**Administration Guide** 

# Novell. Messenger

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# **About This Guide**

This Novell *Messenger 2.1 Administration Guide* helps you configure and manage your Novell Messenger system.

- Chapter 1, "Understanding Your Novell Messenger System," on page 13
- Chapter 2, "Managing the Messaging Agent," on page 29
- Chapter 3, "Managing Messenger Client Users," on page 85
- Chapter 4, "Enabling and Managing Archiving," on page 151
- Chapter 5, "Managing Chat Rooms," on page 195
- Chapter 6, "Integrating Novell Conferencing with Novell Messenger," on page 207
- Chapter 7, "Securing Novell Messenger," on page 209

#### Audience

This guide is intended for network administrators who administer Messenger.

#### Feedback

We want to hear your comments and suggestions about this manual and the other documentation included with this product. Please use the User Comments feature at the bottom of each page of the online documentation, or go to www.novell.com/documentation/feedback.html and enter your comments there.

#### **Documentation Updates**

For the most recent version of the *Messenger 2.1 Administration Guide*, visit the Novell Messenger 2.1 documentation Web site (http://www.novell.com/documentation/novell\_messenger21).

#### Additional Documentation

For additional Messenger documentation, see the *Messenger 2.1 Installation Guide* at the Novell Messenger 2.1 documentation Web site (http://www.novell.com/documentation/ novell\_messenger21).

# Understanding Your Novell Messenger System

By following the instructions in the *Novell Messenger 2.1 Installation Guide*, you set up a basic Messenger system. With the help of the Messenger Installation program, you installed software and created Novell eDirectory objects. The following topics help you understand your initial Messenger system:

- Section 1.1, "Software Components," on page 13
- Section 1.2, "eDirectory Objects," on page 15
- Section 1.3, "Language Availability," on page 26

## **1.1 Software Components**

During installation of your Messenger system, you selected components to install, as described in "Installing a Novell Messenger System" in the *Novell Messenger 2.1 Installation Guide*.

Figure 1-1 Install Components Page of the Messenger Installation Program

Novell Messenger Server Setup							
Installation Options Create a new system or add a server to an existing system.							
Create or update a system:	Extend the directory schema, create the necessary directory objects, and install or update the Novell Messenger software on a server.						
C Install or update a <u>s</u> erver:	Install or update the Novell Messenger software on a server.						
C Extend schema only:	Extend the directory schema only.						
C Admin files only:	Only install the necessary files to administer a Novell Messenger system through ConsoleOne.						
InstallShield							
Installation Guide	< <u>B</u> ack <u>Next</u> Can	el					

**NOTE:** The Installation program interface illustrated throughout this section is available when installing from a Windows workstation, but not when installing on Linux, where a text-based interface is used.

- Section 1.1.1, "Messaging Agent," on page 14
- Section 1.1.2, "Archive Agent," on page 14
- Section 1.1.3, "Administration Files," on page 15

## 1.1.1 Messaging Agent

One Messaging Agent runs in your Messenger system. The Messaging Agent performs the following activities:

- Accesses Novell eDirectory on behalf of users to authenticate users to the Messenger system when they start the Messenger client, to search for contacts as users build their contact lists, to save users' option settings for the Messenger client, and so on
- Transfers instant messages back and forth between Messenger users
- Maintains presence information about Messenger users so that the Messenger client can show user availability status (such as online, busy, away, and idle)
- Passes conversations to the Archive Agent if archiving is enabled

The Messaging Agent is highly scalable. If you are setting up a large Messenger system, you should run the Messaging Agent on a dedicated server with a processor speed of 1-2 GHz and with 1 GB of RAM. The Messaging Agent has been tested to easily support 1000 active conversations on such hardware. If you assume that 2% of Messenger users might be conversing simultaneously, you could plan on your Messenger system including as many as 50,000 users. Although Messenger has not been tested with this many actual users, you can be confident that it can scale to meet the needs of a very large number of users. For more information on the Messaging Agent, see Chapter 2, "Managing the Messaging Agent," on page 29.

## 1.1.2 Archive Agent

If you need to retain a long-term record of all conversations, you can enable archiving. For example, you might need to retain conversations for legal reasons, as an aspect of a corporate e-mail retention policy.

In order to enable archiving, you need to run one Archive Agent in your Messenger system. The Archive Agent performs the following activities:

- Accesses eDirectory on behalf of authorized Messenger users in order to grant them access to the Messenger archive
- Receives completed conversations from the Messaging Agent and stores them in the Messenger archive
- Indexes the archived conversations so that they can be searched by authorized Messenger users
- · Performs searches in the Messenger archive for authorized Messenger users
- Manages expiration of old conversations
- Repairs the Messenger archive in case of damage to its database

For more information on the Archive Agent, see Chapter 4, "Enabling and Managing Archiving," on page 151.

## 1.1.3 Administration Files

Messenger system administration is performed by using ConsoleOne. The Messenger snap-in to ConsoleOne can be installed with the version of ConsoleOne that runs on Windows workstations and servers, NetWare servers, or Linux workstations and servers. After the initial installation of your Messenger system, you can install the Messenger snap-in to ConsoleOne to additional workstations and servers by using the Admin Files Only option of the Messenger Installation program.

# 1.2 eDirectory Objects

When you create your Messenger system, the following eDirectory objects are created:

- Section 1.2.1, "Messenger Service," on page 15
- Section 1.2.2, "Servers and Agents," on page 17
- Section 1.2.3, "Scope Profiles," on page 19
- Section 1.2.4, "LDAP Profiles," on page 21
- Section 1.2.5, "Chat," on page 23
- Section 1.2.6, "Hosts," on page 24
- Section 1.2.7, "Policies," on page 25
- Section 1.2.8, "User Properties," on page 26

## 1.2.1 Messenger Service

During creation of your Messenger system, you specified where you wanted to create your Messenger system in eDirectory, as described in "Installing a Novell Messenger System" in the *Novell Messenger 2.1 Installation Guide*.

Figure 1-2 System Configuration Page of the Messenger Installation Program

Setup					×		
System Configu Specify the tree system	System Configuration Specify the tree and context of a new system or point to an existing system						
Specify the dire tree and contex	Specify the directory tree and context to create a new Novell Messenger system in or the tree and context of an existing Novell Messenger system container:						
Tree:	Tree: CORP_TREE						
Context:	Context: Novell Browse						
Specify the nam	ies of the following d	lirectory obj	ects:				
System containe	er object:	Messenge	erService				
Server object:		PRV-MSGRSERVER					
Server object co InstallShield	ontext:	PRV-MSG	RSERVER.Mes	sengerService	».Novell		
Installation Gu	iide		< Back	Next >	Cancel		

The MessengerService object created at that location represents your Messenger system in eDirectory.





The MessengerService container object provides container objects for a variety of types of Messenger objects. It might be convenient for you to store all Messenger objects under the MessengerService container, but this is not required. You can create Messenger objects elsewhere in the eDirectory tree, if necessary.

## 1.2.2 Servers and Agents

During creation of your Messenger system, you selected a location where the Messenger agents were installed, as described in "Installing a Novell Messenger System" in the *Novell Messenger 2.1 Installation Guide*.

Figure 1-4 Server Information Page in the Messenger Install
-------------------------------------------------------------

Setup	×
<b>Server Information</b> Select the installation path and the type of server on which you will run the Novell Messenger Agents.	N
Server: <ul> <li>NetWare</li> <li>Microsoft Windows Server</li> <li>Install agents as Windows services</li> <li>Install and configure SNMP for the Messenger Agents</li> </ul>	
Installation path:	
z:\Novell\NM Browse	
Installation Guide < Back Next > Cano	el

As a result, you have one Messenger Server object (named after the server where you installed the Messenger agents) that contains objects for the Messaging Agent and Archive Agent. These agent objects store the configuration information for the agents.

Figure 1-5 Server and Agent Objects



If you do not want to enable archiving, or if you want to run the Archive Agent on the same server with the Messaging Agent, one Messenger Server object is sufficient. If you want to enable archiving and run the Archive Agent on a different server, you should remove the initial Archive Agent object and then rerun the Messenger Installation program to create a second Messenger Server object that contains just an Archive Agent object. For instructions, see Chapter 4, "Enabling and Managing Archiving," on page 151.

## 1.2.3 Scope Profiles

During creation of your Messenger system, you provided a list of eDirectory contexts that contain User objects that you want to include in your Messenger system, as described in "Installing a Novell Messenger System" in the *Novell Messenger 2.1 Installation Guide*.

Figure 1-6 User Configuration Page in the Messenger Installation Program

Setup	×
User Configuration Select the context(s) that Novell Messenger should use to authenticate and search for users	N
Use the Add button below to add a context to the list. To remove a context highlight it press the remove button.	and
OU=dev,OU=prv,O=novell	<u>A</u> dd <u>R</u> emove
Include sub contexts. If more granular control is needed, use ConsoleOne to modify the scope profile object created by the install.	
InstallShield	Cancel

This list of contexts was stored in the Default Scope Profile object in eDirectory.

Figure 1-7 Scope Container Object and Contents



You can add users to your Messenger system at any time by adding their eDirectory contexts to the Default Scope Profile object, as described in "Editing the Default Scope Profile to Include Additional eDirectory Users" on page 88.

If you want to subdivide your Messenger users into groups based on their e-mail addresses, you can create multiple scope profiles, as described in Section 3.3, "Providing User Searches Based on E-Mail Addresses," on page 104.

## 1.2.4 LDAP Profiles

During creation of your Messenger system, you chose between direct access and LDAP access to eDirectory, as described in "Installing a Novell Messenger System" in the *Novell Messenger 2.1 Installation Guide*.

Figure 1-8 Directory Access Page in the Messenger Installation Program

Setup		×
Directory Access The Novell Messenger agents can acce through an LDAP server.	ess eDirectory directly or	N
Specify how the agents should access	the directory.	
Use direct access		
Replica Address: (e.g. xxx.xxx.xxx.xxx)		
O Use LDAP to access the directory		
Host: (e.g. xxx.xxx.xxx.xxx)		
Port: 389 or 636 (SSL)	389	
Root Certificate: (e.g. z:\public\rootcert.der)		Browse
InstallShield		
Installation Guide	< Back Next >	Cancel

This choice applies initially to how the Messenger agents access eDirectory to obtain their configuration settings from their eDirectory objects. This access method information is stored in the agent startup files. Without additional configuration, the eDirectory access method chosen during installation also applies to how the Messaging Agent accesses eDirectory on behalf of Messenger users when they log in to Messenger, search for contacts, establish conversations, and so on.

You might want the Messaging Agent to access eDirectory differently on behalf of Messenger users than how the agents access eDirectory to obtain their configuration information. If so, you will create an LDAP Profile object in the LDAP Container object.

Figure 1-9 LDAP Container Object and Contents



An LDAP profile is used instead of a scope profile to provide a list of LDAP servers that the Messenger agents can contact when they need eDirectory access. By creating an LDAP profile, you have more LDAP-specific options available when you configure eDirectory access, as described in "Providing LDAP Access to eDirectory for Messenger Users" on page 91.

## 1.2.5 Chat

The Messenger Chat container is used to store chat room objects. When a chat room is created, a chat room object is created in the Chat Container. The chat room objects contain the information about the chat room, including who owns the chat room, the name of the chat room, access, and other such information.

Figure 1-10 Chat Container and Contents



You can use the chat room objects to edit the chat rooms on the system. You can assign new owners, rename the chat rooms, change access and other such settings. For more information on chat room administration, see Chapter 5, "Managing Chat Rooms," on page 195.

## 1.2.6 Hosts

Messenger Host objects (referred to as host profiles) are used to divide Messenger users into groups based on the Internet domain portion of their Messenger addresses (which you configure to be equivalent to their e-mail addresses). No host profiles are created by default in your Messenger system.

Figure 1-11 Host Container and Contents



You can organize your Messenger system at any time by using hostnames and Messenger addresses, as described in Section 3.3, "Providing User Searches Based on E-Mail Addresses," on page 104.

## 1.2.7 Policies

During creation of your Messenger system, a Default Policy object is created that establishes some basic Messenger user policies.

Figure 1-12 Policy Container and Contents



User policies for controlling specific functionality of the Messenger client, creating a default contact list, setting default privacy, establishing default contact list information, and creating default custom statuses can be established at any time, as described in Section 3.4, "Setting User Policies," on page 112.

## 1.2.8 User Properties

During creation of your Messenger system, all User objects that are located within the scope of your Messenger system have a *Novell Messenger* tab added to their object properties.

Properties of user1							X
General 👻 ZENworks 👻	Novell Messenger	•	Remote Management	Restrictions	→   Mer	nberships	✓ Securit( ▲)
	✔ General						
	Personal History						
IV Enaple Novell Messeng	Contact List						
Archive message sess	Privacy						of 🗳 📋
Allow users to search	Information List	ers					<del></del>
Allow users to send br	roadcast messages to c	othei	r users				<del>ന്</del> ക്രി
-	- vetem broadcast messs	sene					
		ages					
Allow <u>u</u> sers to use cha	at rooms						
Allow users to create	chat rooms						of 🗳 🏼
Allow users to change	their password						🚽 🖧
Allow users to use Rei	member Password						<del>6</del> 4
Default <u>h</u> ost:						2	<del>6</del> 4
Scope profile:		111111					പ് 🗳 💧
Policy:						2	
Last Login: July 28, 200	35 4:48:57 PM MDT						
Restore Default Settings							
Page Options				OK	Cancel	Арр	ly <u>H</u> elp

Figure 1-13 User Object Properties for a Messenger User

The properties on each User object enable you to override user policies for each user as needed, as described in Section 3.4, "Setting User Policies," on page 112.

## 1.3 Language Availability

You can run the Messenger Installation program, administer your Messenger system in ConsoleOne, and run the Messenger agents in the following languages:

- English
- French
- German

- Spanish
- Portuguese

All available administration languages are automatically installed.

By default, the Messenger Installation program, ConsoleOne, and the Messenger agents start in the language of the operating system, if it is available. If the operating system language is not available for Messenger, the next default language is English. In the Installation program, you can select from among the available languages to override the English default. When starting the Messenger agents, you can use the /language startup switch to override the English default on Windows servers.

You can run the Messenger client in the following languages:

- Arabic
- Czech
- Chinese Simplified
- Chinese Traditional
- Danish
- Dutch
- English
- Finnish
- French
- German
- Hebrew
- Hungarian
- Italian
- Japanese
- Korean
- Norwegian
- Polish
- Portuguese
- Russian
- Spanish
- Swedish

Users can select the languages they want when they install the Messenger client.

By default, the Messenger client starts in the language of the operating system, if it is available. If the operating system language is not available, the next default language is English. In the Messenger client, you can click *Tools* > *Options*, then select an interface language from those that have been installed. When starting the Messenger client, you can use the /l startup switch to override the English default and select an interface language from those that have been installed.

# **Managing the Messaging Agent**

The Messaging Agent is the heart of your Messenger system. To review its various roles, see "Messaging Agent" on page 14. The following sections help you manage and monitor the Messaging Agent in your Messenger system:

- Section 2.1, "Starting the Messaging Agent," on page 29
- Section 2.2, "Configuring the Messaging Agent in ConsoleOne," on page 36
- Section 2.3, "Establishing Messaging Security with SSL Encryption," on page 38
- Section 2.4, "Changing the Agent User Password," on page 41
- Section 2.5, "Monitoring the Messaging Agent," on page 42
- Section 2.6, "Optimizing Messaging Agent Performance," on page 61
- Section 2.7, "Managing the Messaging Server," on page 63
- Section 2.8, "Using Messaging Agent Startup Switches," on page 66

# 2.1 Starting the Messaging Agent

When you finish creating your Messenger system, the Installation program can start the Messenger agents for you. If you installed the Messenger agents on a Windows server, the Messaging Agent console appears on the Windows server console, as follows:

#### Figure 2-1 Messaging Agent Console

🖻 Novell Messenger Messaging Agent				
File Configuration Log Help				
.MessagingAgent.SERVER.MessengerService.Wind Up Time: 0 Days 0 Hrs 3 Mins				
Status	- Statistics			
Processing	Requests:	0 Errors:	0	
Users: 0	Requests Pending:	0		
Archive Queue: 0				
14:50:56 EB8 CFG Log Path: c:\Novell\NM\ma\logs         14:50:56 EB8 CFG Log to disk: Yes         14:50:56 EB8 CFG Log Level: Normal         14:50:56 EB8 CFG Log Max Age (in days): 14         14:50:56 EB8 CFG Log Max Size (in MB): 128         14:50:56 EB8 CFG Web Console: Disabled         14:50:56 EB8 Building the client extractor         14:51:01 EB8 Client extractor successfully built         14:51:01 EB8 MTP Message Transfer Protocol initialization         14:51:02 E74 TCP Starting NMMA-TCP-LISTENER         14:51:02 FB8 TCP Starting NMMA-TCP-DISPATCHER				

If you installed the Messenger agents on a NetWare server, the Messaging Agent console appears on the NetWare server console.

If you installed the Messenger agents on a Linux server, the Messaging Agent, by default, runs as a daemon and has no comparable user interface. However, you can, if desired, start it in a terminal window so that status messages are displayed, as described in "Starting the Linux Messaging Agent in a Terminal Window" on page 31, and you can monitor the Messaging Agent from your Web browser, as described in "Using the Messaging Agent Web Console" on page 44.

The following sections help you start the Messaging Agent manually, as well as automatically whenever the server restarts:

- Section 2.1.1, "Starting the NetWare Messaging Agent," on page 30
- Section 2.1.2, "Starting the Linux Messaging Agent," on page 31
- Section 2.1.3, "Starting the Windows Messaging Agent," on page 32
- Section 2.1.4, "Changing the eDirectory Access Method for Starting the Messaging Agent," on page 34

## 2.1.1 Starting the NetWare Messaging Agent

The Installation program creates the nmstart.ncf file in the Messenger agent installation directory (sys:\novell\run by default). This file contains lines similar to the following example:

load sys:\novell\nm\ma\nmma.nlm @sys:\novell\nm\ma\strtup.ma
load sys:\novell\nm\aa\nmaa.nlm @sys:\novell\nm\aa\strtup.aa

If you do not plan to enable archiving, edit the nmstart.ncf file and comment out the second line so that the Archive Agent does not start when the nmstart.ncf file is run.

To start the Messaging Agent manually:

1 Enter sys:\novell\nm\nmstart.ncf at the NetWare server console prompt.

The Messaging Agent console appears.

To start the Messaging Agent automatically when the NetWare server restarts:

1 Add the following line to the autoexec.ncf file in the sys:\system directory:

sys:\novell\nm\nmstart.ncf

If you want to start the Messaging Agent in protected mode, you must be using LDAP access to Novell eDirectory. See "Using LDAP Access for the Messaging Agent" on page 35. In addition, when you stop the Messaging Agent agent in protected mode, you must manually unload the address space.

## 2.1.2 Starting the Linux Messaging Agent

You have several alternatives for starting the Messaging Agent on Linux:

- "Starting the Linux Messaging Agent as a Daemon" on page 31
- "Starting the Linux Messaging Agent in a Terminal Window" on page 31
- "Configuring the Linux Messaging Agent to Start Automatically as a Startup Service" on page 32

#### Starting the Linux Messaging Agent as a Daemon

To start the Messaging Agent as a daemon, use the startup script provided in the /etc/init.d directory.

- 1 At the Linux server, become root by entering su and the root password.
- **2** Change to the /etc/init.d directory.
- **3** To start the Messaging Agent, enter the following command:

./novell-nmma start

You can also use the stop, restart, and status options for the Messaging Agent from the same directory.

Messaging Agent log files are created in the /var/opt/novell/log/messenger directory. The Messaging Agent can be monitored using the agent Web consoles from your Web browser, as described in "Using the Messaging Agent Web Console" on page 44.

#### Starting the Linux Messaging Agent in a Terminal Window

To start the Messaging Agent in a terminal window, run the Messaging Agent executable.

- **1** At the Linux server, become root by entering su and the root password.
- 2 Change to the /opt/novell/messenger/bin directory.

**3** To start the Messaging Agent, enter the following command:

./nmma @/etc/opt/novell/messenger/strtup.ma

Agent status information and messages are displayed in the terminal window.

To stop the Messaging Agent when it is running in a terminal window, press Ctrl+C and the Messaging Agent performs a normal shutdown.

#### Configuring the Linux Messaging Agent to Start Automatically as a Startup Service

A startup service starts automatically each time the server reboots.

- "Configuring the Messaging Agent as a Startup Service on SUSE Linux" on page 32
- "Configuring the Messaging Agent as a Startup Service on Red Hat Linux" on page 32

#### Configuring the Messaging Agent as a Startup Service on SUSE Linux

- 1 At the Linux server, become root by entering su and the root password.
- **2** If eDirectory for Linux is installed, enter the following command:

```
insserv novell-nmma
```

or

If eDirectory for Linux is not installed, use the following command to override the dependency on the ndsd service:

insserv -f novell-nmma

If you later want to remove the Messaging Agent as a startup service, enter the following command in a terminal window:

insserv -r novell-nmma

#### Configuring the Messaging Agent as a Startup Service on Red Hat Linux

- 1 At the Linux server, become root by entering su and the root password.
- **2** Enter the following command:

chkconfig --add novell-nmma

If you later want to remove the Messaging Agent as a startup service, enter the following command in a terminal window:

chkconfig --del novell-nmma

## 2.1.3 Starting the Windows Messaging Agent

Follow the instructions for the Windows installation option you chose:

- "Starting the Messaging Agent as a Windows Application" on page 33
- "Starting the Messaging Agent as a Windows Service" on page 33

#### Starting the Messaging Agent as a Windows Application

To start the Messaging Agent manually:

Click Start > Programs > Novell Messenger Agents > Messaging Agent.
 You might want to create a desktop shortcut for this action.

To start the Messaging Agent automatically whenever the server restarts:

- 1 Click *Start* > *Settings* > *Taskbar* & *Start Menu* > *Advanced* > *Add*.
- **2** Browse to the directory where you installed the Messaging Agent (\novell\nm\ma).
- **3** Double-click nmma.exe, then add the startup file (strtup.ma) to the command line. Example: nmma.exe @strtup.ma
- 4 Click Next.
- **5** Select the *Startup* folder, provide a name for the shortcut, then click *Finish*.

#### Starting the Messaging Agent as a Windows Service

To start the Messaging Agent manually:

- 1 Click *Start* > *Settings* > *Control Panel*.
- **2** Double-click *Administrative Tools > Services*.
- 3 Right-click the Novell Messenger Messaging Agent service, then click Start.

To start the Messaging Agent automatically whenever the server restarts:

- 1 Click *Start* > *Settings* > *Control Panel*.
- **2** Double-click *Administrative Tools* > *Services*.
- 3 Right-click the Novell Messenger Messaging Agent service, then click Properties.
- **4** Set *Startup Type to Automatic*.
- **5** Click *OK* to save the Windows service startup setting.

If you do not want to run the Archive Agent along with the Messaging Agent, make sure that the Novell Messenger Archive Agent service is disabled.

To start the Messaging Agent without a user interface on the Windows server desktop:

- 1 Click *Start* > *Settings* > *Control Panel*.
- **2** Double-click *Administrative Tools* > *Services*.
- **3** Right-click the Novell Messenger Messaging Agent service, then click Properties.
- 4 Click Log On, then deselect Allow Service to Interact with Desktop.

If you suppress the Messaging Agent console in this manner, the Messaging Agent can still be monitored from the Messaging Agent Web console, as described in "Using the Messaging Agent Web Console" on page 44.

5 Click OK to save the Windows service logon setting.

# 2.1.4 Changing the eDirectory Access Method for Starting the Messaging Agent

The Messaging Agent cannot start if it cannot read its configuration settings from the Messaging Agent object in eDirectory. During installation, an eDirectory access method was selected, as described in "Installing a Novell Messenger System" in the *Novell Messenger 2.1 Installation Guide*.



Setup		×
Directory Access The Novell Messenger agents can acc through an LDAP server.	cess eDirectory directly or	N
Specify how the agents should access	the directory.	
Use direct access		
Replica Address: (e.g. xxx.xxx.xxx.xxx)		
C Use LDAP to access the directory		
Host: (e.g. xxx.xxx.xxx.xxx)		
Port: 389 or 636 (SSL)	389	
Root Certificate: (e.g. z:\public\rootcert.der)		Browse
InstallShield		
Installation Guide	< Back Next >	Cancel

The information for the eDirectory access method was stored in the Messaging Agent startup file as settings for the following startup switches:

 Table 2-1
 Startup Switches

Access Method	Startup Switch	Description
Use Direct Access	/dirreplicaipaddr	Specifies the IP address of the server where the eDirectory replica resides (for direct access on a Linux or Windows server; not applicable on a NetWare server).
Use LDAP to Access the Directory	/ldapipaddr	Specifies the IP address of the LDAP server.

Access Method	Startup Switch	Description
	/Idapport	Specifies the port number on which the LDAP server listens for service requests. Port 636 indicates an SSL connection; port 389 indicates a non-SSL connection.
	/ldapssl	Indicates whether or not the LDAP server uses an SSL connection, depending on whether or not you filled in the <i>Root Certificate</i> field.
	/ldapsslkey	Specifies the full path to the root certificate for the server if SSL is in use.

To change the directory access method selected during installation, follow the appropriate set of instructions:

- "Using LDAP Access for the Messaging Agent" on page 35
- "Using Direct Access for the Messaging Agent" on page 35

#### Using LDAP Access for the Messaging Agent

**1** Edit the Messaging Agent startup file (strtup.ma).

On Linux, the startup file is located in /etc/opt/novell/messenger.

On NetWare and Windows, the startup file is located in the Messenger Agent installation directory. You can edit the startup file from the Messaging Agent console. See "Controlling the Messaging Agent from the Messaging Agent Console" on page 44.

2 On Linux and Windows, comment out the /dirreplicaaddr switch.

On a NetWare server, this switch does not apply, because the eDirectory replica resides on the NetWare server.

- **3** Scroll down to the bottom of the startup file.
- **4** Remove the comment character (;) from the /ldap\* switches and provide the required LDAP information, as listed in Table 2-1.
- **5** Save the startup file.
- **6** Stop and then start the Messaging Agent so that it reads its updated startup file and uses LDAP access to eDirectory.

If you have already created an LDAP profile to configure eDirectory access for Messenger users, as described in "Providing LDAP Access to eDirectory for Messenger Users" on page 91, the LDAP profile continues to be used for users, while the startup switches now control how the Messaging Agent accesses eDirectory to obtain its configuration information.

#### Using Direct Access for the Messaging Agent

**1** Edit the Messaging Agent startup file (strtup.ma).

On Linux, the startup file is located in /etc/opt/novell/messenger.

On Windows and NetWare, the startup file is located in the Messenger Agent installation directory. You can edit the startup file from the Messaging Agent console. See "Controlling the Messaging Agent from the Messaging Agent Console" on page 44.

**2** Remove the comment character (;) from the /dirreplicaaddr switch and provide the IP address of the eDirectory replica that you want the Messaging Agent to access.

On a NetWare server, this switch does not apply, because the eDirectory replica resides on the NetWare server.

- **3** Scroll down to the bottom of the startup file.
- 4 Comment out the /ldap\* switches.

Removing the LDAP information causes the Messaging Agent to access the eDirectory replica directly.

- **5** If you want users to continue to use LDAP access, create an LDAP profile for them, as described in "Providing LDAP Access to eDirectory for Messenger Users" on page 91
- 6 Save the startup file.
- 7 Stop and then start the Messaging Agent so that it reads its updated startup file and uses direct access to eDirectory.

# 2.2 Configuring the Messaging Agent in ConsoleOne

The advantage to configuring the Messaging Agent in ConsoleOne, as opposed to using startup switches in the Messaging Agent startup file, is that the Messaging Agent configuration settings are stored in eDirectory.

- 1 In ConsoleOne, browse to and expand the Messenger Service object.
- **2** Select the Messenger Server object where the Messaging Agent runs.



**3** Right-click the Messaging Agent object, then click *Properties*.
Table 2-2 summarizes the Messaging Agent configuration settings in the Messaging Agent object property pages and how they correspond to Messaging Agent startup switches (as described in Section 2.8, "Using Messaging Agent Startup Switches," on page 66):

 Table 2-2
 Messaging Agent Configuration Settings in the Messaging Agent Object Property Pages

ConsoleOne Properties Pages and Settings	Corresponding Tasks and Startup Switches
Identification Page	
IP Address DNS Host Name Bind to This Address Client/Server Port Description	Displays the Messaging Agent server information established during installation.
General Page	
Enable Messenger Services	Turns on and turns off the availability of instant messaging for all Messenger users.
Enable SNMP	See "Using SNMP Monitoring Programs" on page 56, See also / nosnmp.
Work Path	See "Moving the Messaging Agent Working Directory" on page 65.
Security Page	
Certificate Path SSL Certificate SSL Key File Set Password Enable SSL for Client/Server Enable SSL for Message Transfer Protocol	See Section 2.3, "Establishing Messaging Security with SSL Encryption," on page 38. See also /certpath, /certfile, /keyfile, / keypassword, and /ssl.
Log Settings Page	
Log Level Enable Disk Logging Log Files Path Log Maximum Age Log Maximum Size	See "Using Messaging Agent Log Files" on page 53. See also / loglevel, /log, /logdays, /logmax, and /logdiskoff.
Web Console Page	
HTTP Port HTTP Username HTTP Password Enable SSL for Web Console	See "Setting Up the Messaging Agent Web Console" on page 44. See also /httpport, /httpuser, /httppassword, and /httpssl.
Performance Page	
Maximum Number of Users Client/ Server Threads Default Number of Connections Idle TImeout Maximum Number of Connections Maximum Query Results	See Section 2.6, "Optimizing Messaging Agent Performance," on page 61.
Messaging page	
Messaging Queue Path	See "Moving the Messaging Agent Conversation Holding Queue" on page 177.
Enable Client Download through a Browser	See "Using the Novell Messenger Download Page" on page 129.

After you install the Messaging Agent software, you can further configure the Messaging Agent by using a startup file. See Section 2.8, "Using Messaging Agent Startup Switches," on page 66 to survey additional ways the Messaging Agent can be configured.

## 2.3 Establishing Messaging Security with SSL Encryption

Secure Sockets Layer (SSL) ensures secure communication between programs by encrypting the complete communication flow between the programs. The Installation program offered the opportunity to configure the Messaging Agent for SSL encryption, as described in "Installing a Novell Messenger System" in the *Novell Messenger 2.1 Installation Guide*.

Figure 2-3	Security	Configuration	Page in t	he Messenger	Installation Prog	ram
------------	----------	---------------	-----------	--------------	-------------------	-----

Setup	×
Security Configuration Enable/Disable SSL for the agents you are installing.	Ν
Check the box to enable SSL for communication between the Novell Messenger agents and clients.	
Enable SSL	
Certificate File: Browse	
Key file: Browse	
Key password: Verify password:	
InstallShield	
Installation Guide < Back Next > 0	Cancel

If you set up SSL encryption during installation, the Installation program copied the certificate file and key file you specified to the \novell\nm\certs directory to ensure availability for the Messenger agents.

If you did not set up SSL encryption during installation, you can easily do so after installation. If you have not already set up SSL encryption on your system, you must complete the following tasks:

- Section 2.3.1, "Generating a Certificate Signing Request and Private Key," on page 39
- Section 2.3.2, "Submitting the Certificate Signing Request to a Certificate Authority," on page 39

- Section 2.3.3, "Installing the Certificate on the Server," on page 39
- Section 2.3.4, "Configuring the Messaging Agent for SSL," on page 39

## 2.3.1 Generating a Certificate Signing Request and Private Key

Before the Messaging Agent can use SSL encryption, you must send a certificate signing request (CSR) to a certificate authority (CA) and receive a public certificate file in return. The CSR includes the hostname of the server where the Messaging Agent runs. The Messaging Agent and the Archive Agent can use the same certificate if they run on the same server. The CSR also includes your choice of name and password for the private key file that must be used with each certificate. This information is needed when configuring the Messaging Agent to use SSL encryption.

One way to create a CSR is to use the GroupWise GWCSRGEN utility. See "Generating a Certificate Signing Request" in "Security Administration" in the *GroupWise 8 Administration Guide* for instructions. This utility takes the information you provide and creates a .csr file to submit to a certificate authority. You might want to name the .csr file after the server it goes with, for example, *server\_name.csr*.

# 2.3.2 Submitting the Certificate Signing Request to a Certificate Authority

To receive a server certificate, you need to submit the certificate signing request (*server\_name.csr* file) to a certificate authority. If you have not previously used a certificate authority, you can use the keywords "Certificate Authority" to search the Web for certificate authority companies. The certificate authority must be able to provide the certificate in Base64/PEM or PFX format.

**IMPORTANT:** You cannot use an eDirectory root certificate (rootcert.der file) as a public certificate.

The process of submitting the CSR varies from company to company. Most provide online submission of the request. Follow their instructions for submitting the request.

The Novell Certificate Server, which runs on a NetWare server with Novell eDirectory, enables you to establish your own Certificate Authority and issue server certificates for yourself. For more information, see the Novell Certificate Server site (http://www.novell.com/products/certserver).

## 2.3.3 Installing the Certificate on the Server

After processing your CSR, the certificate authority returns to you a certificate (*server\_name.crt*) file and a private key (*server\_name.key*) file. Copy the files to the certs subdirectory of the Messenger agent installation directory.

## 2.3.4 Configuring the Messaging Agent for SSL

After you have a public certificate and a private key file available on the server where the Messaging Agent runs, you are ready to configure the Messaging Agent to use SSL encryption.

- 1 In ConsoleOne, browse to and expand the Messenger Service object.
- 2 Right-click the Messenger Server object, then click *Properties*.

#### **3** Click *Server* > *Security*.

operties of prv-docte	st2Server	
Security NDS Rights ◄	Other   Rights to Files and Folders	
Certificate Path:	Jopt/hovell/messenger/certs	
SSL Certificate:	servercert.pem	
SSL Key File:	serverkey.pem	
	Set Password	
the second s		1

**4** Fill in the following fields:

**Certificate Path:** This field defaults to \novell\nm\certs for NetWare and Windows, and / opt/novell/messenger/certs for Linux.

**IMPORTANT:** The certificate path must be located on the same server where the Messenger agents are installed. If your SSL certificate and key file are located on a different server, you must copy them into the directory specified in the *Certificate Path* field so that they are always accessible to the Messenger agents.

**SSL Certificate:** Browse to and select the public certificate file. Or, if it is located in the directory specified in the *Certificate Path* field, you can simply type the filename.

**SSL Key File:** Browse to and select your private key file. Or, if it is located in the directory specified in the *Certificate Path* field, you can simply type the filename.

**Set Password:** Provide the key file password you established when you submitted the certificate signing request.

Enable SSL: Select this option to enable SSL encryption for your Messenger system.

Because you provided the SSL information on the Messenger Server object, it applies to both the Messaging Agent and the Archive Agent if both agents are running on the same server. The same information can be provided on the Security page of each Messenger agent if necessary.

- **5** Click *OK* to save the SSL settings.
- 6 Stop and then start the Messaging Agent to start using SSL encryption.

**Corresponding Startup Switches:** You can also use the /certpath, /certfile, /keyfile, /keypassword, and /ssl startup switches in the Messaging Agent startup file to configure the Messaging Agent to use SSL encryption.

# 2.4 Changing the Agent User Password

When the Messaging Agent and Archive Agent are installed, the user's eDirectory password that is used to read the configuration that starts the agents is stored in the startup file for each agent. Prior to Messenger 2.0.2 Hot Patch 1, this password was stored in plain text. By default in Messenger 2.0.2 Hot Patch 1, the password is obfuscated to prevent it from being read.

If you want to check whether the password has been obfuscated, look in the startup files. The password is prepended with \$\$: if it has been obfuscated.

The NMPassword utility is used to change the password in the startup file for both the Messaging Agent and the Archive Agent.

- Section 2.4.1, "Changing the Agent User Password on NetWare or Windows," on page 41
- Section 2.4.2, "Changing the Agent User Password on Linux," on page 41

# 2.4.1 Changing the Agent User Password on NetWare or Windows

Before using the utility, you must verify that a drive has been mapped to the location of the startup file.

To change the password:

- 1 In Windows, click Start > Run, then enter cmd to open a command window.
- **2** Use the following command to change the password:

```
c:\gwm202\server\utility\nmpwd.exe --startup=<path to startup file>
--password=<new password>
```

Replace c:\gwm202 with the location where the hot patch files were extracted.

#### 2.4.2 Changing the Agent User Password on Linux

Before using the utility, you must verify the following prerequisites:

- Make sure you have installed Messenger 2.0.2 Hot Patch 1.
- A drive must be mapped to the location of the startup file.
- 1 After installing Messenger 2.0.2 Hot Patch 1, change to the /opt/novell/messenger/bin/ directory.
- **2** Become root by entering sux and the root password.
- **3** Use the following command to change the password:

```
./nmpwd --startup=<path to startup file> --password=<new password>
```

# 2.5 Monitoring the Messaging Agent

By monitoring the Messaging Agent, you can determine whether or not its current configuration is meeting the needs of your Messenger users. You have a variety of tools to help you monitor the operation of the Messaging Agent:

- Section 2.5.1, "Using the Messaging Agent Console on NetWare and Windows," on page 42
- Section 2.5.2, "Using the Messaging Agent Web Console," on page 44
- Section 2.5.3, "Using Messaging Agent Log Files," on page 53
- Section 2.5.4, "Using GroupWise Monitor," on page 55
- Section 2.5.5, "Using Novell 6.5 Remote Manager," on page 56
- Section 2.5.6, "Using SNMP Monitoring Programs," on page 56

# 2.5.1 Using the Messaging Agent Console on NetWare and Windows

The following topics help you use the Messaging Agent console on NetWare and Windows:

- "Monitoring the Messaging Agent from the Messaging Agent Console" on page 42
- "Controlling the Messaging Agent from the Messaging Agent Console" on page 44

**NOTE:** The Messaging Agent console is not available on Linux. Use the Web console instead, as described in "Using the Messaging Agent Web Console" on page 44.

#### Monitoring the Messaging Agent from the Messaging Agent Console

The Messaging Agent console provides information, status, and message statistics about the Messaging Agent to help you assess its current functioning.

#### Figure 2-4 Messaging Agent Console

👎 Novell Messenger Messagi	ng Agent			
File Configuration Log Help				
.MessagingAgent.SERVER.Messen	gerService.Wind Up Time:	0 Days	0 Hrs 3 I	Mins
Status	Statistics			
Processing	Requests:	0 Errors:		0
Users: 0	Requests Pending:	0		
Archive Queue: 0				
14:50:56 EB8 CFG Log Path: c:\Nor 14:50:56 EB8 CFG Log to disk: Yes 14:50:56 EB8 CFG Log Level: Norm 14:50:56 EB8 CFG Log Max Age (in 14:50:56 EB8 CFG Log Max Size (in 14:50:56 EB8 CFG Web Console: D 14:50:56 EB8 Building the client extr 14:51:01 EB8 Client extractor succe 14:51:01 EB8 ARC Archive queue ir 14:51:01 EB8 MTP Message Transf 14:51:01 EB8 SPL Client/Server initi 14:51:01 EB8 SPL Client/Server initi 14:51:02 E74 TCP Starting NMMA-T 14:51:02 FB8 TCP Starting NMMA-T	vell\NM\ma\logs al days): 14 (MB): 128 isabled ractor issfully built nitialization fer Protocol initialization ialization FCP-LISTENER FCP-DISPATCHER			

The Messaging Agent console includes several areas of information:

Information	Description
Information Box	Identifies the Messaging Agent, displays description information provided in ConsoleOne, and shows how long the Messaging Agent has been running.
Status Box	Displays the number of current Messenger client users and the number of conversations that are queued for archiving. The rotating processing bar shows that the Messaging Agent is running.
Statistics Box	Displays the number of requests that the Messaging Agent has received from Messenger clients or from the Archive Agent, along with the number of requests that it has been unable to respond to. Pending requests might indicate a need to optimize Messaging Agent performance to better serve Messenger users.
Log Message Box	Displays the same information that is being written to the Messaging Agent log file. The amount of information displayed depends on the current log settings for the Messaging Agent. See "Using Messaging Agent Log Files" on page 53. The information scrolls up automatically.

 Table 2-3
 Messaging Agent Console Information

#### Controlling the Messaging Agent from the Messaging Agent Console

You can perform the following tasks to monitor and control the Messaging Agent from the Messaging Agent console at the server where the Messaging Agent is running:

Task	NetWare	Windows
Stop the Messaging Agent	F7	File > Exit
Edit the startup file	F10 > Edit Startup File	Configuration > Edit Startup File
Display current agent settings	N/A	Configuration > Agent Settings
Display the current log file	F9	Log > Auto Scroll Off > scroll as needed
Display a selected log file	F10 > View Log Files	Log > View Log
Change log settings for the current agent session	F10 > Logging Options	Log > Log Settings
Start a new log file	F10 > Cycle Log	Log > Cycle Log
Display online help	F1	Help > Help

Table 2-4 Performing Messaging Agent Tasks

#### 2.5.2 Using the Messaging Agent Web Console

The Messaging Agent Web console enables you to monitor and control the Messaging Agent from any location where you have access to a Web browser and the Internet. This provides substantially more flexible access than the Messaging Agent console, which can only be accessed from the server where the Messaging Agent is running.

- "Setting Up the Messaging Agent Web Console" on page 44
- "Accessing the Messaging Agent Web Console from Your Web Browser" on page 45
- "Monitoring the Messaging Agent at the Web Console" on page 47
- "Accessing the Messaging Agent Web Console from GroupWise Monitor" on page 53

#### Setting Up the Messaging Agent Web Console

- 1 In ConsoleOne, browse to and expand the MessengerService object.
- **2** Select the Messenger Server object to display its contents.
- **3** Right-click the Messaging Agent object, then click *Properties*.
- **4** Click *Agent* > *Web Console*.

riebeities et messeBrißiBeiti		$\mathbf{X}$
Agent    NDS Rights    Other Rights to Files and Folders Web Console	1	
HTTP Port: 8314		
Username: Password: Set Password		11111
Enable SSL for Web Console		
Page Options	OK Cancel Anniv Heir	

**5** Fill in the following fields:

**HTTP Port:** Specify the port number for the Messaging Agent to listen on for service requests from your Web browser; for example, 8313.

**Username:** If you want to restrict access to the Messaging Agent Web console, specify a user name for the Messaging Agent to prompt for before allowing access to the Web console.

**Password:** Specify the password for the Messaging Agent to prompt for before allowing access to the Web console.

**Enable SSL for Web Console:** Select this option if you want the Messaging Agent to use SSL encryption when communicating with your Web browser.

In order to use SSL encryption for the Web console, you must properly configure the Messaging Agent, as described in Section 2.3, "Establishing Messaging Security with SSL Encryption," on page 38.

- 6 Click OK to save the Web console settings.
- 7 Stop and then start the Messaging Agent to put the HTTP settings into effect.

**Corresponding Startup Switches:** You can also use the /httpport, /httpuser, /httppassword, and / httpssl startup switches in the Messaging Agent startup file to enable and secure the Messaging Agent Web console.

#### Accessing the Messaging Agent Web Console from Your Web Browser

To monitor the Messaging Agent from your Web browser, view the following URL:

http://Messenger\_server:agent\_port

where *Messenger\_server* represents the IP address or hostname of the server where the Messaging Agent is running and *agent\_port* represents the port number you specified in Step 5 in "Setting Up the Messaging Agent Web Console" on page 44. For example:

http://172.16.5.18:8313

Figure 2-5 Messaging Agent Web Console Status Page

Novell Messenger Messaging Agent		
Status Configuration Environment Log Files		
Up Time: 4 Days 22 Hrs 4 Mins		
	Total	
Current Users	0	
Peak Users	3	
Physical Connections	0	
Thread Status		-
C/S Handler Threads	Total 15	Busy
Event Worker Threads	0	0
Chat Rooms		
	Total	Active
Chat Rooms	3	Ŭ
Statistics		
	Total	
C/S Requests	45	
C/S Requests Pending	<del>ہ</del> ۔ ۱	
Current Conversations/Conferences	0	
Total Conversations/Conferences	ů N	
Total Messages	0	
Total Broadcasts	1	
Total System Broadcasts	0	
Total Overieg	0	
Total Sessions Transferred	0	
	0	
Directory Status		
	Total	
Maximum Connections	50	
Active Connections	0	
Available Connections	10	
Unusable Connections	0	
Archive Status		
	Total	
Archive Queue	0	
Archive Queue Size (MB)	0	
Maxiumum memory per conference	51200	
Current total memory usage	0	

#### Monitoring the Messaging Agent at the Web Console

The Messaging Agent Web console provides several pages of information to help you monitor the performance of the Messaging Agent. The bar at the top of the Messaging Agent Web console displays the name of the agent. Below this bar appears the Web console menu that lists the pages of information available in the Messaging Agent Web console.

- "Monitoring Messaging Agent Status" on page 47
- "Checking Monitor Agent Configuration" on page 49
- "Checking the Messaging Agent Operating System Environment" on page 50
- "Viewing and Searching Messaging Agent Log Files" on page 51

#### Monitoring Messaging Agent Status

When you first access the Messaging Agent Web console, the Status page is displayed.

#### Figure 2-6 Messaging Agent Web Console Status Page

Novell Messenger Messaging Agent		
Status   Configuration   Environment   Log Files		
Up Time: 4 Days 22 Hrs 4 Mins		
Comment II and	Total	
Current Users	0	
Peak Users	د .	
Physical Connections	U	
Thread Status		
	Total	Busy
C/S Handler Threads	15	0
Event worker I meads	U	U
Chat Rooms		
Chat Basers	Total	Active
Chat Rooms	د	U
Statistics		
	Total	
C/S Requests	45	
C/S Requests Pending	0	
Current Conversations/Conferences	0	
Total Conversations/Conferences	0	
Total Messages	0	
Total Broadcasts	1	
Total System Broadcasts	0	
Total Queries	0	
Total Sessions Transferred	0	
Directory Status		
Bactory Status	Total	
Maximum Connections	50	
Active Connections	0	
Available Connections	10	
Unusable Connections	0	
A		
Archive Status	Total	
Archive Queue	0	
Archive Queue Size (MB)	0	
Maxiumum memory per conference	51200	
Current total memory usage	0	
	Ŭ	

The Web console provides more detailed status information than the Messaging Agent console.

Click *Current Users* to display a list of current Messenger users and their IP addresses. Click the User ID, then click *Disconnect User* to disconnect the user.

Click *C/S Handler Threads* to display the Messaging Agent client/server threads, the number of requests each thread has handled, and each thread's current activity.

Click *Chat Rooms* to display a list of current chat rooms and their CN names, owners, and number of active participants. Click *Re-initialize Chat List* to re-initialize the chat room process. By re-initializing the chat room process, chat rooms that are added in ConsoleOne are added to the list of chat rooms. Users can also use ConsoleOne to access the chat rooms after they have been added.

#### **Checking Monitor Agent Configuration**

Novell Messenger Messaging Agent

On the Messaging Agent Web console menu, click *Configuration* to display Messaging Agent configuration information.

Figure 2-7	Messaging Agent V	Web Console	Configuration	Page
------------	-------------------	-------------	---------------	------

Status   Configuration	Environment   Log Elleg
Diarda   Cound manon	Environment   Log Files
Agent Configuration	
General	
Object DN:	.messagingagent.prv-doctest2server.messengerservice.corporate
Parent DN:	.prv-doctest2Server.MessengerService.corporate
Description:	
Version:	1.0
IP/DNS Address:	
Bind to IP/DNS Address	Disabled
Port:	8300
Work Path:	/var/opt/novell/messenger/temp
Security	
Use SSL:	Enabled
SSL Certificate Path:	/opt/novell/messenger/certs
SSL Certificate File:	/opt/novell/messenger/certs/servercert.pem
SSL Key File:	/opt/novell/messenger/certs/serverkey.pem
Use SNMP:	Disabled
Event Log	
Log to disk:	Enabled
Log Level:	Normal
Log Max Age:	14
Log Max Size:	128
Log Path:	/var/opt/novell/log/messenger/ma
Web Console	
WebConsole Port:	8301
WebConsole SSL:	Disabled

#### Checking the Messaging Agent Operating System Environment

On the Messaging Agent Web console menu, click *Environment* to display information about the operating system where the Messaging Agent is running. On a NetWare server, the following information is displayed:

Novell Messenger Messaging Agent	
Status   Configuration   Environment   Log	g Files
Loaded Module Data	
Report Date: 8-2-2005 at 15:07	
Server Configuration	
Server	PRV-DOCTEST1
Company	Novell
O.S. revision	NetWare 5.70
O.S. date	July 3, 2003
Supported connections	31
Connections in use	1
Receive buffer max	10000 (Recommended 2500)
Module Information	
Novell Messenger Archive Agent	
NMAA.NLM	
Version	2.00
Memory allocated	0
Build date	5-5-2005
Novell Messenger Messaging Agent	
NMMA.NLM	
Version	2.00
Memory allocated	0
Build date	5-5-2005
(Legacy) Standard C Runtime Library for N	LMs
CLIB.NLM	
Version	5.90 i
Memory allocated	0
Build date	6-18-2003
(Legacy) Standard C Runtime Library for N	LMs
CLIB.NLM	
Version	5.90 i
Memory allocated	0
Build date	6-18-2003

Figure 2-8	Messaging Agent	Web Console	Environment.	Page for	NetWare
------------	-----------------	-------------	--------------	----------	---------

On a Linux server, the following information is displayed:

Figure 2-9 Messaging Agent Web Console Environment Page for Linux

Novell Messenger Messaging Agent

Status | Configuration | Environment | Log Files

OS Data

Linux Kernel 2.6.5-7.147-default Version #1 Thu Jan 27 09:19:29 UTC 2005

On a Windows server, the following information is displayed:

Figure 2-10 Messaging Agent Web Console Environment Page for Windows

## Novell Messenger Messaging Agent

Status | Configuration | Environment | Log Files

OS Data

Windows NT (TM) Version 4.0 (Build 1381) Service Pack 6

Viewing and Searching Messaging Agent Log Files

On the Messaging Agent Web console menu, click *Log Files* to display and search Messaging Agent log files.

Figure 2-11 Messaging Agent Web Console Log Files Page

Novell Messenger Me <u>Status   Configuration   1</u>	essaging Agent Environment   Log Fi	les		
<u>Cycle Log</u> Event Log Filter				View <u>Event Log Settings</u>
Eletin Eog I mei				
Events containing				
		]		
Event logs:			Select all	
0719nma.001	07-19-05 00:00:00	0	<u>~</u>	
0720nma.001	07-20-05 00:00:00	0		
0721nma.001	07-21-05 00:00:00	0		
0722nma.001	07-22-05 00:00:00	0		
0723nma.001	07-23-05 00:00:00	0		
0723nma.002	07-23-05 13:36:36	1698		
0724nma.001	07-24-05 00:00:00	0	=	
0/25nma.001	07-25-05 00:00:00	U		
0/26nma.001	07-26-05 00:00:00	U		
0/2/nma.001	07-27-05 00:00:00	U		
0/28nma.001	07-28-05 00:00:00	0		
0729nma.001	07-29-05 00:00:00	0		
0730nma.001	07-30-05 00:00:00	0		
0731nma.001	07-31-05 00:00:00	0		
000111118.001	00-01-03 00.00.00	U		
View Events				

To view a particular log file, select the log file, then click View Events.

To search all log files for a particular string, type the string in the *Events Containing* field, select *Select All*, then click *View Events*. You can also manually select multiple log files to search. The results of the search are displayed on a separate page, which can be printed.

To start a new log file, click Cycle Log.

To view your log settings for the current Messaging Agent session, click *Event Log Settings* to display the Configuration page. To change your log settings for the current Message Agent session, click *Event Log* on the Configuration page.

Figure 2-12 Message Agent Web Console Event Log Settings Page

Novell Messenger Messaging Agent
Status   Configuration   Environment   Log Files
Event Log Settings
💿 Normal
C Verbose
C Diagnostic
Log File:
Enabled
C Disabled
Log Maintenance Settings
Max Log File Age (days): 14
Max Log Disk Space (MB): 128
Submit Reset

#### Accessing the Messaging Agent Web Console from GroupWise Monitor

If you use GroupWise Monitor to monitor your GroupWise agents, you can add the Messaging Agent to the list of monitored agents. Continue with "Using GroupWise Monitor" on page 55.

## 2.5.3 Using Messaging Agent Log Files

Error messages and other information about Messaging Agent functioning are written to log files as well as displaying on the Messaging Agent console. Log files can provide a wealth of information for resolving problems with Messaging Agent functioning.

- 1 In ConsoleOne, browse to and expand the MessengerService object.
- 2 Select the Messenger Server object.
- **3** Right-click the Messaging Agent, then click *Properties*.
- **4** Click *Agent* > *Log Settings*.

Properties of MessagingAgent
Agent → NDS Rights → Other   Rights to Files and Folders   Log Settings   Log Level: Normal ▼
Log Files Path: /var/opt/hovell/log/messenger/ma
Page Options OK Cancel Apply Help

**5** Fill in the following fields:

**Log Level:** Controls the amount of information logged by the Messaging Agent. Logged information is displayed in the log message box and written to the Messaging Agent log file during the current agent session. The default is Normal, which displays only the essential information suitable for a smoothly running Messaging Agent. Use Verbose to display the essential information, plus additional information helpful for troubleshooting. Use Diagnostic where very detailed, code-specific information is required.

**Enable disk logging:** Select this option so that the information displayed in the message log box at the Messaging Agent console is also saved to disk in log files.

Log Files Path: Specify the directory where the Messaging Agent stores its log files. On NetWare and Windows, the default location is the logs subdirectory of the Messaging Agent installation directory. On Linux, the default location is /var/opt/novell/log/messenger/ma.

Typically you find multiple log files in the specified directory. The first four characters represent the date. The next three identify the agent. A three-digit extension allows for multiple log files created on the same day. For example, a log file named 0518nma.001 indicates that it is a Messaging Agent log file, created on May 18. If you restarted the Messaging Agent on the same day, a new log file started, named 0518nma.002.

**Log Maximum Age:** Specify how many days to keep Messaging Agent log files on disk. The default is 14 days.

**Log Maximum Size:** Specify the maximum amount of disk space for all Messaging Agent log files. When the specified disk space is consumed, the Messaging Agent deletes existing log files, starting with the oldest. The default is 128 MB.

- 6 Click OK to save the log file settings.
- 7 Stop and then start the Messaging Agent to put the new log settings into effect.

**Corresponding Startup Switches:** You can also use the /log, /loglevel, /logdays, and /logmax startup switches in the Messaging Agent startup file to configure Messaging Agent log files.

## 2.5.4 Using GroupWise Monitor

GroupWise Monitor can be configured to monitor the Messaging Agent as well as the GroupWise Agents (Post Office Agent, Message Transfer Agent, Internet Agent, and WebAccess Agent). For background information about GroupWise Monitor, see "Monitor" in the *GroupWise 8 Administration Guide*.

- 1 Enable the Messaging Agent Web console, as described in "Setting Up the Messaging Agent Web Console" on page 44
- **2** At the Windows Monitor Agent console, click *Configuration > Add Novell Messenger System*.

ovell Messenger System Object	Browse	ОК
Specify a username and password to access the	directory	Cancel
User Name	Browse	Help
Password		
Specify how to access the directory Use direct access		

**3** Fill in the following fields:

Novell Messenger System Object: Browse to and select the MessengerService object.

**User Name:** Browse to and select a User object that has sufficient rights to enable the Monitor Agent to access Messenger agent object properties in eDirectory.

Password: Specify the eDirectory password associated with the selected User object.

**4** Provide the same eDirectory access information as you provided during installation:

Use Direct Access: Select this option if the Messaging Agent uses direct access to eDirectory.

• **Replica Address:** If the Messaging Agent is installed on a Windows server, provide the IP address of a server where the Messaging Agent can access a replica of eDirectory. If the Messaging Agent is installed on a NetWare server, you do not need to specify this information because there is an eDirectory replica on the NetWare server

5 Click OK to save the information about your Messenger system.

The Messaging Agent appears in the root agent group, along with the Archive Agent if it is running on the same server. You might want to create an agent group specifically for the Messenger agents. See "Creating and Managing Agent Groups" in "Monitor" in the *GroupWise 8 Administration Guide*.

#### 2.5.5 Using Novell 6.5 Remote Manager

If the Messaging Agent is running on a NetWare 6.5 server, you can use the IP Address Management feature in Novell Remote Manager (*NetWare Remote Manager > Manage Server > IP Address Management*) to view the IP address and port configuration for the Messaging Agent. This is also true for the Archive Agent running on a NetWare 6.5 server.

You access Novell Remote Manager by entering the following URL in a Web browser:

http://server address:8008

For example:

http://192.168.0.0:8008

For more information about using Novell Remote Manager, see the NetWare 6.5 documentation (http://www.novell.com/documentation/nw65).

#### 2.5.6 Using SNMP Monitoring Programs

You can monitor the Messaging Agent from the Management and Monitoring component of Novell ZENworks for Servers, ManageWise, or any other SNMP management and monitoring program. When properly configured, the Messaging Agent sends SNMP traps to network management consoles for display along with other SNMP monitored programs. It also responds to requests for configuration and status information from SNMP management and monitoring programs.

Although the Messaging Agent is SNMP-enabled by default, the server where the Messaging Agent is installed must be properly configured to support SNMP, and the Messaging Agent object in eDirectory must be properly configured as well. To set up SNMP services for your Messenger server, complete the following tasks:

- "Setting Up SNMP Services for the Messaging Agent" on page 56
- "Copying and Compiling the Messaging Agent MIB File" on page 59
- "Customizing Your ManageWise Installation to Monitor the Messaging Agent" on page 60
- "Configuring the Messaging Agent for SNMP Monitoring" on page 60

#### Setting Up SNMP Services for the Messaging Agent

Select the instructions for the platform where the Messaging Agent runs:

- "Setting Up SNMP Services on a NetWare Server" on page 57
- "Setting Up SNMP Services on a Linux Server" on page 57
- "Setting Up SNMP Services on a Windows Server" on page 58

#### Setting Up SNMP Services on a NetWare Server

The Messaging Agent supports SNMP through the SNMP services loaded on the NetWare server. SNMP services are provided through the SNMP NLM. The SNMP NLM initiates and responds to requests for monitoring information and generates trap messages.

If the SNMP NLM is not loaded before the Messaging Agent, Messaging Agent still loads and functions normally, but SNMP support is disabled. The Messaging Agent does not attempt to auto-load snmp.nlm.

1 Go to the console of the NetWare server where you want to implement SNMP services.

The server should already have the Messenger agents installed.

**2** Enter the command to load the SNMP NLM:

Syntax: load snmp v control=x monitor=y trap=z

where v represents Verbose, meaning to display informational messages, and *x*, *y* and *z* are replaced with your system SNMP community strings for SNMP SETs, GETs and TRAPs.

Example: load snmp v control=private monitor=public trap=all

The TCP/IP NLM automatically loads snmp.nlm, using default values for the community strings. If your system uses different community string values, load snmp.nlm before tcpip.nlm.

If the SNMP NLM is already loaded, you can add the control and trap parameters by entering the following at the console prompt:

snmp control= trap=

3 To automatically load these commands, include them in the autoexec.ncf file.

For more information about implementing SNMP services, see your NetWare documentation.

4 Skip to "Copying and Compiling the Messaging Agent MIB File" on page 59.

Setting Up SNMP Services on a Linux Server

The Linux Messaging Agent is compatible with NET-SNMP. An older version of SNMP called UCD-SNMP cannot be used with the Linux Messaging Agent. NET-SNMP comes with the versions of Red Hat Linux supported for Messenger 1.0 for Linux, but it does not come with the supported versions of SUSE Linux. If you are using SUSE Linux, you must update to NET-SNMP in order to use SNMP to monitor the Linux Messaging Agent.

- **1** Make sure you are logged in as root.
- **2** If NET-SNMP is not already set up on your Linux server, use the following command to configure SNMP:

```
snmpconf -g basic_setup
```

The snmpconf command creates the snmpd.conf file in one of the following directories, depending on your version of Linux:

/usr/share/snmp/usr/local/share/snmp~/.snmp

- **3** Locate the snmpd.conf file on your Linux server.
- 4 In a text editor, modify the snmpd.conf file:
  - **4a** Add the following line:

dlmod Nmweb /opt/novell/messenger/lib/libnmsnmp.so.1

- 4b Save and exit the snmpd.conf file.
- 5 Restart the SNMP daemon (snmpd) to put the changes into effect.
- 6 In a text editor, modify the nmsnmp.conf file in the /etc/opt/novell/messenger directory:
  - **6a** Set /daemonPort to a unique port number for the Messaging Agent to listen on; for example, 8305.
  - **6b** If you have not already configured the Messaging Agent Web console, as described in "Setting Up the Messaging Agent Web Console" on page 44, assign an HTTP port for the Messaging Agent.

You can set the HTTP port in ConsoleOne, using the same steps as for setting up the Web console, or you can set /maPort to a unique port number, such as 8301. If you want to use SNMP with the Archive Agent, you can also provide an HTTP port for it by using /aaPort if you update the nmsnmp.conf file, rather than providing the settings in ConsoleOne.

- 6c Save and exit the nmsnmp.conf file.
- 7 In ConsoleOne, enable SNMP:
  - 7a Browse to and right-click the Messenger Server object, then click *Properties*.
  - **7b** Click *Server* > *General*.
  - 7c Select Enable SNMP.
  - 7d Click *OK* to save the setting.
- **8** Restart the Messaging Agent.
- **9** Skip to "Copying and Compiling the Messaging Agent MIB File" on page 59.

#### Setting Up SNMP Services on a Windows Server

The SNMP service is usually not included during the initial Windows operating system installation. The SNMP service can be easily added at any time. To add or configure the SNMP service, you must be logged in as a member of the Administrator group.

To add the SNMP service to a Windows 2000 server:

- 1 From the Control Panel, double-click Add/Remove Programs.
- 2 Click Add/Remove Windows Components.
- **3** Select *Management and Monitoring Tools*.
- 4 Click Details, then select Simple Network Management Protocol.

For more information about configuring the SNMP service, see your Windows 2000 documentation.

The Messenger Installation program includes an option for installing SNMP support. However, if the Windows server where you installed the Messaging Agent did not yet have SNMP set up, that installation option was not available. Now that you have set up SNMP, you can install Messaging Agent SNMP support.

Rerun the Messenger Installation program, using the Install Server option as described in the *Novell Messenger 2.1 Installation Guide*, noticing that the Install and Configure SNMP for the Messenger Agents option is now available and selected.

Figure 2-13	Server Int	formation	Dialog	Box	With the	SNMP	Option	Selected
J · · ·							- <b>r</b> · · · · ·	

Setup	×
Server Information Select the installation path and the type of server on which you will run the Novell Messenger Agents.	N
Server: C NetWare Microsoft Windows Server Install agents as Windows services Install and configure SNMP for the Messenger Agents Installation path:	
c:\Novell\NM	
Browse	
InstallShield < Back Next > Ca	ancel

When you have finished installing the Messenger Agent, continue with "Copying and Compiling the Messaging Agent MIB File" on page 59.

#### Copying and Compiling the Messaging Agent MIB File

An SNMP-enabled Messaging Agent returns information contained in a Management Information Base (MIB). The MIB is an ASCII data structure that defines the information gathered. It also defines the properties that can be monitored and managed on the SNMP-enabled Messaging Agent.

Before you can monitor an SNMP-enabled Messaging Agent, you must compile the nmma.mib file by using your SNMP management program. On NetWare and Windows, the Messenger agent MIBs are located in the downloaded *Novell Messenger 2.1* image in the \server\snmp directory. On Linux, the Messenger MIBs are located in the /etc/opt/novell/messenger/mibs directory after installation.

1 Copy the nmma.mib file to the location required by your SNMP management program.

For example, ManageWise users would copy the nmma.mib file to the \mw\nms\snmpmibs\current directory. ZENworks for Servers users can access the nmma.mib file in the downloaded *Novell Messenger 2.1* image.

2 Compile or import the nmma.mib file as required by your SNMP management program.

For example, to compile the nmma.mib file for ZENworks for Servers:

**2a** In ConsoleOne, right-click the Site Server object, then click *Properties* > *MIB Pool*.

- **2b** Click *Modify Pool* > *Add*.
- **2c** Browse to and select the nmma.mib file, then click OK.
- 2d Click Compile.
- **2e** Make sure that the server where the Messaging Agent is running is configured to send SNMP traps to the ZfS Site Server.
  - On a NetWare server, add the IP address or hostname of the ZfS Site Server to the traptarg.cfg file in the sys:\etc directory.
  - On a Windows server, add the IP address or hostname of the ZfS Site Server to the list of trap destinations. From the Windows 2000 Control Panel, double-click *Administrative Tools*, then click *Services > SNMP Service > Properties > Traps*.

Refer to your SNMP management program documentation for specific instructions.

**3** If you are using ManageWise, continue with "Customizing Your ManageWise Installation to Monitor the Messaging Agent" on page 60.

or

If you are not using ManageWise, skip to "Configuring the Messaging Agent for SNMP Monitoring" on page 60.

#### Customizing Your ManageWise Installation to Monitor the Messaging Agent

The downloaded *Novell Messenger 2.1* image includes a file that helps ManageWise monitor the Messenger agents more effectively. These capabilities are available only with ManageWise, not with ZENworks for Servers.

The nmma.mib file includes the standard SNMP management information. In addition, the file includes annotations that enhance the Alert functions of ManageWise.

For example, the Summary provides more detailed information than the Description does in other SNMP management programs. The ManageWise annotations are embedded in comments; therefore, they have no affect on other SNMP management programs

When Messaging Agent alarms appear in ManageWise, you can double-click the alarm to display the alarm information contained in the Messenger Alarm help file. To enable this feature, copy the nmalarm.hlp file from the \server\snmp directory in the downloaded *Novell Messenger 2.1* image to the \mw\nms\help directory on your ManageWise station. This help file explains the alarms the Messaging Agent might produce by giving a description, cause, and action for each alarm.

#### Configuring the Messaging Agent for SNMP Monitoring

In order for SNMP monitoring programs to monitor the Messaging Agent, the Messaging Agent must be configured with an SNMP community string.

- **1** In ConsoleOne, browse to and expand the MessengerService object.
- **2** Right-click the Messenger Server object, then click *Properties*.
- **3** Click *Server* > *General*.

Properties of prv-doctest2Server	
Server → NDS Rights → Other Rights to Files and Folders General	
SNMP Community:	
Path Settings	
Software Path: /opt/novell/messenger/software	
Work Path: /var/opt/hovell/messenger/temp	
Page Options OK Cance	Apply Help

- **4** Make sure that *Enable SNMP* is selected.
- 5 In the SNMP Community field, provide your system SNMP community GET string.
- 6 Click *OK* to save the SNMP settings.
- 7 Stop and then start the Messaging Agent to put the SNMP settings into effect.

# 2.6 Optimizing Messaging Agent Performance

You can adjust how the Messaging Agent functions to optimize its performance. Before attempting optimization, you should run the Messaging Agent long enough to observe its efficiency and its impact on other network applications running on the same server. See Section 2.5, "Monitoring the Messaging Agent," on page 42.

Also, remember that optimizing your network hardware and operating system can make a difference in Messaging Agent performance.

- 1 In ConsoleOne, browse to and expand the MessengerService object.
- **2** Select the Messenger Server object.
- 3 Right-click the Messaging Agent object, then click Properties.
- **4** Click *Agent* > *Performance*.

roperties of MessagingAgent		
Agent → NDS Rights → Other	Rights to Files and Folders	
Maximum number of users:	5120 🜩	
Client/Server threads:	15 🛨	
Directory Settings		
Default number of connections:	10 🛨	
Idle timeout (seconds):	30 🜩	
Maximum number of connections:	50 🔶	
Maximum query results:	100 👤	
		1 1

**5** Fill in the following fields to configure how the Messaging Agent communicates with Messenger users:

**Maximum number of users:** Specify the maximum number of Messenger users that you want the Messaging Agent to be able to service at once. The default is 5120, which should be adequate for a very large Messenger system.

**Client/Server threads:** Specify the number of client/server threads that you want the Messaging Agent to start. The Messaging Agent uses its client/server threads to service Messenger clients, to download Messenger client software to users, and to communicate with the Archive Agent if archiving is enabled. Up to half of the client/server threads can be used for downloading the Messenger client software if demand requires it.

The default number of client/server threads is 15. For a large Messenger system, you could increase the number to 50 or more, depending on the system resources of the server where the Messaging Agent is running.

**6** Fill in the following fields to configure how the Messaging Agent communicates with eDirectory when using direct access:

**Default number of connections:** Specify the minimum number of direct access connections you want open between the Messaging Agent and eDirectory. The direct access connections between the Messaging Agent and eDirectory are used to authenticate Messenger users when they start the Messenger client, to perform searches for Messenger users when users build their contact lists, to save user option settings for the Messenger client, and for other directory-based operations. By default, the number of connections is 10.

Do not set the default number of connections to be greater than the number of client/server threads. This results in open connections that could never be serviced by the Messaging Agent.

Idle direct access connections occupy memory, but using an existing connection is faster than creating a new connection. The default number of connections is always kept open, even if some are idle.

**Idle timeout:** If more than the default number of direct access connections are open between the Messaging Agent and eDirectory, and if any connection is idle for the specified amount of time, the idle connection is closed. By default, this time is 30 seconds.

**Maximum number of connections:** Specify the maximum number of eDirectory connections that the Messaging Agent can create. The default is 50 connections.

Do not set the maximum number of connections to be greater than the number of client/server threads. This results in open connections that could never be serviced by the Messaging Agent.

**Maximum query results:** Specify the maximum number of contacts you want the Messaging Agent to return when Messenger users search for other Messenger users when adding contacts to their contact lists.

- 7 Click OK to save the Messaging Agent performance settings.
- 8 Stop and then start the Messaging Agent to put the new performance settings into effect.

**Corresponding Startup Switches:** You can also use the /maxconns, /threads, / dirdefaultconnections, /diridletimeout, /dirmaxconnections, and /dirquerymaxresults startup switches in the Messaging Agent startup file to configure Messaging Agent performance.

# 2.7 Managing the Messaging Server

As your Messenger system grows and evolves, you might need to reconfigure the server where the Messaging Agent runs or move Messaging Agent directories to different locations.

- Section 2.7.1, "Binding the Messaging Agent to a Specific IP Address," on page 63
- Section 2.7.2, "Changing the Messaging Server's Network Address," on page 64
- Section 2.7.3, "Moving the Messaging Agent Working Directory," on page 65

## 2.7.1 Binding the Messaging Agent to a Specific IP Address

On a server with multiple IP addresses, the Messaging Agent binds to all available IP addresses, and Messenger clients can communicate with the Messaging Agent on all available IP addresses unless you bind them to a specific address.

- **1** Stop the Messaging Agent on the server.
- **2** In ConsoleOne, browse to and expand the MessengerService object.
- 3 Right-click the Messaging Agent object, then click Properties.
- 4 Click Agent > Identification

roperties of prv-doctest29	erver	
Server - NDS Rights -	Other   Rights to Files and Folders	
Host Address		
IP Address:		
C DNS Hostname:		
	Bind to this address	
Description:		

**5** Select *IP Address*, then specify the IP address, in dotted decimal format, that you want to bind the Messaging Agent to.

or

Select *DNS Host Name*, then provide the DNS host name you want to bind the Messaging Agent to.

- 6 (Optional) Select Bind to this address.
- 7 Click OK to save the new address information.
- 8 Start the Messaging Agent.

## 2.7.2 Changing the Messaging Server's Network Address

If you change the IP address or DNS hostname of the server where the Messaging Agent is running, you must also update the server information for your Messenger system.

- **1** Stop the Messaging Agent on the server.
- **2** Reconfigure the server, following the appropriate procedure for the operating system (NetWare, Linux, or Windows).
- 3 In ConsoleOne, browse to and expand the MessengerService object.
- 4 Right-click the Messaging Agent object, then click Properties.
- **5** Click *Agent* > *Identification*.

perties of prv-doctest2Se	rver	
erver 👻 NDS Rights 👻 O	ther   Rights to Files and Folders	
entification		
Host Address		
IP Address:		
C DNS Hostname:		
	Bind to this address	
Deseviutieu		
Description:		
and the second states of the second states and the second states of		

6 Select *IP Address*, then specify the server's new IP address.

or

Select DNS Host Name, then provide the server's new DNS hostname.

- 7 Click OK to save the new network address information.
- 8 Start the Messaging Agent.

## 2.7.3 Moving the Messaging Agent Working Directory

The Messaging Agent uses its working directory for saving various temporary files during message processing.

- **1** Stop the Messaging Agent on the server.
- 2 Copy the Messaging Agent working directory to the desired location.

On NetWare and Windows, the Messenger working directory is \novell\nm\temp by default. On Linux, the default is /opt/novell/messenger/temp.

- **3** In ConsoleOne, browse to and expand the MessengerService object.
- 4 Right-click a Messaging Agent object, then click *Properties*.
- **5** Click *Server* > *General*.

Properties of prv-doct	est2Server	
Server  Ceneral  MDS Rights  Ceneral  Enable Messenger S  Enable SNMP	✓ Other Rights to Files and Folders	
_ SNMP Community:		
_ Path Settings		
So <u>f</u> tware Path:	/opt/hovell/messenger/software	
<u>w</u> ork Path:	/var/opt/novell/messenger/temp	
Page Options	OK Cancel	Apply <u>H</u> elp

- 6 In the *Work Path* field, change the path to the working directory to the current location.
- 7 Click OK to save the new working directory location.
- 8 Start the Messaging Agent.
- 9 Delete the previous working directory to conserve disk space.

By default, the Messaging Agent and the Archive Agent use the same working directory if they are running on the same server, as specified on the *General* tab of the Messenger Server object. If you want the Messaging Agent to use a separate working directory, you can specify the working directory on each agent object (*Agent* tab > *General* page > *Work Path* field). The location specified for the Messaging Agent object overrides the location specified for the Messenger Server object.

# 2.8 Using Messaging Agent Startup Switches

You can override settings provided in ConsoleOne by using startup switches in the Messaging Agent startup file (strtup.ma). On NetWare and Windows, the startup file is located in the Messenger Agent installation directory. On Linux, the startup file is located in /etc/opt/novell/ messenger. You can override startup switches provided in the startup file by using startup switches on the command line. For more information about starting the Messaging Agent, see Section 2.1, "Starting the Messaging Agent," on page 29.

This section contains information on the following startup switches:

- Section 2.8.1, "/certfile," on page 70
- Section 2.8.2, "/certpath," on page 70

- Section 2.8.3, "/cluster (NetWare only)," on page 70
- Section 2.8.4, "/dirdefaultconnections," on page 71
- Section 2.8.5, "/diridletimeout," on page 71
- Section 2.8.6, "/dirmaxconnections," on page 71
- Section 2.8.7, "/dirpoolresettime," on page 71
- Section 2.8.8, "/dirquerymaxresults," on page 72
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- Section 2.8.10, "/diruseralias," on page 72
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- Section 2.8.14, "/httppassword," on page 73
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- Section 2.8.17, "/httpuser," on page 74
- Section 2.8.18, "/ip," on page 75
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- Section 2.8.20, "/keyfile," on page 75
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- Section 2.8.26, "/ldapssl," on page 77
- Section 2.8.27, "/ldapsslkey," on page 77
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- Section 2.8.30, "/logdays," on page 78
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The following table summarizes the Messaging Agent startup switches and how they correspond to configuration settings in ConsoleOne.

NetWare Messaging Agent	Linux Messaging Agent	Windows Messaging Agent	ConsoleOne Setting
/certfile	certfile	/certfile	SSL Certificate
/certpath	certpath	/certpath	Certificate Path
/cluster	N/A	N/A	N/A
/dirdefaultconnections	 dirdefaultconnections	/dirdefaultconnections	Default Number of Connections (LDAP profile)
/diridletimeout	diridletimeout	/diridletimeout	Idle Timeout (LDAP profile)
/dirmaxconnections	dirmaxconnections	/dirmaxconnections	Maximum Number of Connections (LDAP profile)
/dirpoolresettime	dirpoolresettime	/dirpoolresettime	N/A
/dirquerymaxresults	dirquerymaxresults	/dirquerymaxresults	Maximum Query Results
N/A	dirreplicaipaddr	/dirreplicaipaddr	N/A
/diruseralias	diruseralias	/diruseralias	N/A
/diruserauthbind	diruserauthbind	/diruserauthbind	N/A
/diruserforcedirect	diruserforcedirect	/diruserforcedirect	N/A
/home	home	/home	N/A
/httppassword	httppassword	/httppassword	HTTP Password
/httpport	httpport	/httpport	HTTP Port
/httpuser	httpuser	/httpuser	HTTP Username
/httpssl	httpssl	/httpssl	Enable SSL for Web Console
/ip	ip	/ip	Host IP Address with Bind to this Address selected
/keepalive	keepalive	/keepalive	N/A
/keyfile	keyfile	/keyfile	SSL Key File

 Table 2-5
 Messaging Agent Startup Switches

NetWare Messaging Agent	Linux Messaging Agent	Windows Messaging Agent	ConsoleOne Setting
/keypassword	keypassword	/keypassword	SSL Set Password
N/A	N/A	/language	N/A
/ldapipaddr	Idapipaddr	/ldapipaddr	LDAP Connection IP Address
/Idapport	Idapport	/Idapport	LDAP Connection Port
/ldappwd	Idappwd	/ldappwd	LDAP Profile Set Password
/Idapssl	Idapssl	/Idapssl	LDAP Connection SSL Enabled
/IdapssIkey	Idapsslkey	/ldapsslkey	LDAP Connection Root Certificate
/Idapuser	Idapuser	/Idapuser	LDAP Profile Username
/log	log	/log	Log Files Path
/logdays	logdays	/logdays	Log Maximum Age
/logdiskoff	logdiskoff	/logdiskoff	Enable Disk Logging
/loglevel	loglevel	/loglevel	Log Level
/logmax	logmax	/logmax	Log Maximum Size
/maxconns	maxconns	/maxconns	Maximum Number of Users
/mtpconnecttimeout	mtpconnecttimeout	/mtpconnecttimeout	N/A
/mtpdatatimeout	mtpdatatimeout	/mtpdatatimeout	N/A
/mtpipaddr	mtpipaddr	/mtpipaddr	Host Address (Archive Agent)
/mtpport	mtpport	/mtpport	Message Transfer Port (Archive Agent)
/mtpssl	mtpssl	/mtpssl	Enable SSL for Message Transfer Protocol (Archive Agent)
/nomtp	nomtp	/nomtp	N/A
/nosnmp	nosnmp	/nosnmp	Enable SNMP
/password	password	/password	Set Password
/port	port	/port	Client/Server Port
/queue	queue	/queue	Messaging Queue Path
/ssl	ssl	/ssl	Enable SSL for Client/Server
/threads	threads	/threads	Client/Server Threads
/user	user	/user	Username

## 2.8.1 /certfile

Specifies the full path to the public certificate files used to provide secure SSL communication between the Messaging Agent and other programs. See Section 2.3, "Establishing Messaging Security with SSL Encryption," on page 38.

	NetWare Messaging Agent	Linux Messaging Agent	Windows Messaging Agent
Syntax:	/certfile-[ <i>svr</i> \][ <i>vol</i> :]\ <i>dir\file</i> /certfile- \\ <i>svr\vol\dir\file</i>	certfile=/dir/file	/certfile-[ <i>drive</i> :]\ <i>dir\file</i> /certfile- \\svr\sharename\dir\file
Example:	/certfile-\novell\nm\ma\certs\nm.crt / certfile- svr2\sys:\novell\nm\ma\certs\nm.crt / certfile- \\svr2\sys\novell\nm\ma\certs\nm.crt	certfile=/certs/ gw.crt	/certfile- \novell\nm\ma\certs\nm.crt / certfile- m:\novell\nm\ma\certs\nm.crt / certfile- \\s2\c\novell\nm\ma\certs\nm.crt

See also /certpath, /keyfile, and /keypassword.

## 2.8.2 /certpath

Specifies the full path to the directory where public certificate file are stored on your system. See Section 2.3, "Establishing Messaging Security with SSL Encryption," on page 38.

	NetWare Messaging Agent	Linux Messaging Agent	Windows Messaging Agent
Syntax:	/certpath-[svr\][vol:]\dir/certpath- \\svr\vol\dir	certpath=/dir	/certpath-[ <i>drive</i> :]\ <i>dir</i> /certpath- \\svr\sharename\dir
Example:	/certpath-\novell\nm\ma\certs / certpath- svr2\sys:\novell\nm\ma\certs / certpath- \\svr2\sys\novell\nm\ma\certs	certpath=/certs	/certpath-\novell\nm\ma\certs / certpath-m:\novell\nm\ma\certs / certpath- \\svr2\c\novell\nm\ma\certs

See also /certfile, /keyfile, and /keypassword.

## 2.8.3 /cluster (NetWare only)

Informs the Messaging Agent that it is running in a clustering environment. See "Implementing Messenger in a NetWare Cluster" in "Novell Cluster Services on NetWare" in the *GroupWise 8 Interoperability Guide*.

If you are running the Messaging Agent on the latest version of NetWare 6.x and Novell Cluster Services, the Messaging Agent can detect the cluster automatically.

	NetWare Messaging Agent	Linux Messaging Agent	Windows Messaging Agent
Syntax:	/cluster	N/A	N/A

See also /ip.

## 2.8.4 /dirdefaultconnections

Specifies the minimum number of direct access connections you want open at all times between the Messaging Agent and eDirectory. The default is 10 connections. See Section 2.6, "Optimizing Messaging Agent Performance," on page 61.

	NetWare Messaging Agent	Linux Messaging Agent	Windows Messaging Agent
Syntax:	/dirdefaultconnections- number	dirdefaultconnections= number	/dirdefaultconnections-number
Example:	/dirdefaultconnections-20	dirdefaultconnections=30	/dirdefaultconnections-50

See also /diridletimeout and /dirmaxconnections.

## 2.8.5 /diridletimeout

Specifies the number of seconds after which idle direct access connections in excess of the default number of connections are closed. The default is 30 seconds. See Section 2.6, "Optimizing Messaging Agent Performance," on page 61.

	NetWare Messaging Agent	Linux Messaging Agent	Windows Messaging Agent
Syntax:	/diridletimeout-seconds	diridletimeout=seconds	/diridletimeout-seconds
Example:	/diridletimeout-20	diridletimeout=60	/diridletimeout-90

See also /dirdefaultconnections.

## 2.8.6 /dirmaxconnections

Specifies the maximum number of direct access connections you want open between the Messaging Agent and eDirectory. The default is 50 connections. See Section 2.6, "Optimizing Messaging Agent Performance," on page 61.

	NetWare Messaging Agent	Linux Messaging Agent	Windows Messaging Agent
Syntax:	/dirmaxconnections-number	dirmaxconnections=number	/dirmaxconnections-number
Example:	/dirmaxconnections-200	dirmaxconnections=100	/dirmaxconnections-100

See also /dirdefaultconnections.

## 2.8.7 /dirpoolresettime

Specifies the number of minutes between the time when the Messaging Agent receives an error response from a pooled LDAP server and the time when that LDAP server is reinstated into the pool of available LDAP servers. The default is 5 minutes. See "Providing LDAP Access to eDirectory for Messenger Users" on page 91.

	NetWare Messaging Agent	Linux Messaging Agent	Windows Messaging Agent
Syntax:	/dirpoolresettime-minutes	dirpoolresettime=minutes	/dirpoolresettime-minutes
Example:	/dirpoolresettime-10	dirpoolresettime=10	/dirpoolresettime-10

## 2.8.8 /dirquerymaxresults

Specifies the maximum number of query results you want the Messaging Agent to return when users search for other users to add to their contact lists in the Messenger client. The default maximum is 100 contacts. See Section 2.6, "Optimizing Messaging Agent Performance," on page 61.

	NetWare Messaging Agent	Linux Messaging Agent	Windows Messaging Agent
Syntax:	/dirquerymaxresults-contacts	dirquerymaxresults= contacts	/dirquerymaxresults-contacts
Example:	/dirquerymaxresults-50	dirquerymaxresults=200	/dirquerymaxresults-200

## 2.8.9 /dirreplicaipaddr (Linux and Windows only)

Specifies the IP address of an eDirectory replica for a Messaging Agent that is running on a Windows server. See "Changing the eDirectory Access Method for Starting the Messaging Agent" on page 34.

	NetWare Messaging Agent	Linux Messaging Agent	Windows Messaging Agent
Syntax:	N/A	dirreplicaipaddr=IP_address	/dirreplicaipaddr-IP_address
Example:	N/A	dirreplicaipaddr=172.16.5.18	/dirreplicaipaddr-172.16.5.19

## 2.8.10 /diruseralias

Specifies the eDirectory attribute that the Messaging Agent searches on when users use the *User ID* field to search for other Messenger users. By default, the Messaging Agent searches on the CN attribute. See "Customizing Authentication and Searches by eDirectory Attribute" on page 103

	NetWare Messaging Agent	Linux Messaging Agent	Windows Messaging Agent
Syntax:	/diruseralias- "eDirectory_attribute"	diruseralias= "eDirectory_attribute"	/diruseralias- "eDirectory_attribute"
Example:	/diruseralias-"Internet EMail	diruseralias="Internet EMail	/diruseralias-"Internet EMail
	Address"	Address"	Address"

## 2.8.11 /diruserauthbind

Indicates that you want users to authenticate to eDirectory by using a bind rather than a compare operation. See "Selecting Bind or Compare eDirectory Access for Users" on page 102.
	NetWare Messaging Agent	Linux Messaging Agent	Windows Messaging Agent
Syntax:	/diruserauthbind	diruserauthbind	/diruserauthbind

#### 2.8.12 /diruserforcedirect

Indicates that you want users to use direct access to eDirectory even though you have configured the Messaging Agent to use LDAP access. See "Using LDAP Access for the Messaging Agent" on page 35.

	NetWare Messaging Agent	Linux Messaging Agent	Windows Messaging Agent
Syntax:	/diruserforcedirect	diruserforcedirect	/diruserforcedirect

#### 2.8.13 /home

Specifies the distinguished name (DN) of the Messaging Agent object where the Messaging Agent configuration information is stored. There is no default location. You must use this switch in order to start the Messaging Agent. See Section 2.1, "Starting the Messaging Agent," on page 29.

	NetWare Messaging Agent	Linux Messaging Agent	Windows Messaging Agent
Syntax:	/home-CN=agent_object, OU=server_object, OU=Messenger_system, O=organization	home=CN=agent_object, OU=server_object, OU=Messenger_system, O=organization	/home-CN=agent_object, OU=server_object, OU=Messenger_system, O=organization
Example:	/home-CN=MessagingAgent, OU=PRV-GWSERVER, OU=MessengerService, O=Novell	 home=CN=MessagingAgent, OU=PRV-GWSERVER, OU=MessengerService, O=Novell	/home-CN=MessagingAgent, OU=PRV-GWSERVER, OU=MessengerService, O=Novell

**IMPORTANT:** Use commas, rather than periods, between object names. If any object name includes a space, surround the switch value with double quotation marks.

#### 2.8.14 /httppassword

Specifies the password for the Messaging Agent to prompt for before allowing Messaging Agent status information to be displayed in your Web browser. Unless you are using SSL encryption, do not use an existing eDirectory password because the information passes over the connection between your Web browser and the Messaging Agent. See "Using the Messaging Agent Web Console" on page 44.

	NetWare Messaging Agent	Linux Messaging Agent	Windows Messaging Agent
Syntax:	/httppassword-	httppassword=	/httppassword-
	unique_password	unique_password	unique_password

	NetWare Messaging Agent	Linux Messaging Agent	Windows Messaging Agent
Exampl e:	/httppassword-AgentWatch	httppassword=AgentWatch	/httppassword-AgentWatch

See also /httpuser.

## 2.8.15 /httpport

Sets the HTTP port number used for the Messaging Agent to communicate with your Web browser. The setting must be unique on the server where the Messaging Agent runs. See "Using the Messaging Agent Web Console" on page 44.

	NetWare Messaging Agent	Linux Messaging Agent	Windows Messaging Agent
Syntax:	/httpport- <i>port_number</i>	httpport= <i>port_number</i>	/httpport- <i>port_number</i>
Example:	/httpport-8314	httpport=8315	/httpport-8316

#### 2.8.16 /httpssl

Sets the availability of SSL encryption between the Messaging Agent and the Web console displayed in your Web browser. Valid values are enable and disable. See "Using the Messaging Agent Web Console" on page 44.

	NetWare Messaging Agent	Linux Messaging Agent	Windows Messaging Agent
Syntax:	/httpssl- <i>setting</i>	httpssl= <i>setting</i>	/httpssl- <i>setting</i>
Example:	/httpssl-enable	httpssl=enable	/httpssl-enable

### 2.8.17 /httpuser

Specifies the username for the Messaging Agent to prompt for before allowing Messaging Agent status information to be displayed in a Web browser. Providing a user name is optional. Unless you are using SSL encryption, do not use an existing eDirectory username because the information passes over the connection between your Web browser and the Messaging Agent. See "Using the Messaging Agent Web Console" on page 44.

	NetWare Messaging Agent	Linux Messaging Agent	Windows Messaging Agent
Syntax:	/httpuser- <i>unique_username</i>	httpuser= <i>unique_username</i>	/httpuser- <i>unique_username</i>
Example:	/httpuser-NMWebConsole	httpuser=NMWebConsole	/httpuser-NMWebConsole

See also /httppassword.

#### 2.8.18 /ip

Binds the Messaging Agent to a specific IP address when the server where it runs uses multiple IP addresses, such as in a clustering environment. Without the /ip switch, the Messaging Agent binds to all available IP addresses and Messenger clients can communicate with the Messaging Agent on all available IP addresses.

	NetWare Messaging Agent	Linux Messaging Agent	Windows Messaging Agent
Syntax:	/ip- <i>IP_addr</i> ess	ip= <i>IP_address</i>	/ip- <i>IP_address</i>
Example:	/ip-172.16.5.18	ip=172.16.5.19	/ip-172.16.5.20

See also /cluster.

#### 2.8.19 /keepalive

Adjusts the default ping interval at which the Messenger clients notify the Messaging Agent that they are still active. The default interval is every 10 minutes. This regular communication between the Messaging Agent and the client prevents firewalls and routers from disconnecting connections that seem to be inactive. You can decrease the interval if client users are being unexpectedly disconnected. You can increase the interval to decrease network traffic. Use a setting of 0 (zero) to turn off the ping activity.

	NetWare Messaging Agent	Linux Messaging Agent	Windows Messaging Agent
Syntax:	/keepalive-minutes	keepalive= <i>minutes</i>	/keepalive-minutes
Example:	/keepalive-20	keepalive=5	/keepalive-15

The ping interval can be adjusted for individual clients by using the /keepalive startup switch with the Messenger client.

### 2.8.20 /keyfile

Specifies the full path to the private file used to provide SSL encryption between the Messaging Agent and other programs. See Section 2.3, "Establishing Messaging Security with SSL Encryption," on page 38.

	NetWare Messaging Agent	Linux Messaging Agent	Windows Messaging Agent
Syntax:	/keyfile-[ <i>svr</i> \][ <i>vol</i> :]\ <i>dir\file</i> /keyfile- \\ <i>svr\vol\dir\file</i>	keyfile=/ <i>dir/file</i>	/keyfile-[ <i>drive</i> :]\ <i>dir\file</i> /keyfile- \\svr\sharename\dir\file
Example:	/keyfile-\novell\nm\ma\certs\nm.key / keyfile- svr2\sys:\novell\nm\ma\certs\nm.key /keyfile- \\svr2\sys\novell\nm\ma\certs\nm.ke y	keyfile=/certs/ gw.key	/keyfile-\novell\nm\ma\certs\nm.key /keyfile- m:\novell\nm\ma\certs\nm.key / keyfile- \\svr2\c\novell\nm\ma\certs\nm.key

See also /keypassword.

#### 2.8.21 /keypassword

Specifies the password used to encrypt the private SSL key file when it was created. See Section 2.3, "Establishing Messaging Security with SSL Encryption," on page 38.

	NetWare Messaging Agent	Linux Messaging Agent	Windows Messaging Agent
Syntax:	/keypassword-password	keypassword=password	/keypassword-password
Example:	/keypassword-gwssl	keypassword=gwssl	/keypassword-gwssl

See also /keyfile.

#### 2.8.22 /language (Windows only)

Specifies the language to run the Messaging Agent in, using a two-letter language code as listed below. When you install the Messenger agents, all language versions are automatically installed.

The initial default is the language used by the operating system. If that language is not available, the Messaging Agent runs in English. Use this switch only if you need to override these defaults.

	NetWare Messaging Agent	Linux Messaging Agent	Windows Messaging Agent
Syntax:	N/A	N/A	/language-code
Example:	N/A	N/A	/language-fr

The table below lists the valid language codes:

Language	Language Code	
English	EN	
French	FR	
German	DE	
Portuguese	PT	
Spanish	ES	

#### 2.8.23 /ldapipaddr

Specifies the LDAP server's network address as either an IP address or a DNS hostname. You can specify multiple network addresses to provide failover capabilities for your LDAP servers. See Section 3.2, "Customizing eDirectory Access for Users," on page 90.

	NetWare Messaging Agent	Linux Messaging Agent	Windows Messaging Agent
Syntax:	/ldapipaddr- network_address	 Idapipaddr= <i>network_address</i>	/ldapipaddr-network_address
Example:	/ldapipaddr-172.16.5.18 / ldapipaddr-server1 server2	Idapipaddr=172.16.5.19 Idapipaddr server1 server2	/ldapipaddr-172.16.5.20 / ldapipaddr-server1 server2

If you specify multiple LDAP servers, use a space between each address. When so configured, the Messaging Agent tries to contact the first LDAP server in order to access eDirectory. If that LDAP server is down, the Messaging Agent tries the next LDAP server in the list, and so on until it is able to access eDirectory.

See also /ldapport.

#### 2.8.24 /Idapport

Specifies the port number that the LDAP server listens on for service requests. The default is 389. See "Providing LDAP Access to eDirectory for Messenger Users" on page 91.

	NetWare Messaging Agent	Linux Messaging Agent	Windows Messaging Agent
Syntax:	/Idapport- <i>port_number</i>	Idapport= <i>port_number</i>	/Idapport- <i>port_number</i>
Example:	/Idapport-390	Idapport=391	/Idapport-392

See also /ldapipaddr.

#### 2.8.25 /Idappwd

Provides the password for the LDAP user that the Messaging Agent uses to log in to the LDAP server. See "Providing LDAP Access to eDirectory for Messenger Users" on page 91.

	NetWare Messaging Agent	Linux Messaging Agent	Windows Messaging Agent
Syntax:	/Idappwd-LDAP_password	Idappwd=LDAP_password	/Idappwd-LDAP_password
Example:	/ldappwd-nmldap	ldappwd=nmldap	/ldappwd-nmldap

See also /ldapuser.

#### 2.8.26 /Idapssl

Indicates to the Messaging Agent that the LDAP server it is logging in to uses SSL encryption. See Section 2.3, "Establishing Messaging Security with SSL Encryption," on page 38.

	NetWare Messaging Agent	Linux Messaging Agent	Windows Messaging Agent
Syntax:	/Idapssl	Idapssl	/ldapssl

See also /ldapsslkey.

#### 2.8.27 /IdapssIkey

Specifies the full path to the private SSL key file used with LDAP authentication. See "Providing LDAP Access to eDirectory for Messenger Users" on page 91.

	NetWare Messaging Agent	Linux Messaging Agent	Windows Messaging Agent
Syntax:	/ldapsslkey-[ <i>svr</i> \][ <i>vol</i> :]\dir\file / ldapsslkey-\\ <i>svr</i> \vol\dir\file	Idapsslkey=/dir/file	/ldapsslkey-[drive:]\dii\file / ldapsslkey-\\svr\sharename\dii\file
Example:	/ldapsslkey- \novell\nm\ma\certs\nmk ey.der /ldapsslkey- server2\sys:\novell\nm\ ma\certs\nmkey.der / ldapsslkey- \\server2\sys\novell\nm\ ma\certs\nmkey.der	ldapsslkey=/certs/ gwkey.der	/ldapsslkey- novell\nm\ma\certs\\nmkey.d er /ldapsslkey- m:\novell\nm\ma\certs\nmkey .der /ldapsslkey- \\server2\c\novell\nm\ ma\certs\nmke y.der

See also /ldapssl.

#### 2.8.28 /Idapuser

Specifies the username that the Messaging Agent can use to log in to the LDAP server to obtain information from eDirectory. See "Providing LDAP Access to eDirectory for Messenger Users" on page 91.

	NetWare Messaging Agent	Linux Messaging Agent	Windows Messaging Agent
Syntax:	/Idapuser-LDAP_userID	Idapuser=LDAP_userID	/ldapuser-LDAP_userID
Example:	/Idapuser-NMAuth	Idapuser=NMAuth	/Idapuser-NMAuth

See also /ldappwd.

#### 2.8.29 /log

Specifies the directory where the Messaging Agent will store its log files. The default location is the \novell\nm\ma\log directory. See "Using Messaging Agent Log Files" on page 53.

	NetWare Messaging Agent	Linux Messaging Agent	Windows Messaging Agent
Syntax:	/log-[svr\][vol:]\dir /log- \\svr\vo\dir	log=/dir	/log-[drive:]\dir /log- \\svr\sharename\dir
Example:	/log-\nmlog\ma /log- \\server2\mail:\nmlog\ma /log- \\server2\mail\nmlog\ma	log=/nm/log/ma	/log-\nmlog\ma /log-m:\nmlog\ma /log-\\server2\c\mail\nmlog\ma

See also /loglevel, /logdays, /logmax, and /logdiskoff.

#### 2.8.30 /logdays

Specifies how many days to keep Messaging Agent log files on disk. The default is 14 days. See "Using Messaging Agent Log Files" on page 53.

	NetWare Messaging Agent	Linux Messaging Agent	Windows Messaging Agent
Syntax:	/logdays- <i>days</i>	logdays= <i>days</i>	/logdays- <i>days</i>
Example:	/logdays-7	logdays=30	/logdays-90

See also /log, /loglevel, /logmax, and /logdiskoff.

#### 2.8.31 /logdiskoff

Turns off disk logging for the Messaging Agent so no information about the functioning of the Messaging Agent is stored on disk. The default is for logging to be turned on. See "Using Messaging Agent Log Files" on page 53.

	NetWare Messaging Agent	Linux Messaging Agent	Windows Messaging Agent
Syntax:	/logdiskoff	logdiskoff	/logdiskoff

See also /log, /loglevel, /logdays, and /logmax.

#### 2.8.32 /loglevel

Controls the amount of information logged by the Messaging Agent. Logged information is displayed in the log message box and written to the Messaging Agent log file during the current agent session. The default is Normal, which displays only the essential information suitable for a smoothly running Messaging Agent. Use Verbose to display the essential information, plus additional information helpful for troubleshooting. Use Diagnostic to include very detailed, code-specific information. See "Using Messaging Agent Log Files" on page 53.

	NetWare Messaging Agent	Linux Messaging Agent	Windows Messaging Agent
Syntax:	/loglevel-level	loglevel=/evel	/loglevel- <i>level</i>
Example:	/loglevel-verbose	loglevel=diagnostic	/loglevel-diagnostic

See also /log, /logdays, /logmax, and /logdiskoff.

#### 2.8.33 /logmax

Sets the maximum amount of disk space for all Messaging Agent log files. When the specified disk space is consumed, the Messaging Agent deletes existing log files, starting with the oldest. The default is 128 MB. See "Using Messaging Agent Log Files" on page 53.

	NetWare Messaging Agent	Linux Messaging Agent	Windows Messaging Agent
Syntax:	/logmax- <i>megabytes</i>	logmax= <i>megabytes</i>	/logmax- <i>megabytes</i>
Example:	/logmax-64	logmax=256	/logmax-256

See also /log, /loglevel, /logdays, and /logdiskoff

#### 2.8.34 /maxconns

Specifies the maximum number of connections between the Messaging Agent and Messenger clients. The default is 5120. See Section 2.6, "Optimizing Messaging Agent Performance," on page 61.

	NetWare Messaging Agent	Linux Messaging Agent	Windows Messaging Agent
Syntax:	/maxconns-connections	maxconns=connections	/maxconns-connections
Example:	/maxconns-10000	maxconns=10000	/maxconns-10000

See also /threads.

#### 2.8.35 /mtpconnecttimeout

Specifies the number of seconds that the Messaging Agent waits for a response from the Archive Agent before returning an error. The default is 5 seconds. See "Optimizing the Connection between the Archive Agent and the Messaging Agent" on page 173.

	NetWare Messaging Agent	Linux Messaging Agent	Windows Messaging Agent
Syntax:	/mtpconnecttimeout-seconds	mtpconnecttimeout= seconds	/mtpconnecttimeout-seconds
Example:	/mtpconnecttimeout-30	mtpconnecttimeout=60	/mtpconnecttimeout-60

See also /mtpdatatimeout.

#### 2.8.36 /mtpdatatimeout

Specify in seconds the amount of time the Messaging Agent tries to send conversations to the Archive agent before reporting an error. The default is 20 seconds. See "Optimizing the Connection between the Archive Agent and the Messaging Agent" on page 173.

	NetWare Messaging Agent	Linux Messaging Agent	Windows Messaging Agent
Syntax:	/mtpdatatimeout-seconds	mtpdatatimeout=seconds	/mtpdatatimeout-seconds
Example:	/mtpconnecttimeout-30	mtpconnecttimeout=40	/mtpconnecttimeout-60

See also /mtpdatatimeout.

#### 2.8.37 /mtpipaddr

Specifies the network address of the Server where the Archive Agent runs, as either an IP address or a DNS hostname. By default, the Messaging Agent uses the network address specified on the Identification page of the Archive Agent object.

	NetWare Messaging Agent	Linux Messaging Agent	Windows Messaging Agent
Syntax:	/mtpipaddr-network_address	mtpipaddr= network_address	/mtpipaddr-network_address
Example:	/mtpipaddr-172.16.5.18 / mtpipaddr-server2	mtpipaddr=172.16.5.19 mtpipaddr=server3	/mtpipaddr-172.16.5.20 / mtpipaddr-server4

See also /mtpport.

#### 2.8.38 /mtpport

Specifies the message transfer port number the Archive Agent listens on for conversations to archive. By default, the Messaging Agent uses the message transfer port specified on the Identification page of the Archive Agent object, which is 8312.

	NetWare Messaging Agent	Linux Messaging Agent	Windows Messaging Agent
Syntax:	/mtpport- <i>port_number</i>	mtpport= <i>port_number</i>	/mtpport- <i>port_number</i>
Example:	/mtpport-8412	mtpport=8413	/mtpport-8414

See also /mtpipaddr.

#### 2.8.39 /mtpssl

Sets the availability of SSL encryption between the Archive Agent and the Messaging Agent. Valid values are enable and disable. See Section 4.6, "Enhancing Archive Security with SSL Encryption," on page 163.

	NetWare Messaging Agent	Linux Messaging Agent	Windows Messaging Agent
Syntax:	/mtpssl- <i>setting</i>	mtpssl= <i>setting</i>	/mtpssl-setting
Example:	/mtpssl-enable	mtpssl=enable	/mtpssl-enable

#### 2.8.40 /nomtp

Disables the Messaging Agent's attempts to contact the Archive Agent. You might want to do this if you do not plan to enable archiving.

_	NetWare Messaging Agent	Linux Messaging Agent	Windows Messaging Agent
Syntax:	/nomtp	nomtp	/nomtp

#### 2.8.41 /nosnmp

Disables SNMP for the Messaging Agent. The default is to have SNMP enabled. See "Using SNMP Monitoring Programs" on page 56.

	NetWare Messaging Agent	Linux Messaging Agent	Windows Messaging Agent
Syntax:	/nosnmp	nosnmp	/nosnmp

#### 2.8.42 /password

Provides the password for the Messaging Agent to use when accessing eDirectory in order to obtain its configuration information from the Messaging Agent object. This switch is required in order to start the Messaging Agent. See Section 2.1, "Starting the Messaging Agent," on page 29. By default after Messenger 2.0.2 Hot Patch 1 is installed, the password is obfuscated for security purposes. If the password has been obfuscated, the password is prepended with \$\$: in the startup file. In order to change the obfuscated password, you need to use the NMPassword utility. For additional information on how to use the NMPassword utility, see Section 2.4, "Changing the Agent User Password," on page 41.

	NetWare Messaging Agent	Linux Messaging Agent	Windows Messaging Agent
Syntax:	/password-eDir_password	password=eDir_password	/password-eDir_password
Example:	/password-NMAgent	password=NMAgent	/password-NMAgent

See also /user.

### 2.8.43 /port

Sets the port number on which the Messaging Agent listens for service requests from Messenger clients. The default is 8300. See Section 2.2, "Configuring the Messaging Agent in ConsoleOne," on page 36.

	NetWare Messaging Agent	Linux Messaging Agent	Windows Messaging Agent
Syntax:	/port- <i>port_number</i>	port= <i>port_number</i>	/port- <i>port_number</i>
Example:	/port-8301	port=8302	/port-8303

#### 2.8.44 /queue

Specifies the directory where the Messaging Agent stores conversations to archive if it is unable to communicate with the Archive Agent. The default is \novell\nm\ma\queue. See "Moving the Messaging Agent Conversation Holding Queue" on page 177.

	NetWare Messaging Agent	Linux Messaging Agent	Windows Messaging Agent
Syntax:	/queue-[svr\][vol:]\dir /queue- \\svr\vo\dir	queue=/dir	/queue-[ <i>drive</i> :]\dir /queue- \\svr\sharename\dir\
Example:	/queue-\nmqueues\ma /queue- \\server2\mail:\nmqueues\ma / queue- \\server2\mail\nmqueues\ma	queue=/nmqueues/ma	/queue-\nmqueues\ma /queue- m:\nmqueues\ma /queue- \\server2\c\mail\nmqueues\ma

#### 2.8.45 /ssl

Sets the availability of SSL encryption between the Messaging Agent, the Archive Agent, and Messenger clients. Valid values are enable and disable. See Section 2.3, "Establishing Messaging Security with SSL Encryption," on page 38.

	NetWare Messaging Agent	Linux Messaging Agent	Windows Messaging Agent
Syntax:	/ssl-setting	ssl=setting	/ssl-setting
Example:	/ssl-enable	ssl=enable	/ssl-enable

See also /certpath, /certfile, /keyfile, and /keypassword.

#### 2.8.46 /threads

Specifies the maximum number of client/server threads the Messaging Agent can create. The default is 15. See Section 2.6, "Optimizing Messaging Agent Performance," on page 61.

	NetWare Messaging Agent	Linux Messaging Agent	WIndows Messaging Agent
Syntax:	/threads-number	threads=number	/threads-number
Example:	/threads-10	threads=20	/threads-30

See also /maxconns.

#### 2.8.47 /user

Provides the eDirectory username for the Messaging Agent to use when accessing eDirectory to obtain its configuration information from the Messaging Agent object. This switch is required in order to start the Messaging Agent. See Section 2.1, "Starting the Messaging Agent," on page 29.

	NetWare Messaging Agent	Linux Messaging Agent	Windows Messaging Agent
Syntax:	/user-CN= <i>User_object</i> ,	user=CN= <i>User_object</i> ,	/user-CN= <i>User_object</i> ,
	OU=org_unit,O=organization	OU= <i>org_unit</i> ,O= <i>organization</i>	OU=org_unit,O=organization
Example	/user-CN=Messenger,	user=CN=Messenger,	/user-CN=Messenger,
:	OU=Users,O=Novell	OU=Users,O=Novell	OU=Users,O=Novell

**IMPORTANT:** Use commas, rather than periods, between object names. If any object name includes a space, surround the switch value with double quotation marks.

See also /password.

## **Managing Messenger Client Users**

Although users can begin to use the Novell Messenger client immediately after you have set up your Messenger system, as described in the *Novell Messenger 2.1 Installation Guide*, you might want to do some additional system setup, as described in the following sections:

- Section 3.1, "Adding Users to Your Messenger System," on page 85
- Section 3.2, "Customizing eDirectory Access for Users," on page 90
- Section 3.3, "Providing User Searches Based on E-Mail Addresses," on page 104
- Section 3.4, "Setting User Policies," on page 112
- Section 3.5, "Distributing the Messenger Client Software," on page 128
- Section 3.6, "Configuring the Messenger Client Software," on page 141
- Section 3.7, "Excluding Users from Your Messenger System," on page 150

These sections focus on the Messaging Agent, although some of the tasks apply to the Archive Agent as well.

## 3.1 Adding Users to Your Messenger System

Users are considered to be part of your Messenger system if their User objects reside in a Novell eDirectory context listed in a scope profile. A default scope profile was established during installation, as described in "Installing a Novell Messenger System" in the *Novell Messenger 2.1 Installation Guide*.

Figure 3-1 User Configuration Page In the Messenger Installation Program

Setup	×
User Configuration Select the context(s) that Novell Messenger should use to authenticate and search for users	N
Use the Add button below to add a context to the list. To remove a context highlight i press the remove button.	t and
OU=dev,OU=prv,O=novell	<u>A</u> dd <u>R</u> emove
Include sub contexts. If more granular control is needed, use ConsoleOne to modify the scope profile object created by the install.	
InstallShield < <u>B</u> ack <u>Next</u> >	Cancel

**NOTE:** GroupWise External Entity objects in the listed contexts are not considered part of your Messenger system.

You can add more users after installation.

- Section 3.1.1, "Adding New eDirectory Users," on page 86
- Section 3.1.2, "Editing the Default Scope Profile to Include Additional eDirectory Users," on page 88

**IMPORTANT:** If users are addressed through various hostnames, you must create a different scope profile for each hostname, as described in Section 3.3, "Providing User Searches Based on E-Mail Addresses," on page 104".

#### 3.1.1 Adding New eDirectory Users

Any time you add a new User object in eDirectory in a context listed in a Messenger scope profile, that user is automatically part of your Messenger system.

To see what scope profiles have been defined for your Messenger system and to view the contents of a scope profile:

1 In ConsoleOne, browse to and expand the Messenger Service object.

**2** Select the Scope Container object.



Existing scope profiles are displayed in the right pane.

**3** Right-click a scope profile, then click *Properties*.

Properties of DefaultScopeProfile	×
Scope Profile   NDS Rights  →   Other   Rights to Files and Folders   General	
Context List:	
	Add
	Edit
	Remove
	Move up
	Move down
Page Options	OK Cancel Apply <u>H</u> elp

The context list includes the contexts contained in the scope profile.

If you create new eDirectory users in any of the contexts listed in any of the scope profiles, no additional configuration is necessary for them to be part of your Messenger system.

## 3.1.2 Editing the Default Scope Profile to Include Additional eDirectory Users

There is no limit to the number of eDirectory contexts you can list in a scope profile. However, all contexts in a scope profile must be in the same eDirectory tree where your Messenger system is located.

To add users in the same eDirectory tree where your Messenger system is located:

- 1 In ConsoleOne, browse to and expand the Messenger Service object.
- **2** Select the ScopeContainer object.
- **3** Right-click the *Default Scope Profile* object, then click *Properties*.

Properties of DefaultScopeProfile	×
Scope Profile   NDS Rights  →   Other   Rights to Files and Folders   General	
Context List:	
	Add
	Edit
	Remove
	Move up
	Move down
Page Options	OK Cancel Apply <u>H</u> elp

Initially, the context list includes those contexts selected during installation.

4 Click Add.

Context List Entry			
Context:			
☐ Include <u>s</u> ub-contexts			
	<u>o</u> k	Cancel	Help

- **5** Browse to and select an eDirectory context, then click *OK*.
- 6 If necessary, select *Include sub-contexts* in the Context List Entry dialog box.
- 7 Click OK to updated the context list with the new context.
- **8** Repeat Step 4 through Step 7 for each eDirectory context you want to add to the default scope profile.
- **9** Click *OK* to save the updated default scope profile.

**IMPORTANT:** Be sure to avoid duplicating contexts in the context list, especially if you selected the *Include Sub-contexts* option. If the same context appears multiple times in the context list, Messenger users receive duplicate results when searching for contacts.

## 3.2 Customizing eDirectory Access for Users

During installation of your Messenger system and agents, you chose between direct access and LDAP access to eDirectory, as described in "Installing a Novell Messenger System" in the *Novell Messenger 2.1 Installation Guide*.

Figure 3-2 Directory Access Page in the Messenger Installation Program

Setup		×
Directory Access The Novell Messenger agents can acces through an LDAP server.	N	
Specify how the agents should access th	he directory.	
Use direct access		
Replica Address: (e.g. xxx.xxx.xxx.xxx)		
C Use LDAP to access the directory		
Host: (e.g. xxx.xxx.xxx.xxx)		
Port: 389 or 636 (SSL)	389	
Root Certificate: (e.g. z:\public\rootcert.der)		Browse
InstallShield		
Installation Guide	< Back Next >	Cancel

The access method chosen during installation applies initially to how the Messenger agents access eDirectory to obtain their configuration information. If you want to change this method, see "Changing the eDirectory Access Method for Starting the Messaging Agent" on page 34

With no further configuration, the Messaging Agent also accesses eDirectory on behalf of users by using the access method chosen during installation. The Messaging Agent accesses eDirectory for users whenever they:

- Start the Messenger client and authenticate to the Messenger system
- Search for users to add to their contact lists
- Display user information about contacts in their contact lists
- Save Messenger client settings

The following tasks help you customize eDirectory access for Messenger users:

- Section 3.2.1, "Providing LDAP Access to eDirectory for Messenger Users," on page 91
- Section 3.2.2, "Providing Full Name Indexing," on page 101
- Section 3.2.3, "Selecting Bind or Compare eDirectory Access for Users," on page 102
- Section 3.2.4, "Forcing Direct eDirectory Access for Users," on page 103
- Section 3.2.5, "Customizing Authentication and Searches by eDirectory Attribute," on page 103

## 3.2.1 Providing LDAP Access to eDirectory for Messenger Users

To customize LDAP access for Messenger users, you create an LDAP profile where you provide information about the LDAP servers that are available in your system. You need only one LDAP profile for your Messenger system, no matter how many LDAP servers you have.

If you have already configured your default scope profile, as explained in "Editing the Default Scope Profile to Include Additional eDirectory Users" on page 88, you can continue to use the default scope information, while providing additional LDAP configuration information in the LDAP profile. However, the LDAP profile allows you to provide scope information in a more detailed, LDAP-specific manner. As you set up the LDAP profile, you can decide which source of scope information you want to use for your Messenger system.

To set up an LDAP profile, complete the following tasks:

- "Creating an LDAP Profile" on page 91
- "Configuring the LDAP Profile" on page 92
- "Assigning the LDAP Profile to Your Messenger System" on page 97
- "Assigning Required Rights for eDirectory Access" on page 98

#### **Creating an LDAP Profile**

- 1 In ConsoleOne, browse to and expand the Messenger Service object.
- **2** Right-click the *LDAP Container* object, then click *New* > *Object*.



**3** Select *nnmLDAPProfile*, then click *OK*.

New LDAP Profi	le		$\mathbf{X}$	
Name:	<u>inanana n</u> anana n			
Define additional properties				
	<u>o</u> k	Cancel	Help	

- **4** Specify a descriptive name for the LDAP Profile object, select *Define additional properties*, then click *OK*.
- **5** Continue with "Configuring the LDAP Profile" on page 92.

#### **Configuring the LDAP Profile**

The LDAP profile has a *General* tab, where you identify the scope, query settings, and LDAP user information.

Figure 3-3 LDAP Profile General Page

Base DN:	ne and scope			
– Ba <u>s</u> e scope:	Search whole subtree	¥		J <u>*</u> ]
Additional DNs:			Add	
			Edit	
			Remove	•
			Move up	о
			Move dov	vn
	Follow LDAP referrals			
-Query Settings- Query <u>M</u> aximum Query <u>T</u> imeout (:	Results: 100 🗲			

**1** On the *General* tab, fill in the following fields if you want to use the LDAP profile, rather than a scope profile, to define the scope of your Messenger system:

**Base DN:** Browse to and select the container object in eDirectory where the majority of User objects are located. Your selection is displayed in the *Base DN* field as the distinguished name (DN) of the container object. For example, OU=users,O=corporate.

Base scope: Select the scope you want searched for User objects:

- Search whole subtreee
- Search base DN and one level below
- Only search base DN

Searching only the base DN provides the fastest results. Searching the whole subtree provides the most thorough search. The base scope you select depends on where User objects are located in your eDirectory tree.

Additional DNs: If your eDirectory tree includes User objects that are located outside of the base DN, list other DNs as needed. The additional DNs are searched in the order listed.

**Follow LDAP referrals:** Select this option if you want to take advantage of the LDAP referral feature. The eDirectory replica that an LDAP server accesses might or might not contain all the contexts that exist in the eDirectory tree. If the LDAP server does not find any results in the contexts available in its eDirectory replica, it can refer the query to another LDAP server that accesses a different eDirectory replica, where additional contexts might be available for searching and where results might be obtained.

Selecting this option might add to the search time but might produce better results. Do not select this feature if you do not want the Messaging agent to be referred to possibly unknown LDAP servers.

**IMPORTANT:** If you previously associated a scope profile with your Messenger system, you must remove it in order for the scope information provided in these fields to take effect. Rightclick the Messenger Service object, then click *Properties*. On the *General* tab, clear the contents of the *Scope Profile* field, then click *OK* to save the change. Also check for and remove any scope profiles associated with policies or individual users that you want to use the LDAP profile.

**2** On the *General* tab, fill in the following fields to control how you want information returned when users search for other Messenger users to add to their contact lists in the Messenger client:

**Query Maximum Results:** Specify the maximum number of users you want returned to the Messenger client when users search for other users to add to their contact lists. The default is 100.

**Query Timeout:** Specify in seconds the maximum amount of time you want a search for Messenger users to take. If no users are found within the allotted time, the Messenger user receives no results from the search. The default is 30 seconds.

**3** On the *General* tab, fill in the following fields to provide LDAP server login information if you want the Messaging Agent to log in differently on behalf of Messenger users than it does when logging in to obtain its configuration information:

**Username:** Specify the LDAP username that the Messaging Agent can use to access the LDAP server (for example, CN=Admin,OU=Users,O=Corporate). The Messaging Agent needs to log in with Read, Write, and Browse rights to all User objects. This user must be added as a trustee to the eDirectory Tree object (or to the top organizational container that holds your Messenger system and users). Steps for this are provided later in this procedure.

**Set Password:** Click *Set Password*, type the password for the LDAP username twice for verification, then click *Set Password*.

- 4 Click *Apply* to save the general LDAP settings.
- **5** Click *LDAP Profile > Connections* to display the Connections page.

operties of LDAP Profile			
DAP Profile → NDS Rights → Other Rights to Files and Folders	122.0305723		
onnections			
Connection Settings	en Samellend Shittin Same	na na tina na 1200 Tina Na mana na 1200	
Default Connections: 10			
Idle Timeout (seconds): 300			
Maximum Connections: 30			
Connections List:			
			Add
			Edit
			Remove
			10000 - 1000
	- Charles - Consel		the second second
Page Options	OK	Cancel Ar	pply <u>H</u> elp

6 Fill in the following fields to configure how the Messaging Agent connects to LDAP servers:

**Default Connections:** Specify the minimum number of connections that the Messaging Agent can establish with each LDAP server on startup and maintain even when the connections are idle. The default is 10.

Do not set the default number of connections greater than the number of client/server threads defined for the Messaging Agent on the Performance page of the Messaging Agent object. This results in open connections that could never be serviced by the Messaging Agent.

Idle connections occupy memory, but using an existing connection is faster than creating a new connection. The default number of connections is always kept open, even if they are idle.

**Idle Timeout:** Specify in seconds how long a connection between the Messaging Agent and an LDAP server should remain open if it is idle and there are more than the minimum number of connections open. The default is 30 seconds. Increase the idle timeout to maintain more open connections. Decrease the idle timeout to conserve memory.

**Maximum Connections:** Specify the maximum number of connections that can exist between the Messaging Agent and each LDAP server. The default is 30.

Below the *Connection Settings* fields, the *Connections List* defines which LDAP servers you want the Messaging Agent to be able to connect to.

**Connections List:** The LDAP servers that you add to the connections list form a pool of LDAP servers. When the Messenger client tries to connect to the Messenger system, if the first LDAP server it contacts isn't responding, the Messenger client automatically tries another LDAP server in the pool until it is able to connect.

7 Click *Add* to provide information about an LDAP server.

LDAP Connection	
Host Address       Image: Paddress       Image: Paddress       Image: Paddress       Image: Paddress	
Port:  Preference:  Security Information SSL Enabled	
Root Certificate:	
<u>O</u> K <u>Cancel</u>	Help

**8** Fill in the following fields:

IP Address or DNS Hostname: Specify the IP address or DNS hostname of the LDAP server.

**Port:** Specify the port number on which the LDAP server listens for service requests. The typical port number for non-SSL connections is 389. The typical port number for SSL connections is 636.

**Preference:** Assign the LDAP server a preference (or priority) of 0, 1, or 2. The Messaging Agent attempts to contact all priority 0 LDAP servers before contacting priority 1 LDAP servers and all priority 1 LDAP servers before any priority 2 LDAP servers.

**IMPORTANT:** For best performance, do not define more than one priority 0 LDAP server.

SSL Enabled: Select SSL Enabled if the LDAP server uses SSL encryption.

**Root Certificate:** Specify the full path to the root certificate on the LDAP server. Typically, the root certificate is named rootcert.der. On a NetWare server, it is located in sys:\public. On a Windows server, it is exported to a user-specified location after installation of eDirectory for Windows.

If you do not specify a root certificate, your LDAP server must be configured to accept clear text passwords in order for you to enable SSL encryption without a root certificate.

- **9** Click *OK* to save the information for the LDAP server.
- **10** Repeat Step 7 through Step 9 for each LDAP server that you want to use to provide eDirectory access.

When you specify multiple LDAP servers, they form a pool of available LDAP servers that the Messaging Agent contacts in a round-robin fashion. This provides very reliable eDirectory access for Messenger users.

- **11** Click *OK* to save the LDAP profile.
- 12 Continue with "Assigning the LDAP Profile to Your Messenger System" on page 97.

Corresponding Startup Switches: You can also use the /dirquerymaxresults, /

dirdefaultconnections, /diridletimeout, and /dirmaxconnections startup switches in the Messaging Agent startup file to configure how the Messaging Agent interacts with LDAP servers. In addition, if you have multiple LDAP servers, you can use the /dirpoolresettime startup switch to specify the number of minutes between the time when the Messaging Agent receives an error response from a pooled LDAP server and the time when that LDAP server is reinstated into the pool of available LDAP servers. You can use the /ldapuser and /ldappwd startup switches to override the information provided for the /user and /password startup switches during installation.

#### Assigning the LDAP Profile to Your Messenger System

The LDAP profile is not in effect until you have selected it on the General page of the Messenger system object.

- Properties of Messenger Vice
   Image: Ceneral Status of Messenger Vice Corporate
   Image: Ceneral Status of Messenger Vice Corporate

   Default Policy:
   DefaultPolicy PolicyContainer.MessengerService.corporate
   Image: Ceneral Status of MessengerService.corporate

   Default Policy:
   DefaultPolicy:
   DefaultScopeProfile.ScopeContainer.MessengerService.corporate
   Image: Ceneral Status of MessengerService.corporate

   Scope Profile:
   DefaultScopeProfile.ScopeContainer.MessengerService.corporate
   Image: Ceneral Status of MessengerService.corporate

   Host List:
   Add
   Edit

   Remove
   Remove

   Page Options...
   OK
   Cancel
   Apply
- 1 Right-click the Messenger Service object, then click *Properties*.

- 2 In the LDAP Profile field, browse to and select the LDAP profile you just created.
- **3** If you provided scope information for the LDAP profile in Step 1 in "Configuring the LDAP Profile" on page 92, make sure that the Scope Profile field is empty.

Also check for and remove any scope profiles associated with policies or individual users that you want to use the LDAP profile.

- 4 Click OK to save the LDAP profile information for your Messenger system.
- 5 Continue with "Assigning Required Rights for eDirectory Access" on page 98

#### Assigning Required Rights for eDirectory Access

If the user you specified in Step 3 in "Configuring the LDAP Profile" on page 92 does not have adequate rights, the Messaging Agent cannot access eDirectory successfully. Without sufficient rights to the Messenger Service object, the Messaging Agent cannot access its configuration information on the Messaging Agent object in eDirectory. Without sufficient rights to User objects, the Messaging Agent cannot access users' contact lists, Messenger client settings, and other user-specific information.

- "Assigning Trustee Rights to Access Agent Objects" on page 98
- "Assigning Trustee Rights to Access User Objects" on page 99

#### Assigning Trustee Rights to Access Agent Objects

- **1** Right-click the Messenger Service object, then click *Properties*.
- **2** Click *NDS Rights > Trustees of This Object*.
- 3 Click Add Trustee.
- **4** Browse to and select the user you specified in Step 3 in "Configuring the LDAP Profile" on page 92.



- **5** Set the following trustee rights:
  - **5a** Select [Entry Rights], select Browse, then select Inheritable.
  - **5b** Select [All Attributes Rights], select Compare, Read, and Write, then select Inheritable.
  - **5C** Click *OK* to add the user, with the assigned trustee rights, to the list of trustees.
- 6 Click OK to save the updated list of trustees for the Messenger Service object.
- 7 Continue with "Assigning Trustee Rights to Access User Objects" on page 99

#### Assigning Trustee Rights to Access User Objects

- 1 Right-click the eDirectory Tree object (or the top organizational container that holds User objects), then click *Properties*.
- 2 On the Trustees of This Object page, click *Add Trustee*.
- **3** Browse to and select the user you specified in Step 3 in "Configuring the LDAP Profile" on page 92.

Rights assigned to selected objects	
Rights assigned to selected objects         On object: MessengerService.corporate         Property <ul> <li>[Entry Rights]</li> <li>[All Attributes Rights]</li> </ul>	Rights   Supervisor   Compare   Read   Write   Add Self     Add Property   Delete Property
ок	Delete Property Cancel Help

- **4** Set the following trustee rights:
  - **4a** Select *Entry Rights*, select *Browse*, then select *Inheritable*.
  - 4b Select All Attributes Rights, select Compare and Read, then select Inheritable.
  - **4c** Click *Add Property*, select *Show All Properties*, then select one of the following properties:
    - nnmBlocking
    - nnmBlockingAllowList
    - nnmBlockingDenyList
    - nnmClientSettings
    - nnmContactList
    - nnmCustomStatusList
    - nnmLastLogin

Properties that start with lowercase letters sort after all properties that start with uppercase letters.

4d Click OK to add the selected property to the property list.

- 4e For the selected property, assign *Compare*, *Read*, and *Write* rights, then select *Inheritable*.
- 4f Repeat Step 4c through Step 4e for each Messenger property.
- 4g Click OK to add the user, with the assigned trustee rights, to the list of trustees.
- 5 Click OK to save the updated list of trustees for User objects.
- 6 Stop and then start the Messenger agents to put the LDAP profile into effect.

#### 3.2.2 Providing Full Name Indexing

When users search for a contact, the Messenger client uses the eDirectory indexes of User object attributes in order to find users. By default, the eDirectory Full Name attribute is not indexed. As a result, when users perform a name search, results are returned more slowly because all User objects in the scope must be checked. Therefore, you should configure eDirectory on the Messenger server so that it indexes the Full Name attribute.

This procedure requires the eDirectory snap-in to ConsoleOne, which can be obtained from the Novell Product Downloads site (http://download.novell.com).

1 In ConsoleOne, browse to and right-click the Server object that represents your NetWare, Linux, or Windows server, then click *Properties*.

Nomo	State	Turo	Pula	Ottributo	Auu
Name Aliesed Ob	Online	Operational	Walue	Alliesed Ob	Dalata
CN	Online	Auto Added	Value	CN	Delete
CN SS	Online	Auto Added	Substring	CN	
 dc	Online	Auto Added	Value	dc	Other Servers
Equivalent	Online	System	Value	Equivalent	
- extensionInfo	Online	System	Value	extensionInfo	Bring Online
Given Name	Online	Auto Added	Value	Given Name	
GUID	Online	Operational	Value	GUID	
ldapAttrib	Online	System	Value	ldapAttrib	
ldapClassList	Online	Auto Added	Value	ldapClassList	
Member	Online	System	Value	Member	
Obituary	Online	Operational	Presence	Obituary	
Reference	Online	System	Value	Reference	
Revision	Online	System	Value	Revision	
Surname	Online	Auto Added	Value	Surname	
uniqueID	Online	Auto Added	Value	uniqueID	
uniqueID_SS	Online	Auto Added	Substring	uniqueID	
	1				

2 Click *Indexes* to list the eDirectory attributes that are currently indexed.

3 Click Add to add a new attribute to the list.

Create Inde	x	×
Index Definitio	n	
Index Name:		
Attribute:	ACL	~
Rule:	Presence	~
	OK Cancel Help	

**4** Fill in the following fields:

Index Name: Specify a descriptive name for the attribute, such as Full Name.

Attribute: Select Full Name.

Rule: Select Value.

This matches the entire value or the just first part of the value of an attribute. For example, value matching could be used to find entries with a Full Name that is equal to "Jensen" as well as entries that begin with "Jen."

- 5 Click *OK* to add the Full Name attribute to the list.
- 6 Click *OK* again to activate the index for the Full Name attribute.

#### 3.2.3 Selecting Bind or Compare eDirectory Access for Users

When the Messenger agents authenticate to eDirectory on behalf of Messenger users (using either direct access or LDAP access), they use either a bind or compare operation. By default, a compare operation is used.

With a compare, the Messaging Agent provides the user's password to eDirectory or the LDAP server. When responding to a compare request, eDirectory or the LDAP server compares the password provided by the Messaging Agent with the user's password in eDirectory, and returns the results of the comparison.

You can configure the Messaging Agent to use a bind operation instead of a compare. With a bind, the Messaging Agent essentially logs in to eDirectory or the LDAP server. When responding to a bind request, eDirectory and most LDAP servers enforce password policies such as grace logins and intruder lockout, if such policies have been implemented.

Using a compare can provide faster access than a bind; there is typically less overhead involved because password policies are not being enforced.

If you want Messenger users to authenticate by using a bind rather than a compare:

1 Edit the Messaging Agent startup file (strtup.ma).

On NetWare and Windows, the startup file is located in the Messenger Agent installation directory. You can edit the startup file from the Messaging Agent console. See "Controlling the Messaging Agent from the Messaging Agent Console" on page 44.

On Linux, the startup file is located in /etc/opt/novell/messenger.

- **2** Remove the comment character (;) from the /diruserauthbind switch.
- **3** Save the startup file.
- **4** Stop and then start the Messaging Agent so that it reads its updated startup file and uses a bind operation when authenticating to eDirectory on behalf of Messenger users.

#### 3.2.4 Forcing Direct eDirectory Access for Users

You can configure the Messaging Agent to use direct access to eDirectory on behalf of Messenger users even if you have configured the Messaging Agent to use LDAP access when retrieving its configuration information, as described in "Using LDAP Access for the Messaging Agent" on page 35.

If you want Messenger users to use direct access to eDirectory:

1 Edit the Messaging Agent startup file (strtup.ma).

On NetWare and Windows, the startup file is located in the Messenger Agent installation directory. You can edit the startup file from the Messaging Agent console. See "Controlling the Messaging Agent from the Messaging Agent Console" on page 44.

On Linux, the startup file is located in /etc/opt/novell/messenger.

- **2** Remove the comment character (;) from the /diruserforcedirect switch.
- **3** Save the startup file.
- **4** Stop and then start the Messaging Agent so that it reads its updated startup file and uses direct access when authenticating to eDirectory on behalf of Messenger users.

#### 3.2.5 Customizing Authentication and Searches by eDirectory Attribute

By default, when Messenger users search by user ID, the Messaging Agent searches on the CN (common name) eDirectory attribute. The CN attribute corresponds to the name of User objects in the eDirectory tree. Typically, User objects are named based on users' names, such as SJones or SophieJones. If your eDirectory tree uses the CN attribute for something less helpful in the Messenger client (for example, employee numbers), you can use the /diruseralias startup switch in the Messaging Agent startup file to configure the Messaging Agent to search on a different attribute besides CN. For example, you might want the Messaging Agent to search based on the Internet EMail Address. You can use any eDirectory attribute of type STRING.

To change the eDirectory attribute that the Messaging Agent searches on:

1 Edit the Messaging Agent startup file (strtup.ma)

On NetWare and Windows, the startup file is located in the Messenger Agent installation directory. You can edit the startup file from the Messaging Agent console. See "Controlling the Messaging Agent from the Messaging Agent Console" on page 44.

On Linux, the startup file is located in /etc/opt/novell/messenger.

- 2 Remove the comment character (;) from the /diruseralias switch.
- **3** Provide the eDirectory attribute in quotation marks:

Example: /diruseralias-"Internet EMail Address"

- 4 Save the startup file.
- **5** Stop and then start the Messaging Agent so that it reads its updated startup file and searches on the specified eDirectory attribute instead of CN.

When you restart the Messaging Agent, Messenger users need to log in again in order to see the results of this change.

# 3.3 Providing User Searches Based on E-Mail Addresses

By default, Messenger users can search for other users to add to their contact lists in the Messenger client by first name, by last name, by first and last name, and by eDirectory user ID. You can add the capability of searching on e-mail addresses by setting up Messenger addresses that are equivalent to users' existing e-mail addresses. To set up Messenger addresses, you must add one or more hostnames to your Messenger system.

- Section 3.3.1, "Establishing a Hostname for Your Messenger System," on page 104
- Section 3.3.2, "Setting Up Multiple Hostnames," on page 107

For another approach to this task, see "Customizing Authentication and Searches by eDirectory Attribute" on page 103.

#### 3.3.1 Establishing a Hostname for Your Messenger System

If all of your Messenger users have e-mail addresses that are part of the same Internet domain (for example, Corporate.com), you can set up your Messenger system to recognize that Internet domain name as a Messenger address. This enables users to locate contacts by searching for their e-mail addresses (for example, JSmith@Corporate.com).

- **1** In ConsoleOne, browse to and expand the Messenger Service object.
- 2 Right-click the Host Container object, then click New > Object.



**3** Select *nnmHost*, then click *OK*.

New Host		
Name:		
Define additional prope	rties	
ок	Cancel	Help

**4** Specify a descriptive name for the new Host object (or host profile)

For simplicity, you might want to name the new host profile after the Internet domain name it represents. For example, if users receive e-mail at *username*@Corporate.com, then you could use Corporate as the name of the host profile.

**5** Select *Define Additional Properties*, then click *OK*.

Properties of host object	2
Host NDS Rights - Other Rights to Files and Folders	
Host Name:	
Scope Profile:	臣 🖉
Page Options	OK Cancel Apply Help

- **6** In the *Host Name* field, specify the Internet domain name that appears in users' e-mail addresses (for example, Corporate.com).
- 7 In the *Scope Profile* field, browse to and select the *Default Scope Profile* object, then click *OK* to create the new host profile.
- 8 Right-click the Messenger Service object, then click *Properties*.

Properties of N	MessengerService	
<b>Novell Messen</b> General	nger    NDS Rights    Other    Rights to Files and Folders	
Default Policy:	DefaultPolicy.PolicyContainer.MessengerService.corporate	■ _
Scope Profile:	DefaultScopeProfile.ScopeContainer.MessengerService.corporate	
Host List:		Add
		Edit
	-	Remove
Page Options	OK Cancel Apply	Help

- **9** Beside the *Host list*, click *Add*.
- **10** Browse to and select the new host profile you created in Step 7 above.
- **11** Click *OK* to save the updated host list.
- 12 Stop and then start the Messaging Agent to put the new hostname into effect.

Messenger users can now specify e-mail addresses as well as eDirectory user IDs in the Messenger client *Use This User ID* field.

If archiving is enabled, authorized Messenger users can search the Messenger archive for users' conversations by specifying their e-mail addresses. Conversations archived before the hostname was established are not searchable by e-mail address.

#### 3.3.2 Setting Up Multiple Hostnames

If your organization is large, it might be divided into units. For example, Corporate.com might include Development.Corporate.com, Sales.Corporate.com, and so forth. By setting up multiple hostnames, you enable Messenger users to search for contacts within subsets of your organization.

In order to set up multiple hostnames, you must first set up a scope profile for each hostname.

- 1 In ConsoleOne, browse to and expand the Messenger Service object.
- 2 Right-click the Scope Container object, then click *New* > *Object*.



**3** Select *nnmScopeProfile*, then click *OK*.

New Scope	Profile		×
Name:			
🗖 Define a	dditional prope	rties	
	ок	Cancel	Help

**4** Type a descriptive name for the new scope profile, select *Define Additional Properties*, then click *OK*.
eneral	
	Add
	Edit
	Remove
	Move up
	Move down

Click *Add*.

Context List Entry			
Context:			te:
$\Box$ include <u>s</u> ub-contexts			
	<u>o</u> k	Cancel	Help

- **6** Browse to and select one or more contexts that use the hostname you want to create.
- 7 If necessary, select *Include sub-contexts* for the selected contexts.
- Click *OK* to add the contexts to the context list.
- Repeat Step 5 through Step 8 for additional contexts that use the hostname you want to create.
- Click *OK* to save the scope profile for the hostname.
- Right-click the Host Container object, then click *New* > *Object*.



**12** Select *nnmHost*, then click *OK*.

New Host		$\mathbf{X}$
Name:		
Define additional proper	ties	
ок	Cancel	Help

**13** Type a descriptive name for the new Host object.

It could be the same as the hostname you are setting up or it could be different, as needed.

**14** Select *Define additional properties*, then click *OK*.

Properties of host object				×
Host General NDS Rights ▼   Other   Rights to Files and Folders				I
Host Name:				
Scope Profile:				臣 🖉
Page Options	OK	Cancel	Apply	Help

**15** Fill in the following fields:

**Host Name:** Specify the hostname the corresponds to the scope profile you created in Step 10 above.

Continuing with the above example, to subdivide Corporate.com, you would specify Development.Corporate.com.

Scope Profile: Browse to and select the new scope profile you just created in Step 10 above.

- **16** Click *OK* to create the new Host object.
- **17** Repeat Step 2 through Step 16 for each hostname you want to establish in your Messenger system.
- **18** Right-click the Messenger Service object, then click *Properties*.

Properties of N	MessengerService	
<b>Novell Messen</b> General	nger    NDS Rights    Other    Rights to Files and Folders	
Default Policy:	DefaultPolicy.PolicyContainer.MessengerService.corporate	· · · · · ·
Scope Profile:	DefaultScopeProfile.ScopeContainer.MessengerService.corporate	
Host List:		Add
		Edit
	-	Remove
Page Options	OK Cancel Apply	Help

- **19** Beside the host list, click *Add*.
- **20** Browse to and select the new Host objects to add them to the host list.
- **21** Click *OK* to save the updated host list.
- 22 Stop and then start the Messaging Agent to put the new hostnames into effect.

# 3.4 Setting User Policies

As an administrator, you can set user policies to control how some Messenger client features work and to establish defaults for some Messenger client functionality. You can configure user policies to apply to all Messenger users or to selected Messenger users.

- Section 3.4.1, "Editing the Default User Policy," on page 113
- Section 3.4.2, "Creating a User Policy," on page 114
- Section 3.4.3, "Customizing Messenger Client Features," on page 116
- Section 3.4.4, "Customizing Personal History Features," on page 118
- Section 3.4.5, "Controlling Users' Contact Lists," on page 119
- Section 3.4.6, "Setting Up a Default Privacy List," on page 121
- Section 3.4.7, "Selecting Default Display Attributes," on page 123
- Section 3.4.8, "Creating A Custom Status," on page 125
- Section 3.4.9, "Applying a Policy to Specific Users," on page 127

## 3.4.1 Editing the Default User Policy

If you use the same policy for all Messenger users, editing the default user policy affects all users. If you have multiple user policies, editing the default user policy affects those users who are not governed by another policy.

- 1 In ConsoleOne, browse to and expand the Messenger Service object.
- 2 Select the Policy Container object, right-click the Default Policy object, then click *Properties*.

Properties of DefaultPolicy		×
Policy → NDS Rights → Other Rights to Files and Folders		
Enable Novell Messenger services		<b>6</b>
Archive message sessions		<b>6</b>
✓ Allow users to search eDirectory for other users		<b>6</b>
Allow users to send broadcast messages to other users		<b>6</b>
Allow users to send system broadcast messages		<b>6</b>
Allow users to use chat rooms		<b>6</b>
Allow users to create chat rooms		<b>6</b>
Allow users to change their password		<b>6</b>
✓ Allow users to use Remember Password		<b>6</b>
Enable Conferencing Integrations		60
Default host:	第 🟒	<b>6</b>
Scope profile:		<b>6</b>
Page Options	OK Cancel Apply	Help

**3** Continue with the type of customization you want to perform:

Policy Property Page	Policy Options
General	Enable Novell Messenger services, Archive message sessions, Allow users to search eDirectory for other users, Allow users to send broadcast messages to other users, Allow users to send system broadcast messages, Allow users to use chat rooms, Allow users to create chat rooms, Allow users to change their password, Allow users to use Remember Password, Enable Conferencing Integrations, Default host, Scope profile
Personal History	Allow users to print and save conversations, Allow users to use Personal History
Contact List	Maximum number of contacts, Maximum number of folders, Contact List
Privacy	Allowed/Blocked

Policy Property Page	Policy Options
Information List	Selected Attributes
Custom Status	Custom Status List
Used By	Reference List

- 4 Click OK.
- **5** After you modify the Default Policy object, stop and then start the Messenger agents to put the new default policy into effect throughout your Messenger system.

## 3.4.2 Creating a User Policy

If you want to provide different policies for different users, you need to create multiple Policy objects.

- 1 In ConsoleOne, browse to and expand the Messenger Service object.
- **2** Right-click the Policy Container object, then click *New* > *Object*.

1
ок
Cancel
Help

**3** Select *nnmPolicy*, then click *OK*.

New Policy			×
Name:			
Novell Messenger:			下 📃
	<u>o</u> ĸ	Cancel	Help

- **4** Specify a descriptive name for the new policy, browse to and select the Novell Messenger system that this policy belongs to, then click *OK*.
- **5** In the Policy Container, right-click the new policy object, then click *Properties*.

Properties of test		
Policy → NDS Rights → Other Rights to Files and Folders		
Enable Novell Messenger services		<b>6</b>
Archive message sessions		<b>6</b>
Allow users to search eDirectory for other users		<b>6</b>
Allow users to send broadcast messages to other users		<b>6</b>
Allow users to send system broadcast messages		<b>6</b>
Allow users to use chat rooms		<b>6</b>
Allow users to create chat rooms		<b>6</b>
Allow users to change their password		<b>6</b>
Allow users to use Remember Password		<b>6</b>
Enable Conferencing Integrations		6
Default host:	第 🗾	6
Scope profile:	E 🖉	<b>6</b>
Restore Default Settings		
Page Options	OK Cancel Apply	Help

**6** Continue with the type of policy customization you want to perform:

Policy Property Page	Policy Options
General	Enable Novell Messenger services, Archive message sessions, Allow users to search eDirectory for other users, Allow users to send broadcast messages to other users, Allow users to send system broadcast messages, Allow users to use chat rooms, Allow users to create chat rooms, Allow users to change their password, Allow users to use Remember Password, Enable Conferencing Integrations, Default host, Scope profile

Policy Property Page	Policy Options
Personal History	Allow users to print and save conversations, Allow users to use Personal History
Contact List	Maximum number of contacts, Maximum number of folders, Contact List
Privacy	Allowed/Blocked
Information List	Selected Attributes
Custom Status	Custom Status List
Used By	Reference List

#### 7 Click OK.

After you create a new policy, you do not need to restart the Messenger agents in order for the updated policy to be in effect. The new policy is in effect the next time users governed by the policy log in to Messenger, as described in "Applying a Policy to Specific Users" on page 127.

## 3.4.3 Customizing Messenger Client Features

The options on the General page of the Policy object customize how the Messenger client works for users governed by the policy you are creating or editing. You can set these options to enable or disable certain functionality and to provide some settings that override comparable settings on the Messenger Service object.

- **1** Edit or create a user policy.
- **2** Click *Policy* > *General*.

Properties of DefaultPolicy	×
Policy → NDS Rights → Other Rights to Files and Folders	
Enable Novell Messenger services	<b>6</b>
Archive message sessions	<b>6</b>
✓ Allow users to search eDirectory for other users	<b>6</b> 7
✓ Allow users to send broadcast messages to other users	<b>6</b>
Allow users to send system broadcast messages	<b>6</b>
✓ Allow users to use chat rooms	<b>6</b>
Allow users to create chat rooms	<b>6</b> 2
Allow users to change their password	<b>6</b> 2
✓ Allow users to use Remember Password	<b>6</b> 2
Enable Conferencing Integrations	<b>6</b> 3
Default host:	<b>f</b> A
Scope profile:	<b>6</b> 3
Page Options OK Cancel Apply	Help

**3** Fill in the following fields:

**Enable Novell Messenger Services:** Use this option to enable or disable the Messenger client for the users governed by this policy. It is enabled by default.

**Archive Message Sessions:** Use this option to enable or disable conversation archiving for users governed by this policy. It is disabled by default. If you want to enable archiving, see Chapter 4, "Enabling and Managing Archiving," on page 151.

Allow Users to Search eDirectory for Other Users: Use this option to allow or prevent Messenger users from building their contact lists by searching for users in eDirectory. It is enabled by default. If you disable this option, users governed by this policy can only add known eDirectory user IDs to their contact lists.

Allow Users to Send Broadcast Messages to Other Users: Use this option to enable or disable users to send broadcast messages to other users. It is enabled by default. If you disable this option, users governed by this policy cannot send broadcast messages to other users.

Allow Users to Send System Broadcast Messages: Use this option to enable or disable users to send system broadcast messages to all users who are online. It is disabled by default. If you enable this feature, users governed by this policy can send broadcast messages to all online users.

Allow Users to Use Chat Rooms: Use this option to enable or disable users to use Messenger chat rooms. It is enabled by default. If you disable this feature, users governed by this policy cannot join Messenger chat rooms.

Allow Users to Create Chat Rooms: Use this option to enable or disable users to create Messenger chat rooms. It is disabled by default. If you enable this option, users governed by this policy can create Messenger chat rooms.

Allow Users to Change Their Password: Use this option to enable or disable users to change their eDirectory passwords from the Messenger client. It is disabled by default because Messenger authenticates users by using their eDirectory passwords and you might not want users changing their eDirectory passwords in the Messenger client. If you enable this option, users governed by this policy have a *Change Password* item on the *Tools* menu in the Messenger client where they can change their eDirectory passwords.

Allow Users to Use Remember Password: Use this option to enable or disable users to use Remember Password. It is enabled by default. If you disable this option, users governed by this policy cannot use Remember Password in the client.

**Default Host:** If you have set up multiple hosts in your Messenger system, as described in Section 3.3, "Providing User Searches Based on E-Mail Addresses," on page 104, browse to and select the host that applies to the users governed by this policy.

**Scope Profile:** To override the scope profile defined on the General page of the Messenger Service object for users governed by this policy, browse to and select the scope profile that lists the contexts where users governed by the policy can search for User objects.

**4** If you do not want an option to be changeable for individual Messenger users, click the *Lock* button next to it.

Each option is accompanied by a *Lock* button. When an option is unlocked, it can be overridden by changing the option setting on the Novell Messenger General page of individual User objects.

- 5 Click Apply to save the general policy settings.
- **6** Continue with Section 3.4.4, "Customizing Personal History Features," on page 118.

or

If you are finished configuring the policy and you are not modifying the Default Policy, skip to "Applying a Policy to Specific Users" on page 127.

## 3.4.4 Customizing Personal History Features

The options on the History page of the Policy object customize how the Messenger client works for users governed by the policy you are creating or editing. You can set these options to enable or disable certain functionality and to provide some settings that override comparable settings on the Messenger Service object.

- 1 Edit or create a user policy.
- 2 Click *Policy* > *Personal History*.

Properties of test	
Policy    NDS Rights    Other Rights to Files and Folders Personal History	
<ul> <li>Allow users to print and save conversations</li> <li>Allow users to use Personal History</li> </ul>	<u>ଜି କ</u> ଇ.ଜି
Restore Default Settings	
Page Options	OK Cancel Apply Help

**3** Fill in the following fields:

Allow Users to Print and Save Conversations: Use this option to enable or disable users to print or save their conversations. It is enabled by default. If you disable this feature, users governed by this policy cannot print or save their conversations.

**Allow Users to Use Personal History:** Use this option to enable or disable users to use Personal History. It is enabled by default. If you disable this feature, users governed by this policy cannot use Personal History.

- **4** If you do not want an option to be changeable for individual Messenger users, click the *Lock* button next to it.
- **5** Click *Apply* to save the general policy settings.
- 6 Continue with "Controlling Users' Contact Lists" on page 119.

or

If you are finished configuring the policy and you are not modifying the Default Policy, skip to "Applying a Policy to Specific Users" on page 127.

## 3.4.5 Controlling Users' Contact Lists

By default, users build their own contact lists in the Messenger client and they can add as many as 100 contacts. As an administrator, you can control the size of the contact list and you can create a default contact list for Messenger users, so that users governed by this policy have something to start with when they first use the Messenger client.

**1** Edit or create a user policy.

**2** Click *Policy* > *Contact List*.

ontact List	a rolaers
Maximum number of contacts: 100	6 6 6
	Add User
	Add Folder
	Edit
	Remove

**3** Fill in the following fields to control the size of users' contact lists:

**Maximum Number of Contacts:** Specify the maximum number of users that users governed by this policy can add to their contact lists. The default is 100. Users' contact lists are stored on their User objects in your Messenger system. Therefore, you might want to limit the amount of space occupied by contact lists in eDirectory.

**Maximum Number of Folders:** Specify the maximum number of folders that users governed by this policy can create in their contact lists. The default is 50.

- **4** If you want to create a default contact list for the users governed by this policy:
  - **4a** To add users to the default contact list, click *Add User*, browse to and select one or more User objects, then click *OK*.
  - **4b** To add a folder in the default contact list, click *Add Folder*, select the new folder, click *Edit*, specify the name of the folder, then click *OK*.
  - **4c** To add users to a folder, select the folder, click *Add User*, browse to and select one or more User objects, then click *OK*.

You cannot drag and drop users into a folder.

- **4d** To expand or collapse the list of users in a folder, double-click the folder.
- **4e** To change the way a username displays in the default contact list, select the user, click *Edit*, specify the username that you want to appear in the contact list, then click *OK*.

This does not rename the eDirectory User object.

**4f** To delete a user or folder from the default contact list, select the user or folder, then click *Remove*.

Folders do not need to be empty to be deleted. You are not prompted for confirmation. There is no undo.

**4g** If you are creating an extensive default contact list, click *Apply* occasionally to save your work.

New Messenger users see the default contact list when they first start the Messenger client. Existing Messenger users who already have their own contact lists are not affected by your default contact list.

Each contact list option is accompanied by a *Lock* button. When an option is unlocked, it can be overridden by changing the option setting on the Novell Messenger General page of individual User objects, or in the case of the contact list, by Messenger users themselves.

**5** If you do not want an option to be changeable for individual Messenger users, click the *Lock* button next to it.

**IMPORTANT:** If you lock the contact list, users cannot change their contact lists in the Messenger client.

- 6 Click *Apply* to save the contact list settings.
- 7 Continue with "Setting Up a Default Privacy List" on page 121.

or

If you are finished configuring the policy and you are not modifying the Default Policy, skip to "Applying a Policy to Specific Users" on page 127.

## 3.4.6 Setting Up a Default Privacy List

By default, all users whose User objects are located in a context listed in a scope profile have access to Messenger. Users control who can see their online status and who can send them messages. As an administrator, you can establish a default privacy list for users governed by the policy you are creating or editing.

- **1** Edit or create a user policy.
- **2** Click *Policy* > *Privacy*.

olicy ←   NDS Rights ←   Other   Rig ivacy	to Hiles and Folders
Allowed: <everyone else=""></everyone>	Blockedt
Restore Default Settings	

**3** To add users to the *Allowed* list, click in the *Allowed* list, then click the + button.

or

To add users to the *Blocked* list, click in the *Blocked* list, then click the + button.

- **4** Browse to and select one or more users.
- **5** To move users from the one list to the other, select one or more users, then click the right-arrow or left-arrow button.
- 6 To delete users from either list, select one or more users, then click the *Remove* button.

New Messenger users see the default privacy list when they first start the Messenger client. Existing Messenger users who already have their own privacy lists are not affected by your default privacy list.

The privacy list option is accompanied by a *Lock* button. When an option is unlocked, it can be overridden by changing the option setting on the Novell Messenger General page of individual User objects, or in the case of the privacy list, by Messenger users themselves.

7 If you do not want the default privacy list to be changeable for individual Messenger users, click the *Lock* button.

**IMPORTANT:** If you lock the privacy list, users cannot change their privacy lists in the Messenger client.

- 8 Click *Apply* to save the default privacy list.
- **9** Continue with "Selecting Default Display Attributes" on page 123.

or

If you are finished configuring the policy and you are not modifying the Default Policy, skip to "Applying a Policy to Specific Users" on page 127.

## 3.4.7 Selecting Default Display Attributes

When Messenger users display contact property information in their Messenger contact lists, the following information is displayed if it is available in eDirectory:

- First Name
- Last Name
- Department
- Title
- E-Mail Address
- Description

You can make more or less eDirectory information available for display in the Messenger client to meet the needs of your users.

- **1** Edit or create a user policy.
- **2** Click *Policy* > *Information List*.

ormation List		
Internet Email Address		Add
ou		Edit
Title		Remove
Description		
Restore Defeuit Settinge		
Restore Default Settings		

The information is listed according to its eDirectory attribute name. For example, L stands for Location. The Messenger client automatically translates OU into Department and Internet Email Address into E-mail Address, but any other attribute name changes must be made manually.

- **3** If you want to clarify the meaning of an attribute for Messenger users:
  - **3a** Select an attribute, then click *Edit*,



- **3b** Specify the name you want users to see when displaying contact properties, then click OK.
- **4** If the list includes information that you do not want users to be able to see, select an attribute, then click *Remove*.
- **5** If you want to add more attributes to the list:
  - 5a Click Add.

Information Display Li	st		×
Selected Attributes:	-		
		Available Attributes	
		1	
	ок	Cancel	Help

**5b** If you want to add eDirectory attributes, click *Available Attributes*.

C Information Display List 🛛 🛛 🛛	]
<u>A</u> vailable Attributes:	
accessCardNumber 🗾	
assistant 📃	
assistantPhone	B
Audit:File Link	
businessCategory	2
carLicense	
city	
CN	
co 🗾	
OK <u>C</u> ancel <u>H</u> elp	

All eDirectory attributes of type STRING or DN are listed.

**5c** Select one or more attributes, then click *OK* twice to return to the Information List page. or

If you want to add LDAP attributes, specify one or more LDAP attributes, separating the attributes with semicolons (;), then click *OK* to return to the Information List page.

**5d** If you are using LDAP access to eDirectory and if you want to add telephone numbers and fax numbers (which are not attributes of type STRING or DN in eDirectory), specify telephoneNumber and/or faxNumber as attributes, then click *OK* to return to the Information List page.

The information list option is accompanied by a *Lock* button. When an option is unlocked, it can be overridden by changing the option setting on the Novell Messenger General page of individual User objects.

- **6** If you do not want the default information list to be changeable for individual Messenger users, click the *Lock* button.
- 7 Click *Apply* to save the information list.
- 8 Continue with "Creating A Custom Status" on page 125.

or

If you are finished configuring the policy and you are not modifying the Default Policy, skip to "Applying a Policy to Specific Users" on page 127.

## 3.4.8 Creating A Custom Status

By default, the Messenger client provides the following selectable user statuses that indicate user presence in the Messenger system:

lcon	Status
Þ	Online
٥	Busy
٩	Away
8×	Appear Offline

In the Messenger client, users can create their own custom statuses to indicate their presence. As an administrator, you can create custom statuses to be available to all users governed by this policy.

- **1** Edit or create a user policy.
- **2** Click *Policy* > *Custom Status*.

		Add
		Edit
		Remove

Any existing custom status is listed.

**3** Click *Add* to create a new custom status.

Custom Availa	bility Status			
<u>S</u> how As: Title:	Away			
– Auto-Reply <u>M</u> essage:				
		<u>o</u> ĸ	Cancel	Help

**4** Fill in the following fields:

Show As: Select *Online*, *Away* or *Busy* to determine the icon to accompany the custom status. Title: Specify a descriptive name for the new status.

**Auto-Reply Message:** (Optional) Specify a message for the Messenger Agent to return automatically whenever the new status is selected in the Messenger client.

- **5** Click *OK* to add the new custom status to the list.
- 6 Repeat Step 3 through Step 5 to create additional custom statuses.

New Messenger users see your custom statuses when they first start the Messenger client. Existing Messenger users who might have created their own custom statuses are not affected by your custom statuses.

The custom status list option is accompanied by a *Lock* button. When an option is unlocked, it can be overridden by changing the option setting on the Novell Messenger General page of individual User objects, or in the case of the custom status list, by Messenger users themselves.

7 If you do not want the custom statuses to be changeable for individual Messenger users, click the *Lock* button.

**IMPORTANT:** If you lock the custom status list, users cannot create their own custom statuses in the Messenger client.

8 Click *Apply* to save the custom statuses, then continue with "Applying a Policy to Specific Users" on page 127.

or

If you are modifying the Default Policy, click OK to save it.

## 3.4.9 Applying a Policy to Specific Users

After you have set the needed policy options, you select the Messenger users to be governed by the policy.

- **1** Edit or create a user policy.
- **2** Click *Policy* > *Used By*.

Properties of test		X
Policy   NDS Rights   Other   Rights to Files and Folders    Ilsed By		
Reference List:		
		Add
		Edit
		Remove
Page Options	OK Canc	el Apply Help

Any users currently governed by the policy are listed.

3 Click Add, then browse to and select those users that you want to be governed by this policy.

You can select only User objects. You cannot select container objects, Group objects, Organizational Role objects, GroupWise Distribution List objects, and so on.

The reference list option is accompanied by a *Lock* button. When an option is unlocked, it can be overridden by changing the option setting on the Novell Messenger General page of individual User objects.

- 4 Repeat Step 3 for each context where User objects are located.
- **5** If you do not want the reference list to be changeable for individual Messenger users, click the *Lock* button.
- 6 Click OK to save the user policy.

You do not need to restart the Messaging Agent in order for the new policy to be in affect. The new policy takes effect for users governed by the policy the next time they log in to Messenger.

# 3.5 Distributing the Messenger Client Software

You have many alternatives for helping users install the Messenger client:

- Section 3.5.1, "Using the Novell Messenger Download Page," on page 129
- Section 3.5.2, "Setting Up Auto-Update," on page 130
- Section 3.5.3, "Configuring Your Web Server to Download the Messenger Client," on page 132

- Section 3.5.4, "Using ZENworks for Desktops to Distribute the Messenger Windows Client Software," on page 134
- Section 3.5.5, "Using Red Carpet on Linux to Distribute the Cross-Platform Messenger Client Software," on page 141

### 3.5.1 Using the Novell Messenger Download Page

The Novell Messenger download page is available to users as soon as you finish running the Messenger Installation program, as described in the *Novell Messenger 2.1 Installation Guide*, and start the Messaging Agent, as described in Section 2.1, "Starting the Messaging Agent," on page 29.

In order for users to access the Novell Messenger download page in their Web browsers, you need to tell them the IP address or DNS hostname of the server where the Messaging Agent is running and the port number (8300 by default). So, for example, if you installed the Messaging Agent on a server with an IP address of 172.16.5.18, the Novell Messenger download page is:

http://172.16.5.18:8300

When users view this URL, they see the following page:

Figure 3-4 Novell Messenger Download Page



When users click the Novell Messenger link, they download the nvlmsgr.exe file from the \novell\nm\ma\software\client\win32 directory. By following the instructions on the download page, users can install and start the Messenger client quickly and easily.

## 3.5.2 Setting Up Auto-Update

You can require Messenger users to update their Messenger client software whenever a new version of the client is available

- 1 In ConsoleOne, browse to and right-click the Messenger Service object, then click *Properties*.
- **2** Click Novell Messenger > Client Update.

Properties of Messeng	erService	×
Novell Messenger 👻	NDS Rights 🗸   Other   Rights to Files and Folders	
	Client Download URLs are used both for web browser downloads and for auto-updates.	
Client Download URLs:	Add	
	Edit	
	Remove	
	Move up	
	Move down	
_		
Enable client downl	oad through a browser	
Enable client auto-u	pdate	
Version: Date:		
Grace logins:		
Update message:		
To require a client updat	e, specify the minimum version and date of the product. Leave the fields blank if an update is not required.	
Page Options	OK Cancel Apply Help	

**3** Fill in the following fields to configure the update process:

**Client Download URLs:** Click *Add* to specify each URL where the user's browser or the Messenger client are redirected when attempting to download the updated client software.

The URLs in the list you create are tried in the order you list them. Make sure that the Messenger nvlmsgr.exe file is available for download from each URL in the list. For more information, see "Configuring Your Web Server to Download the Messenger Client" on page 132.

**Enable Client Download Through a Browser:** Select this option so that users can download the updated Messenger client software from the Novell Messenger download page, as described in "Using the Novell Messenger Download Page" on page 129.

**Update Message:** If desired, type the message that you want Messenger users to see when they are notified about the Messenger client update.

4 If you want to require Messenger users to update, fill in the following fields:

Version: Specify the minimum acceptable version number for the Messenger client software.

**Date:** Click the *Calendar* button to specify the earliest acceptable date for the Messenger client software.

If you fill in the *Version* and/or *Date fields*, users cannot run the Messenger client until they update their software, unless you allow grace logins.

**Grace Logins:** Specify the number of times users can log in to the Messenger system without updating their Messenger client software.

If you leave the *Date* and *Version* fields blank, users can choose whether or not to update their Messenger client software when they are notified that a new version is available.

Client version information is stored on each user's workstation in the nmcl32.ver file.

**5** Click *OK* to establish the update process.

When Messenger users start the Messenger client, they are notified whenever updated client software is available.

## 3.5.3 Configuring Your Web Server to Download the Messenger Client

By default, the Messaging Agent handles downloading Messenger client software to Messenger users. If this activity seems to interfere with its ability to handle its instant messaging functions in a timely manner, you can configure your Web server to download the client software instead. Before performing the following steps, you should already have created your Messenger system and have the Messenger agents running. You can download either Messenger client (Windows or Cross-Platform) from a Messenger system on any platform (NetWare, Linux, or Windows).

- 1 In ConsoleOne, browse to and right-click the Messenger Service object, then click *Properties*.
- **2** Click *Novell Messenger > Client Update*.
- **3** Click *Novell Messenger > Client Update*.

Properties of Messeng	erService 🛛 🗙
Novell Messenger 👻 Client Update	NDS Rights  ▼   Other   Rights to Files and Folders
1	Client Download URLs are used both for web browser downloads and for auto-updates.
Client Download URLs:	Add
	Edit
	Remove
	Move up
	Move down
✓ Enable client auto-u Version: Date: Grace logins: Update message:	
To require a client updat	e, specify the minimum version and date of the product. Leave the fields blank if an update is not required.

4 Next to the Client Download URLs list, click Add.

C Download URL			X
Download URL:			
	ок	Cancel	Help

**5** Specify the URL of your Web server, for example:

```
http://nm.novell.com:80
```

Be sure to include both the http:// and the port number where your Web server listens for service requests.

- 6 Click *OK* to close the Download URL dialog box, then click *OK* again to save the updated information on the Client Update page.
- 7 From the Messenger software subdirectory, copy the index.htm file and the msgricon.gif file to the primary document directory of your Web server.

On NetWare and Windows, the Messenger software directory is \novell\nm\ma\software. On Linux, it is /opt/novell/messenger/software.

If you want to provide the Novell Messenger download page in a language other than English, copy the index.htm file from the appropriate language subdirectory beneath the Messenger software directory.

8 Edit the index.htm file to remove all instances of ~down, for example:

```
Before: /~down/client/win32/nvlmsgr.exe /~down/client/linux/nvlmsgr.bin / ~down/client/mac/nvlmsgr.sit
```

After: /client/win32/nvlmsgr.exe /client/xplat/linux/nvlmsgr.bin /client/ xplat/mac/nvlmsgr.sit

- **9** Depending on the requirements of your Web server, save the file as either index.htm or index.html.
- **10** Under the primary document directory of your Web server, create a client subdirectory, then create a platform-specific subdirectory in it, to create the following directory structure:

primary\_doc\_dir/client/win32 primary\_doc\_dir/client/xplat/linux
primary doc dir/client/xplat/mac

- 11 From the platform-specific subdirectory (win32, linux, or mac) of the Messenger software directory, copy the appropriate Messenger file (nvlmsgr.exe, nvlmsgr.bin, or nvlmsgr.sit) into the corresponding primary doc dir platform-specific subdirectory.
- **12** In the platform-specific *primary\_doc\_dir* subdirectory, create an ASCII text file named files.txt with one of the following lines depending on your client platform:

```
client/win32/nvlmsgr.exe client/xplat/linux/nvlmsgr.bin client/xplat/mac/
nvlmsgr.sit
```

- **13** After typing the appropriate platform-specific line shown in Step 12, press Enter so that there is an empty line at the end of the file.
- **14** Save the updated files.txt file.

- **15** Repeat Step 12 through Step 14 for each platform-specific subdirectory you created in Step 10, so that you have three files.txt files, one for each platform.
- 16 Restart the Messenger agents to put the list of client download URLs into effect.

You do not need to restart the Web server in order for Messenger users to be able to download the Messenger client software.

## 3.5.4 Using ZENworks for Desktops to Distribute the Messenger Windows Client Software

You can use the Application Management functionality in Novell ZENworks for Desktops to distribute the Messenger client software to workstations. The following sections provide instructions:

- "Understanding the Messenger Client .aot Files" on page 134
- "Creating a Messenger Client Application Object" on page 134

**IMPORTANT:** This information assumes that you are familiar with ZENworks for Desktops. For background information, or for help completing the ZENworks tasks outlined in the steps below, see the ZENworks for Desktops documentation at the Novell ZENworks documentation site (http://www.novell.com/documentation-index/index.jsp?category=ZENworks).

#### Understanding the Messenger Client .aot Files

The most effective way to create a Messenger client Application object is from an Application Object Template (.aot) file. If desired, you can use the ZENworks for Desktops snAppShot utility to create a Messenger client .aot file, or you can use one of the predefined .aot files included with Messenger:

- english.aot: Creates an Application object you can use to install English.
- **multi.aot:** Creates an Application object you can use to install all languages that are available except English.

The .aot files contain the basic information required to create Messenger client Application objects in Novell eDirectory. For example, the multi2.aot file can be used to create an Application object that, when associated with users, causes the English, Czech, Hungarian, Polish, and Russian versions of the Messenger client to be installed to a user's Windows workstation. For this to work, you must have already installed the files for these language versions to a location that is accessible to users.

#### **Creating a Messenger Client Application Object**

The following steps explain how to use ZENworks for Desktops 4 to create a Messenger client Application object from one of the .aot files. If you are using a different version of ZENworks for Desktops, the steps you need to complete might be slightly different.

- 1 Copy the contents of the \novellnm\ma\software\client\win32 directory to a location on a server that is accessible to all users (for example, \\server\volume\novell\messenger).
- 2 In ConsoleOne, right-click the container where you want to create the Messenger client Application object, then click *New* > *Object* to display the New Object dialog box.

**3** In the list of objects, select *App:Application*, then click *OK* to display the New Application dialog box.

New Application Object		×
N	<ul> <li>Create an Application object for:</li> <li>A simple application (no .AOT/.AXT/.MSI file)</li> <li>An application that has an .AOT/.AXT file</li> <li>An application that has an .MSI file</li> <li>An application by using an existing Application object</li> <li>A Web application</li> <li>A Terminal Server application</li> </ul>	
	To continue, click Next. < <u>Back Next</u> > Cancel Finish <u>H</u> elp	-

**4** Select *An Application that Has an .AOT/.AXT File*, then click *Next* to display the .AOT/.AXT file path page.

New Application Object		×
	Specify the path to the .AOT/.AXT file you want to use to create the Application object.	
N	Path to .AOT/.AXT File: d:/zen/Mulit1.aot	a l
	To continue, click Next. < <u>B</u> ack <u>Next</u> > Cancel Finish <u>H</u> elp	-

5 In the *Path to .AOT/.AXT File* field, browse for and select the .aot file you want to use. By default, the .aot files are located in the zen subdirectory in the downloaded *Novell Messenger 2.1* image.

For example, if you want to create an Application object to install the English, Czech, Hungarian, Polish, and Russian versions of the Messenger client, select the multi2.aot file.

6 Click *Next* to display the Application object information page, then customize the object name, source path, and target path information if necessary.

New Application Object		X
Ν	Define the following information for the Application object.          Object Name:         Messenger         SOURCE_PATH (location of installation files (.fil)):         H:\Novell\NM\ma\software\client         TARGET_PATH (client workstation directory path):         C:\Novell\Messenger	
	To continue, click Next. < <u>B</u> ack <u>N</u> ext > Cancel Finish <u>H</u> u	elp

**Object Name:** This is the name for the Application object created in eDirectory. You might want to use a descriptive name (for example, "Messenger ECHPR Client" for the Czech, Hungarian, Polish, and Russian versions.

**SOURCE\_PATH:** This is the directory from which the Messenger client will be installed. Specify the full path to the client directory (for example,

\\*server*\*volume*\novell\messenger). Unless all users have the same drive mapping to the volume, make sure you use a UNC path.

This path is saved as the SOURCE\_PATH variable. If you need to change it later, you can do so on the Application object's Macros page (Application object > *Common* tab > Macros page).

**TARGET\_PATH:** This is the workstation directory where the Messenger client will be installed. Specify a path relative to the user's workstation.

This path is saved as the TARGET\_PATH variable. If you need to change it later, you can do so on the Application object's Macros page (Application object > *Common* tab > Macros page).

7 Click *Next* to display the system requirements page, then modify the system requirements if necessary.

New Application Object					X
	Add requiren	nents to control a	vailability of this	application.	
	Show	Туре	Subject	Operator	Value
Ν	False False False False False	Disk size Disk size Disk size OS version	Temp Directo Windows Dir C: Windows 98 Windows NT/	greater than greater than greater than greater than greater than	1 1 8
,	To continue,	click Next.			
			A <u>d</u> d 💌	<u>M</u> odify	Delete
		< <u>B</u> ack	<u>N</u> ext > C	ancel Finis	sh <u>H</u> elp

8 Click *Next* to display the user associations page.

New Application Object	×
N	Add user and workstation associations:
	Column Name:
	To continue, click Next.
	A <u>d</u> d Dele <u>t</u> e
	Sext > Cancel Finish Help

You can associate the Application object with the users and workstations you want it distributed to at this time, or you can create the associations later.

- **9** After you have added the associations you want, click *Next*, review the information, then click *Finish* to create the Application object.
- 10 Right-click the newly created Messenger client Application object, then click *Properties*.

Properties of Messenger
Identification - Distribution Options - Run Options - Associations Availability - Common - Fault Tolerand,
Application icon title: Novell Messenger
Application Icon
☑ Disconnectable
□ <u>W</u> ait on force run
☑ Determine force run order
Or <u>d</u> er: 0
☑ <u>S</u> how progress
Page Options OK Cancel Apply Help

**11** Click *Common* > *Macros* to display the Macros page.

Properties of Messenger	X
Identification 👻 Distribution Options 👻	Run Options 🔹 Associations Availability 👻 Common 👻 Fault Tolerand, 🔍 Macros
Macros	<u> </u>
Name	Value Prompt
SOURCE_PATH	Nprv-gw/sys/NovelNMMma/software/client/win32
SHORT TARGET PATH	C:NovellMESSEN~1
PROGRAM_FOLDER	Messenger
MESSENGER_SERVER_ADDRESS	Replace with IP Address or Host Name for the Messenger server
MESSENGER_SERVER_PORT	8300
DEFAULT_LANGUAGE	EN
	File • Add • Modify Delete
Page Options	OK Cancel Apply <u>H</u> elp

The MESSENGER\_SERVER\_ADDRESS and MESSENGER\_SERVER\_PORT variables provide the location of the Messaging Agent, so that users do not need to provide this information when starting the Messenger client.

If you used one of the multix.aot files to create the Application object, the Macros list includes a DEFAULT\_LANGUAGE variable. This variable specifies the interface language that the Messenger client defaults to when it is installed. If necessary, individual users can change the language when they start the Messenger client. If you modify the default language, use the language codes listed under /l.

If you have users who use different language versions and you do not want them to be required to change the default language, you can use the same .aot file to create multiple Application objects. For each Application object, you should specify a default language and then associate the Application object with the users who might want that default language.

**12** Configure any other Application object settings required to provide the performance or functionality you want.

For example, you can configure the Application object so that the Messenger client is installed immediately upon distribution to the user's workstation, without any intervention by the user. Or, you can change the locations where the Messenger client's icon is displayed. For information about Application object settings, see the ZENworks for Desktops documentation at the Novell Documentation Web site (http://www.novell.com/documentation-index/index.jsp?category=ZENworks).

After you associate the Application objects with the users you want, Novell Application Launcher displays the Application object's icon on the users' workstations, if the workstation meets the operating system requirements. If the Application object's icon does not appear immediately, have the user refresh Novell Application Launcher.

**13** If necessary, repeat the above steps to create additional Messenger client Application objects from the Messenger client .aot files.

## 3.5.5 Using Red Carpet on Linux to Distribute the Cross-Platform Messenger Client Software

You can distribute the Messenger by using Red Carpet on Linux. For additional information, see the Red Carpet Web site (http://www.novell.com/products/desktop/update.html).

# 3.6 Configuring the Messenger Client Software

The following sections describe some specialized ways to configure the Messenger client software:

- Section 3.6.1, "Using the Configuration File (setup.cfg) When Installing the Windows Messenger Client," on page 141
- Section 3.6.2, "Using Startup Switches When Starting the Messenger Client," on page 144
- Section 3.6.3, "Using URL Commands in Your Web Browser on Windows," on page 147
- Section 3.6.4, "Changing the Messenger Server IP Address and Port Number," on page 149

# 3.6.1 Using the Configuration File (setup.cfg) When Installing the Windows Messenger Client

The Messenger configuration file (setup.cfg) controls how the Windows Messenger client software is installed by client users. It includes the following sections and parameters:

[NMSetup] Path= ProgramFolder= LaunchNow= ViewReadme= IconOnDesktop= LaunchOnStartup= ServerAddress= ServerPort= ForceAddressAndPort= UseWindowsColors= ShowRememberPassword=

[Languages]

[Show Dialogs] HideAllDialogs= SelectDestination= SelectProgramFolder= LanguageSelect= SetupComplete=

After you change information in the setup.cfg file, you must delete the nvlmsgr.exe file, then stop and restart the Messaging Agent so that it re-creates the nvlmsgr.exe file with the new configuration information. The new configuration information then applies the next time users install or update their client software.

- "[NMSetup]" on page 141
- "[Languages]" on page 143
- "[Show Dialogs]" on page 143

#### [NMSetup]

The [NMSetup] section of the setup.cfg file enables you to control the options the Messenger client Installation program presents to the user during installation.

#### Path=

Specify the path where you want the Installation program to install the client software.

#### ProgramFolder=

Specify the item on the *Start > Programs* menu where you want the Messenger client to appear. For example, you can specify Novell Messenger.

#### LaunchNow=

By default, the *Start Novell Messenger Now* check box on the Setup Complete page is selected. Specify No if you want it deselected by default when the user installs the client software.

#### ViewReadme=

By default, the *View the Novell Messenger Readme* check box on the Setup Complete page is selected. Specify No if you want it deselected by default when the user installs the client software.

#### IconOnDesktop=

By default, the *Put an Icon on the Desktop* check box on the Setup Complete page is selected. Specify No if you want it deselected by default when the user installs the client software.

#### LaunchOnStartup=

By default, the Messenger client starts when Windows starts. Specify No if you don't want it to start when Windows starts. Users then need to use the desktop icon to start the Messenger client.

#### ServerAddress=

Defaults to the IP address of the server where the Messaging Agent is installed. If you move the Messaging Agent to a different server, update this information to match. See "Changing the Messenger Server IP Address and Port Number" on page 149.

#### ServerPort=

Defaults to 8300. Specify a different port number if the default port number is already in use on the server. See "Changing the Messenger Server IP Address and Port Number" on page 149.

#### ForceAddressAndPort=

If you change the server address or port information, specify No if you want existing Messenger client installations to continue using the original server address and/or port while new Messenger client installations use the updated server and/or port information. Specify Yes for both existing and new installations to use the updated information.

If you do not set ForceAddressAndPort=Yes after changing the server address and port information, users need to use the /ipa and /ipp client startup switches to manually provide this information when they start the Messenger client or they need to update the Address and Port values of the \HKEY\_CURRENT\_USER\Software\Novell\Messenger\Login key in the Windows registry. Using the ForceAddressAndPort=Yes parameter makes life much easier for users. They are prompted to update their client software and the address and port information is automatically changed for them.

#### UseWindowsColors=

By default, the Messenger client uses its own custom color scheme. Specify Yes to use standard Windows colors instead.

#### ShowRememberPassword=

This setting controls whether the user sees the Remember Password option during the initial login to the client.

The default setting displays the Remember Password option on the Messenger Login window. Setting ShowRememberPassword to No causes the Remember Password option to not display during the initial login.

After the initial login, this option is controlled by its setting in ConsoleOne.

#### [Languages]

The [Languages] section of the setup.cfg file enables you to control what languages are selected by default on the Language Selection page. Specify Yes for a language that you want selected by default. Specify No for each language that you want deselected by default. For example:

```
ChineseSimplified=No
Chinese=No
Czech=No
BrazilianPortuguese=No
Danish=No
Dutch=No
English=Yes
Finnish=No
French=Yes
German=Yes
...
```

If you suppress the Language Selection page, all selected languages are automatically installed on users' workstations.

#### [Show Dialogs]

The [Show Dialogs] section of the setup.cfg file enables you to control what interactions take place when users install the Messenger client for the first time. If you choose to suppress a page, use the corresponding parameter in the [NMSetup] section to provide the information that the Installation program needs from the suppressed page.

#### HideAllDialogs=

Specify Yes for a completely non-interactive installation of the Messenger client. Provide all required information in the [NMSetup] section.

#### SelectDestination=

Specify No to suppress the Choose Destination Location page during installation. Make sure you have set the Path= parameter to the location where you want the client software to be installed on users' workstations.

#### SelectProgramFolder=

Specify No to suppress the Select Program Folder page during installation. Make sure you have set the ProgramFolder= parameter to the item on the *Start* > *Programs* menu where you want the Messenger client to appear.

#### LanguageSelect=

Specify No to suppress the Language Selection page during installation. Make sure you have specified Yes for each language in the [Languages] section that you want to be installed on users' workstations.

#### SetupComplete=

Specify No to suppress the Setup Complete page at the end of the installation. If you suppress this page, users cannot review the Messenger client Readme. Make sure you have set the LaunchNow= and IconOnDesktop= parameters to control whether the client starts automatically and whether users have desktop icons to start the client.

## 3.6.2 Using Startup Switches When Starting the Messenger Client

In general, Messenger client users do not need to be concerned with startup switches. However, they can learn about client startup switches by looking up "startup options" in Messenger online help. The client startup switches are summarized below as a reference for administrators:

Windows Messenger Client	Linux/Mac Messenger Client	
/background	-background	
/import	-import	
/initstatus	/initstatus	
/ipa	-ipa	
/ipp	-ipp	
/keepalive	-keepalive	
Л	-1	
/u or /@u	-u or -@u	

#### /background

Starts the Messenger client without displaying the main window. By default, the client displays its main window on the desktop.

	Windows Messenger Client	Linux/Mac Messenger Client
Syntax:	/background	-background
### /import

Specifies the name of a file containing Messenger contacts to import. The file is created in the Messenger client by using File > Export Contact List. The .nmx extension identifies the file as a Messenger contacts file. If the contacts file is not in the same directory where the client software is located, you must provide a full pathname.

	Windows Messenger Client	Linux/Mac Messenger Client
Syntax:	/import-[\ <i>directory</i> \] <i>filename</i> .nmx	-import [/directory/]filename.nmx
Example:	/import-contacts.nmx /import- d:\shared\contacts.nmx	-import contacts.nmx -import /nm/contacts.nmx

### /initstatus

Specifies your presence at the time of login. The possible values are Away, Busy, and Offline. Online is the default status if no initiatus argument is specified.

	Windows Messenger Client	Linux/Mac Messenger Client
Syntax:	/initstatus-presence	-initstatus-presence
Example:	/initstatus-away	-initstatus-away

### /ipa

Specifies the IP address or DNS hostname of the server where the Messaging Agent is running.

	Windows Messenger Client	Linux/Mac Messenger Client
Syntax:	/ipa-network_address	-ipa network_address
Example:	/ipa-172.16.5.18 /ipa- nmserver	-ipa 172.16.5.19 -ipa nmserver2

On Windows, the Messenger user does not need to be aware of this information because the Messenger server Installation program adds the network address and port information to the setup.cfg file that it installs into the \novell<nm<massftware<client<win32</pre> directory. When the user downloads the client software and installs it, the Messenger client Installation program reads the server information in the setup.cfg file and updates the Windows registry of the user's workstation with the information necessary for the Messenger client to start. This startup switch, as well as the /ipp switch, are only needed to override the server information automatically stored in the registry.

### /ipp

Specifies the port number on which the Messaging Agent listens for service requests. By default, the port number is 8300.

	Windows Messenger Client	Linux/Mac Messenger Client
Syntax:	/ipp- <i>port_number</i>	-ipp port_number

	Windows Messenger Client	Linux/Mac Messenger Client
Example:	/ipp-8400	/ipp 8301

### /keepalive

Overrides the current ping interval at which the Messenger client notifies the Messaging Agent that it is still active. The default interval is every 10 minutes or as specified by the Messaging Agent / keepalive startup switch. This regular communication between the Messaging Agent and the client prevents firewalls and routers from disconnecting connections that seem to be inactive. You can decrease the interval if a specific client user keeps getting unexpectedly disconnected. Use a setting of 0 (zero) to turn off the ping activity.

	Windows Messenger Client	Linux/Mac Messenger Client
Syntax:	/keepalive-minutes	-keepalive-minutes
Example:	/keepalive-5	-keepalive 0

### /I

Specifies the language to start the Messenger client in. By default, Messenger starts in the language of the operating system, if it is available. If the operating system language is not available, Messenger starts in English, but after it has started, you can choose a different language using *Tools* > *Options* > *User Interface Language*.

For the Windows client, this language is saved in the Windows registry and is used as the default thereafter. For the Cross-Platform client, it is saved in the Java preferences file for Messenger (~/ .java/.userPrefs/Novell/Messenger/prefs.xml on Linux and ~/Library/Preferences/ com.apple.java.util.prefs.plist on Macintosh).

	Windows Messenger Client	Linux/Mac Messenger Client
Syntax:	/l language_code	-l language_code
Example:	/l-ru	-l de

Use one of the following language codes with the /l switch to select the language for Messenger:

Language	Language Code	Language	Language Code
Arabic	AR	Hungarian	HU
Czech	CS	Italian	ΙТ
Chinese-Simplified	zhCN	Japanese	AL
Chinese-Traditional	zhTW	Korean	ко
Danish	DA	Norwegian	NO
Dutch	NL	Polish	PL

 Table 3-1
 Messenger Language Codes

Language	Language Code	Language	Language Code
English	EN	Portuguese	PT
Finnish	FI	Russian	RU
French	FR	Spanish	ES
German	DE	Swedish	SV
Hebrew	IW		

### /u or /@u

Specifies the username to log in to your Messenger system with.

	Windows Messenger Client	Linux/Mac Messenger Client
Syntax:	/u- <i>username /@</i> u- username	-username /@username
Example:	/u-LTanaka /@u-SJones	-u MPalu -@u GSmith

For the Windows client, the user's initial successful login is stored in the Windows registry and is used as the default thereafter. If multiple users regularly need to run Messenger from the same workstation, you could set up a shortcut on the desktop using the /u startup switch for each user. Within Messenger, one user can log out and another log in using File > Log Out > Log In as a Different User.

For the Cross-Platform client, the user information is saved in the Java preferences file for Messenger (~/.java/.userPrefs/Novell/Messenger/prefs.xml on Linux and ~/Library/ Preferences/com.apple.java.util.prefs.plist on Macintosh).

## 3.6.3 Using URL Commands in Your Web Browser on Windows

You can use URL commands in Web pages add applications to make specific Windows Messenger client dialog boxes appear from those locations. Some URL commands take parameters. Use a question mark (?) between the command and the parameter. Use an ampersand (&) between multiple parameters.

The following URL commands are available:

- "nim:launchNM" on page 148
- "nim:startIm" on page 148
- "nim:addContact" on page 148
- "nim:import" on page 148
- "nim:invite" on page 149
- "nim:preferences" on page 149
- "nim:close" on page 149
- "nim:open" on page 149
- "nim:exit" on page 149

### nim:launchNM

Starts Messenger.

### nim:startIm

Opens the Send Instant Message dialog box so you can select a contact, or opens the Conversation dialog box, if you use parameters to specify a contact and, optionally, a message.

Syntax:

```
nim:startIm
nim:startIm?username=username
nim:startIm?username=username&message=message
```

### Example:

```
nim:startIm
nim:startIm?username=LTanaka
nim:startIm?username=LTanaka&message=Good+morning
```

Use a plus (+) between words in the message. The message must not include spaces.

See also "nim:invite" on page 149.

#### nim:addContact

Opens the Find dialog box so you can search for a new contact, or adds the specified contact to the specified folder in the Messenger main window, if you use parameters to specify a contact and, optionally, a folder.

Syntax:

```
nim:addContact
nim:addContact?username=username
nim:addContact?username=username&Folder=folder_name
```

#### Example:

```
nim:startIm
nim:startIm?username=LTanaka
nim:startIm?username=LTanaka&foldername=Team+Members
```

If the folder name consists of more than one word, use a plus (+) between words instead of a space.

### nim:import

Opens the Import Contact List dialog box so you can browse to and select a .nmx file, or immediately imports the contacts from the file into the Messenger main window, if you use a parameter to specify the .nmx file.

Syntax:

```
nim:import
nim:import?filename=filename
```

Example:

nim:import
nim:import?filename=c:\temp\contacts.nmx

### nim:invite

Equivalent to nim:startIm.

### nim:preferences

Opens the Options dialog box.

### nim:close

Closes the Messenger main window but does not exit the Messenger client.

### nim:open

Opens the Messenger main window after it has been closed.

### nim:exit

Exits Messenger.

# 3.6.4 Changing the Messenger Server IP Address and Port Number

When you install and start the Messaging Agent, it creates the nvlmsgr.exe file that users download in order to install the Messenger client. The information in this file includes the IP address of the server where the Messaging Agent is installed and the port number on which it listens for requests from Messenger clients so that users do not need to concern themselves with this information. If you need to move the Messaging Agent to a different server, so that it is using a different IP address and possibly port, each client installation needs to be updated with the new information.

- 1 Install, configure, and start the Messaging Agent on the new Messaging Agent server.
- 2 Edit the setup.cfg file in the following directory on the original Messaging Agent server:

\novell\nm\ma\software\client\win32

- **2a** Scroll down to the ServerAddress= line and provide the new IP address.
- **2b** On the ServerPort= line, provide a new port number if necessary.
- **2c** On the ForceAddressAndPort= line, specify Yes so that all client installations and updates receive the new information.
- **2d** Save and exit from the setup.cfg file.
- **3** Stop the Messaging Agent on the original server.
- 4 Delete the nvlmsgr.exe file from the following directory on the original server:

\novell\nm\ma\software\client\win32

**5** Start the Messaging Agent again on the original server.

This creates a new nvlmsgr.exe file and, if you are using the auto-update feature as described in "Setting Up Auto-Update" on page 130, the clients automatically install the updated version of the client software, which includes the new address and port information. When the updated clients start, they connect to the Messaging Agent on the new server.

# 3.7 Excluding Users from Your Messenger System

The users that are included in your Messenger system are those users whose User objects are located in an eDirectory context listed in a scope profile or an LDAP profile. If you need to exclude specific users from your Messenger system even though their User objects fall within the scope of your Messenger system, you can do so.

If you want to maintain a list of excluded users, you can create a policy to govern the excluded users, as described in "Creating a User Policy" on page 114. On the General page of the Policy object, deselect *Enable Novell Messenger Services*. On the Used by page of the Policy object, list those users that you want to exclude from your Messenger system.

You can also edit the Novell Messenger General page of individual User objects and deselect *Enable Novell Messenger Services for individual users*.

# **Enabling and Managing Archiving**

When you enable archiving, the Messaging Agent passes completed conversations to the Archive Agent for storage on disk. The Archive Agent saves the conversations, indexes them, and searches them when requested by authorized Messenger client users. If you do not need to archive everyone's conversations, you can set up a policy to determine whose conversations are archived and whose are not.

Archiving is optional. Because all users' conversations are stored together in the Messenger archive, archiving is only necessary if you need to retain conversations for legal reasons, such as to comply with a corporate e-mail retention policy that has been extended to instant messages.

The following sections help you enable and manage archiving in your Messenger system:

- Section 4.1, "Establishing the Master Archive Agent," on page 151
- Section 4.2, "Starting the Archive Agent," on page 153
- Section 4.3, "Enabling Archiving in Your Messenger System," on page 160
- Section 4.4, "Granting Authorized User Access to the Archive," on page 160
- Section 4.5, "Configuring the Archive Agent in ConsoleOne," on page 161
- Section 4.6, "Enhancing Archive Security with SSL Encryption," on page 163
- Section 4.7, "Changing the Agent User Password," on page 163
- Section 4.8, "Configuring and Indexing the Messenger Archive," on page 164
- Section 4.9, "Establishing Archive Maintenance," on page 166
- Section 4.10, "Monitoring the Archive Agent," on page 168
- Section 4.11, "Optimizing Archive Agent Performance," on page 171
- Section 4.12, "Managing the Archive Server," on page 173
- Section 4.13, "Using Archive Agent Startup Switches," on page 179

# 4.1 Establishing the Master Archive Agent

If you installed the Archive Agent along with the Messaging Agent when you created your Messenger system, both Messenger agents were installed on the same server. This initial Archive Agent was automatically established as the master Archive Agent on the Archive page of the Messenger Service object.

To verify this:

- 1 In ConsoleOne, browse to and right-click the Messenger Service object, then click *Properties*.
- **2** Click *Novell Messenger > Archive*.

Properties of Messenger	Service	
Novell Messenger - N Archive	DS Rights    Other    Rights to Files and Folders	
Master Archive Agent:	ArchiveAgent.prv-doctest2Server.MessengerService.corporate	Fii: 🧷
Passphrase: Session Timeout (minutes):	Rq186039Q79238541917431X3622u33	
Store Maintenance	2	
Interval (hours):		
Expire (days):	90 👤	
Page Options	OK Cancel	Apply Help

Observe that a randomly generated passphrase has been provided. The passphrase is used for encrypting conversations as they are saved into the archive. You can change the passphrase if you want.

**3** To change the passphrase, type a string of characters in the *Passphrase* field.

A passphrase must be longer than 7 characters and can be up to 100 characters in length.

4 Click OK.

You might want to continue to run both Messenger agents on the same server. However, the Messaging Agent is CPU intensive because it handles users' conversations and eDirectory searches in memory, and the Archive Agent is file intensive because it archives conversations and indexes the archive on disk. Therefore, you might want to run them on different servers.

If you want to continue running the initial Archive Agent on the same server with the Messaging Agent, skip to Section 4.2, "Starting the Archive Agent," on page 153.

If you want to install the Archive Agent on a different server from where the Messaging Agent is running:

- **1** In ConsoleOne, delete the initial Archive Agent object.
- **2** Run the Messenger Installation program as described in the *Novell Messenger 2.1 Installation Guide*.
- **3** On the Install Components page, deselect *Messaging Agent* and *Administration Files*.

Novell Messenger Server	Novell Messenger Server Setup			
Install Components Select the components to in	nstall to the Novell Messenger server.			
Messaging Agent:	Handles all message routing and presence notification for the system. A Novell Messenger system must have a Messaging Agent installed.			
✓ Archive Agent:	Handles archiving and searching of conversations. A Novell Messenger system with archiving enabled must have an Archive Agent installed.			
Administration Files:	Install the files necessary to administer Novell Messenger through ConsoleOne.			
InstallShield	< Back Next > Cancel			

- **4** Continue through the installation, providing the information necessary for installing the Archive Agent.
- **5** Continue with Section 4.2, "Starting the Archive Agent," on page 153.

# 4.2 Starting the Archive Agent

When you finish creating your Messenger system, the Installation program can start the Messenger agents for you. If you installed the Messenger agents on a Windows server, the Archive Agent console appears on the Windows server console.

Novell Messenger Archive	Agent				_ 🗆 🛛
File Configuration Log Actions	Help				
.ArchiveAgent.SERVER.Messenger	Service.Window: Up Time:		0 Days	0 Hrs	1 Mins
Status	Statistics	ibaa Heisi			
Processing	Requests:	0	Errors:		0
Users: 0	Requests Pending:	0	Queries:		0
Archive Queue: 0	Archives:	0			
14:50:56 EC4 CFG Message Transfe 14:50:56 EC4 CFG Message Transfe 14:50:56 EC4 CFG Log Path: c:\No 14:50:56 EC4 CFG Log to disk: Yes 14:50:56 EC4 CFG Log Lovel: Norm 14:50:56 EC4 CFG Log Max Age (in 14:50:56 EC4 CFG Log Max Size (in 14:50:56 EC4 CFG Web Console: D 14:50:56 EC4 CFG Web Console: D 14:50:56 EC4 ARC Archive queue ir 14:50:56 EC4 ARC Archive queue ir 14:50:58 EC4 APL Client/Server init 14:50:59 E3C TCP Starting NMAA-T 14:50:59 A44 TCP Starting NMAA-T	er Protocol: Enabled er Protocol Port: 8312 vell\NM\aa\logs al days): 14 MB): 1 isabled nitialization fer Protocol initialization ialization FCP-LISTENER FCP-DISPATCHER				

If you installed the Messenger agents on a NetWare server, the Archive Agent console appears on the NetWare server console.

If you installed the Messenger agents on a Linux server, the Archive Agent, by default, runs as a daemon and has no comparable user interface. However, you can start it in a terminal window so that status messages are displayed, as described in "Starting the Linux Archive Agent in a Terminal Window" on page 155, and you can monitor the Archive Agent from your Web browser, as described in "Using the Archive Agent Web Console and GroupWise Monitor" on page 170.

The following sections help you start the Archive Agent manually, or automatically whenever the server restarts:

- Section 4.2.1, "Starting the NetWare Archive Agent," on page 154
- Section 4.2.2, "Starting the Linux Archive Agent," on page 155
- Section 4.2.3, "Starting the Windows Archive Agent," on page 156
- Section 4.2.4, "Changing the eDirectory Access Method for Starting the Archive Agent," on page 158

### 4.2.1 Starting the NetWare Archive Agent

The Messenger Installation program creates the nmstart.ncf file in the Messenger agent installation directory (sys:\novell\nm by default). This file contains lines similar to the following example:

load sys:\novell\nm\ma\nmma.nlm @sys:\novell\nm\ma\strtup.ma
load sys:\novell\nm\aa\nmaa.nlm @sys:\novell\nm\aa\strtup.aa

If you are running the Archive Agent on a different server from where the Messaging Agent is running, edit the nmstart.ncf file and comment out the first line so that the Messaging Agent does not start when the nmstart.ncf file is run.

To start the Archive Agent manually:

1 Enter sys:\novell\nm\nmstart.ncf at the NetWare server console prompt.

The Archive Agent console appears.

To start the Archive Agent automatically when the NetWare server restarts:

1 Add the following line to the autoexec.ncf file in the sys:\system directory:

sys:\novell\nm\nmstart.ncf

If you want to start the Archive Agent in protected mode, you must be using LDAP access to eDirectory. See "Using LDAP Access for the Archive Agent" on page 159. In addition, when you stop the Archive Agent agent in protected mode, you must manually unload the address space.

## 4.2.2 Starting the Linux Archive Agent

You have several alternatives for starting the Archive Agent on Linux:

- "Starting the Linux Archive Agent as a Daemon" on page 155
- "Starting the Linux Archive Agent in a Terminal Window" on page 155
- "Configuring the Linux Archive Agent to Start Automatically as a Startup Service" on page 156

### Starting the Linux Archive Agent as a Daemon

To start the Archive Agent as a daemon, use the startup script provided in the /etc/init.d directory.

- 1 At the Linux server, become root by entering su and the root password.
- **2** Change to the /etc/init.d directory.
- **3** To start the Archive Agent, enter the following command:

./novell-nmaa start

You can also use the stop, restart, and status options for these agents from the same directory.

Messenger agent log files are created in the /var/opt/novell/log/messenger directory. The Messenger agents can be monitored by using the agent Web consoles from your Web browser, as described in Section 2.5.2, "Using the Messaging Agent Web Console," on page 44.

### Starting the Linux Archive Agent in a Terminal Window

To start the Archive Agent in a terminal window, run the Archive Agent executable.

- 1 At the Linux server, become root by entering su and the root password.
- **2** Change to the /opt/novell/messenger/bin directory.
- **3** To start the Archive Agent, enter the following command:

./nmaa @/etc/opt/novell/messenger/strtup.aa

Agent status information and messages are displayed in the terminal window.

To stop the Archive Agent when it is running in a terminal window, press Ctrl+C and the Archive Agent performs a normal shutdown.

### Configuring the Linux Archive Agent to Start Automatically as a Startup Service

A startup service starts automatically each time the server reboots.

- "Configuring the Archive Agent as a Startup Service on SUSE Linux" on page 156
- "Configuring the Archive Agent as a Startup Service on Red Hat Linux" on page 156

### Configuring the Archive Agent as a Startup Service on SUSE Linux

- 1 At the Linux server, become root by entering su and the root password.
- 2 If eDirectory for Linux is installed, enter the following command:

```
insserv novell-nmaa
```

or

If eDirectory for Linux is not installed, use the following command to override the dependency on the ndsd service:

```
insserv -f novell-nmaa
```

If you later want to remove the Archive Agent as a startup service, enter the following command in a terminal window:

insserv -r novell-nmaa

#### Configuring the Archive Agent as a Startup Service on Red Hat Linux

- **1** At the Linux server, become root by entering su and the root password.
- **2** Enter the following command:

chkconfig --add novell-nmaa

If you later want to remove the agents as startup services, enter the following command in a terminal window:

chkconfig --del novell-nmaa

### 4.2.3 Starting the Windows Archive Agent

Follow the instructions for the Windows installation option you chose:

- "Starting the Archive Agent as a Windows Application" on page 157
- "Starting the Archive Agent as a Windows Service" on page 157

### Starting the Archive Agent as a Windows Application

To start the Archive Agent manually:

Click *Start* > *Programs* > *Novell Messenger Agents* > *Archive Agent*.
 You might want to create a desktop shortcut for this action.

To start the Archive Agent automatically whenever the server restarts:

- 1 Click *Start* > *Settings* > *Taskbar* & *Start Menu* > *Advanced* > *Add*.
- **2** Browse to the directory where you installed the Archive Agent (\novell\nm\aa).
- **3** Double-click nmaa.exe, then add the startup file (strtup.aa) to the command line. **Example:** nmaa.exe @strtup.aa
- 4 Click Next.
- **5** Select the Startup folder, provide a name for the shortcut, then click *Finish*.

### Starting the Archive Agent as a Windows Service

To start the Archive Agent manually:

- 1 Click *Start* > *Settings* > *Control Panel*.
- **2** Double-click *Administrative Tools > Services*.
- 3 Right-click the Novell Messenger Archive Agent service, then click Start.

To start the Archive Agent automatically whenever the server restarts:

- 1 Click *Start* > *Settings* > *Control Panel*.
- **2** Double-click *Administrative Tools* > *Services*.
- **3** Right-click the *Novell Messenger Archive Agent* service, then click *Properties*.
- **4** Set *Startup Type* to *Automatic*.
- **5** Click *OK* to save the Windows service startup setting.

If you do not want to run the Messaging Agent along with the Archive Agent, make sure that the Novell Messenger Messaging Agent service is disabled.

To start the Archive Agent without a user interface on the Windows server desktop:

- 1 Click *Start* > *Settings* > *Control Panel*.
- **2** Double-click *Administrative Tools* > *Services*.
- **3** Right-click the *Novell Messenger Archive Agent* service, then click *Properties*.
- 4 Click Log On, then deselect Allow Service to Interact with Desktop.

If you suppress the Archive Agent console in this manner, the Archive Agent can still be monitored from the Archive Agent Web console, as described in "Using the Archive Agent Web Console and GroupWise Monitor" on page 170.

5 Click OK to save the Windows service logon setting.

# 4.2.4 Changing the eDirectory Access Method for Starting the Archive Agent

The Archive Agent cannot start if it cannot read its configuration settings from the Archive Agent object in Novell eDirectory. During installation, an eDirectory access method was selected, as described in "Installing a Novell Messenger System" in the *Novell Messenger 2.1 Installation Guide*.



Novell Messenger Server Setup			
Directory Access The Novell Messenger agents can a through an LDAP server.	access eDirectory d	irectly or	N.
Specify how the agents should acce	ess the directory.		
Use LDAP to access the director	(y		
Host: (e.g. xxx.xxx.xxx.xxx)			
Port: 389 or 636 (SSL)	389		
Root Certificate: (e.g. z:\public\rootcert.der)			Browse,
InstallShield			
Installation Guide	< B-	ack Next>	Cancel

The information for the eDirectory access method was stored in the Archive Agent startup file as settings for the following startup switches:

 Table 4-1
 Startup Switches Settings

Access Method	Startup Switch	Description
Use Direct Access	/dirreplicaipaddr	Specifies the IP address of the server where the eDirectory replica resides (for direct access on a Linux or Windows server; not applicable on a NetWare server).
Use LDAP to Access the Directory	/ldapipaddr	Specifies the IP address of the LDAP server.

Access Method	Startup Switch	Description
	/Idapport	Specifies the port number on which the LDAP server listens for service requests. Port 636 indicates an SSL connection; port 389 indicates a non-SSL connection.
	/ldapssl	Indicates whether or not the LDAP server uses an SSL connection, depending on whether or not you filled in the <i>Root Certificate</i> field.
	/ldapsslkey	Specifies the full path to the root certificate for the server if SSL is in use.

To change the eDirectory access method selected during installation, follow the appropriate set of instructions:

- "Using LDAP Access for the Archive Agent" on page 159
- "Using Direct Access for the Archive Agent" on page 159

### Using LDAP Access for the Archive Agent

**1** Edit the Archive Agent startup file (strtup.aa).

On Linux, the startup file is located in /etc/opt/novell/messenger.

On Windows, the startup file is located in the Messenger Agent installation directory. You can edit the startup file from the Messaging Agent console. See "Controlling the Archive Agent from the Archive Agent Console" on page 170.

2 On Linux and Windows, comment out the /dirreplicaaddr switch.

On a NetWare server, this switch does not apply, because the eDirectory replica resides on the NetWare server.

- **3** Scroll down to the bottom of the startup file.
- **4** Remove the comment character (;) from the /ldap\* switches and provide the required LDAP information.
- **5** Save the startup file.
- **6** Stop and then start the Archive Agent so that it reads its updated startup file and uses LDAP access to eDirectory.

### **Using Direct Access for the Archive Agent**

1 Edit the Archive Agent startup file (strtup.aa).

On Linux, the startup file is located in /etc/opt/novell/messenger.

On Windows, the startup file is located in the Messenger Agent installation directory. You can edit the startup file from the Messaging Agent console. See "Controlling the Archive Agent from the Archive Agent Console" on page 170.

**2** On Linux and Windows, remove the comment character (;) from the /dirreplicaaddr switch and provide the IP address of the eDirectory replica that you want the Archive Agent to access.

On a NetWare server, this switch does not apply, because the eDirectory replica resides on the NetWare server.

- **3** Scroll down to the bottom of the startup file.
- **4** Comment out the /ldap\* switches.

Removing the LDAP information causes the Archive Agent to access the eDirectory replica directly.

- **5** Save the startup file.
- 6 Stop and then start the Archive Agent so that it reads its updated startup file and uses direct access to eDirectory.

# 4.3 Enabling Archiving in Your Messenger System

If you want to archive the conversations of all Messenger users, select *Archive Sessions* on the General page of the Default Policy object, as described in "Editing the Default User Policy" on page 113. After you edit the default policy, you must stop and then start the Messenger agents in order to put the modified policy into effect throughout your Messenger system. Thereafter, the next time users log in to the Messenger system, their conversations are archived.

If you want to archive the conversations of some users but not others, you must create a policy that lists the users whose conversations you want to archive, as described in "Creating a User Policy" on page 114. You do not need to stop and then start the Messenger agents after creating the new policy. The next time the users governed by the policy log in to the Messenger system, their conversations are archived.

When users' conversations are being archived, the Novell Messenger client displays a page icon notifying users that their conversations are being logged into the archive.

# 4.4 Granting Authorized User Access to the Archive

The Messenger archive is a single archive containing the conversations of all Messenger users for whom archiving is enabled. Therefore, access to the archive should be granted only to users who can appropriately view everyone's conversations. Users who can search the Messenger archive must be added to the Messenger access control list (ACL).

- 1 In ConsoleOne, browse to and right-click the Messenger Service object, then click *Properties*.
- **2** Click *Novell Messenger > Archive ACL*.

ovell Messenger ▼   NDS Rights ▼   Other   Rights to Files and Fo rchive ACL	lders
User List:	
	Add
	Edit
	Remove

**3** Click *Add*, then browse to and select those users that you want to grant access to the Messenger archive.

You can select only User objects. You cannot select container objects, Group objects, Organizational Role objects, GroupWise Distribution List objects, and so on.

- 4 Repeat Step 3 for each context where User objects are located.
- 5 Click *OK* to save the Messenger archive access control list.
- 6 Stop and then start the Archive Agent to put the access control list into effect.
- **7** Have authorized users log out and back in to the Messenger system in order to add the Search Archive item on the File menu.

# 4.5 Configuring the Archive Agent in ConsoleOne

The advantage to configuring the Archive Agent in ConsoleOne, as opposed to using startup switches in the Archive Agent startup file, is that the Archive Agent configuration settings are stored in eDirectory.

- 1 In ConsoleOne, browse to and expand the Messenger Service object.
- 2 Select the Messenger Server object where the Archive Agent runs.

C Novell ConsoleOne	
File Edit View Tools Help	
🔊 My World 📃	📴 MessagingAgent
🛱 🍄 NDS	ArchiveAgent
DOCTEST2	
🖻 🚠 corporate	
🖻 🖓 MessengerService	
🕀 🔃 🕞 ChatContainer	
🕀 🕕 🔠 HostContainer	
E-% LDAPContainer	
PolicyContainer	
prv-doctest2Serve	
prv-doctest2	
PRV-DOCTEST2-W	
	2 items 載
User: admin.corporate	Tree: DOCTEST2

**3** Right-click the Archive Agent object, then click *Properties*.

The table below summarizes the Archive Agent configuration settings in the Archive Agent object property pages and how they correspond to Archive Agent startup switches (as described in Section 4.13, "Using Archive Agent Startup Switches," on page 179):

 Table 4-2
 Archive Agent Configuration Settings

ConsoleOne Properties Pages and Settings	Corresponding Tasks and Startup Switches
Identification Page	
IP Address DNS Host Name Bind to This Address Client/ Server Port Message Transfer Port Description	Displays the Archive Agent server information established during installation.
General Page	
Enable Messenger Services	Turns on and turns off the availability of archiving and archive searching for Messenger users.
Enable SNMP	See "Using SNMP Monitoring Programs" on page 171, See also / nosnmp.
Work Path	See "Moving the Archive Agent Working Directory" on page 174.
Security Page	

ConsoleOne Properties Pages and Settings	Corresponding Tasks and Startup Switches
Certificate Path SSL Certificate SSL Key File Set Password Enable SSL for Client/Server Enable SSL for Message Transfer Protocol	See Section 4.6, "Enhancing Archive Security with SSL Encryption," on page 163. See also /certpath, /certfile, /keyfile, /keypassword, and /ssl.
Log Settings Page	
Log Level Enable Disk Logging Log Files Path Log Maximum Age Log Maximum Size	See "Using Archive Agent Log Files" on page 171. See also /loglevel, / log, /logdays, /logmax, and /logdiskoff.
Web Console Page	
HTTP Port HTTP Username HTTP Password Enable SSL for Web Console	See "Using the Archive Agent Console on NetWare and Windows" on page 168. See also /httpport, /httpuser, /httppassword, and /httpssl.
Performance Page	
Maximum Number of Users Client/Server Threads	See Section 4.11, "Optimizing Archive Agent Performance," on page 171. See also /maxconns and /threads.
Archive Page	
Queue Path Passphrase Delay Interval Expire	See "Moving the Archive Queue Directories" on page 176. See also / queue. See Section 4.1, "Establishing the Master Archive Agent," on page 151 See Section 4.12.5, "Maintaining the Archive Store," on page 175.

# 4.6 Enhancing Archive Security with SSL Encryption

Messenger archive security is initially established with the archive passphrase, as described in Section 4.1, "Establishing the Master Archive Agent," on page 151. The passphrase enables the Archive Agent to encrypt conversations as they are saved on disk.

Secure Sockets Layer (SSL) ensures secure communication between programs by encrypting the complete communication flow between the programs. The Messenger Installation program offered the opportunity to configure the Messenger agents for SSL encryption. If you did not set up SSL encryption during installation, you can easily do so after installation. You can use the same procedure for setting up SSL encryption for the Archive Agent as for the Messaging Agent. For instructions, see Section 2.3, "Establishing Messaging Security with SSL Encryption," on page 38.

# 4.7 Changing the Agent User Password

When the Messaging Agent and Archive Agent are installed, the user's eDirectory password that is used to read the configuration that starts the agents is stored in the startup file for each agent. Prior to Messenger 2.0.2 Hot Patch 1, this password was stored in plain text. By default in Messenger 2.0.2 Hot Patch 1, the password is obfuscated to prevent the password from being read.

If you want to check whether the password has been obfuscated, look in the startup files. The password is prepended with \$\$: if it has been obfuscated.

The NMPassword utility is used to change the password in the startup file for both the Messaging Agent and the Archive Agent.

For additional information on how to use NMPassword, see Section 2.4, "Changing the Agent User Password," on page 41.

# 4.7.1 Changing the Agent User Password on NetWare or Windows

Before starting to use the utility, you must verify the following prerequisites:

- If you are changing the password on a NetWare server, a drive must be mapped to the location of the startup file.
- If you are using the utility on a workstation and changing the password on a Windows server, a drive must be mapped to the location of the startup file.

To change the password:

- 1 In Windows, click Start > Run, then enter cmd to open a command window.
- **2** Use the following command to change the password:

```
c:\gwm202\server\utility\nmpwd.exe --startup=<path to startup file>
--password=<new password>
```

Replace *c*:\*gwm202* with the location where the hot patch files extracted.

### 4.7.2 Changing the Agent User Password on Linux

1 After installing Messenger 2.0.2 Hot Patch 1, change to the /opt/novell/messenger/bin/ directory.

For complete instructions on installing Messenger 2.0.2 Hot Patch 1, see the Messenger 2.0.2 Readme file located on the Novell Messenger 2.1 Web site (http://www.novell.com/ documentation/novell\_messenger21).

- **2** Become root by entering sux and the root password.
- **3** Use the following command to change the password:

./nmpwd --startup=<path to startup file> --password=<new password>

# 4.8 Configuring and Indexing the Messenger Archive

Information about the Messenger archive is stored in the File Module object in the Archive Agent container.

- 1 In ConsoleOne, browse to and expand the Messenger Service object.
- **2** Expand the Messenger Server object where the Archive Agent runs, then double-click the Archive Agent object.

C Novell ConsoleOne	
File Edit View Tools Help	
🔊 My World 📃	■₹ FileModule
🛱 🧛 NDS	
DOCTEST2	
🖻 朂 corporate	
🖻 🖓 MessengerService	
🕀 🔃 🕞 ChatContainer	
🕀 🔠 HostContainer	
E	
PolicyContainer	
□ □ □ prv-doctest2Serve	
HarchiveAgent	
⊞⊡oj ScopeContainer	
	1 items 🕄
User: admin.corporate	Tree: DOCTEST2

**3** Right-click the File Module object, then click *Properties*.

	Other Bights to Files and Folders	
tore Settings		
Store path:	/var/opt/novell/messenger/aa/store	
Maximum file size (MB):	10 👤	
QuickFinder Maintenance		
Delay (hours):	2	
Update interval (hours):	4	
Compress interval (hours):	24 🗬	

**4** Fill in the following fields to configure the Messenger Archive:

Store Path: Specify the full path to the directory where you want the archive created.

By default, the archive is created in the store subdirectory of the Archive Agent installation directory. You should choose a location that has adequate disk space to store the expected volume of conversations for the amount of time for which they must be retained. If you need to move an existing archive to a location where additional disk space is available, see "Moving the Archive" on page 174.

**Maximum File Size:** Specify the maximum size of the archive file. The default is 10 MB compressed.

When an archive file reaches this size, a new archive file is started.

**5** Fill in the following fields to configure QuickFinder indexing for the archive:

**Delay:** Specify the number of hours after midnight when you want the Archive Agent to begin its first indexing cycle for the day. The default is 2 hours after midnight (2:00 a.m.)

**Update Interval:** Specify the number of hours between indexing cycles. The default is 4 hours. So, by default, the Archive Agent indexes conversations at 2:00 a.m., 6:00 a.m., 10:00 a.m., 2:00 p.m., 6:00 p.m., and 10:00 p.m. Increase the interval to index less frequently; decrease the interval to index more frequently. One hour is the smallest indexing interval you can specify.

**Compress Interval:** Specify the number of hours between index compression cycles. The default is 24 hours (once a day at the time specified in the *Delay* field).

- 6 Click OK to save the archive settings.
- 7 Stop and then start the Archive Agent to put the settings into effect.

From the Archive Agent console and Web console, you can perform indexing and compression for the archive at any time. See "Controlling the Archive Agent from the Archive Agent Console" on page 170 and "Using the Archive Agent Web Console and GroupWise Monitor" on page 170.

# 4.9 Establishing Archive Maintenance

The Messenger archive is stored in a database format that requires occasional maintenance:

- Section 4.9.1, "Expiring Old Conversations," on page 166
- Section 4.9.2, "Repairing the Archive," on page 167

### 4.9.1 Expiring Old Conversations

It might not be practical to store all conversations indefinitely. Establishing archive maintenance procedures keeps your archive current and eliminates obsolete conversations.

- **1** In ConsoleOne, browse to and right-click the Messenger Service object.
- 2 Click Properties > Novell Messenger > Archive.

Properties of Messengers	iervice	×
Novell Messenger - NC Archive	S Rights ▼   Other   Rights to Files and Folders	
Master Archive Agent:	ArchiveAgent.prv-doctest2Server.MessengerService.corporate	臣 🖉
Passphrase:	Rq186039Q79238541917431X3622u33	
Session Timeout (minutes):	5 🜩	
Store Maintenance		
Delay (hours):	2 🔹	
Interval (hours):	4 🔹	
Expire (days):	90 🜩	
Page Options	OK Cancel A	.pply Help

**3** Fill in the following fields to control when the Archive Agent performs maintenance on the archive, including when old conversations are expired and deleted from the Messenger archive and when the expiration process takes place.

**Delay:** Specify the number of hours after midnight when you want the Archive Agent to perform maintenance. The default is 2 hours after midnight (2:00 a.m.)

Interval: Specify how often to perform maintenance. The default is 4 hours.

**Expire:** Specify the number of days you want to keep conversations in the archive. The default is 90 days. Specify 0 (zero) to disable expiration and retain all conversations indefinitely.

- 4 Click *OK* to save the archive maintenance settings.
- 5 Stop and then start the Archive Agent to put the maintenance settings into effect.

When the Archive Agent expires conversations, it does not reduce the physical size of the Messenger archive. However, the archive does not grow again until the space reclaimed by expiring conversations has been filled.

## 4.9.2 Repairing the Archive

If the Messenger archive is damaged for any reason, you can repair it at the Archive Agent console and Web console. For instructions, see "Controlling the Archive Agent from the Archive Agent Console" on page 170 and "Using the Archive Agent Web Console and GroupWise Monitor" on page 170.

# 4.10 Monitoring the Archive Agent

By monitoring the Archive Agent, you can determine whether or not its current configuration is meeting the archiving and indexing needs being placed upon it. You have a variety of tools to help you monitor the operation of the Archive Agent:

- Section 4.10.1, "Using the Archive Agent Console on NetWare and Windows," on page 168
- Section 4.10.2, "Using the Archive Agent Web Console and GroupWise Monitor," on page 170
- Section 4.10.3, "Using Archive Agent Log Files," on page 171
- Section 4.10.4, "Using Novell 6.5 Remote Manager," on page 171
- Section 4.10.5, "Using SNMP Monitoring Programs," on page 171

# 4.10.1 Using the Archive Agent Console on NetWare and Windows

The following topics help you use the Archive Agent console on NetWare and Windows:

- "Monitoring the Archive Agent from the Archive Agent Console" on page 168
- "Controlling the Archive Agent from the Archive Agent Console" on page 170

**NOTE:** The Archive Agent console is not available on Linux. Use the Web console instead, as described in "Using the Archive Agent Web Console and GroupWise Monitor" on page 170.

### Monitoring the Archive Agent from the Archive Agent Console

The Archive Agent console provides information, status, and statistics about the Archive Agent to help you assess its current functioning.



Novell Messenger Archive	Agent				
File Configuration Log Actions Help					
ArchiveAgent.SERVER.MessengerService.Window: Up Time: 0 Days 0 Hrs 1 Mins					
Status	- Statistics				
Processing	Requests:	0	Errors:		0
Users: 0	Requests Pending:	0	Queries:		0
Archive Queue: 0	Archives:	0			
14:50:56 EC4 CFG Message Transfer Protocol: Enabled         14:50:56 EC4 CFG Message Transfer Protocol Port: 8312         14:50:56 EC4 CFG Log Path: c:\Novell\NM\aa\logs         14:50:56 EC4 CFG Log to disk: Yes         14:50:56 EC4 CFG Log Level: Normal         14:50:56 EC4 CFG Log Max Age (in days): 14         14:50:56 EC4 CFG Log Max Age (in days): 14         14:50:56 EC4 CFG Log Max Size (in MB): 1         14:50:56 EC4 CFG Web Console: Disabled         14:50:56 EC4 ARC Archive queue initialization         14:50:56 EC4 ARC Archive queue initialization         14:50:58 EC4 APL Client/Server initialization         14:50:59 E3C TCP Starting NMAA-TCP-LISTENER         14:50:59 A44 TCP Starting NMAA-TCP-DISPATCHER					

The Archive Agent console includes several areas of information:

Information	Description
Information Box	Identifies the Archive Agent, displays description information provided in ConsoleOne, and shows how long the Archive Agent has been running.
Status Box	Displays the number of current users who are searching the archive and the number of conversations that are queued for archiving. The rotating processing bar shows that the Archive Agent is running.
Statistics Box	Displays the number of requests that the Archive Agent has received from client users who are searching the archive or from the Messaging Agent, along with the number of requests that it has been unable to respond to. Pending requests might indicate a need to optimize Archive Agent performance so that it can keep up with the demands being placed upon it.
Log Message Box	Displays the same information that is being written to the Archive Agent log file. The amount of information displayed depends on the current log settings for the Archive Agent. See "Using Archive Agent Log Files" on page 171. The information scrolls up automatically.

 Table 4-3
 Archive Agent Console

### Controlling the Archive Agent from the Archive Agent Console

You can perform the following tasks to monitor and control the Archive Agent from the Archive Agent console at the Messenger server:

Task	NetWare	Windows
Stop the Archive Agent	F7	File > Exit
Edit the startup file	F10 > Edit Startup File	Configuration > Edit Startup File
Display current agent settings	N/A	Configuration > Agent Settings
Display the current log file	F9	Log > Auto Scroll Off > scroll as needed
Display a selected log file	F10 > View Log Files	Log > View Log
Change log settings for the current agent session	F10 > Logging Options	Log > Log Settings
Start a new log file	F10 > Cycle Log	Log > Cycle Log
Index the archive	F10 > Actions > Update Indexes	Actions > Update Indexes
Compress the archive indexes	F10 > Actions > Compress Indexes	Actions > Compress Indexes
Perform maintenance on the archive	F10 > Actions > Verify and Repair Archive	Actions > Verify and Repair Archive
Display online help	F1	Help > Help

 Table 4-4
 Archive Agent Keyboard Shortcuts

# 4.10.2 Using the Archive Agent Web Console and GroupWise Monitor

The Archive Agent Web console enables you to monitor and control the Archive Agent from any location where you have access to a Web browser and the Internet. This provides substantially more flexible access than the Archive Agent console, which can only be accessed from the server where the Archive Agent is running.

You can use the same procedure to set up the Archive Agent Web console as the Messaging Agent Web console. For instructions, see "Using the Messaging Agent Web Console" on page 44. In addition, you can compress the archive indexes and perform maintenance on the archive from the Web console.

As with the Messaging Agent, you can access the Archive Agent Web console from GroupWise Monitor. For setup and usage instructions, "Using GroupWise Monitor" on page 55.

## 4.10.3 Using Archive Agent Log Files

Error messages and other information about the Archive Agent are written to log files as well as displaying on the Archive Agent console. Log files can provide a wealth of information for resolving problems with Archive Agent functioning. On NetWare and Windows, the default location for log files is the logs subdirectory of the Archive Agent installation directory. On Linux, the default location is /var/opt/novell/log/messenger/aa.

You can use the same procedure for Archive Agent log files as for Messaging Agent log files. For instructions, see "Using Messaging Agent Log Files" on page 53.

## 4.10.4 Using Novell 6.5 Remote Manager

If the Archive Agent is running on a NetWare 6.5 server, you can use the IP Address Management feature in Novell Remote Manager (*NetWare Remote Manager > Manage Server > IP Address Management*) to view the IP address and port configuration for the Archive Agent. This is also true for the Messenger Agent running on a NetWare 6.5 server.

You access Novell Remote Manager by entering the following URL in a Web browser:

http://server\_address:8008

For example:

http://137.65.123.11:8008

For more information about using Novell Remote Manager, see the NetWare 6.5 documentation (http://www.novell.com/documentation/nw65).

## 4.10.5 Using SNMP Monitoring Programs

You can monitor the Archive Agent from the Management and Monitoring component of Novell ZENworks for Servers, ManageWise, or any other SNMP management and monitoring program. When properly configured, the Archive Agent sends SNMP traps to network management consoles for display along with other SNMP monitored programs. It also responds to requests for configuration and status information from SNMP management and monitoring programs.

You can use the same procedure for setting up the Archive Agent as for the Messaging Agent. For instructions, see "Using SNMP Monitoring Programs" on page 56.

# 4.11 Optimizing Archive Agent Performance

Before attempting optimization, you should run the Archive Agent long enough to observe its efficiency and its impact on other network applications running on the same server. See Section 4.10, "Monitoring the Archive Agent," on page 168.

Also, remember that optimizing your network hardware and operating system can make a difference in Archive Agent performance.

- Section 4.11.1, "Optimizing Connections between the Archive Agent and Messenger Users," on page 172
- Section 4.11.2, "Optimizing the Connection between the Archive Agent and the Messaging Agent," on page 173

# 4.11.1 Optimizing Connections between the Archive Agent and Messenger Users

- 1 In ConsoleOne, browse to and expand the MessengerService object.
- 2 Select the Messenger Server object.
- 3 Right-click the Archive Agent object, then click Properties.
- **4** Click *Agent* > *Performance*.

Properties of ArchiveAgent				×
Agent → NDS Rights → Other Rights to Files and Folders	1 - Contraction			
<u>renominate</u>				
Maximum number of users: 5120				
Client/Server threads:				
Page Options	ок	Cancel	Apply	Help

**5** Fill in the following fields to configure how the Archive Agent communicates with Messenger users:

**Maximum Number of Users:** Specify the maximum number of Messenger users that you want the Archive Agent to be able to search the archive for at once. The default is 5120, which should be adequate for a very large Messenger system.

**Client/Server Threads:** Specify the number of client/server threads that you want the Archive Agent to start. The Archive Agent uses its client/server threads to search the archive for Messenger users, to communicate with the Messaging Agent in order to receive conversations to archive, and to maintain and index the archive.

The default number of client/server threads is 15. For a large Messenger system with archiving enabled for all users, you could increase the number to 50 or more, depending on the system resources of the server where the Archive Agent is running.

- 6 Click OK to save the Archive Agent performance settings.
- 7 Stop and then start the Messaging Agent to put the new performance settings into effect.

**Corresponding Startup Switches:** You can also use the /maxconns and /threads startup switches in the Archive Agent startup file to configure Archive Agent performance.

## 4.11.2 Optimizing the Connection between the Archive Agent and the Messaging Agent

By default, the Messaging Agent waits 5 seconds for a response when trying to contact the Archive Agent. If no response is received from the Archive Agent, the Messaging Agent tries again three more times. If all four attempts fail, the Messaging Agent reports an error, then waits 10 minutes before it tries again.

When the Messaging Agent attempts to send conversations to the Archive Agent, the Messaging Agent tries for 20 seconds before reporting an error.

On some networks, these wait intervals might not be sufficient when the Messaging Agent and the Archive Agent are running on different servers. As a result, the Messaging Agent might report an error when, by waiting longer, the needed connection or data transfer can take place.

Use the /mtpconnecttimeout switch in the Messaging Agent startup file to increase the number of seconds the Messaging Agent waits for a response from the Archive Agent before reporting an error.

Use the /mtpdatatimeout switch in the Messaging Agent startup file to increase the number of seconds the Messaging Agent attempts to send conversations to the Archive Agent before reporting an error.

# 4.12 Managing the Archive Server

As your Messenger system grows and evolves, you might need to reconfigure the server where the Archive Agent runs or move Archive Agent directories to different locations.

- Section 4.12.1, "Binding the Archive Agent to a Specific IP Address," on page 173
- Section 4.12.2, "Changing the Archive Server's IP Address or DNS Host Name," on page 174
- Section 4.12.3, "Moving the Archive Agent Working Directory," on page 174
- Section 4.12.4, "Moving the Archive," on page 174
- Section 4.12.5, "Maintaining the Archive Store," on page 175
- Section 4.12.6, "Moving the Archive Queue Directories," on page 176

### 4.12.1 Binding the Archive Agent to a Specific IP Address

On a server with multiple IP addresses, the Archive Agent binds to all available IP addresses and Messenger clients can communicate with the Archive Agent on all available IP addresses unless you bind it to a specific address.

You can use the same procedure to bind the Archive Agent as you use to bind the Messaging Agent. See "Binding the Messaging Agent to a Specific IP Address" on page 63

# 4.12.2 Changing the Archive Server's IP Address or DNS Host Name

If you change the IP address or DNS hostname of the server where the Archive Agent is running, you must update the server information for your Messenger system as well.

You can use the same procedure for the Archive Agent as for the Messaging Agent. See "Changing the Messaging Server's Network Address" on page 64.

## 4.12.3 Moving the Archive Agent Working Directory

The Archive Agent uses its working directory for saving various temporary files during archiving and indexing. By default, the Archive Agent and the Messaging Agent share the same working directory if they are running on the same server.

You can use the same procedure to move the Archive Agent working directory as you use to move the Messaging Agent working directory. See "Moving the Messaging Agent Working Directory" on page 65.

## 4.12.4 Moving the Archive

Depending on the volume of conversations to archive and the length of time conversations must be retained, the Messenger archive can grow to be quite large. On NetWare and Windows, the default location for the archive is \novell\nm\aa\store. On Linux, the default is /var/opt/novell/ messenger/aa/store. If necessary, you can move it to a different location where more disk space is available. However, the archive must reside on the same server where the Archive Agent runs.

- **1** Stop the Archive Agent.
- 2 Copy the Messenger archive (store directory) to the desired location.
- 3 In ConsoleOne, browse to and expand the Messenger Service object.
- **4** Expand the Messenger Server object where the Archive Agent runs, then double-click the Archive Agent object.
- **5** Right-click the File Module object, then click *Properties*.

operties of FileModule		
Module NDS Rights ▼	Other   Rights to Files and Folders	
j		
Store path:	/var/opt/novell/messenger/aa/store	
Maximum file size (MB):	10 🛨	
QuickFinder Maintenance		
Delay (hours):	2 🜩	
Update interval (hours):	4	
Compress interval (hours):	24 🚖	
Page Options	OK	Apply Help

- 6 In the *Store Path* field, browse to and select the new location of the Messenger archive.
- 7 Click *OK* to save the new archive location.
- 8 Start the Archive Agent.
- **9** Delete and regenerate the archive indexes from the Archive Agent console. See "Controlling the Archive Agent from the Archive Agent Console" on page 170.

### 4.12.5 Maintaining the Archive Store

When messages are added to the archive store, they are not immediately indexed. Before a user can search for a message in the archive, it must be indexed. You can set when the store starts indexing, the interval time between indexing, and how long a message should be kept in the archive.

- **1** Stop the Archive Agent.
- 2 In ConsoleOne, browse to and expand the Messenger Service object.
- **3** Expand the Messenger Server object where the Archive Agent runs, then double-click the Archive Agent object.
- **4** Right-click the File Module object, then click *Properties*.

operties of FileModule		
NDS Rights 👻	Other Rights to Files and Folders	
Store path:	/var/opt/novell/messenger/aa/store	
Maximum file size (MB):	10 🚖	
CQuickFinder Maintenance		
Delay (hours):	2 🜩	
Update interval (hours):	4 🜩	
Compress interval (hours):	24 丈	

- **5** In the *Delay* field, select the number of hours to wait until the first index is created, based upon how many hours after 12 A.M.
- 6 In the Update interval field, select the number of hours to wait between indexings.
- 7 In the Compress interval field, select the number of hours between QuickFinder compression.
- 8 Click *OK* to save the new archive location.
- 9 Start the Archive Agent.

### 4.12.6 Moving the Archive Queue Directories

When archiving is enabled, the Messaging Agent passes conversations to the Archive Agent when the conversations are completed. If the Messaging Agent cannot communicate with the Archive Agent when it has a conversation to archive, it saves the conversation in its holding directory (queue) until it can communicate with the Archive Agent again. When the Archive Agent receives a conversation to archive, if it is already busy processing other conversations, it temporarily stores the conversation in its holding directory (queue). Either of these holding queues can be moved if necessary.

- "Moving the Messaging Agent Conversation Holding Queue" on page 177
- "Moving the Archive Agent Conversation Holding Queue" on page 178

### Moving the Messaging Agent Conversation Holding Queue

On NetWare and Windows, the default location for the Messaging Agent holding queue is \novell\nm\ma\queue. On Linux, the default location is /var/opt/novell/messenger/ma/ queue.

To move the Messaging Agent queue:

- **1** Stop the Messaging Agent.
- **2** If there are conversations waiting to be passed to the Archive Agent, copy the Messaging Agent queue directory and its contents to the desired location.
- **3** In ConsoleOne, browse to and expand the Messenger Service object.
- 4 Select the Messenger Server object.
- 5 Right-click the Messaging Agent object, then click *Properties*.
- **6** Click *Agent* > *Messaging*.

Properties of MessagingAgent	
Agent ▼ NDS Rights ▼ Other Rights to Files and Folders Messaging	
Messaging Queue Path: /var/opt/hovell/messenger/ma/queue	
☑ Enable client download through a browser	
Page Options OK Cancel Apply	Help

- 7 In the *Messaging Queue Path* field, browse to and select the new location of the Messaging Agent queue.
- 8 Click *OK* to save the new location.
- **9** Start the Messaging Agent.

### Moving the Archive Agent Conversation Holding Queue

On NetWare and Windows, the default location for the Archive Agent holding queue is \novell\nm\aa\queue. On Linux, the default location is /var/opt/novell/messenger/aa/ queue.

**1** Stop the Archive Agent.

While the Archive Agent is stopped, the Messaging Agent is storing conversations to archive in its holding queue.

- **2** If there are conversations waiting to be archived in the Archive Agent holding queue, copy the Archive Agent queue directory and its contents to the new location.
- 3 In ConsoleOne, browse to and expand the Messenger Service object.
- 4 Select the Messenger Server object.
- 5 Right-click the Archive Agent object, then click Properties.
- 6 Click *Agent* > *Archive*.

Store path:	/var/opt/novell/messenger/aa/store	<b>`</b>
Maximum file size (MB	i): 10 🔶	
-QuickFinder Mainter	iance	
Delay (hours):	2	
Update interval (hou	rs): 4	
Compress interval (	nours): 24 🚔	
	,	

- 7 In the *Queue Path* field, browse to and select the new location of the Archive Agent holding queue.
- 8 Click *OK* to save the new location.
- **9** Start the Archive Agent.

# 4.13 Using Archive Agent Startup Switches

You can override settings provided in ConsoleOne by using startup switches in the Archive Agent startup file (strtup.aa). On NetWare and Windows, the startup file is located in the Messenger Agent installation directory. On Linux, the startup file is located in /etc/opt/novell/ messenger.You can override startup switches provided in the startup file by using startup switches on the command line. For more information about starting the Archive Agent, see Section 4.2, "Starting the Archive Agent," on page 153.

This section contains information on the following Archive Agent startup switches:

- Section 4.13.1, "/certfile," on page 182
- Section 4.13.2, "/certpath," on page 182
- Section 4.13.3, "/cluster (NetWare only)," on page 182
- Section 4.13.4, "/dirdefaultconnections," on page 183
- Section 4.13.5, "/diridletimeout," on page 183
- Section 4.13.6, "/dirmaxconnections," on page 183
- Section 4.13.7, "/dirpoolresettime," on page 183
- Section 4.13.8, "/dirquerymaxresults," on page 184
- Section 4.13.9, "/dirreplicaipaddr (Linux and Windows only)," on page 184
- Section 4.13.10, "/diruseralias," on page 184
- Section 4.13.11, "/diruserauthbind," on page 184
- Section 4.13.12, "/diruserforcedirect," on page 185
- Section 4.13.13, "/home," on page 185
- Section 4.13.14, "/httppassword," on page 185
- Section 4.13.15, "/httpport," on page 186
- Section 4.13.16, "/httpssl," on page 186
- Section 4.13.17, "/httpuser," on page 186
- Section 4.13.18, "/ip," on page 186
- Section 4.13.19, "/keyfile," on page 187
- Section 4.13.20, "/keypassword," on page 187
- Section 4.13.21, "/language (Windows only)," on page 187
- Section 4.13.22, "/ldapipaddr," on page 188
- Section 4.13.23, "/ldapport," on page 188
- Section 4.13.24, "/ldappwd," on page 189
- Section 4.13.25, "/ldapssl," on page 189
- Section 4.13.26, "/ldapsslkey," on page 189
- Section 4.13.27, "/ldapuser," on page 189
- Section 4.13.28, "/log," on page 190
- Section 4.13.29, "/logdays," on page 190
- Section 4.13.30, "/logdiskoff," on page 190

- Section 4.13.31, "/loglevel," on page 191
- Section 4.13.32, "/logmax," on page 191
- Section 4.13.33, "/maxconns," on page 191
- Section 4.13.34, "/mtpipaddr," on page 191
- Section 4.13.35, "/mtpport," on page 192
- Section 4.13.36, "/mtpssl," on page 192
- Section 4.13.37, "/nomtp," on page 192
- Section 4.13.38, "/nosnmp," on page 192
- Section 4.13.39, "/password," on page 193
- Section 4.13.40, "/port," on page 193
- Section 4.13.41, "/queue," on page 193
- Section 4.13.42, "/ssl," on page 194
- Section 4.13.43, "/threads," on page 194
- Section 4.13.44, "/user," on page 194

The table below summarizes the Archive Agent startup switches and how they correspond to configuration settings in ConsoleOne. These startup switches must begin with a dash (-) when used in the Cross-Platform client.

NetWare Archive Agent	Linux Archive Agent	Windows Archive Agent	ConsoleOne Setting
/certfile	certfile	/certfile	SSL Certificate
/certpath	certpath	/certpath	Certificate Path
/cluster	N/A	N/A	N/A
/ dirdefaultconnectio ns	 dirdefaultconnection s	/ dirdefaultconnection s	Default Number of Connections (LDAP profile)
/diridletimeout	diridletimeout	/diridletimeout	Idle Timeout (LDAP profile)
/dirmaxconnections	 dirmaxconnections	/dirmaxconnections	Maximum Number of Connections (LDAP profile)
/dirpoolresettime	dirpoolresettime	/dirpoolresettime	N/A
/dirquerymaxresults	 dirquerymaxresults	/dirquerymaxresults	Maximum Query Results
/dirreplicaipaddr	dirreplicaipaddr	/dirreplicaipaddr	N/A
/diruseralias	diruseralias	/diruseralias	N/A
/diruserauthbind	diruserauthbind	/diruserauthbind	N/A
/diruserforcedirect	diruserforcedirect	/diruserforcedirect	N/A
/home	home	/home	N/A

Table 4-5	Archive Agent S	Startup Switches	
-----------	-----------------	------------------	
NetWare Archive Agent	Linux Archive Agent	Windows Archive Agent	ConsoleOne Setting
--------------------------	---------------------	--------------------------	-------------------------------------------------------
/httppassword	httppassword	/httppassword	HTTP Password
/httpport	httpport	/httpport	HTTP Port
/httpuser	httpuser	/httpuser	HTTP Username
/httpssl	httpssl	/httpssl	Enable SSL for Web Console
/ip	ip	/ip	Host IP Address with Bind to this Address selected
/keyfile	keyfile	/keyfile	SSL Key File
/keypassword	keypassword	/keypassword	SSL Set Password
/language	language	/language	N/A
/ldapipaddr	Idapipaddr	/ldapipaddr	LDAP Connection IP Address
/Idapport	Idapport	/Idapport	LDAP Connection Port
/ldappwd	Idappwd	/ldappwd	LDAP Profile Set Password
/Idapssl	Idapssl	/Idapssl	LDAP Connection SSL Enabled
/ldapsslkey	Idapsslkey	/ldapsslkey	LDAP Connection Root Certificate
/Idapuser	Idapuser	/ldapuser	LDAP Profile Username
/log	log	/log	Log Files Path
/logdays	logdays	/logdays	Log Maximum Age
/logdiskoff	logdiskoff	/logdiskoff	Enable Disk Logging
/loglevel	loglevel	/loglevel	Log Level
/logmax	logmax	/logmax	Log Maximum Size
/maxconns	maxconns	/maxconns	Maximum Number of Users
/mtpipaddr	mtpipaddr	/mtpipaddr	Host Address
/mtpport	mtpport	/mtpport	Message Transfer Port
/mtpssl	mtpssl	/mtpssl	Enable SSL for Message Transfer Protocol
/nomtp	nomtp	/nomtp	N/A
/nosnmp	nosnmp	/nosnmp	Enable SNMP
/password	password	/password	Set Password
/port	port	/port	Client/Server Port
/queue	queue	/queue	Messaging Queue Path
/ssl	ssl	/ssl	Enable SSL for Client/Server
/threads	threads	/threads	Client/Server Threads
/user	user	/user	Username

## 4.13.1 /certfile

Specifies the full path to the public certificate file used to provide secure SSL communication between the Archive Agent and other programs. See Section 4.6, "Enhancing Archive Security with SSL Encryption," on page 163.

	NetWare Archive Agent	Linux Archive Agent	Windows Archive Agent
Syntax:	/certfile-[ <i>svr</i> \][ <i>vol</i> :]\ <i>dir\file</i> /certfile- \\ <i>svr\vo\\</i> dir\file	certfile /dir/file	/certfile-[ <i>drive</i> :]\ <i>dir\file</i> /certfile- \\svr\sharename\dir\file
Example:	/certfile-\novell\nm\ma\certs\nm.crt / certfile- svr2\sys:\novell\nm\ma\certs\nm.crt / certfile- \\svr2\sys\novell\nm\ma\certs\nm.crt	certfile /certs/ gw.crt	/certfile- \novell\nm\ma\certs\nm.crt / certfile- m:\novell\nm\ma\certs\nm.crt / certfile- \\s2\c\novell\nm\ma\certs\nm.crt

See also /certpath, /keyfile, and /keypassword.

## 4.13.2 /certpath

Specifies the full path to the directory where public certificate files are stored on your system. See Section 4.6, "Enhancing Archive Security with SSL Encryption," on page 163.

	NetWare Archive Agent	Linux Archive Agent	Windows Archive Agent
Syntax:	/certpath-[ <i>svr</i> \][ <i>vol</i> :]\dir/certpath- \\ <i>svr</i> \ <i>vo</i> \dir	certpath /dir	/certpath-[ <i>drive</i> :]\ <i>dir</i> /certpath- \\svr\sharename\dir
Example:	/certpath-\novell\nm\aa\certs / certpath-svr2\sys:\novell\nm\aa\certs /certpath- \\svr2\sys\novell\nm\aa\certs	certpath /certs	/certpath-\novell\nm\aa\certs / certpath-m:\novell\nm\aa\certs / certpath- \\svr2\c\novell\nm\aa\certs

See also /certfile, /keyfile, and /keypassword.

## 4.13.3 /cluster (NetWare only)

Informs the Archive Agent that it is running in a clustering environment. The issues are the same as for the Messaging Agent. See "Implementing Messenger in a NetWare Cluster" in "Novell Cluster Services on NetWare" in the *GroupWise 8 Interoperability Guide*.

If you are running the Archive Agent on the latest version of NetWare 6.*x* and Novell Cluster Services, the Archive Agent can detect the cluster automatically.

	NetWare Archive Agent	Linux Archive Agent	Windows Archive Agent
Syntax:	/cluster	N/A	N/A

See also /ip.

## 4.13.4 /dirdefaultconnections

Specifies the minimum number of direct access connections you want open at all times between the Archive Agent and eDirectory. The default is 10 connections.

	NetWare Archive Agent	Linux Archive Agent	Windows Archive Agent
Syntax:	/dirdefaultconnections- number	dirdefaultconnections number	/dirdefaultconnections-number
Example:	/dirdefaultconnections-20	dirdefaultconnections 30	/dirdefaultconnections-50

See also /diridletimeout and /dirmaxconnections.

## 4.13.5 /diridletimeout

Specifies the number of seconds after which idle direct access connections in excess of the default number of connections are closed. The default is 30 seconds

	NetWare Archive Agent	Linux Archive Agent	Windows Archive Agent
Syntax:	/diridletimeout-seconds	diridletimeout seconds	/diridletimeout-seconds
Example:	/diridletimeout-20	diridletimeout 60	/diridletimeout-90

See also /dirdefaultconnections.

## 4.13.6 /dirmaxconnections

Specifies the maximum number of direct access connections you want open between the Archive Agent and eDirectory. The default is 50 connections.

	NetWare Archive Agent	Linux Archive Agent	Windows Archive Agent
Syntax:	/dirmaxconnections-number	dirmaxconnections number	/dirmaxconnections-number
Example:	/dirmaxconnections-200	dirmaxconnections 150	/dirmaxconnections-100

See also /dirdefaultconnections.

## 4.13.7 /dirpoolresettime

Specifies the number of minutes between the time when the Archive Agent receives an error response from a pooled LDAP server and the time when that LDAP server is reinstated into the pool of available LDAP servers. The default is 5 minutes. See "Providing LDAP Access to eDirectory for Messenger Users" on page 91.

	NetWare Archive Agent	Linux Archive Agent	Windows Archive Agent
Syntax:	/dirpoolresettime-minutes	dirpoolresettime-minutes	/dirpoolresettime-minutes
Example:	/dirpoolresettime-10	dirpoolresettime-15	/dirpoolresettime-20

## 4.13.8 /dirquerymaxresults

Specifies the maximum number of query results you want the Archive Agent to return to users in the Messenger client. The default maximum is 100 contacts.

	NetWare Archive Agent	Linux Archive Agent	Windows Archive Agent
Syntax:	/dirquerymaxresults-results	dirquerymaxresults results	/dirquerymaxresults-results
Example:	/dirquerymaxresults-50	dirquerymaxresults 150	/dirquerymaxresults-200

## 4.13.9 /dirreplicaipaddr (Linux and Windows only)

Specifies the IP address of an eDirectory replica for an Archive Agent that is running on a Windows server. See "Changing the eDirectory Access Method for Starting the Archive Agent" on page 158.

	NetWare Archive Agent	Linux Archive Agent	Windows Archive Agent
Syntax:	N/A	dirreplicaipaddr IP_address	/dirreplicaipaddr-IP_address
Example:	N/A	dirreplicaipaddr 173.16.5.18	/dirreplicaipaddr-173.16.5.19

## 4.13.10 /diruseralias

Specifies the eDirectory attribute that the Archive Agent searches on for users in the Messenger client. By default, the Archive Agent searches on the CN attribute. If you use this startup switch for the Messaging Agent, as described in "Customizing Authentication and Searches by eDirectory Attribute" on page 103, you should use it for the Archive Agent as well, to keep searching functionality consistent.

	NetWare Archive Agent	Linux Archive Agent	Windows Archive Agent
Syntax:	/diruseralias- "eDirectory_attribute"	diruseralias "eDirectory_attribute"	/diruseralias- "eDirectory_attribute"
Example:	/diruseralias-"Internet EMail	diruseralias "Internet EMail	/diruseralias-"Internet EMail
	Address"	Address"	Address"

## 4.13.11 /diruserauthbind

Indicates that you want users to authenticate to eDirectory by using a bind rather than a compare operation.

	NetWare Archive Agent	Linux Archive Agent	Windows Archive Agent
Syntax:	/diruserauthbind	diruserauthbind	/diruserauthbind

## 4.13.12 /diruserforcedirect

Indicates that you want users to use direct access to eDirectory even though you have configured the Archive Agent to use LDAP access. See "Using LDAP Access for the Archive Agent" on page 159.

	NetWare Archive Agent	Linux Archive Agent	Windows Archive Agent
Syntax:	/diruserforcedirect	diruserforcedirect	/diruserforcedirect

## 4.13.13 /home

Specifies the distinguished name (DN) of the Archive Agent object where the Archive Agent configuration information is stored. There is no default location. You must use this switch in order to start the Messaging Agent. See Section 4.2, "Starting the Archive Agent," on page 153.

	NetWare Archive Agent	Linux Archive Agent	Windows Archive Agent
Syntax:	/home-CN=agent_object,	home CN=agent_object,	/home-CN=agent_object,
	OU=server_object,	OU=server_object,	OU=server_object,
	OU=Messenger_system,	OU=Messenger_system,	OU=Messenger_system,
	O=organization	O=organization	O=organization
Example:	/home-CN=ArchiveAgent,	home CN=ArchiveAgent,	/home-CN=ArchiveAgent,
	OU=PRV-GWSERVER,	OU=PRV-GWSERVER,	OU=PRV-GWSERVER,
	OU=MessengerService,	OU=MessengerService,	OU=MessengerService,
	O=Novell	O=Novell	O=Novell

**IMPORTANT:** Use commas, rather than periods, between object names. If any object name includes a space, surround the switch value with double quotation marks.

## 4.13.14 /httppassword

Specifies the password for the Archive Agent to prompt for before allowing Archive Agent status information to be displayed in your Web browser. Unless you are using SSL encryption, do not use an existing eDirectory password because the information passes over the connection between your Web browser and the Archive Agent. See "Using the Archive Agent Web Console and GroupWise Monitor" on page 170.

	NetWare Archive Agent	Linux Archive Agent	Windows Archive Agent
Syntax:	/httppassword- unique_password	httppassword unique_password	/httppassword- unique_password
Example:	/httppassword-AgentWatch	httppassword AgentWatch	/httppassword-AgentWatch

See also /httpuser.

## 4.13.15 /httpport

Sets the HTTP port number used for the Archive Agent to communicate with your Web browser. The setting must be unique on the server where the Archive Agent runs. See "Using the Archive Agent Web Console and GroupWise Monitor" on page 170.

	NetWare Archive Agent	Linux Archive Agent	Windows Archive Agent
Syntax:	/httpport- <i>port_number</i>	httpport <i>port_number</i>	/httpport- <i>port_number</i>
Example:	/httpport-8313	httpport 8314	/httpport-8315

## 4.13.16 /httpssl

Sets the availability of SSL encryption between the Archive Agent and the Web console displayed in your Web browser. Valid values are enable and disable. See "Using the Archive Agent Web Console and GroupWise Monitor" on page 170.

	NetWare Archive Agent	Linux Archive Agent	Windows Archive Agent
Syntax:	/httpssl- <i>setting</i>	httpssl setting	/httpssl-setting
Example:	/httpssl-enable	httpssl enable	/httpssl-enable

## 4.13.17 /httpuser

Specifies the username for the Archive Agent to prompt for before allowing Archive Agent status information to be displayed in a Web browser. Providing a username is optional. Unless you are using SSL encryption, do not use an existing eDirectory username because the information passes over the connection between your Web browser and the Archive Agent. See "Using the Archive Agent Web Console and GroupWise Monitor" on page 170.

	NetWare Archive Agent	Linux Archive Agent	Windows Archive Agent
Syntax:	/httpuser- <i>unique_username</i>	httpuser unique_username	/httpuser- <i>unique_username</i>
Exampl e:	/httpuser-NMWebConsole	httpuser NMWebConsole	/httpuser-NMWebConsole

See also /httppassword.

## 4.13.18 /ip

Binds the Archive Agent to a specific IP address when the server where it runs uses multiple IP addresses, such as in a clustering environment. Without the /ip switch, the Archive Agent binds to all available IP addresses and Messenger clients can communicate with the Messaging Agent on all available IP addresses.

	NetWare Archive Agent	Linux Archive Agent	Windows Archive Agent
Syntax:	/ip- <i>IP_address</i>	ip <i>IP_address</i>	/ip-IP_address

	NetWare Archive Agent	Linux Archive Agent	Windows Archive Agent
Example:	/ip-172.16.5.18	ip 172.16.5.19	/ip-172.16.5.20

See also /cluster.

## 4.13.19 /keyfile

Specifies the full path to the private file used to provide SSL encryption between the Archive Agent and other programs. See Section 4.6, "Enhancing Archive Security with SSL Encryption," on page 163.

	NetWare Archive Agent	Linux Archive Agent	Windows Archive Agent
Syntax:	/keyfile-[ <i>svr</i> \][ <i>vol</i> :]\ <i>dir\file</i> /keyfile- \\ <i>svr\vol\dir\file</i>	keyfile /dir/file	/keyfile-[ <i>drive</i> :]\ <i>dir\file</i> /keyfile- \\svr\sharename\dir\file
Example:	/keyfile- \novell\nm\ma\certs\nm.key / keyfile- svr2\sys:\novell\nm\ma\certs\nm.k ey /keyfile- \\svr2\sys\novell\nm\ma\certs\nm.k ey	keyfile /certs/ gw.key	/keyfile-\novell\nm\ma\certs\nm.key /keyfile- m:\novell\nm\ma\certs\nm.key / keyfile- \\svr2\c\novell\nm\ma\certs\nm.key

See also /keypassword.

## 4.13.20 /keypassword

Specifies the password used to encrypt the private SSL key file when it was created. See Section 4.6, "Enhancing Archive Security with SSL Encryption," on page 163.

	NetWare Archive Agent	Linux Archive Agent	Windows Archive Agent
Syntax:	/keypassword-password	keypassword password	/keypassword-password
Example:	/keypassword-gwssl	keypassword gwssl	/keypassword-gwssl

See also /keyfile.

## 4.13.21 /language (Windows only)

Specifies the language to run the Archive Agent in, using a two-letter language code as listed below. When you install the Messenger agents, all language versions are automatically installed.

The initial default is the language used by the operating system. If that language is not available, the Archive Agent runs in English. You only need to use this switch if you need to override these defaults.

	NetWare Archive Agent	Linux Archive Agent	Windows Archive Agent
Syntax:	N/A	N/A	/language-code
Example:	N/A	N/A	/language-fr

The table below lists the valid language codes:

Language	Language Code
English	EN
French	FR
German	DE
Portuguese	PT
Spanish	ES

## 4.13.22 /ldapipaddr

Specifies the LDAP server's network address as either an IP address or a DNS hostname. You can specify multiple network addresses to provide failover capabilities for your LDAP servers. See Section 3.2, "Customizing eDirectory Access for Users," on page 90.

	NetWare Archive Agent	Linux Archive Agent	Windows Archive Agent
Syntax:	/ldapipaddr-network_address	ldapipaddr network_address	/ldapipaddr- network_address
Example:	/ldapipaddr-172.16.5.18 / ldapipaddr-server1 server2	Idapipaddr 172.16.5.19 Idapipaddr server1 server2	/ldapipaddr-172.16.5.20 / ldapipaddr-server1 server2

If you specify multiple LDAP servers, use a space between each address. When so configured, the Archive Agent tries to contact the first LDAP server in order to access eDirectory. If that LDAP server is down, the Archive Agent tries the next LDAP server in the list, and so on until it is able to access eDirectory.

See also /ldapport.

## 4.13.23 /Idapport

Specifies the port number that the LDAP server listens on for service requests. The default is 389. See "Providing LDAP Access to eDirectory for Messenger Users" on page 91.

	NetWare Archive Agent	Linux Archive Agent	Windows Archive Agent
Syntax:	/Idapport- <i>port_number</i>	Idapport <i>port_number</i>	/ldapport- <i>port_number</i>
Example:	/Idapport-390	Idapport 391	/Idapport-392

See also /ldapipaddr.

## 4.13.24 /ldappwd

Provides the password for the LDAP user that the Archive Agent uses to log in to the LDAP server. See "Providing LDAP Access to eDirectory for Messenger Users" on page 91.

	NetWare Archive Agent	Linux Archive Agent	Windows Archive Agent
Syntax:	/Idappwd-LDAP_password	Idappwd LDAP_password	/Idappwd-LDAP_password
Example:	/ldappwd-nmldap	Idappwd nmldap	/ldappwd-nmldap

See also /ldapuser.

## 4.13.25 /Idapssl

Indicates to the Archive Agent that the LDAP server it is logging in to uses SSL encryption. See Section 4.6, "Enhancing Archive Security with SSL Encryption," on page 163.

	NetWare Archive Agent	Linux Archive Agent	Windows Archive Agent
Syntax:	/ldapssl	Idapssl	/ldapssl

See also /ldapsslkey.

## 4.13.26 /ldapsslkey

Specifies the full path to the private SSL key file used with LDAP authentication. See "Providing LDAP Access to eDirectory for Messenger Users" on page 91.

	NetWare Archive Agent	Linux Archive Agent	Windows Archive Agent
Syntax:	/ldapsslkey-[svr\][vol:]\dir\file / ldapsslkey-\\svr\vo\\dir\file	Idapsslkey / <i>dir/file</i>	/ldapsslkey-[ <i>drive</i> :]\dir\file / ldapsslkey- \\svr\sharename\dir\file
Example:	/ldapsslkey- \novell\nm\aa\certs\nmkey. der /ldapsslkey- server2\sys:\novell\nm\ aa\certs\nmkey.der /ldapsslkey- \\server2\sys\novell\nm\ aa\certs\nmkey.der	IdapssIkey /certs/ gwkey.der	/ldapsslkey- novell\nm\aa\certs\\nmkey. der /ldapsslkey- m:\novell\nm\aa\certs\nmk ey.der /ldapsslkey- \\server2\c\novell\nm\ aa\certs\nmk ey.der

See also /ldapssl.

## 4.13.27 /Idapuser

Specifies the username that the Archive Agent can use to log in to the LDAP server to obtain information from eDirectory. See "Providing LDAP Access to eDirectory for Messenger Users" on page 91.

	NetWare Archive Agent	Linux Archive Agent	Windows Archive Agent
Syntax:	/ldapuser-LDAP_user_ID	Idapuser LDAP_user_ID	/Idapuser-LDAP_user_ID
Example:	/Idapuser-NMAuth	Idapuser NMAuth	/Idapuser-NMAuth

See also /ldappwd.

## 4.13.28 /log

Specifies the directory where the Archive Agent stores its log files. The default location is the \novell\nm\aa\log directory. See "Using Archive Agent Log Files" on page 171.

	NetWare Archive Agent	Linux Archive Agent	Windows Archive Agent
Syntax:	/log-[svr\][vol:]\dir /log- \\svr\vo\\dir	log /dir	/log-[drive:]\dir /log- \\svr\sharename\dir
Example:	/log-\nmlog\aa /log- \\server2\mail:\nmlog\aa /log- \\server2\mail\nmlog\aa	log /nm/log/aa	/log-\nmlog\aa /log-m:\nmlog\aa / log-\\server2\c\mail\nmlog\aa

See also /loglevel, /logdays, /logmax, and /logdiskoff.

## 4.13.29 /logdays

Specifies how many days to keep Archive Agent log files on disk. The default is 14 days. See "Using Archive Agent Log Files" on page 171.

	NetWare Archive Agent	Linux Archive Agent	Windows Archive Agent
Syntax:	/logdays- <i>days</i>	logdays <i>days</i>	/logdays- <i>days</i>
Example:	/logdays-7	logdays 30	/logdays-30

See also /log, /loglevel, /logmax, and /logdiskoff.

#### 4.13.30 /logdiskoff

Turns off disk logging for the Archive Agent so no information about the functioning of the Archive Agent is stored on disk. The default is for logging to be turned on. See "Using Archive Agent Log Files" on page 171.

	NetWare Archive Agent	Linux Archive Agent	Windows Archive Agent
Syntax:	/logdiskoff	logdiskoff	/logdiskoff

See also /log, /loglevel, /logdays, and /logmax.

## 4.13.31 /loglevel

Controls the amount of information logged by the Archive Agent. Logged information is displayed in the log message box and written to the Archive Agent log file during the current agent session. The default is Normal, which displays only the essential information suitable for a smoothly running Archive Agent. Use Verbose to display the essential information, plus additional information helpful for troubleshooting. Use Diagnostic to include code-specific information. See "Using Archive Agent Log Files" on page 171.

	NetWare Archive Agent	Linux Archive Agent	Windows Archive Agent
Syntax:	/loglevel-level	loglevel level	/loglevel- <i>level</i>
Example:	/loglevel-verbose	loglevel diagnostic	/loglevel-diagnostic

See also /log, /logdays, /logmax, and /logdiskoff.

## 4.13.32 /logmax

Sets the maximum amount of disk space for all Archive Agent log files. When the specified disk space is consumed, the Archive Agent deletes existing log files, starting with the oldest. The default is 128 MB. See "Using Archive Agent Log Files" on page 171.

	NetWare Archive Agent	Linux Archive Agent	Windows Archive Agent
Syntax:	/logmax- <i>megabytes</i>	logmax <i>megabytes</i>	/logmax- <i>megabytes</i>
Example:	/logmax-64	logmax 256	/logmax-256

See also /log, /loglevel, /logdays, and /logdiskoff

## 4.13.33 /maxconns

Specifies the maximum number of connections between the Archive Agent and Messenger clients. The default is 5120. See "Optimizing Connections between the Archive Agent and Messenger Users" on page 172.

	NetWare Archive Agent	Linux Archive Agent	Windows Archive Agent
Syntax:	/maxconns-connections	maxconns connections	/maxconns-connections
Example:	/maxconns-10000	maxconns 10000	/maxconns-10000

See also /threads.

## 4.13.34 /mtpipaddr

Specifies the network address of the Server where the Messaging Agent runs, as either an IP address or a DNS hostname. By default, the Archive Agent uses the network address specified on the Identification page of the Messaging Agent object.

	NetWare Archive Agent	Linux Archive Agent	Windows Archive Agent
Syntax:	/mtpipaddr-network_address	mtpipaddr network_address	/mtpipaddr-network_address
Example:	/mtpipaddr-172.16.5.18 / mtpipaddr-server2	mtpipaddr-172.16.5.19 mtpipaddr server3	/mtpipaddr-172.16.5.20 / mtpipaddr-server4

See also /mtpport.

## 4.13.35 /mtpport

Specifies the message transfer port number the Archive Agent listens on for conversations to archive. By default, the Archive Agent uses the message transfer port specified on the Identification page of the Archive Agent object, which is 8312.

	NetWare Archive Agent	Linux Archive Agent	Windows Archive Agent
Syntax:	/mtpport- <i>port_number</i>	mtpport port_number	/mtpport- <i>port_number</i>
Example:	/mtpport-8412	mtpport 8413	/mtpport-8413

See also /mtpipaddr.

## 4.13.36 /mtpssl

Sets the availability of SSL encryption between the Archive Agent and the Messaging Agent. Valid values are enable and disable. See Section 4.6, "Enhancing Archive Security with SSL Encryption," on page 163.

	NetWare Archive Agent	Linux Archive Agent	Windows Archive Agent
Syntax:	/mtpssl- <i>setting</i>	mtpssl setting	/mtpssl- <i>setting</i>
Example:	/mtpssl-enable	mtpssl enable	/mtpssl-enable

## 4.13.37 /nomtp

Disables the Archive Agent's attempts to contact the Messaging Agent.

	NetWare Archive Agent	Linux Archive Agent	Windows Archive Agent
Syntax:	/nomtp	nomtp	/nomtp

## 4.13.38 /nosnmp

Disables SNMP for the Archive Agent. The default is to have SNMP enabled. See "Using SNMP Monitoring Programs" on page 171.

	NetWare Archive Agent	Linux Archive Agent	Windows Archive Agent
Syntax:	/nosnmp	nosnmp	/nosnmp

## 4.13.39 /password

Provides the password for the Archive Agent to use when accessing eDirectory in order to obtain its configuration information from the Archive Agent object. This switch is required in order to start the Archive Agent. See Section 4.2, "Starting the Archive Agent," on page 153.

	NetWare Archive Agent	Linux Archive Agent	Windows Archive Agent
Syntax:	/password- eDirectory_password	password eDirectory_password	/password- eDirectory_password
Example:	/password-NMAgent	password NMAgent	/password-NMAgent

See also /user.

## 4.13.40 /port

Sets the port number on which the Archive Agent listens for service requests from Messenger clients. The default is 8310. See Section 4.5, "Configuring the Archive Agent in ConsoleOne," on page 161.

	NetWare Archive Agent	Linux Archive Agent	Windows Archive Agent
Syntax:	/port- <i>port_number</i>	port <i>port_number</i>	/port- <i>port_number</i>
Example:	/port-8410	port 8411	/port-8412

## 4.13.41 /queue

Specifies the directory where the Archive Agent stores conversations it receives from the Messaging Agent while it is archiving other conversations. The default is \novell\nm\aa\queue. See "Moving the Archive Agent Conversation Holding Queue" on page 178

	NetWare Archive Agent	Linux Archive Agent	Windows Archive Agent
Syntax:	/queue-[ <i>svr</i> \][vol:]\dir /queue- \\svr\vol\dir	queue / <i>dir</i>	/queue-[ <i>drive</i> :]\ <i>dir</i> /queue- \\ <i>svr</i> \sharename\dir\
Example:	/queue-\nmqueues\aa /queue- \\server2\mail:\nmqueues\aa / queue- \\server2\mail\nmqueues\aa	queue /nmqueues/ aa	/queue-\nmqueues\aa /queue- m:\nmqueues\aa /queue- \\server2\c\mail\nmqueues\aa

## 4.13.42 /ssl

Sets the availability of SSL encryption between the Archive Agent, the Messaging Agent, and Messenger clients. Valid values are enable and disable. See Section 4.6, "Enhancing Archive Security with SSL Encryption," on page 163.

	NetWare Archive Agent	Linux Archive Agent	Windows Archive Agent
Syntax:	/ssl-setting	ssl setting	/ssl-setting
Example:	/ssl-enable	ssl enable	/ssl-enable

See also /certpath, /certfile, /keyfile, and /keypassword

## 4.13.43 /threads

Specifies the maximum number of client/server threads the Archive Agent can create. The default is 15. See "Optimizing Connections between the Archive Agent and Messenger Users" on page 172.

	NetWare Archive Agent	Linux Archive Agent	WIndows Archive Agent
Syntax:	/threads-number	threads number	/threads-number
Example:	/threads-10	threads 20	/threads-20

See also /maxconns.

## 4.13.44 /user

Provides the eDirectory username for the Archive Agent to use when accessing eDirectory to obtain its configuration information from the Archive Agent object. This switch is required in order to start the Messaging Agent. See Section 4.2, "Starting the Archive Agent," on page 153.

	NetWare Archive Agent	Linux Archive Agent	Windows Archive Agent
Syntax:	/user-CN= <i>User_object</i> ,	user CN= <i>User_object</i> ,	/user-CN= <i>User_object</i> ,
	OU=org_unit,O=organization	OU=org_unit,O=organization	OU=org_unit,O=organization
Example:	/user-CN=Messenger,	user CN=Messenger,	/user-CN=Messenger,
	OU=Users,O=Novell	OU=Users,O=Novell	OU=Users,O=Novell

**IMPORTANT:** Use commas, rather than periods, between object names. If any object name includes a space, surround the switch value with double quotation marks.

See also /password.

# **Managing Chat Rooms**

You can create chat rooms for users to participate in, or you can allow them to create their own chat rooms. When you initially create your Messenger system, there are no chat rooms. In order for users to start using chat rooms you must to do some additional system setup, as described in the following sections:

- Section 5.1, "Creating Chat Rooms," on page 195
- Section 5.2, "Editing Chat Room Settings," on page 199
- Section 5.3, "Allowing or Blocking Chat Room Access," on page 205
- Section 5.4, "Allowing Users to Create Chat Rooms," on page 205

# 5.1 Creating Chat Rooms

There are two ways to create a chat room: in the client interface and in ConsoleOne.

- Section 5.1.1, "Creating a Chat Room in ConsoleOne," on page 195
- Section 5.1.2, "Creating a Chat Room in the Client," on page 197

## 5.1.1 Creating a Chat Room in ConsoleOne

You can use ConsoleOne to create chat rooms for users to participate in.

- 1 In ConsoleOne, browse to and expand the Messenger Service object.
- **2** Select the Chat container.

C Novell ConsoleOne	
File Edit View Tools Help	
🔊 My World 📃 🔼	
🛱 🦷 NDS 👘 🚺	
DOCTEST2	
🖻 🚠 corporate	
🖻 🚀 MessengerService	
ChatContainer	
🕀 🌆 HostContainer	
E 🦋 LDAPContainer	
PolicyContainer	
⊡ ∎ prv-doctest2Serve	
E ArchiveAgent	
	0 items 🗐
User: admin.corporate	Tree: DOCTEST2

Existing scope profiles are displayed in the right pane.

**3** Right-click the Chat container, then click *New* > *Object*.

New Object	
Create object in:	ок
ChatContainer.MessengerService.corporate Class:	Cancel
<sup>†</sup> 〉Alias <mark>■</mark> nnmChat	Help

**4** Select *nnmChat*, then click *OK*.

New Chat Room			×
Directory ID (CN):			
Chat room <u>n</u> ame:		N. 1995 - 1997 - 1997	
	<u>о</u> к	Cancel	Help

**5** Type a directory ID name (this is the name that displays in eDirectory) and a chat room name (this is the name that users see), then click OK.

The chat room is created; however, you might want to change some additional settings after creation. For more information about editing chat room settings, see Section 5.2.1, "Editing Chat Room Settings In ConsoleOne," on page 199.

**6** To make the chat room visible, you must either re-initialize the chat service or restart the Messaging Agent.

## 5.1.2 Creating a Chat Room in the Client

Both administrators and users can create chat rooms in the client. However, users must be granted access in ConsoleOne before they can create a chat room. For information on how to allow users to create chat rooms in the client, see Section 5.4, "Allowing Users to Create Chat Rooms," on page 205.

1 Click *Tools* > *Chat Rooms*, then click *Create*.

Chat Room Properties	×
General Access Information	
Owner:	Change Quiper
user1	
Chat room name:	Delete Owner
Support	
Description:	
For support questions	~ ~
Welcome message:	
Welcome to the support chat room.	
The welcome message will be seen when people enter t	he chat room.
Maximum participants: 50 😂	
Always archive	
Allow chat room to be searchable	
OK Cance	el Apply

**2** (Optional) Select the owner of the chat room.

By default, the owner is the user who is creating the chat room.

- **3** Type the chat room name.
- 4 (Optional) Type a description, and welcome message for the chat room.
- **5** (Optional) Select the maximum number of participants.
- 6 (Optional) Select if you want to archive the chat room.
- 7 (Optional) Select if you want the chat room to be searchable.
- 8 (Optional) Click the Access tab, then select the access rights for all users and a particular user.
- **9** Click *OK* to create the chat room.

# 5.2 Editing Chat Room Settings

You can edit the chat room settings either in ConsoleOne or in the client interface. Users can modify chat room settings in the client interface if they have been granted access to do so. For information on how to allow users to create and edit chat rooms in the client, see Section 5.4, "Allowing Users to Create Chat Rooms," on page 205.

- Section 5.2.1, "Editing Chat Room Settings In ConsoleOne," on page 199
- Section 5.2.2, "Editing Chat Room Settings in the Client," on page 202

## 5.2.1 Editing Chat Room Settings In ConsoleOne

In ConsoleOne, you can change the general settings and the access settings for a chat room.

- "General Settings" on page 199
- "Access Settings" on page 200

#### **General Settings**

- 1 In ConsoleOne, browse to and expand the Messenger Service object.
- **2** Select the Chat object to edit.



Existing scope profiles are displayed in the right pane.

**3** Right-click the chat object, then click *Properties*.

Properties of support		
Chat ▼ NDS Rights ▼ General	Other Rights to Files and Folders	
Owner:	admin.corporate	語 🖉
Chat room name:	Support Chat Room	
Description:		
Welcome message:		
Maximum participants:	32 🚽	
🗖 Always archive messa	ages in this room	
I Chat room is searchab	ole	
Page Options	OK Cancel Apply	Help

- 4 Select an owner of the chat room. You can click 📧 to browse for the owner in the eDirectory tree.
- **5** Type a chat room name. This is the name that users see.
- 6 (Optional) Type a description for the chat room.
- 7 (Optional) Type a welcome message for the chat room.
- **8** (Optional) Select the maximum number of participants, then specify the number of participants.
- **9** (Optional) Select if you want to always archive the chat room messages.
- **10** (Optional) Select if you want to make the chat room searchable. By default, the chat room is searchable.
- **11** Click *OK* to save the settings.

#### **Access Settings**

- 1 In ConsoleOne, browse to and expand the Messenger Service object.
- **2** Select the Chat object to edit.



Existing scope profiles are displayed in the right pane.

- **3** Right-click the chat object, then click *Properties*.
- 4 Click *Chat* > *Access*.

Name	Rights			
<general acc<="" th="" user=""><th>ess&gt; ∣View, Send</th><th></th><th></th><th></th></general>	ess> ∣View, Send			
Add User	Remove User			
<b>⊠</b> ⊻iew	Send	Modify <u>Rig</u> hts	☐ <u>M</u> oderator	
	Clear Password			
Set Password				
Set Password				

- **5** By default, general user access is displayed in the access list. To add another user to the access list, click *Add User*.
- 6 Browse to and select the user in the eDirectory tree, then click OK.
- 7 Select the access rights for the user.

View: Allows the user to view the chat room.

Send: Allows the user to send a message to the chat room.

Modify Rights: Allows the user to modify the rights to the chat room.

Moderator: Allows the moderator to delete a user and change the topic of the chat room.

8 (Optional) Click *Set Password* to set a password for the chat room.

This requires users to enter a password to join the chat room. There is only one password for all participants in the chat room.

**9** Click *OK* to save the settings.

## 5.2.2 Editing Chat Room Settings in the Client

In the client, you can change the general settings and the access settings for the chat room.

- "General Settings" on page 203
- "Access Settings" on page 204

#### **General Settings**

Users can edit the settings for a chat room only if the administrator has granted access to create chat rooms. The default access does not allow users to create or edit a chat room.

For information on allowing users to create and edit chat rooms, see Section 5.4, "Allowing Users to Create Chat Rooms," on page 205.

1 Click *Tools > Chat Rooms*, select the chat room to edit, then click *Properties*.

Chat Room Properties	
General Access Information	
Owner:	Change Owner
user1	
Chat room name:	Delete Uwner
Support	
Description:	
For support questions	<u>×</u>
Welcome message:	
Welcome to the support chat room.	~
The welcome message will be seen when people enter t	the chat room.
Maximum participants: 50	
Always archive	
Allow chat room to be searchable	
OK Cance	el Apply

**2** (Optional) Select the owner of the chat room.

By default, the owner is the user who is creating the chat room.

- **3** Type the chat room name.
- **4** (Optional) Type a description, and welcome message for the chat room.

- **5** (Optional) Select the maximum number of participants.
- **6** (Optional) Select if you want to archive the chat room.
- 7 (Optional) Select if you want the chat room to be searchable.
- 8 (Optional) Click the Access tab, then select the access rights for all users and a particular user.
- **9** Click *OK* to save the settings.

#### **Access Settings**

You can modify the access rights for a chat room if you have been granted rights to do so.

1 Click *Tools* > *Chat Rooms*, select the chat room to modify, then click *Properties*.

Chat Room Properties
General Access Information
User Rights
Name Rights
<general access="" user=""> View, Send</general>
<u>Find User</u> Remove <u>U</u> ser
✓ ⊻iew ✓ <u>S</u> end Modify <u>R</u> ights <u>M</u> oderator
Moderators can delete users and change the Chat Room Topic.
Set Password Clear Password
OK Cancel <u>A</u> pply

- **2** By default general, user access is displayed in the access list. To add another user to the access list, click *Find User*.
- **3** Type the user's name in the *Name* field, then click *Next*.
- 4 Select the user in the list, then click *Finish*.
- **5** Select the access rights for the user:

View: Allows the user to view the chat room.

Send: Allows the user to send a message to the chat room.

Modify Rights: Allows the user to modify the rights to the chat room.

Moderator: Allows the moderator to delete a user and change the topic of the chat room.

6 Click Set Password to set a password for the chat room.

This requires users to enter a password to join the chat room. There is only one password for all participants in the chat room.

7 Click *OK* or *Apply* to save the settings.

# 5.3 Allowing or Blocking Chat Room Access

By default, users are allowed to use chat rooms. However, you can disable this functionality for all users, for a user policy, or for a certain user.

- 1 Right-click either the default policy (all users), a user policy (users governed by the policy), or a user, then click *Properties*.
- 2 Select or deselect Allow Users to Use Chat Rooms.
- **3** Click *OK* to save the settings.

# **5.4 Allowing Users to Create Chat Rooms**

By default users are not allowed to create chat rooms. However, you can enable this functionality for all users, for a user policy, or for a certain user.

- 1 Right-click either the default policy (all users), a user policy (users governed by the policy), or a user, then click *Properties*.
- **2** Select Allow Users to Create Chat Rooms.
- **3** Click *OK* to save the settings.

# Integrating Novell Conferencing with Novell Messenger

When you integrate Novell Messenger with your Novell Conferencing system, users can easily launch Conferencing meetings directly from the Messenger client, as described in "Using Novell Messenger with Novell Conferencing" in the *Novell Messenger 2.1 Client User Guide*.

- Section 6.1, "Specifying Your Conferencing Server Address," on page 207
- Section 6.2, "Enabling Conferencing Integrations for Your Messenger System," on page 207

# 6.1 Specifying Your Conferencing Server Address

- **1** In ConsoleOne, expand your Messenger tree, right-click *MessengerService*, then click *Properties*.
- 2 Click the *Novell Messenger* tab, then click *Conferencing*.
- **3** In the *Conferencing Server URL* field, specify the URL of the Conferencing server that you want to integrate your Messenger system with.

This must be a secure URL. If you try to specify a non-SSL URL, ConsoleOne automatically makes it secure by converting the URL from http to https.

- **4** Select *Allow clients to authenticate using Messenger credentials* if you want to enable users to launch Conferencing without entering their Conferencing login credentials.
- 5 Click OK.
- **6** Continue with Section 6.2, "Enabling Conferencing Integrations for Your Messenger System," on page 207.

# 6.2 Enabling Conferencing Integrations for Your Messenger System

Before you can enable Conferencing integrations, you must first specify your Conferencing server address, as described in Section 6.1, "Specifying Your Conferencing Server Address," on page 207.

You can enable the Conferencing integrations for your entire system, for a specific policy, or for individual users.

- Section 6.2.1, "Enabling Conferencing Integrations for Your Entire System," on page 207
- Section 6.2.2, "Enabling Conferencing Integrations for a Specific Policy," on page 208
- Section 6.2.3, "Enabling Conferencing Integrations for a Specific User," on page 208

# 6.2.1 Enabling Conferencing Integrations for Your Entire System

1 In ConsoleOne, expand your Messenger tree, then click *PolicyContainer*.

- 2 In the window on the right, double-click *Default Policy*.
- **3** Click the *Policy* tab, then click *General*.
- **4** Ensure that *Enable Conferencing Integrations* is selected. If it is not selected, select it, then click *OK*.

## 6.2.2 Enabling Conferencing Integrations for a Specific Policy

- 1 In ConsoleOne, expand your Messenger tree, then click *PolicyContainer*.
- **2** In the window on the right, click the policy for which you want to enable the Conferencing integrations.
- **3** Click the *Policy* tab, then click *General*.
- **4** Ensure that *Enable Conferencing Integrations* is selected. If it is not selected, select it, then click *OK*.

## 6.2.3 Enabling Conferencing Integrations for a Specific User

- **1** Browse to the user for whom you want to enable the Conferencing integrations.
- **2** Right-click the user's name, then click *Properties*.
- 3 Click the Novell Messenger tab, then click General.
- **4** Select *Enable Conferencing Integrations*.
- 5 Click OK.

# **Securing Novell Messenger**

This section provides specific instructions on how to install, configure, and maintain Novell Messenger 2.1 in the most secure way possible.

- Section 7.1, "Limiting Physical Access to Messenger Servers," on page 209
- Section 7.2, "Securing File System Access," on page 209
- Section 7.3, "Securing the Messenger Agents," on page 209
- Section 7.4, "Securing Directory Access," on page 214
- Section 7.5, "Securing the Messenger System," on page 214

# 7.1 Limiting Physical Access to Messenger Servers

Servers where Messenger data resides should be kept physically secure, so unauthorized persons cannot gain access to the server consoles.

# 7.2 Securing File System Access

In ConsoleOne, Server objects for servers where Messenger agents reside should be assigned appropriate trustees and rights to prevent access from unauthorized persons.

For additional data security, encrypted file systems should be used on servers where Messenger agents and archives reside.

# 7.3 Securing the Messenger Agents

- Section 7.3.1, "Enabling SSL for Client/Server Connections," on page 209
- Section 7.3.2, "Enabling SSL for the Message Transfer Protocol," on page 210
- Section 7.3.3, "Enabling SSL for the Web Console," on page 212
- Section 7.3.4, "Enabling Password Protection for the Web Console," on page 212
- Section 7.3.5, "Securing the Data Files," on page 212

## 7.3.1 Enabling SSL for Client/Server Connections

All the connections between the client and the server should be configured to use SSL. To do this, SSL must be configured for the agents. For information on configuring SSL for the agents and for the client, see "Creating Your Messenger System" for NetWare and Windows and "Configuring the Linux Messenger Agents for SSL" for Linux in the *Novell Messenger 2.1 Installation Guide*. To secure the client, simply use the port number specified for secure connections when connecting to the server.

## 7.3.2 Enabling SSL for the Message Transfer Protocol

When you install the agents, you have the option to configure SSL for the agents. If you chose to use SSL for the connection between the agents and the clients, the Message Transfer Protocol is automatically configured to use SSL as well. For more information, see "Creating Your Messenger System" for NetWare and Windows and "Configuring the Linux Messenger Agents for SSL" for Linux in the *Novell Messenger 2.1 Installation Guide*.

#### Configuring SSL for the Message Transfer Protocol After Installation

In order for the Message Transfer Protocol to use SSL, you must enable SSL for the agents. If you chose not to use SSL during the installation, you can configure SSL for the agents in ConsoleOne.

Before the agents and the Message Transfer Protocol can use SSL encryption, you must send a certificate signing request (CSR) to a certificate authority (CA) and receive a public certificate file in return. The CSR includes the hostname of the server where the Messaging Agent runs. The Messaging Agent and the Archive Agent can use the same certificate if they run on the same server. The CSR also includes your choice of name and password for the private key file that must be used with each certificate. This information is needed when configuring the Messaging Transfer Protocol to use SSL encryption. For more information, see Section 2.3.1, "Generating a Certificate Signing Request and Private Key," on page 39.

After you have a public certificate and a private key file available on the server where the Messaging Agent runs, you are ready to configure the Messaging Agent to use SSL encryption.

- 1 In ConsoleOne, browse to and expand the Messenger Service object.
- 2 Right-click the Messenger ArchiveAgent object, then click *Properties*.
- **3** Click *Agent > Security*.

Properties of ArchiveAgent	
Agent ▼ NDS Rights ▼ Oth Security	er Rights to Files and Folders
Certificate Path:	/opt/hovell/messenger/certs
-Security	
SSL Certificate.	server.pem
SSE Ney File.	Server key
Enable SSL for Message Tra     Restore Default Settings	Insfer Protocol
Page Options	OK Cancel Apply Help

**4** Fill in the following fields:

**Certificate Path:** This field defaults to \novell\nm\certs for NetWare and Windows, and / opt/novell/messenger/certs for Linux.

**IMPORTANT:** The certificate path must be located on the same server where the Messenger agents are installed. If your SSL certificate and key file are located on a different server, you must copy them into the directory specified in the *Certificate Path* field so they are always accessible to the Messenger agents.

**SSL Certificate:** Browse to and select the public certificate file. Or, if the certificate is located in the directory specified in the *Certificate Path* field, you can simply type the filename.

**SSL Key File:** Browse to and select your private key file. Or, if the file is located in the directory specified in the *Certificate Path* field, you can simply type the filename.

**Set Password:** Provide the key file password you established when you submitted the certificate signing request.

**Enable SSL for Client/Server:** Select this option to enable SSL encryption for your client and server.

**Enable SSL for Message Transfer Protocol:** Select this option to enable SSL encryption for your Message Transfer Protocol.

- **5** Click *OK* to save the SSL settings.
- 6 Restart the Messaging Agent to begin using SSL encryption.

## 7.3.3 Enabling SSL for the Web Console

The Web console should already be configured to use SSL when SSL is configured during the installation. However, additional configuration is needed to enable SSL for the Web console. For information on how to secure and configure the Web console, see "Setting Up the Messaging Agent Web Console" on page 44 and Section 4.10.2, "Using the Archive Agent Web Console and GroupWise Monitor," on page 170.

## 7.3.4 Enabling Password Protection for the Web Console

The Web console should be configured to use SSL and password protection, but password protection needs to be enabled. For information on how to enable password protection for the Web console, see "Setting Up the Messaging Agent Web Console" on page 44 and Section 4.10.2, "Using the Archive Agent Web Console and GroupWise Monitor," on page 170.

## 7.3.5 Securing the Data Files

- "Securing the Data Store" on page 212
- "Securing the Queue Files" on page 212
- "Securing the Log Files" on page 213
- "Securing the Startup Files" on page 213
- "Securing the Root Certificate" on page 213

#### Securing the Data Store

The data store files should be protected from access by unauthorized persons. The data store files are identified by an eight-digit hexadecimal number followed by either .maf or .mai. They are found in the following default locations:

Platform	Directory	Store Files
NetWare	sys:\Novell\NM\aa\store	xxxxxxxx.maf xxxxxxxx.mai
Linux	/var/opt/novell/messenger/aa/store	xxxxxxxx.maf xxxxxxxx.mai
Windows	C:\Novell\NM\aa\store	xxxxxxxx.maf xxxxxxxx.mai

 Table 7-1
 Messenger Data Store File Locations

#### Securing the Queue Files

The queue files should be protected from access by unauthorized persons. The queue files are identified by an eight-digit hexadecimal number followed by three numbers. They are found in the following default locations:

Table 7-2	Messenger	Queue Fi	le Locations
-----------	-----------	----------	--------------

Platform	Directory	Queue Files
NetWare	sys:\Novell\NM\ma\queue sys:\Novell\NM\aa\queue	xxxxxxx.nnn
Linux	/var/opt/novell/messenger/ma/queue /var/opt/novell/messenger/aa/queue	xxxxxxx.nnn
Windows	C:\Novell\NM\ma\queue C:\Novell\NM\aa\queue	xxxxxxx.nnn

#### Securing the Log Files

The log files for all Messenger agents should be protected from access by unauthorized persons. Some contain very detailed information about your Messenger system and Messenger users. They are found in the following default locations:

Table 7-3 /	Messenger A	gent Log	File Locations
-------------	-------------	----------	----------------

Platform	Directory	Log Files
NetWare	<i>vol</i> :\Novell\MA\logs <i>vol</i> :\Novell\AA\logs	mmddnma.nnn mmddnaa.nnn
Linux	/var/opt/novell/log/messenger/ma/ /var/opt/novell/log/messenger/aa	mmddnma.nnn mmddnaa.nnn
Windows	C:\Novell\MA\logs mmddnma.nnn C:\Novell\AA\logs mmddnaa.nnn	

#### Securing the Startup Files

The startup files for all Messenger agents should be protected from access by unauthorized persons. They are found in the following default locations:

Platform	Directory	Startup Files
NetWare	sys:\Novell\NM\ma sys:\Novell\NM\aa	strtup.ma strtup.aa
Linux	/etc/init.d	novell-nmma novell-nmaa
Windows	C:\Novell\NM\ma C:\Novell\NM\aa	strtup.ma strtup.aa

 Table 7-4
 Messenger Agent Startup File Locations

#### Securing the Root Certificate

The root certificate files should be protected from access by unauthorized persons. The root certificate files are copied to the following default locations:

 Table 7-5
 Root Certificate File Locations

Platform	Directory	Startup Files
NetWare	sys:\Novell\NM\certs	certname.der
Linux	/opt/novell/messenger/certs	<i>certname.</i> der
Windows	C:\Novell\NM\certs	<i>certname.</i> der

# 7.4 Securing Directory Access

- Section 7.4.1, "Enabling SSL for LDAP," on page 214
- Section 7.4.2, "Creating a Proxy User for LDAP Access," on page 214
- Section 7.4.3, "Using DirUserAuthBind," on page 214

## 7.4.1 Enabling SSL for LDAP

You should use LDAP instead of direct access mode if the eDirectory tree is on a different machine than the agents. When connecting with LDAP, SSL should be used to secure the connection. For additional information on how to secure the LDAP connection, see "eDirectory Access and Authentication" in the *Novell Messenger 2.1 Installation Guide*.

## 7.4.2 Creating a Proxy User for LDAP Access

The admin user should not be used when connecting with LDAP access. Instead, a proxy user should be created with limited rights. For information on what rights the LDAP proxy user must have, see "eDirectory Access and Authentication" in the *Novell Messenger 2.1 Installation Guide*.

## 7.4.3 Using DirUserAuthBind

When a user authenticates, DirUserAuthBind binds the user to the directory tree so password policies can be enforced. DirUserAuthBind is a startup switch in the startup files for both agents.

For additional information on configuring DirUserAuthBind, see Section 3.2.3, "Selecting Bind or Compare eDirectory Access for Users," on page 102.

# 7.5 Securing the Messenger System

- Section 7.5.1, "Configuring Remember Passwords," on page 214
- Section 7.5.2, "Understanding History and Save Conversation Security," on page 215
- Section 7.5.3, "Using Scopes as Security," on page 215

## 7.5.1 Configuring Remember Passwords

Messenger can be configured to remember passwords for the client login. However, this can cause security concerns. If a workstation is left unlocked, anyone can log in as that user if the Remember Password setting is selected. In addition, some third-party software packages, such as Gaim, might store the passwords in plain text.

For security reasons, the ability to remember passwords should be disabled. For information on how to disable the Remember Password option, see Section 3.4.3, "Customizing Messenger Client Features," on page 116.

## 7.5.2 Understanding History and Save Conversation Security

- "History Security" on page 215
- "Saved Conversation Security" on page 215

#### **History Security**

When the history option is enabled, the history files are stored on the client workstation in the following locations by default:

 Table 7-6
 Default History File Locations

Operating System	Location
Windows	C:\Documents and Settings\ <i>username</i> \Local Settings\Application Data\Novell\Messenger\history
Linux	/home/username/.novell//messenger/history
Macintosh	/User/username/.novell/messenger/history

The history files are stored as XML files, so anyone with access to the machine can view the files. For maximum security, the History option should be disabled. For information on how to disable the History option, see Section 3.4.3, "Customizing Messenger Client Features," on page 116.

#### **Saved Conversation Security**

A saved conversation is stored as a text file, so anyone with access to the machine can view the file. For maximum security, the ability to save conversations should be disabled. For information on how to do this, see Section 3.4.3, "Customizing Messenger Client Features," on page 116.

## 7.5.3 Using Scopes as Security

When the Messenger system is created, a default scope profile is created, and you are prompted for the location of users to add to the default scope profile. You can also create custom scope profiles. Users can only see users in contexts defined by their scope profiles. Multiple scope profiles can be created with different ranges of contexts. These scope profiles can be assigned to users to limit the other users they can see. For example, many companies create a separate scope profile for executives, to allow them to use Messenger but not be seen or accessed by other users. This could also be used for different departments or business units.

To create a new Messenger scope profile:

- 1 In ConsoleOne, browse to and expand the Messenger Service object.
- 2 Right-click the Scope Container object, then click New > Object.
- 3 Select nnmScopeProfile, then click OK.

- 4 Specify the name of the scope profile, then select *Define additional properties*.
- 5 Click OK.
- 6 Click Add.
- 7 Specify the context for the users to be added to the new scope, then select *Include sub-contexts* to include sub-contexts if desired.
- 8 Click *OK* twice.
- **9** Right-click a User object to add a user, or click a Policy object to add a group of users assigned to a policy, then click *Properties*.
- **10** Click the *Novell Messenger > General*.
- 11 In the *Scope profile* box, specify the new scope profile, then click OK.
- **12** Restart the Messenger agents.