will deliver it to the appropriate user.

---

## How the Mail Server Uses DNS

All SMTP mail servers that communicate with other Internet hosts use a DNS server to look up mail addresses. The basic communications between a mail server and a DNS server work as follows for incoming mail and outgoing mail.

### Incoming Mail:

To illustrate how a DNS server is used to look up mail addresses, we use the example of what happens when a user on another Internet host sends mail to a user on your IMail Server host (for example to *fred@domain.com*).

- 1 A user sends mail to your user, *fred@domain.com*.
- 2 The sending mail server asks the DNS server on the *domain.com* network for the host name of the mail server. The MX (Mail eXchanger) record in DNS identifies the Host Name of the mail server.
- 3 The DNS server for *domain.com* returns the value of the MX record, which is the host name of the mail server, in this case, *mail.domain.com*.
- 4 The sending mail server now asks the DNS server on the *domain.com* network for the address of the mail server host (*mail.domain.com*). The A record in DNS maps the host name to an IP address.
- 5 The DNS server for *domain.com* returns the value of the A record for the mail server host (*mail.domain.com*), which is the IP address (156.50.1.5).
- 6 The sending mail server connects to the receiving mail server’s IP address and sends the mail.

## Outgoing Mail:

When one of your IMail Server users sends mail to a user on another Internet host (for example, to *sam@widgets.com*), the same process occurs, except that it is your mail server that does the lookups for MX and A records on the DNS server for the *widgets.com* network.

## Reverse Lookups

Note that some mail servers, upon receiving a mail, will do a “reverse lookup” on the address to make sure it is valid. This is done in an attempt to thwart bulk mailers who may be illegally using someone else’s mail server to relay mail. To do a reverse lookup, the receiving mail server asks the DNS server on the sending mail server’s network to confirm that the IP address of the sending server matches the host name of the sending server.

Reverse lookups are enabled in DNS by creating a PTR record for the mail host. The PTR record maps an IP address to a host name.

---

## Setting Up Mail Server Records in the DNS

To set up your mail server in the DNS, you must create the records that other mail servers use to find and connect to your mail server. Making these entries requires that you first have:

- A registered Internet domain name for your local network (for example, *domain.com*).
- A DNS server for your local network.

### Your Local Network’s DNS server

Before your mail server can communicate with other mail hosts, you must configure the DNS server to recognize your mail server. Without a functional and correctly set DNS, IMail Server cannot deliver mail, except to domains that are within IMail Server.

For each mail host on your network, you must make the following entries in your DNS:

- An MX record for the mail domain (for example, *domain.com*). The MX record identifies the host name of the mail host.

Note that mail hosts (virtual hosts) that do not have an IP address require only an MX record.

- An A record for the host name of the mail host. The A record maps a host name to an IP address.
- A PTR record for the IP address of the mail host. The PTR record maps an IP address to the host name and is used for reverse lookups.

Since there are DNS servers from many vendors available, we cannot describe how to create the records for your specific DNS server. Instead, we show an example using a basic configuration for a single mail host.

### Example of a Basic Configuration

In this example, we use a DNS lookup tool to query the DNS server and show the responses. You can use the Windows NT command line program, NSLOOKUP, to query a DNS server. If you are not familiar with this tool, we suggest the Ipswitch WS\_Ping ProPack application, which provides a graphical interface for querying a DNS server. Use the Lookup tool in WS\_Ping ProPack.

To describe the DNS entries for a mail server, we use examples from a typical small network and start with the following assumptions:

- You have one computer with a network interface card (NIC) installed.
- You have set the IP address for this computer to a valid address within your range of addresses. In the example, we will use 156.21.50.5.
- You have assigned this computer a host name that is valid in your domain. In the example, we will use *mail.domain.com*.
- You have designated another SMTP server to act as a backup if your mail server is down. In the example, we will use *cecil.domain.com*.

You must set up the following records for the computer:

- An MX record for the domain *domain.com* that points to the host name of the computer running IMail (*mail.domain.com*).
- An A record for *mail.domain.com*
- A PTR record for *mail.domain.com*

E-mail for the users on this mail host is addressed to *user@domain.com*.

First, we do an MX lookup (just as a sending mail server would do) to find the mail host for the *domain.com* network. To simulate this, in the WS\_Ping ProPack's Lookup tool, we enter *domain.com* in the Name/Address box and **MX** as the Query Type, which returns the following:

```
domain.com
  10, mail.domain.com
  50, cecil.domain.com
```

This shows that *mail.domain.com* and *cecil.domain.com* are both mail hosts for the *domain.com* network. The *cecil.domain.com* host is a backup mail server. The number indicates the priority of the mail host — it tells the sending mail server which mail host to try first. The lower the number, the higher the priority. In our case, *mail.domain.com* is the one we want other mail servers to use first; *cecil.domain.com* is used only if *mail.domain.com* is down.

For information about how a backup mail server works, see “Setting Up IMail Server as a Backup Mail Spooler” in the IMail Server User's Guide.

Only a host name is returned in response to an MX query. The sending mail server needs the IP address of this host name so it can connect to the mail host. The sending mail server performs another DNS lookup to get the IP address (defined in the A record) of highest priority mail host. To simulate this, in the Lookup tool, we enter *mail.domain.com* in the **Name/Address** box and A as the Query Type, which returns the following:

```
mail.domain.com
  156.21.50.5
```

If we query the A record for *cecil.domain.com*, we get:

```
cecil.domain.com
  156.21.50.100
```

With the IP address for the *mail.domain.com* host, the sending mail server can now connect to that host and deliver the mail. If the attempt is successful, there is no need to go any further. However, if the *mail.domain.com* host is down, the connection attempt fails and the sending mail server will have to try the next highest priority MX record, in this case, *cecil.domain.com*.

## Sample DNS Records

If we use a DNS lookup tool to query the DNS server for the network in our example (for all information, in verbose mode), you would see entries like the following:

```
domain.com.    IN MX    50 cecil.domain.com.  
               IN MX    10 mail.domain.com
```

```
cecil.domain.com.  IN A    156.21.50.100  
mail.domain.com.   IN A    156.21.50.5
```

```
5.50.21.156.in-addr.arpa.,type = PTR  
  host = mail.domain.com  
5.100.21.156.in-addr.arpa.,type = PTR  
  host = cecil.domain.com
```

## Other Configurations

If you have multiple mail hosts on your IMail Server, you will need an MX, A, and PTR record for each host. “Chapter 2: Configuration” in the IMail Server User’s Guide describes some advanced configuration topics and describes the DNS entries you must make for these advanced configurations.

# Index

## A

- A record 26
  - viewing 15
- adding users 19
- alias 18
- antispam-table.txt 22
- antispam-table.ini.txt 22
- authentication,SMTP 10

## C

- clients
  - e-mail 1

## D

- Data Source Name. See System DSN
- database
  - confirming setup 18
  - external 7
  - IMail 6
  - selecting 12
  - Windows 6
- database, users 6
- DNS 25
  - and mail servers 25
  - description 25
  - lookup 26
- DNS entries 4
  - A records 5
  - background information 5
  - confirming 15
  - MX records 5
  - PTR records 5
- DNS server 1
- domain name 4
- DSN 12

## E

- e-mail clients 1
- external user database 7

## H

- host
  - official name 11
  - primary 4
- host alias 18
- hosts
  - multiple 10

## I

- IMail Administrator 17
  - using wizards 23
- IMail Client 20
- IMail user database 6
- Incoming mail
  - DNS and 26
- installation 11
  - planning 3
  - selecting location 12
  - testing 15
- IP address 4

## K

- Knowledge Base 1

## L

- lookup 15
- Lookup, DNS 26

## M

- mail client 1
- Mail domains
  - DNS and 26
- mail server
  - DNS entries 4
  - installing 11
  - number of users 4
  - security 8
  - services 7
  - setting security 12
  - testing 15

- mail services
  - selecting 14
- mail system
  - components 1
- MX record 26
  - viewing 15

## N

- nslookup 15
- NTFS 1, 3

## O

- ODBC database 7
- Official Host Name 11

## P

- PTR record 27
  - viewing 16

## R

- Re-Installing
  - anti-spam features 22
  - to a different location 22
  - web messaging 21
- relay options 8
- Removing 23
- requirements 3
- Reverse lookups 27

## S

- security 8, 10
  - setting 12
  - SSL 12
- services
  - selecting 14
- services, mail 7
- SMTP Authentication 10
- spamblkm.txt 22
- spamblkm.ini.txt 22
- spamming

see security 12

SSL 12

System DSN 12

system requirements 3

## T

technical support 24

testing

send and receive mail 19

## U

Uninstalling 23

Upgrading 20

anti-spam features 22

external databases 21

web messaging 21

user database

confirming setup 18

## W

Web Messaging 21

Windows NT registry 23

Windows user database 6

wizards, in IMail

Administrator 23

WS\_Ping ProPack 15