Chapter 7
Setting Up and Configuring Mail

This chapter explains how to set up mail and the MHS gateway and also includes information on

- How to set up and configure UnixWare mail
- How to configure the MHS gateway on a UnixWare server
- How to set up an MHS gateway on a NetWare server

NOTE: Some of the information in this chapter assumes you are knowledgeable about mail−related topics such as domains, clusters, and a smarter host (described later in this chapter). If you have an Application Server, see the *System Administration* guide for information on clusters and smarter hosts.

Overview

Mail services provide electronic communications between users on the same system, or between systems connected together on a network. All UNIX mail programs process incoming mail and store it in a mailbox. In most systems, mail is stored in **/var/mail**, which is also known as a user's mailbox. To be able to communicate with other systems, mail should be set up on the desktop using the Mail Setup program. By default, however, a basic mail service is set up without any additional modification. So if you decided not to customize your mail services, the mail program would still work.

It is often desirable to assign a single name to a set (cluster) of computers for mail routed outside your local area. Mail Setup in this chapter also allows you to set up a cluster.

Further, you can set up a Smarter Host in Mail Setup. A Smarter Host is a reference to a UNIX system where remote mail will be shipped if the mail destination is not known to the local system. If set up, all non−local messages would be sent through the Smarter Host. See "Setting Mail Variables" later in this chapter.

NetWare users often rely on an MHS gateway to route MHS mail to non−MHS mail systems. If you need to establish an MHS gateway at your site, you can do this by using MHS Setup which establishes a connection from your UnixWare system. You do not need to set up an MHS gateway unless you need to send mail to MHS users.

Files and Directories Referenced in this Chapter

Before you set up the UnixWare mail variables, you may want to know about the following files and directories:

/bin/mail. This is a UNIX program that is normally only used for mail routing and serves as a back−end to the desktop mailer. This is referred to in the Log messages variable in Mail Setup; see "Using Mail Setup" later in this chapter.

/etc/mail/mailsurr. This file contains a program for routing mail and is executed by **/bin/mail**.

/usr/lib/mail/mailsurr.proto. This file is a prototype for **mailsurr**. The **createSurr** program uses this prototype to create the **mailsurr** file. See **mailsurr.proto** in the *Command Reference* for more information.

/etc/mail/namefiles. This file contains a partial list of alias files and directories to be searched by the **`mailalias`**

command. By default, this list consists of **/etc/mail/names** (an alias file) and **/etc/mail/lists** (a directory of mailing lists). See **`mailalias`** in the *Command Reference* for more information.

/var/mail. This subdirectory contains a mailbox assigned to each user as well as mail log files. This is referred to in the Log messages variable of Mail Setup. See "Using Mail Setup" later in this chapter.

Using Mail Setup

The following setup tasks describe how to customize your UNIX mail system. For example, you can set up a smarter host to route messages through a central system or you can log messages.

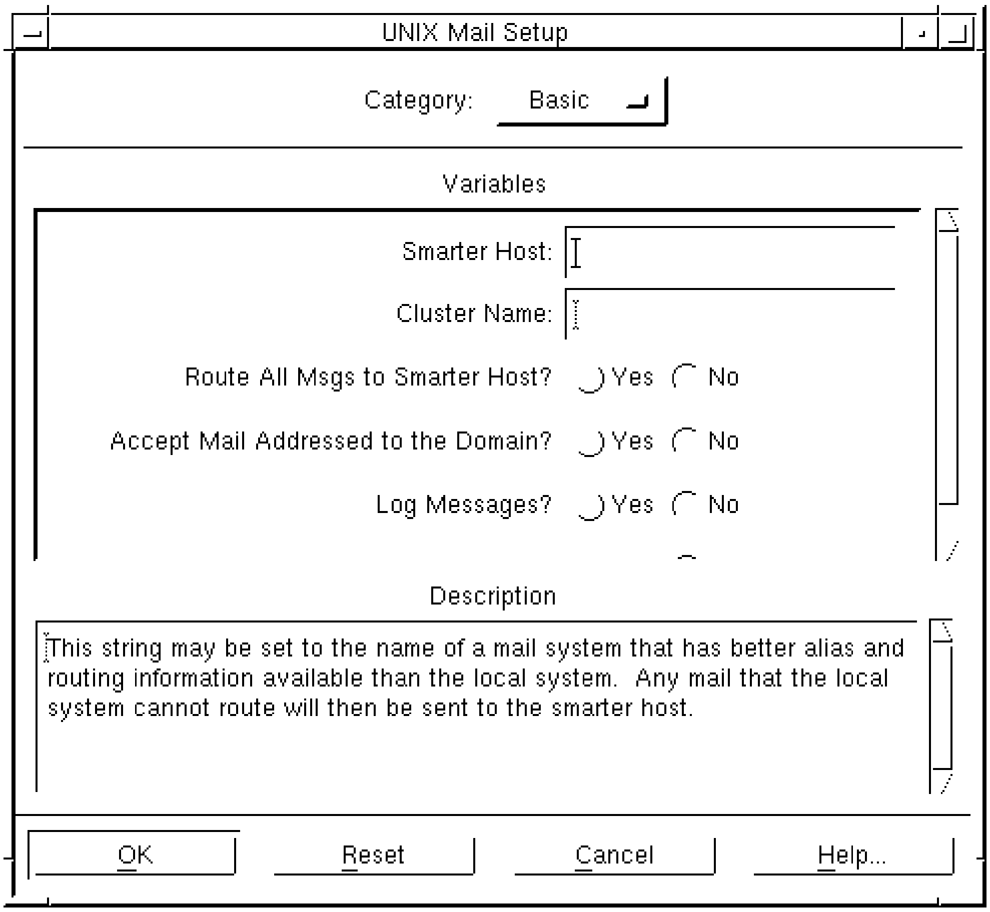
> **NOTE:** Files under the **/etc/mail** directory are programmatically generated and changes could be lost at any time. If you need to edit your **mailsurr** file, edit **mailsurr.proto** and run the **createSurr** program.

> **NOTE:** To configure UnixWare Mail, you must have permission to change Mail Setup (see the Administer UNIX Mail option in "Using User Setup" in the chapter "Configuring Your User Environment"). The system owner automatically has permission to use this setup feature by default.

To access Mail Setup, double−click on the Mail Setup icon in the Admin Tools folder.

The "UNIX Mail Setup" window appears:

Figure 7−1. UNIX Mail Setup− Basic Variables



Setting Mail Variables

To set the mail variables, do the following:

1. **Set the desired options in Category: Basic or Extended.**
2. **Provide the following variables, as appropriate:**

   NOTE: When you click on a variable label, information about the variable appears in the Description box at the bottom of the window.

Basic. The Basic Mail Setup category shows the most commonly changed UnixWare mail variables

Smarter Host. If desired, type the name of a system that will be used to route mail sent from your system inside or outside of your network if the destination is not recognized by your system. A smarter host is a system that is configured to act as a mail server and knows how to reach computer systems and networks that your system may not recognize.

Cluster Name. Type a name (blank spaces are acceptable) that represents a closely coupled set of systems, called a cluster. For example, you could mount **/var/mail** onto a server so that all mail delivered to client systems seems as though it is coming from one server, even though it may not be.

Route All Msgs to Smarter Host?. Click on Yes to have all mail messages not destined for users on other systems sent to the smarter host (described previously). The smarter host will then route each message to its correct destination.

Accept Mail Addressed to the Domain. Click on Yes to have mail accepted for the local domain if a system name is not specified and will be sent to the local system.

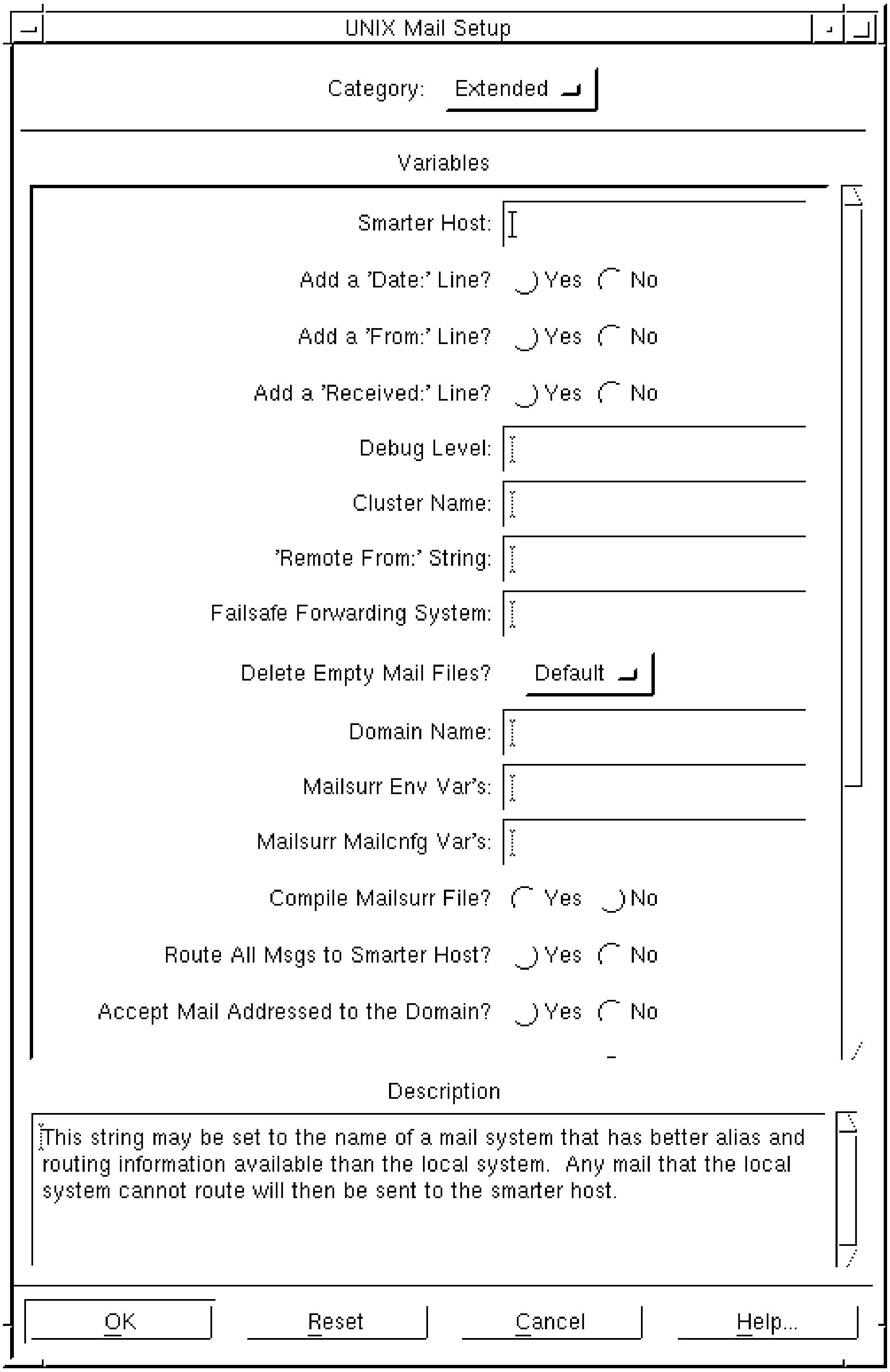
Log Messages?. Click on Yes to keep a record of all incoming and outgoing mail messages that pass through **/bin/mail** on your system in **/var/mail/:log**. The **/var/mail/:errors** file logs mail errors.

Click on No if you do not want to keep a record of all incoming and outgoing mail messages.

Extended. The Extended Mail Setup category (which includes the variables in the Basic Mail Setup category) shows and allows you to change less commonly used mail variables, such as adding a debug level to your mail.

When you select Extended, the following window appears:

Figure 7−2. UNIX Mail Setup − Extended Variables


UNIX Mail Setup
Category: Extended
Variables
Smarter Host:
Add a 'Date:' Line? Yes No
Add a 'From:' Line? Yes No
Add a 'Received:' Line? Yes No
Debug Level:
Cluster Name:
'Remote From:' String:
Failsafe Forwarding System:
Delete Empty Mail Files? Default
Domain Name:
Mailsurr Env Var's:
Mailsurr Mailcnfg Var's:
Compile Mailsurr File? Yes No
Route All Msgs to Smarter Host? Yes No
Accept Mail Addressed to the Domain? Yes No
Description
This string may be set to the name of a mail system that has better alias and routing information available than the local system. Any mail that the local system cannot route will then be sent to the smarter host.
OK
Reset
Cancel
Help...

Use the scrollbar to view all of the variables.

Smarter Host. If desired, type the name of a system that will be used to route mail sent from your system inside or outside of your network if the destination is not recognized by your system. A smarter host is a system that is configured to act as a mail server and knows how to reach computer systems and networks that your system may not recognize if your system is not connected to the destination but the smarter host is, if it has a better alias file, or you want to hide your local system so all mail from your company appears to come from the same system.

Add a 'Date:' Line?. If you select Yes, a Date header line is added automatically to mail messages sent out if a Date header does not already exist. The default is No.

Add a 'From:' Line?. If you select Yes, a From header line is added automatically to mail messages sent out if a From header does not already exist. The default is No.

Add a 'Received:' Line?. If you select Yes, a Received header line is added automatically to mail messages received by your system if a Received header does not already exist. The default is No.

Debug Level. Add a debug value (between 0 for no debugging and 9 for maximum debugging) to generate information about each attempt to send mail. This information is stored in **/tmp/MLDBGprocess id**, where **process id** is the process identification of the **/bin/mail** program. The default is 0.

Cluster Name. Type a name (blank spaces are acceptable) that represents a closely coupled set of systems, called a cluster. For example, you could mount **/var/mail** onto a server so that all mail delivered to client systems seems as though it is coming from one server even though it may not be.

'Remote From:' String. Type a string with the message you want to send in the From header line and which you want to use instead of your system name or the smarter host name. This offers more security; your system name or smarter host name are not used.

Failsafe Forwarding System. Type a system name where **system** is the name of the system that stores your system's **/var/mail** directory. This is used when you share the same **/var/mail** directory with several systems using NFS and other networked file systems.

If the **/var/mail** directory is not available when mail is sent because the system that physically contains that directory is not working, mail is delivered to the correct mail directories when the system comes back up.

Delete Empty Mail Files?. Click on Yes to display a menu and to have the system automatically delete empty mailboxes (the default permissions are 660 to delete the mailboxes). This option saves disk space and simplifies your directory structure.

Domain Name. Type the domain name you want to use for mail if different than your default domain name.

> **NOTE: The following two options, Mailsurr Env Var's and Mailsurr Mailcnfg Var's, require advanced knowledge of the mail system.**
>
> **Mailsurr Env Var's**. Type a comma–separated list of environment variables to be passed through to the **`mailsurr`** commands.
>
> **Mailsurr Mailcnfg Var's**. Type a comma–separated list of **mailcnfg** variables to be passed through to the **`mailsurr`** commands as environment variables.
>
> **Compile Mailsurr File?**. Click on Yes to have mail:
>
> – Recompile **/etc/mail/mailsurr** to create **mailsurr** if **mailsurr** was modified after it was compiled.
>
> – Use **Cmailsurr** rather than **mailsurr** for configuration.
>
> – The default is No. See **`mailsurr`**(4) in the *System Files and Devices Reference* for more information.

Route All Msgs to Smarter Host?. Click on Yes to have all mail messages that are not destined for the local system to be sent through the system designated as the smarter host. The default is No.

Accept Mail Addressed to the Domain. Click on Yes to have mail accepted for the local domain if a system name is not specified and will be sent to the local system.

Log Messages?. Click on Yes to keep a record of all incoming or outgoing mail messages that pass through **/bin/mail** on your system in **/var/mail/:log** or **/var/mail/:errors**.

Route local messages through MHS?. Click Yes to have your incoming mail messages routed through the MHS gateway if the mail is addressed to your system and if another user on your system is not using your address.

Add a 'Message ID:' Line?. Click on Yes to add a message identifcation string to the Header field. The default is No.

Convert to 7−Bit Headers?. Click on Yes to convert incoming 8−bit headers to 7−bit headers. The default is No.

Convert to 7−Bit MIME?. Click on Yes to convert incoming messages to 7−bit MIME (Multipurpose Internet Mail Extensions). The default is No.

Convert non−MIME to MIME?. Click on Yes to convert to MIME. This allows additional character sets, audio, video, and so on to be added to mail messages. The default is No.

Add a 'To:' Line?. Click on Yes to add a To field to the header if it is missing when mail comes in. The default is No.

If you have an Application Server, see the *System Administration* guide for more information on these fields.

1. **Click on OK to save your changes and exit.**

Using MHS Setup

This section describes how to set up the UnixWare side of the MHS gateway from your desktop.

If you are not setting up an MHS gateway on your UnixWare system, skip this section. If you are not sure if you need to set up a gateway, read "Determining the Need for an MHS Gateway" in the next section.

NOTE: The **/etc/mail** directory is programmatically generated and changes could be lost at any time. If you need to edit your **mailsurr** file, edit **mailsurr.proto** and run the `createSurr` program.

To configure MHS Mail, you must have permission to change MHS Setup (see the Administer MHS Mail option in "Assigning User Permissions" in the chapter "Configuring Your User Environment"). The system owner automatically has permission to use this setup feature by default.

Use MHS Setup to configure the UnixWare side of a gateway between MHS and UNIX mail systems. We suggest configuring one MHS gateway per site. Supporting one gateway on one system rather than several gateways on many systems reduces administrative work.

We suggest you use a production system (such as an Application Server) rather than a desktop system for MHS gateway purposes. If you assign a gateway on a user's desktop system and the gateway goes down, mail will be rejected.

All other systems should be set up to send mail going to an MHS address (see "UnixWare Applications" in the *D esktop User Handbook*) to the single UnixWare system running the gateway. For example, you can set smarter hosts to point to the MHS gateway system (see "Using Mail Setup" earlier in this chapter for information on smarter hosts).

Non−UnixWare systems can access the gateway by forwarding mail to the gateway system.

Determining the Need for an MHS Gateway

Before you decide to set up an MHS gateway, you need to understand what it is and how it is configured.

The following questions may help you determine if you need to set up a gateway:

1. What is an MHS gateway?

   The UnixWare MHS gateway is a set of programs that allow UnixWare and NetWare mail to send and receive messages from an MHS mail system. To accomplish this, the gateway translates between the Internet RFC822 mail format and the MHS SMF71 mail format. This gateway places SMF71 messages into the MHS incoming mail queue and retrieves SMF71 messages destined for UnixWare from an outgoing mail queue.

2. When do I need an MHS gateway?

   You should use the gateway if you need to exchange messages between a UnixWare mail system and an MHS mail system. Only one MHS gateway is required per site, so there is no need to set up a gateway on every UnixWare system at your location.

3. Do I need to run MHS Setup on each UnixWare Desktop?

   No. Only run MHS Setup on the system you are configuring as the UnixWare side of the MHS gateway. The other systems must be set up to send MHS−bound mail to the gateway system. For example, you can set smarter hosts to point to the MHS gateway system (see "Using Mail Setup" for information on setting up smarter hosts). The MHS Setup program does not configure access to smarter hosts.

Configuring the MHS Gateway

This section discusses how the MHS gateway site administrator can configure the MHS gateway and describes how to do the following:

- Set up the MHS gateway and gateway account
- Configure the UnixWare gateway through MHS Setup on the UnixWare desktop

> **NOTE:** This section assumes you are knowledgeable about NetWare MHS or NetWare Global MHS. Many of the functions in this section apply only to the site administrator of the NetWare MHS gateway system.

Configuring MHS

An MHS gateway, configured on a NetWare file server, functions as a transfer agent for incoming and outgoing mail through NetWare and UnixWare. When mail comes in to an MHS network, the MHS host automatically routes the mail to a drop box (gateway directory) on a server. UnixWare then retrieves the mail from the server and transfers it to individual systems.

In order for MHS to work, the MHS gateway administrator must configure MHS from both NetWare and UnixWare.

From the NetWare MHS server side, the administrator must do the following:

- Set up an MHS gateway on the server that contains the NetWare MHS host
- Set up a gateway account on the MHS host NetWare file server

See the next section and your Novell MHS documentation for more information.

From the UnixWare side, the administrator of the UnixWare system on which the MHS gateway resides must run MHS Setup at one UnixWare system for each gateway (see "Determining the Need for an MHS Gateway") earlier in

MHS Setup at one UnixWare system for each gateway (see "Determining the Need for an MHS Gateway") earlier in this chapter.

Setting Up the NetWare Side of an MHS Gateway

To set up the NetWare side of the MHS gateway, the NetWare administrator must do the following:

- Ensure that the appropriate NLMs are installed on your NetWare file server (see the chapter "Setting Up and Configuring NetWare Connectivity" and the *NLM Installation and Administration* manual).
- Create a new gateway on the MHS host. Use gateway version 71 or SMF71, depending on your MHS software.
- Set up an account on the MHS host. If MHS is installed, an account is already set up. See your MHS administrator for account information.
- Set up MHS routes for users who will be sending and receiving MHS mail through the gateway.
- Name the directory that contains the mail folder **/mhs**.

For information on configuring the NetWare side of the MHS gateway, see your Novell MHS documentation.

Setting Up the UnixWare Side of an MHS Gateway

To set up the UnixWare side of the MHS gateway from a UnixWare system, double−click on MHS Setup in Admin Tools.

Once the MHS mail gateway is set up, mail being sent to an MHS address will be sent out through the gateway to the MHS mail system. For information on how to use MHS Mail and UNIX mail, refer to the chapter, "UnixWare Applications" in the *Desktop User Handbook*.

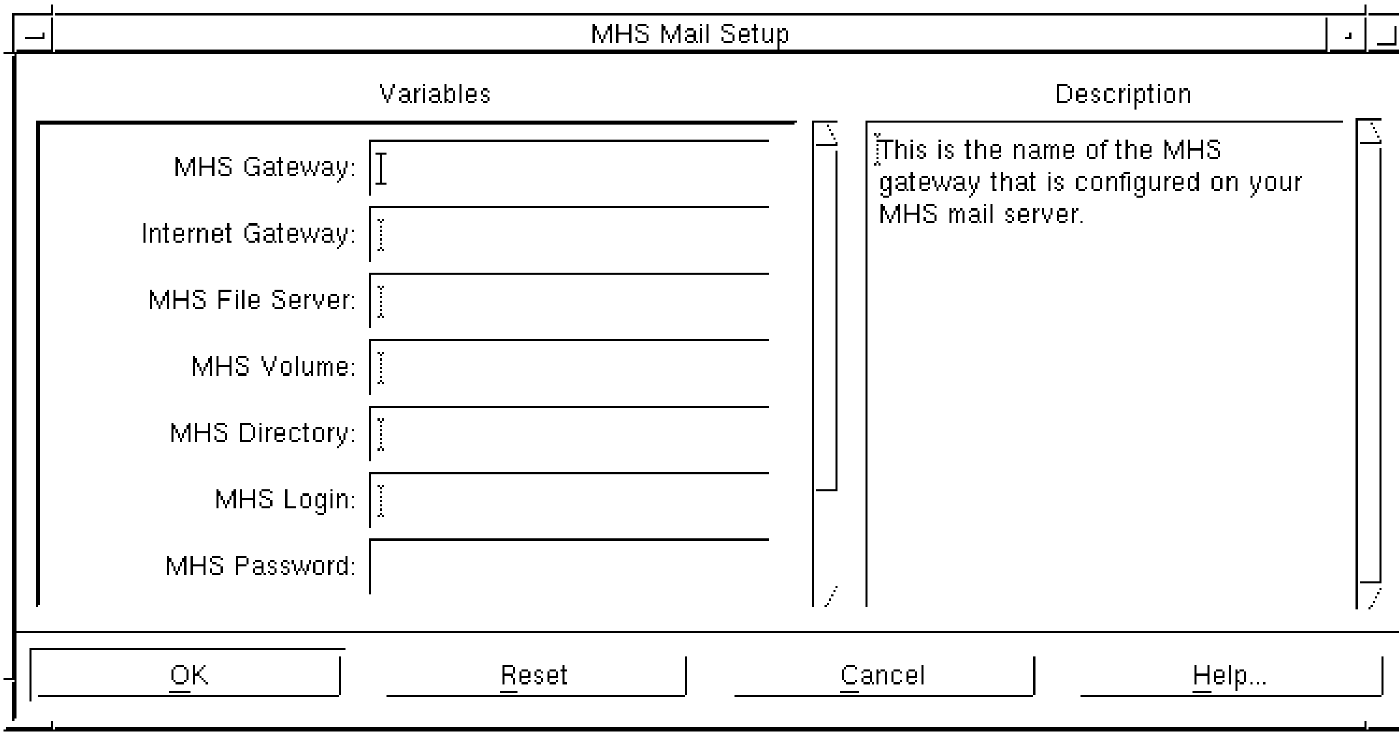
NOTE: In the file **/usr/lib/setup/MHS_Setup/setup.def**, change `DEBUG` to **`MHSLOGIN`**.

Setting Up the Gateway

To start MHS Setup, double−click on the MHS Setup icon in the Admin Tools folder.

The "MHS Mail Setup" window appears:

Figure 7−3. MHS Mail Setup



1. **Set the following variables. Your NetWare system administrator can provide you with this information if necessary:**

   NOTE: When you click on a variable label, information about the variable appears in the Description box.

   MHS Gateway. Type the name of the MHS gateway that was configured on your MHS mail server.

   Internet Gateway. Type the name to be used to designate your MHS gateway in UNIX mail (we suggest the name **mhs**).

   If your system is configured with a domain name, the name entered in this field will be acknowledged as if it were a sub−domain. For example, if you want UNIX mail sent to the domain **mhs.Novell.COM** to go through the MHS gateway and your system's domain is **Novell.COM**, type `mhs`. To reach users in a domain, mail would have to be addressed to ***user***`@mhs.novell.com`, where ***user*** is the login ID of the user who receives the mail. See the chapter " UnixWare Applications" in the *Desktop User Handbook* for information on mail addressing.

   If your system is not configured with a domain name, this field contains a special name that directs mail to route through the gateway. For example, if you want UNIX mail sent to **mhs** to go through the MHS gateway, type

mhs.

MHS File Server. Type the name of the NetWare server containing the MHS directory. The UnixWare MHS gateway expects the NetWare side of the gateway to be on this server.

MHS Volume. Type the name of the volume on the NetWare server containing the MHS directory. Normally, this is the **sys** volume.

MHS Directory. Type the name of the directory on the NetWare server under the NetWare MHS volume.

MHS Login. Type the name of the login account on the NetWare server used to access the MHS gateway directory.

MHS Password. Type the password for the MHS login. For security reasons, the password does not display.

After you exit this field, a window appears in which you enter the password a second time. The two passwords are then compared for accuracy.

Poll Frequency. Type the number of times per hour to have the gateway checked for incoming MHS mail. Type **0** to turn off the gateway.

If you want to set the poll frequency to a value other than 0 (such as a positive integer, which turns the gateway on), all other text boxes in this window (previously described) must be filled in. When Poll Frequency is 0, the gateway will not route mail.

Gateway SMF Version. Type the gateway version you used (70 or 71) when you set up the NetWare side of the MHS gateway. For more information, see "Setting Up the NetWare Side of an MHS Gateway" earlier in this chapter.

2. **Click on OK to apply changes to the MHS gateway configuration and close the window.**