Installation Guide
Messenger 3.0

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Novell.

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About This Guide

This Novell *Messenger 3.0 Installation Guide* helps you install a new Novell Messenger system. The guide is intended for network administrators who install and administer Messenger and is divided into the following sections:

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- Chapter 2, "Novell Messenger Hardware and Software Requirements," on page 9
- Chapter 3, "Installing a Novell Messenger System," on page 13
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Audience

This guide is intended for Novell Messenger administrators.

Feedback

We want to hear your comments and suggestions about this manual and the other documentation included with this product. Please use the *comment on this topic* 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 3.0 Installation Guide*, visit the Novell Messenger 3.0 documentation website (http://www.novell.com/documentation/novell_messenger30)

Additional Documentation

For additional Messenger documentation, see the Novell Messenger 3.0 documentation website (http://www.novell.com/documentation/novell_messenger30).

1 What Is Novell Messenger?

Novell Messenger is a corporate, cross-platform instant messaging product that is based on NetIQ eDirectory. Your Messenger system can be set up on Linux or Windows.

Messenger features include the following:

- Sending instant messages in a secure environment (user authentication through eDirectory and SSL encryption of messages)
- Creating a contact list and displaying user information from the contact list (based on user information already available in eDirectory)
- Displaying user presence (online, busy, away, idle, and so on)
- Blocking others from seeing your presence
- Creating custom statuses to define your presence
- Participating in multi-user conversations
- Saving personal conversations
- Creating and searching a corporate-level conversation archive
- Broadcasts
- Personal history
- Chat rooms

A Messenger system consists of three software components (Messaging Agent, Archive Agent, and Messenger snap-in to ConsoleOne) and various eDirectory objects where Messenger configuration information is stored. This *Messenger 3.0 Installation Guide* lists system requirements, helps you plan and install your Messenger system, and describes the easiest way to distribute the Novell Messenger client software to users. The *Novell Messenger 3.0 Administration Guide* describes your Messenger system in detail and helps you configure and manage your Messenger system to meet your users' needs.

2 Novell Messenger Hardware and Software Requirements

2.1 Messenger System Requirements

Before installing Messenger, ensure that your system meets the following server installation requirements:

2.1.1 Messenger Server Requirements

❑ 32-bit/x86 processor or 64-bit/x86 processor

On a 64-bit processor, Messenger still runs as a 32-bit application.

❑ Any of the following server operating systems for the Messenger agents:

◆ Novell Open Enterprise Server 11 or Novell Open Enterprise Server 15, plus the latest Support Pack

◆ SUSE Linux Enterprise Server 11 or SUSE Linux Enterprise Server 12, plus the latest Support Pack

When installing on SLES 12, be aware of the following:

◆ The Linux client must be installed as an RPM file on SLES 12.

◆ Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, plus the latest Service Pack for your version of Windows.

❑ Adequate server memory as required by the operating system

❑ eDirectory 8.7 or later, plus the latest Support Pack

❑ ConsoleOne 1.3.6h or later, with the LDAP snap-in installed

On Linux, ConsoleOne requires Java Virtual Machine (JVM) 1.4.2, plus the X Window System, version X11R6 or later. If you do not already have it installed, ConsoleOne for Linux is available to install in the Messenger download file.

On Windows, ConsoleOne also requires the Novell Client. ConsoleOne 1.3.6h requires Novell Client 4.91 SP3 or later. If necessary, you can download the latest Novell Client from the Novell Product Downloads site (http://download.novell.com).

❑ Windows 2008, Windows 2012, and the Novell Client on any administrator Windows machine where you run ConsoleOne or the Messenger Installation program

If you do not already have it installed, ConsoleOne for Windows is available to install in the Messenger download file.

If necessary, you can download the Novell Client from the Novell Product Downloads site (http://download.novell.com).

The Messenger agents are highly scalable. If you are setting up a large Messenger system, you should run the Messaging Agent on a dedicated server with dual processor speeds of 3 GHz and with 4 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.

2.1.2 Installation User Rights Requirements

❒ You must have the following rights when you run the Messenger Installation program:

  ◆ Supervisor rights at the root of the eDirectory tree to extend the eDirectory schema

  ◆ Read and Create rights in any containers where Messenger objects will be created

  ◆ File, Super user, or Administrator rights (depending on the operating system) to the server or workstation where the Messenger snap-in to ConsoleOne and the Messenger agents will be installed

❒ Additionally, if you run the Messenger Windows Installation program from a Windows workstation, you must have the following:

  ◆ Access to the eDirectory tree

  ◆ Novell Client

2.2 Messenger Client Workstation Requirements

2.2.1 Windows Client

◆ Any of the following desktop operating systems for the Novell Messenger Windows client:

  ◆ Windows XP

  ◆ Windows 7

  ◆ Windows 8 and 8.1

  ◆ Windows 10

2.2.2 Linux Client

◆ SUSE Linux Enterprise Desktop 11, plus the KDE desktop or the GNOME desktop

2.2.3 Mac Client

- Any of the following desktop operating systems:
  - Mac OS 10.8 (Mountain Lion)
  - Mac OS 10.9 (Mavericks)
  - Mac OS 10.10 (Yosemite)
  - Mac OS 10.11 (El Capitan)

2.2.4 Mobile Clients

Native applications for Novell Messenger are available for mobile devices with the following operating systems:

- iOS 8 or later (available from the Apple iTunes App Store)
- Android 2.3 or later (available from the Google Play App Store, formerly Android Market)
- BlackBerry PlayBook and Z10 (the native application is available in the BlackBerry World app store)

Applications work on both phone and tablet devices.

For more information about using Messenger on your mobile device, see "Using Novell Messenger on Your Mobile Device" in the *Novell Messenger 3.0 Client User Guide*.

2.3 Supported Environments

2.3.1 IPV6 Support

The Messaging Agent and Archive Agent support the IPV6 protocol when it is available on the server. If IPV6 is available, the agent detects it and supports it by default, along with IPV4.

As you configure your Messenger system and specify the network address of an IPV6 server, you must specify its DNS hostname. IP Address fields in ConsoleOne do not accommodate the IPV6 address format.

IPV6 support is available both on Linux and Windows.

2.3.2 Clustering Support

You can set up your Messenger system in many different clustering environments, as described in the *GroupWise 2014 Interoperability Guide* (https://www.novell.com/documentation/groupwise2014/gw2014_guide_interop/data/interop_front.html).

If you are using one of these clustering environments, follow the installation instructions in the *GroupWise 2014 Interoperability Guide* (https://www.novell.com/documentation/groupwise2014/gw2014_guide_interop/data/interop_front.html), rather than the installation instructions in this guide.

2.3.3 Virtual Machine Support

You can install components of your Messenger system in virtual environments where a software program enables one physical server to function as if it were two or more physical servers. The following virtualization software is supported:

- Xen virtualization on SUSE Linux Enterprise Server 10, or Xen virtualization on SUSE Linux Enterprise Server 11
- VMware GSX Server, an enterprise-class virtual infrastructure for x86-based servers
- VMware ESX Server, a data-center-class virtual infrastructure for mission-critical environments

For more information, see the VMware website (http://www.vmware.com).

2.3.4 Support for Mobile Workspace Solutions

The Novell Messenger client runs successfully when used with mobile workspace solutions such as Citrix and Terminal Services, provided that the solution is using a supported operating system. For information about which operating systems are supported, see Section 2.1, "Messenger System Requirements," on page 9.

3 Installing a Novell Messenger System

The following sections present the background information and installation instructions you need to successfully implement your Novell Messenger system.

3.1 Planning Your Novell Messenger System

The Messenger Installation program helps you install and set up your Messenger system. The Installation program also provides information to guide you through the process.

Review the following sections while filling out . The worksheet lists all the information you are prompted for as you run the Installation program.

3.1.1 Determining Installation Locations

The Installation program prompts you for information about the eDirectory tree where you will create Messenger objects and the network server locations where you will create Messenger directories and install files. The following sections prepare you to supply the required information:

eDirectory

Messenger is administered through the eDirectory directory service. All Messenger components and users are configured through objects in eDirectory. Ensure that you have eDirectory installed in your environment. See for more information.

Extending the eDirectory Tree's Schema

The Installation program must extend the schema of the eDirectory tree where you plan to create your Messenger system. Because all objects in a Messenger system must reside in the same eDirectory tree, only one tree needs to be extended.

ConsoleOne

Messenger administration is performed through ConsoleOne. When you install Messenger, the Messenger snap-in files are copied into an existing ConsoleOne installation. The Messenger snap-in files extend the functionality of ConsoleOne to let you administer Messenger. ConsoleOne considerations differ by platform:

- **Windows:** For a Messenger system on Windows, you need to decide which ConsoleOne location you want to use to administer Messenger. This can be a ConsoleOne location on a network server or it can be on a local workstation. ConsoleOne 1.3.6 is included in the downloaded *Novell Messenger 3.0* image, so you can update your ConsoleOne installation if necessary. If you plan to use ConsoleOne on a local workstation, you need to perform the Messenger installation from that workstation.

- **Linux:** If you will be administering a Messenger system on Linux, ConsoleOne must be installed before you set up Messenger. ConsoleOne 1.3.6 is included in the downloaded *Novell Messenger 3.0* image, so you can update your ConsoleOne installation if necessary. If you plan to use ConsoleOne on a local workstation, you need to perform the Messenger installation from that workstation. Ensure that ConsoleOne is installed on the Linux server where you plan to create your Messenger system.

After your initial Messenger installation, you can install ConsoleOne and the Messenger snap-in to additional locations as needed.

3.1.2 Planning Your Novell Messenger System

Your Novell Messenger system is a collection of eDirectory objects to which the Messenger agents need access. In addition, the Messenger agents need access to all User objects that will be included in your Messenger system. The following sections help you decide how to implement your Messenger system in eDirectory:

- "Messenger System Location" on page 15
- "Messenger User Locations" on page 15
- "eDirectory Access and Authentication" on page 16
- "Messenger System Security" on page 17

Messenger System Location

You can create your Messenger system in any context in your eDirectory tree, except at the root of the tree. Within the Messenger system container you will have server, agent, policy, scope profile, LDAP profile, host, and chat objects.

The default name of the object that represents your Messenger system is MessengerService. The default object name for the server where you install the Messenger agents is the server's DNS hostname with SERVER appended to it. You can change these object names, if necessary.

WORKSHEET

Under Item 5: Messenger System Context, specify the eDirectory context where you want to create your Messenger system. Ensure that the context exists in your eDirectory tree.

Under Item 6: Messenger System Objects, provide alternate names for the Messenger system and server objects if you do not want to use the default names.

After you have completed the installation of your Messenger system, the following structure is created in eDirectory:

Figure 3-1   *Messenger Service Container and Contents*
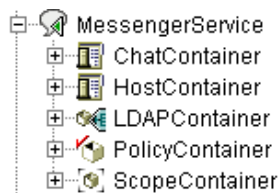
These objects are explained in "Understanding Your Novell Messenger System" in the *Novell Messenger 3.0 Administration Guide*.

Messenger User Locations

The Messenger agents scan eDirectory to obtain information about users. During installation, you can specify one or more eDirectory contexts where User objects are located. You can include subcontexts if necessary. The list of contexts you supply establishes the initial scope of your Messenger system.

User objects located in those contexts are considered part of your Messenger system and their associated users can communicate with each other by using the Messenger client. User objects located outside those contexts are not considered part of your Messenger system and their associated users cannot use Messenger.

NOTE: GroupWise External Entity objects are not treated as User objects and are not considered part of your Messenger system.

Under Item 11: User Configuration, list the eDirectory contexts where User objects are located and mark whether you want to include subcontexts.

On Linux, you cannot automatically include subcontexts during installation. You must list each subcontext separately or use ConsoleOne after installation to include subcontexts, as described in "Editing the Default Scope Profile to Include Additional eDirectory Users" in "Managing Messenger Client Users" in the *Novell Messenger 3.0 Administration Guide*.

Using the information you provide during installation, the Installation program creates a Scope Profile object in your Messenger system. When you view the properties of this object in the tree, you see the contexts you specified during installation. You can change the scope of your Messenger system as needed after installation, as described in "Adding Users to Your Messenger System" in "Managing Messenger Client Users" in the *Novell Messenger 3.0 Administration Guide*.

eDirectory Access and Authentication

Messenger is a directory-based application. Messenger agent configuration information, user information, and settings are stored in eDirectory. You can choose between two different methods of eDirectory access:

- **Direct Access:** The Messenger agents can log directly into eDirectory to obtain the information they need. An advantage of direct access is fast access to a local eDirectory replica.

- **LDAP Access:** The Messenger agents can be configured to access eDirectory through an LDAP server.

Under Item 9: Directory Access, mark whether you want the Messenger agents to use direct access or LDAP access to eDirectory.

If you are installing the Messenger agents on a Windows or Linux server, specify the IP address of an eDirectory replica. You can use only an IPV4 IP address for the eDirectory replica.

If you want to use LDAP access, specify the hostname and port number where the Messenger agents can communicate with the LDAP server. The default port number is 389 for non-SSL and 636 for SSL.

The initial eDirectory access method that you set up during installation determines how Messenger agents access eDirectory to obtain their configuration information and 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. Additional directory access alternatives can be configured after installation, as described in "Customizing eDirectory Access for Users" in the *Novell Messenger 3.0 Administration Guide*.

During installation, you must provide an eDirectory user name and password for the Messenger agents to use when accessing eDirectory. The simplest approach is to let them log in as an Admin equivalent user.

If you do not want to let the Messenger agents log in to eDirectory as an Admin equivalent user, you must set up an eDirectory user that meets these specific requirements:

- Must be visible to the Messenger agents using the eDirectory access method you have selected (direct or LDAP).

- Must be a trustee of your Messenger system object (MessengerService, by default) and have the following rights as a trustee in order to access the Messenger agent objects:

Property	Rights
[All Attribute Rights]	- Compare, Read, and Write - Inheritable
[Entry Rights]	- Browse, Create, Rename, and Delete - Inheritable

- Must be a trustee of the eDirectory tree object or of the highest-level container object that contains all User objects that will be part of your Messenger system, and have the following rights as a trustee in order to access User objects:

Property	Rights
[All Attribute Rights]	- Compare and Read - Inheritable
[Entry Rights]	- Browse - Inheritable
nnmBlocking nnmBlockingAllowList nnmBlockingDenyList nnmClientSettings nnmContactList nnmCustomStatusList nnmLastLogin	- Compare, Read, and Write - Inheritable

Without sufficient rights to the Messenger system object, the Messenger agents cannot access their configuration information in eDirectory. Without sufficient rights to User objects, the Messaging Agent cannot access users' contact lists, Messenger client settings, and other user-specific information.

WORKSHEET

Under Item 10: Directory Authentication, supply the user name and password that the Messenger agents can use to authenticate to eDirectory with the required rights.

For step-by-step instructions on setting up the required rights, see "Assigning Required Rights for eDirectory Access" in "Managing Messenger Client Users" in the *Novell Messenger 3.0 Administration Guide*.

Messenger System Security

- "Securing Communication between Messenger and eDirectory" on page 18
- "Securing Messenger Internal Communication" on page 18

Securing Communication between Messenger and eDirectory

By default, communication between the Messenger agents and eDirectory is not secure. Information obtained from eDirectory is not encrypted.

If you want to enable SSL encryption between the Messenger agents and eDirectory, you must use LDAP access, not direct access, to eDirectory. The Messenger agents must communicate with the LDAP server on the LDAP SSL port of 636, rather than on the default LDAP port of 389.

For additional security between the Messenger agents and eDirectory when using LDAP access, you can reference the root certificate for the server where the eDirectory replica accessed by the agents is located. Typically, the root certificate is named `rootcert.der`. On a Linux or Windows server, it is exported to a user-specified location after installation of eDirectory.

IMPORTANT: If you do not specify a root certificate, your LDAP server must be configured to accept clear text passwords.

Root certificates can be exported from ConsoleOne or iManager at any time after eDirectory is installed. For information about how to export a root certificate from iManager, see Exporting a Trusted Root or Public Key Certificate (https://www.netiq.com/documentation/edir88/crtadmin88/data/a2ebopb.html#a2ebopd) in the *NetIQ Certificate Server Administration Guide (https://www.netiq.com/documentation/edir88/crtadmin88/data/bookinfo.html)*.

WORKSHEET

Under Item 9: Directory Access, specify 636 as the LDAP port number and, if desired, provide the full path to the root certificate.

Securing Messenger Internal Communication

Internal communication in Messenger can either use an internal certificate, or an external certificate. If you decide to use an internal certificate, Messenger will create the certificate file and its private key for you. If you want to use an external certificate and private key, they must be available on your Messenger server.

WORKSHEET

Under Item 15: Security Configuration, specify the full path to the certificate file, your private key file (if separate from the certificate file), and the private key password.

If you want to move from internal certificates to external certificate or update your external certificates, follow the steps in "Configuring Messaging Security with SSL Encryption" in "Managing the Messaging Agent" in the *Novell Messenger 3.0 Administration Guide*.

3.1.3 Planning the Novell Messenger Agents

Your Novell Messenger system can include two agents:

- **Messaging Agent:** Your Messenger system requires one Messaging Agent. The Messenger client communicates with the Messaging Agent for messaging, presence, and searching for users to add to the Messenger Contact List. The Messaging Agent also manages the queue for archiving conversations.

- **Archive Agent:** If you want to enable archiving, your Messenger system requires one Archive Agent. The Archive Agent archives conversations, indexes conversations, and performs searches on the archive when contacted by an authorized Messenger user.

The following sections prepare you to supply the information required when installing the Messenger agents. Depending on the operating system you are installing to, some of these options might not apply:

- "Agent Platform" on page 19
- "Agent Software Location" on page 19
- "Agent Network Address and Ports" on page 19
- "Clustering Option for the Messenger Agents" on page 20
- "Linux Agent High Availability" on page 20
- "Windows Server Options for the Windows Messenger Agents" on page 21

Agent Platform

The agents are available as Linux executables and Windows executables.

WORKSHEET

Under Item 1: Server Information, mark the type of agents (Linux or Windows) that you want to install.

Agent Software Location

On Windows, you can specify where you want to install the Messenger agents. By default, they are installed to `drive:\novell\nm` where *drive* represents a mapped drive letter from the perspective of the Windows machine where you will run the Messenger Installation program.

On Linux, the Messenger agents are always installed to the `bin` and `lib` subdirectories of `/opt/novell/messenger`.

WORKSHEET

Under Item 3: Installation Path, specify the full path to the directory where you want to install the Windows Messenger agent software. If the directory does not exist, it will be created.

Agent Network Address and Ports

The Messenger Installation program obtains the IP address and DNS hostname of the server where you want to install the Messenger agents based on the agent software location you provide. If the server has multiple IP addresses and DNS hostnames associated with it, you can specify different information from what the Installation program obtained automatically.

In addition to the IP address and DNS hostname information, the Installation program also establishes the ports on which the Messenger agents listen for service requests. By default, the Messaging Agent listens for the Messenger client on client/server port 8300, meaning that conversations take place on port 8300. By default, the Archive Agent listens for the Messenger client on client/server port 8310, meaning that archive searches take place on port 8310. If a default port number is already in use on the server, select a different port number.

If you are using IPV6 for your Messenger agents, you must use the DNS hostname instead of the IP address for the agents.

WORKSHEET

Under Item 12: Server Address, list the IP address or DNS hostname of the server where you want to install the Messenger agents. If the default port numbers are in use on the server, specify unique port numbers for the Messenger agents.

Clustering Option for the Messenger Agents

Novell Cluster Services is a server clustering system that ensures high availability and manageability of critical network resources, including applications (such as the Messaging Agent and the Archive Agent) and volumes (where the Messenger queues and archive reside). Novell Cluster Services supports failover, failback, and migration of individually managed cluster resources. Novell Cluster Services is only available for OES Linux.

The Messenger agents can be configured to take advantage of the fault-tolerant environment provided by Novell Cluster Services. The Installation program adds a /cluster switch to the Messenger agent startup files. This tells the Messenger agents to use the cluster virtual server name rather than the specific server name in path names obtained from the Agent object properties in eDirectory or from startup switches.

In addition to Novell Cluster Services, Messenger also supports PolyServe and Heartbeat clusters. For additional information on how to install and configure PolyServe and Heartbeat clusters, see the *GroupWise 2014 Interoperability Guide* (https://www.novell.com/documentation/groupwise2014/ gw2014_guide_interop/data/interop_front.html).

WORKSHEET

Under Item 13: Configure Agents for Clustering, mark whether you want to configure the Messenger agents for clustering.

For more information on clustering Messenger, see the *GroupWise 2014 Interoperability Guide* (https://www.novell.com/documentation/groupwise2014/gw2014_guide_interop/data/ interop_front.html).

Linux Agent High Availability

The GroupWise High Availability service makes sure that if the Messaging Agent or the Archiving Agent goes down for any reason, it starts again automatically. On Windows, Microsoft Clustering Services automatically restarts a service that is not responding. On Linux, Novell Cluster Services does not include this capability, so it is built into the Novell Messenger Linux agents.

The GroupWise High Availability service (gwha) must be installed from the downloaded from the GroupWise image that you are running. After the gwha service has been installed, it starts when your server boots and makes sure that the Messaging Agent and the Archiving Agent are running. If it detects that one of these agents is no longer running, it immediately issues the command to start it. The High Availability service uses the GroupWise Monitor Agent to periodically check the status of the agents that it is responsible for restarting. For instructions on how to set up the High Availability service, see Section 3.2.4, "Setting Up the High Availability Service," on page 32. For information on configuring Monitor for the Novell Messaging agents, see "Monitoring Messaging Agent Status" in the *Novell Messenger 3.0 Administration Guide*.

Windows Server Options for the Windows Messenger Agents

You can run the Windows Messenger agents as Windows applications or as Windows services. When you run the agents as Windows services, they can run under a specific Windows user account, or they can run under the local system account, with no user name or password required. As with all Windows services, you can start the agents manually or have them start automatically each time the Windows server starts.

WORKSHEET

Under Item 2: Windows Server Options, select *Install Agents as Windows Services* if you want to run the Messenger agents as Windows services.

If you will run the agents as Windows services, under Item 8: Windows Service Options, record the account that the agents will run under (unless they will run under the local system account) and, if necessary, the password for the account. Also select whether you want the service to start automatically or manually.

If you want to use an SNMP manager program (such as the Management and Monitoring Services component of Novell ZENworks for Servers) to monitor the Windows Messenger agents, you must install some SNMP components along with the Windows Messenger agent software.

WORKSHEET

Under Item 2: Windows Server Options, select *Install and Configure SNMP for Novell Messenger Agents* if you want to use an SNMP manager program.

If this option is dimmed during installation, the SNMP service has not been set up on the Windows server where you are installing the Messenger agents. If you want to monitor the agents from an SNMP management program, the SNMP service must be enabled so that you can select this option. For information about setting up SNMP on a Windows server, see "Using SNMP Monitoring Programs" in "Managing the Messaging Agent" in the *Novell Messenger 3.0 Administration Guide*.

3.2 Installing and Setting Up Your Novell Messenger System

You should have already reviewed Section 3.1, "Planning Your Novell Messenger System," on page 13 and filled out the worksheet. The following sections guide you through the installation process:

- Section 3.2.1, "Installation Prerequisites," on page 22
- Section 3.2.2, "Installing and Setting Up a Messenger System on Windows," on page 22
- Section 3.2.3, "Installing and Setting Up a Messenger System on Linux," on page 27
- Section 3.2.4, "Setting Up the High Availability Service," on page 32
- Section 3.2.5, "Setting Up Non-root Access on an NSS Volume on Novell Open Enterprise Server Linux," on page 33

3.2.1 Installation Prerequisites

Before starting the Messenger Installation program, ensure that your system has been prepared for the Messenger system configuration for which you have planned. In addition to this list, ensure that the server requirements have been met.

  ◆ Ensure that the container object exists where you want to create your Messenger system.

  ◆ If you are planning to have the Messenger agents use LDAP access to eDirectory but you are not providing a root certificate, ensure that your LDAP server supports clear text passwords. In ConsoleOne, check the properties of the LDAP Group object that your LDAP server is a part of. Depending on your version of eDirectory, the *Allow Clear Text Passwords* option should be selected or the *Require SSL/TSL* option should be deselected.

  ◆ If you are planning to install the Windows Messenger agents as Windows services and you do not want them to run under the local system account, ensure that the account you want them to use has been created on the Windows server.

  ◆ If you are running the Messenger Installation program at a Windows workstation or server, ensure that you are logged in as an Admin equivalent to the eDirectory tree where you are planning to create your Messenger system. If you are installing the Messaging agents on a Windows server, you should run the Installation program at that server.

Follow the setup instructions for the platform where you are creating your Messenger system:

  ◆ Section 3.2.2, "Installing and Setting Up a Messenger System on Windows," on page 22
  ◆ Section 3.2.3, "Installing and Setting Up a Messenger System on Linux," on page 27

3.2.2 Installing and Setting Up a Messenger System on Windows

  ◆ "Installing ConsoleOne on Windows" on page 22
  ◆ "Starting the Messenger Installation Program" on page 22
  ◆ "Creating Your Messenger System" on page 23
  ◆ "Installing the Messenger Software" on page 27

Installing ConsoleOne on Windows

If ConsoleOne is not already installed on the Windows server where you plan to install Messenger, you need to install it.

1 At a Windows workstation or server, download the `consoleone.zip` file from the Novell Customer Center (NCC) (https://www.novell.com/center).

2 Unzip the `consoleone.zip` file on your Windows workstation or server.

3 In the `ConsoleOne` directory, run the *install.exe* file and complete the installation wizard.

4 Continue with Starting the Messenger Installation Program.

Starting the Messenger Installation Program

1 At a Windows workstation or server, download the *Novell Messenger 3.0* image.

2 In the `server` directory, run the `setup.exe` file to start the installation program.

3 Select the language in which you want to run the Installation program, then click *OK*.

4 Click *Yes* to accept the License Agreement.

5 Continue with Creating Your Messenger System.

Creating Your Messenger System

The Installation Options page lets you select what type of installation you want to perform.

Throughout the installation process, you can refer to the *Installation Guide* by clicking *Installation Guide* in the lower-left corner of each Installation program page.

Figure 3-2   *Installation Options Dialog Box*
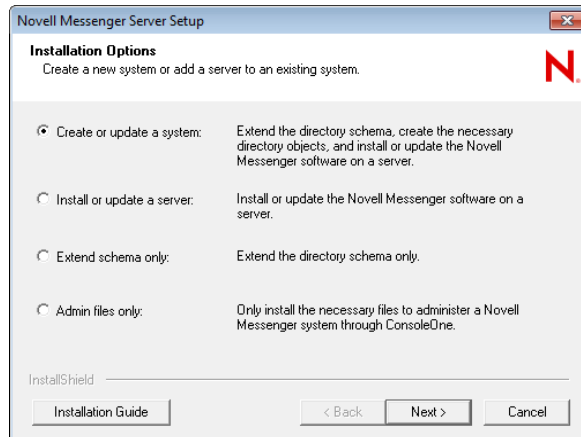
1 Select *Create* or *Update a System*, then click *Next* to display the Installation Path page.
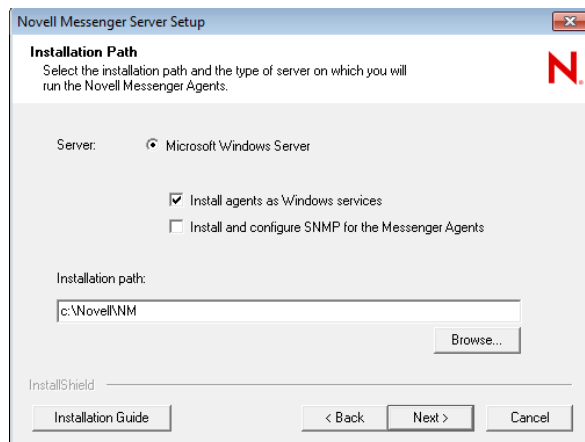
2 Specify the directory path or browse to and select the directory where you want to install the Messenger agents as planned under item 3 of the worksheet, then click *Next* to display the System Configuration page.
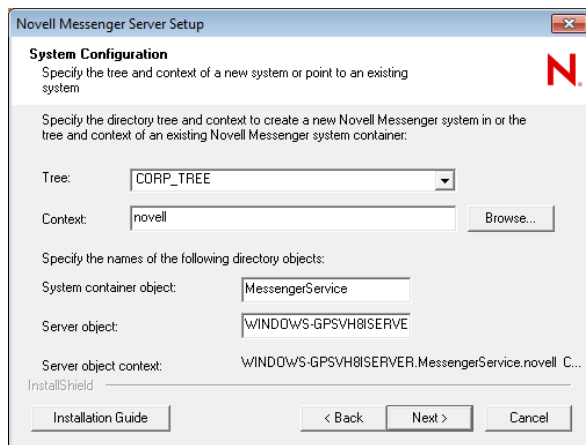
3 Provide the Messenger system configuration information as planned under item 4 through item 6 of the worksheet, then click *Next* to display the Installation Components page.
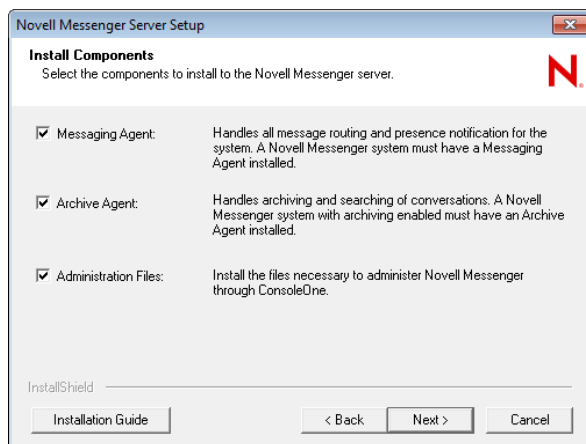
4 Leave all the components selected for your initial Messenger installation, then click *Next*.

If you are installing the Windows Messenger agents and selected to install them as Windows services, the Windows Service Options page appears.
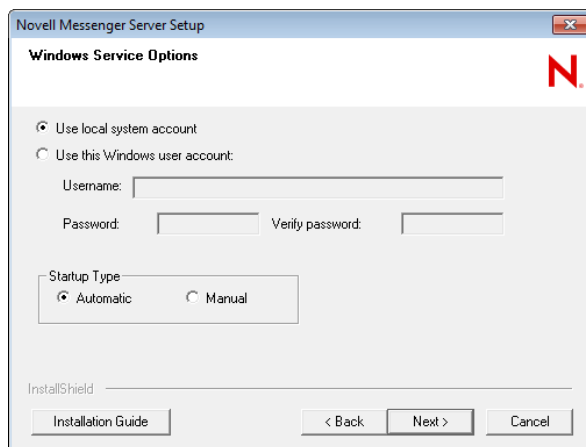
5 For the Windows Messenger agents, provide the Windows service information as planned under item 8 of the worksheet, then click *Next* to display the Directory Access page.
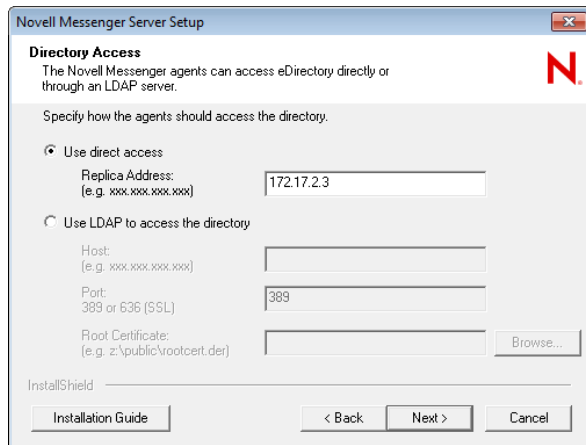
6 Provide the eDirectory access information as planned under item 9 of the worksheet, then click *Next* to display the Directory Authentication page.
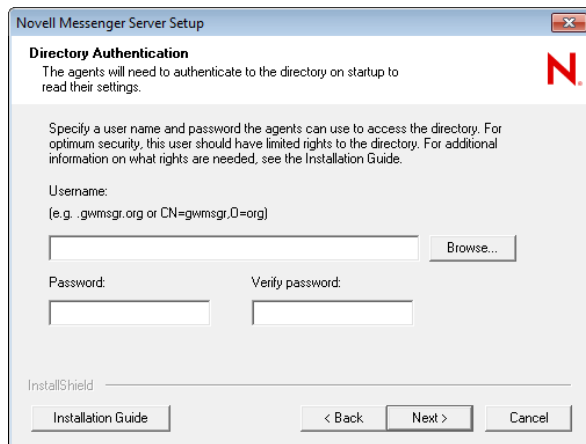
7 Provide the eDirectory authentication information as planned under item 10 of the worksheet, then click *Next* to display the User Configuration page.
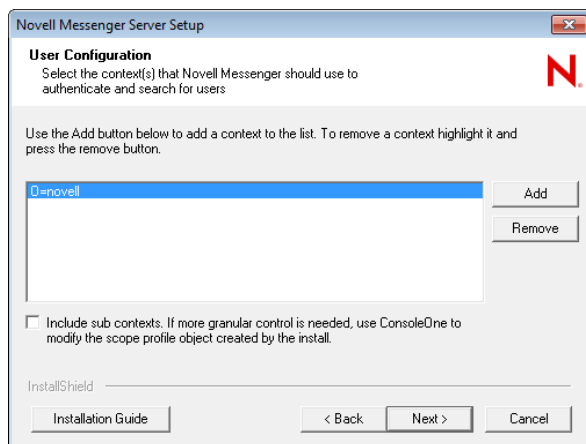
The context of the eDirectory user is automatically added to the context list.

8 If necessary, click *Add*, then browse to and select another user context as planned under item 11 of the worksheet.
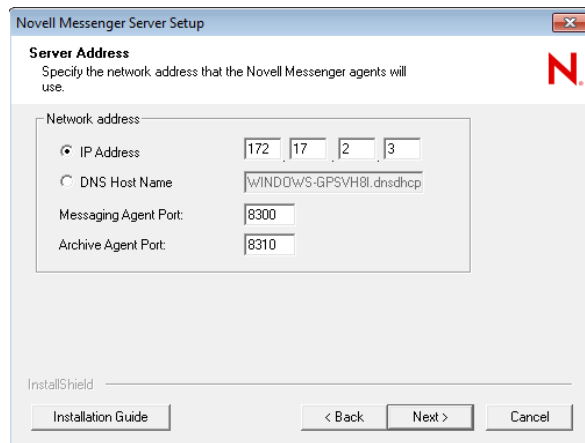
9 Select *Include subcontexts* if User objects exist in nested container objects beneath the selected context.

IMPORTANT: If you do not select *Include subcontexts*, User objects in containers beneath the selected context are not considered part of your Messenger system.
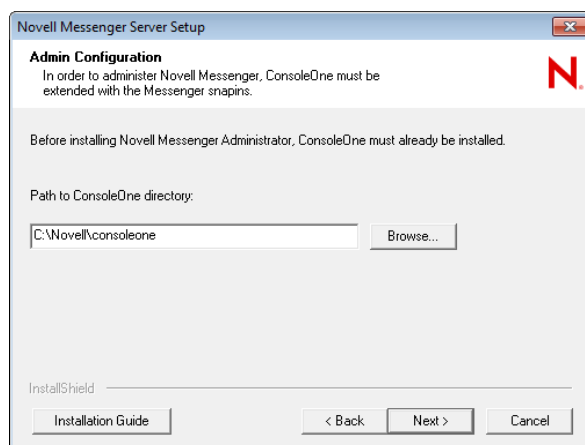
10 Click *OK* to add the context to the contact list.

11 Repeat Step 8 through Step 10 for each context where User objects reside, then click *Next* to display the Server Address page.

12 Verify the IP address or DNS hostname of the server where the agents will run, and the port number that each agent will use as planned under item 12 of the worksheet.

If you are using IPV6 for the agents, you must us the DNS hostname instead of the IP address.

13 Click *Next* to display the Security Configuration page.

14 Check the box to input your own certificates. If you do not import your own certificates, Messenger will create an internal SSL certificate.

15 Verify the path to ConsoleOne.

16 Click *Next*.

17 If you are installing Messenger in a cluster, see the appropriate section of the *GroupWise 2014 Interoperability Guide* (https://www.novell.com/documentation/groupwise2014/gw2014_guide_interop/data/interop_front.html) for additional instructions.

18 Specify if you want to allow product improvement to collect and send information to Micro Focus.

19 Continue with "Installing the Messenger Software" on page 27.

Installing the Messenger Software

The installation summary lets you review the information you have provided before the installation actually begins.

Figure 3-3 *Installation Summary Dialog Box*
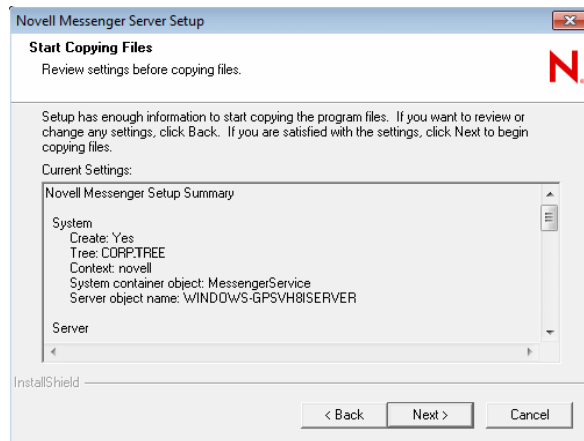
1 Review the summary of the selections you have made.

If necessary, click *Back* to change information as needed before proceeding with the installation.

2 Click *Next* to begin the installation.

When the installation is complete, you can choose to view the Readme or start the Messenger agents immediately.

3 Select the post-installation options you want, then click *Finish*.

4 Continue with Section 3.4, "What's Next," on page 35.

3.2.3 Installing and Setting Up a Messenger System on Linux

- ◆ "Installing ConsoleOne on Linux" on page 27
- ◆ "Starting the Messenger Installation Program on Linux" on page 28
- ◆ "Configuring Your Messenger System on Linux" on page 28
- ◆ "Configuring the Linux Messenger Agents for SSL" on page 30
- ◆ "Starting the Linux Messenger Agents" on page 31

Installing ConsoleOne on Linux

If ConsoleOne is not already installed on the Linux server where you plan to install Messenger, you need to install it.

1 At a Linux server, download the `consoleone.tar.gz` file from the Novell Customer Center (https://www.novell.com/center).

2 Untar the `consoleone.tar.gz` file on your Linux server.

3 In a terminal window, become root by entering `su -` and the root password.

4 Change to the `consoleone/Linux` subdirectory of the software image.

5 Check to see if an older version of ConsoleOne is already installed on the Linux server:

```
ls /usr/ConsoleOne
```

6 (Conditional) If the ConsoleOne directory exists, uninstall ConsoleOne:

```
./c1-uninstall
```

7 Install ConsoleOne:

```
./c1-install
```

8 Enter the numbers for the languages that you want to install.

9 Enter `3` to install the LDAP snap-in.

10 When asked whether to install the IBM JRE, select *Yes*.

11 Continue with Starting the Messenger Installation Program on Linux.

Starting the Messenger Installation Program on Linux

1 At the Linux server, become `root` by entering `su` and the root password.

2 Change to the `/server` directory on the downloaded *Messenger 3.0* image.

3 Ensure that the `install.sh` file has execute permissions. If it does not, enter `chmod +x install.sh`.

4 Enter the following:

```
./install.sh
```

5 Press Enter to continue and display the license agreement.

6 Press Enter or the Spacebar to scroll through the license agreement. At the end of the license agreement, enter `y` to accept the agreement, or enter `n` to not accept the license agreement.

7 If you accept the license agreement, the necessary `.rpm` files are installed to the server. Enter `y` to continue with the installation.

8 Continue with Configuring Your Messenger System on Linux.

Configuring Your Messenger System on Linux

1 After the packages are installed, enter `y` to configure the Messenger system.

The following options are displayed:

1) Create a new system
2) Install a new server to an existing system
3) Extend schema only

2 Enter `1` to create a new system.

If you are installing from a support pack file:

Enter `Y` when asked *Are you installing to a cluster? (y/n)*. For additional clustering configuration steps, see the *GroupWise 2014 Interoperability Guide* (https://www.novell.com/documentation/groupwise2014/gw2014_guide_interop/data/interop_front.html).

The following options are displayed:

1) Use LDAP to access eDirectory
2) Use eDirectory libraries for direct access

3 Enter `1` or `2` (worksheet item 9).

If 32-bit eDirectory is not installed on the Linux server, only the option for using LDAP is displayed.

4 If you selected LDAP in Step 3, specify the following information:

- The IP address of the LDAP server.
- `y` or `n` to select whether to use SSL.
- The port of the LDAP server (worksheet item 9).
- If you select to use SSL, you next need to enter the path to the LDAP server's root certificate (worksheet item 15). For more information, see "Messenger System Security" on page 17.

or

If you selected direct access, specify the name of the eDirectory tree to extend and create objects in, and the replica address for that tree (IP address of the server running eDirectory) (worksheet item 9).

5 Specify the context to create the objects in, for example, ou=linuxsystem,o=novell (worksheet item 5).

6 Specify the Messenger system object name (worksheet item 6).

You can press Enter to accept the default name of MessengerService.

7 Specify the Messenger server object name (worksheet item 6).

You can press Enter to accept the default name, which is the Linux server name plus the word *server*.

8 Specify the full context of the directory user object that will be used to extend the schema and create the objects. For example, cn=admin,ou-linuxsystem,o=novell.

This user must have rights to extend the schema and create objects in eDirectory. This user is not saved to disk and is deleted from memory after the installation.

9 Specify the full context of the directory user object that will be used by the agents to access the directory. For example, cn=admin,ou=linuxsystem,o=novell (worksheet item 10).

For more information, see "eDirectory Access and Authentication" on page 16.

10 Enter the password for this user twice (worksheet item 10).

11 Specify the default contexts where Messenger will authenticate and search for users. For example, ou=linuxsystem,o=novell (worksheet item 11).

For more information, see "Messenger User Locations" on page 15.

12 Specify the IP address of the Linux server (worksheet item 12).

13 Specify `y` or `n` to select whether to use your own SSL certificate or to use a Messenger created certificate.

If you select `y`, specify the path to the server's root certificate and the path to the server's root certificate key, then enter the password for the server's root certificate.

If you select `n`, Messenger will automatically configure the certificate for you. You need to enter the host name or IP address that users will use to connect to Messenger and the certificate path for the server.

14 Enter a non-`root` system user for the Messenger service to run as.

You can press Enter to accept the default name of nvlmsgr.

If you are installing to an NSS volume, select `root` as the default user. For additional information on configuring Novell Messenger for an NSS volume, see Section 3.2.5, "Setting Up Non-root Access on an NSS Volume on Novell Open Enterprise Server Linux," on page 33.

15 Specify if you want to allow product improvement to collect and send information to Micro Focus.

A summary of the information you supplied is displayed.

16 Enter `y` to continue with the installation.

17 After the installation and configuration are complete, enter `n` to not start the agents at this time.

18 Continue with Configuring the Linux Messenger Agents for SSL.

Configuring the Linux Messenger Agents for SSL

The Messenger Cross-Platform client requires an SSL connection with the Messenger agents. If you are not already familiar with SSL, or if SSL is not already set up on your system, you can add SSL security to your Messenger system, as described in "Configuring Messaging Security with SSL Encryption" in "Managing the Messaging Agent" in the *Novell Messenger 3.0 Administration Guide*.

NOTE: The Messenger Windows client does not require an SSL connection with the Messenger agents.

The required SSL connection is most easily configured in ConsoleOne. On Linux, ConsoleOne does not automatically authenticate to any eDirectory trees when it starts, so the NDS object is not immediately expandable.

Figure 3-4 *ConsoleOne on Linux*
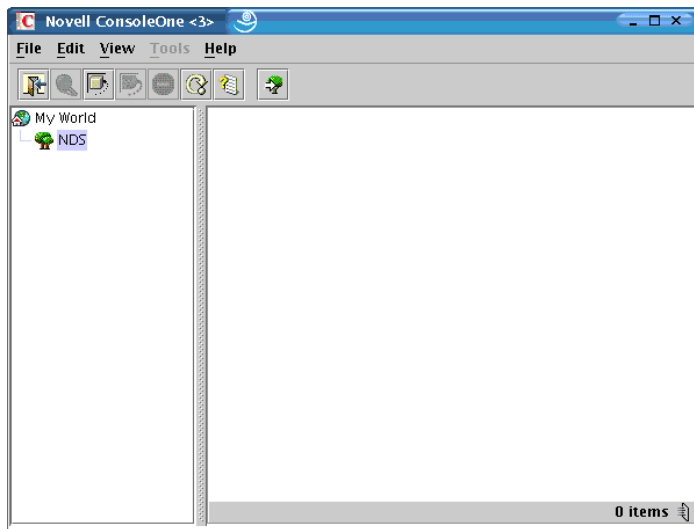
1 In ConsoleOne, select *NDS*, then click *File* > *Authenticate*.

2 Fill in the following fields:

Login Name: Provide a NetIQ eDirectory user name that has rights to modify eDirectory objects.

Password: Provide the password for the user name.

Tree: Type or select the eDirectory tree where you created your Messenger system.

If the eDirectory tree is located on a Windows server, you might need to specify the IP address of the server instead of the tree name.

Context: Provide the full context of the User object associated with the user name you provided.

3 Click *Login*.

4 Under the NDS object, select the tree where you created your Messenger system.

5 Browse to and right-click the Server object in your Messenger system, then click *Properties*.

6 Click *Server > Security*.
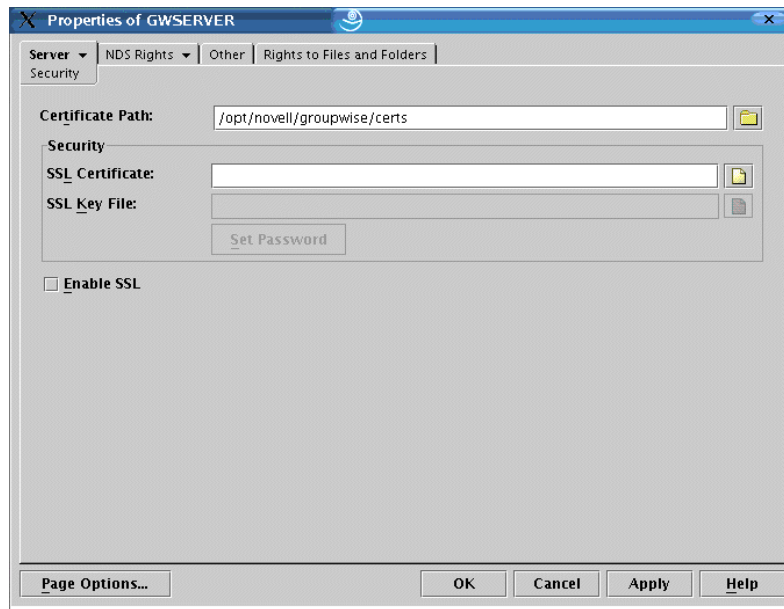
7 Fill in the fields (worksheet item 15).

8 Click *OK* to save the security settings.

9 Continue with Starting the Linux Messenger Agents.

Starting the Linux Messenger Agents

To start the agents manually, use the startup scripts 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
```

4 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 browser, as described in "Using the Messaging Agent Web Console" in "Managing the Messaging Agent" in the *Novell Messenger 3.0 Administration Guide*.

For additional agent startup alternatives, see "Starting the Messaging Agent" and "Starting the Archive Agent" in the *Novell Messenger 3.0 Administration Guide*.

5 Skip to Section 3.4, "What's Next," on page 35.

3.2.4 Setting Up the High Availability Service

The High Availability service uses the GroupWise Monitor Agent to periodically check the status of the agents that it is responsible for restarting. For information on configuring Monitor for the GroupWise Messaging agents, see "Monitoring the Messaging Agent" in the *Novell Messenger 3.0 Administration Guide*.

1 Become root by entering `su` and the root password.

2 Copy the `novell-groupwise-gwha` RPM file to your local drive.

3 From the location that you copied the novell-groupwise-gwha rpm, enter the following command to install the gwha service:

```
rpm -Uvf novell-groupwise-gwha-7.0.xxxxxxxx.i386.rpm
```

4 Modify the GroupWise High Availability service file (gwha):

4a Change to the `/etc/xinetd.d` directory.

4b Edit the gwha file in a text editor.

4c In the `port =` field, specify a unique port number, for example 8303.

4d Save the file, then exit the text editor.

5 If you use SSL, you need to modify the High Availability service configuration file.

5a Change to the `/etc/opt/novell/groupwise` directory.

5b Edit the `gwha.conf` file in a text editor.

5c Under the [gwha] section, fill in the fields as follows:

```
[gwha]
ssl      = yes
key      = filename.key
cert     = filename.crt
password = password
```

5d Save the file, then exit the text editor.

6 Enable the High Availability service:

6a In YaST, click *Network Services > Network Services (inetd)*.

6b If necessary, select *Enable* to activate the list of services.

6c Scroll down to the gwha line, select it, then click *Toggle Status* (On or Off) to change the status to On.

6d Click *Finish*.

7 Start the agents as daemons.

7a Change to the `/etc/init.d` directory.

7b Enter the following commands to start the Messaging Agent and the Archiving Agent:

```
./novell-nmma start
./novell-nmaa start
```

7c If the agents started correctly, a message displays indicating "Done."

8 Create a new user and associated password on your Linux server to represent the High Availability service.

You might name it gwha.

9 Test your configuration of the High Availability service.

NOTE: If you configured the High Availability service for SSL, you cannot use a telnet session to test it. The connection will be refused. You can try to test it by killing the PID for the Agents and watch for Monitor to restart the Agents.

9a Telnet into the High Availability server.

For example, on the Linux server where you have configured the High Availability service, you could use the following command:

```
telnet localhost port_number
```

Use the unique port number you specified in Step 4c.

9b Specify the user name and password that you set up in Step 8.

If telnet returns 000 Ok, then the gwha service is configured correctly.

9c To exit the telnet session, press Ctrl+].

3.2.5 Setting Up Non-root Access on an NSS Volume on Novell Open Enterprise Server Linux

When the Novell Messenger agents are located on a Novell Open Enterprise Server (OES) Linux NSS volume, you must create an eDirectory user for the agents to run as, and you must LUM-enable that user. On OES Linux, you can use Novell iManager to accomplish these tasks.

After you have installed the agents on OES Linux, you need to configure the agents to switch users after startup and provide access to an NSS volume.

- "Creating an eDirectory User" on page 33
- "Enabling a LUM User" on page 33
- "Configuring Novell Messenger for the NSS Volume" on page 34

Creating an eDirectory User

You might want to create a new user specifically for the Novell Messenger service, perhaps named novellmsgr.

1 On the Open Enterprise Server Welcome page in your browser, expand Network Management, then click *iManager 2.5.x*.

2 In the *iManager Links* box, click *Open Novell iManager 2.5*.

3 To log in to iManager, specify a user name, a password, and a tree.

4 In the left pane, expand *Users*, then click *Create User*.

5 Provide the required information, then click *OK*.

The user does not need a password.

Enabling a LUM User

To LUM-enable the user you just created:

1 In the left pane, expand *Linux User Management*, then click *Enable User for LUM*.

2 Browse to and select the user you just created, then click *OK*.

3 Browse to and select a primary group for the LUM user.

4 Select */bin/false* as the desired shell (because the LUM user does not need a shell), then click *OK*.

Configuring Novell Messenger for the NSS Volume

After you have finished LUM-enabling the eDirectory user, you need to set the user as the default user for the Novell Messenger service. In addition, you need to change the store path, queue path, and log path to be on the NSS volume.

- ◆ "Changing the Service User" on page 34
- ◆ "Changing the Store Path" on page 34
- ◆ "Changing the Messenger Agent Queue Path" on page 34
- ◆ "Changing the Archive Agent Queue Path" on page 34
- ◆ "Changing the Messenger Agent Log Path" on page 35
- ◆ "Changing the Archive Agent Log Path" on page 35
- ◆ "Granting Access to the LUM-Enabled User" on page 35

Changing the Service User

1 In a terminal window, enter the following command:

```
cd /etc/opt/novell/messenger
```

2 Using a text editor, edit the `uid.conf` file, remove `root` as the user, and add the LUM-enabled user.

Changing the Store Path

1 In ConsoleOne, log in to the eDirectory tree containing your Novell Messenger service.

2 Browse to the File Module object, right-click it, then select *Properties*.

The File Module object is located at *eDirectory Tree > Messenger Service > Messenger server > Archive Agent > File Module*.

3 Change the *Store Path* to the NSS volume, then click *OK*.

Changing the Messenger Agent Queue Path

1 In ConsoleOne, log in to the eDirectory tree containing your Novell Messenger service.

2 Browse to the Messenger Agent object, right-click it, then select *Properties*.

3 Change the *Queue Path* to the NSS volume, then click *OK*.

Changing the Archive Agent Queue Path

1 In ConsoleOne, log in to the eDirectory tree containing your Novell Messenger service.

2 Browse to the Archive Agent object, right-click it, then select *Properties*.

3 Change the *Queue Path* to the NSS volume, then click *OK*.

Changing the Messenger Agent Log Path

1 In ConsoleOne, log in to the eDirectory tree containing your Novell Messenger service.

2 Browse to the Messenger Agent object, right-click it, then select *Properties*.

3 Change the *Log Path* to the NSS volume, then click *OK*.

Changing the Archive Agent Log Path

1 In ConsoleOne, log in to the eDirectory tree containing your Novell Messenger service.

2 Browse to the Archive Agent object, right-click it, then select *Properties*.

3 Change the *Log Path* to the NSS volume, then click *OK*.

Granting Access to the LUM-Enabled User

The new LUM-enabled user must have rights to the store, queue, and log paths on the NSS volumes.

In a terminal window, use the following command to grant the user the required rights to the directories that the agents need to access on the local server:

```
rights -f /directory -r rwcemf trustee user.context.tree
```

When you have finished changing the rights to the directories, you must stop and then start the agents.

3.3 Monitoring Novell Messenger with GroupWise Monitor

Novell GroupWise Monitor is a monitoring and management tool that allows you to monitor GroupWise agents and Novell Messenger agents from any location where you are connected to the Internet and have access to a browser. Some agent administration can also be performed from your browser. For information on how to install and configure GroupWise Monitor, see "Planning GroupWise Monitor" in the *GroupWise 2014 Installation Guide* "Installing GroupWise Monitor" in the *GroupWise 8 Installation Guide*.

3.4 What's Next

After you have created your Messenger system and installed the Messenger software, you are ready to continue with the following configuration and administration tasks that are covered in the *Novell Messenger 3.0 Administration Guide*:

◆ Set up corporate-level conversation archiving. See "Enabling and Managing Archiving."

◆ Add SSL encryption to the Messaging Agent's connections with Novell Messenger clients. See "Configuring Messaging Security with SSL Encryption" in "Managing the Messaging Agent."

◆ Add SSL encryption to the Messaging Agent's eDirectory access, if you didn't set it up during installation. See "Using LDAP Access for the Messaging Agent" in "Managing the Messaging Agent."

◆ Provide customized LDAP authentication for Novell Messenger users. See "Customizing eDirectory Access for Users" in "Managing Messenger Client Users."

- Customize the functionality of the Novell Messenger client. See "Setting User Policies" in "Managing Messenger Client Users."

- Decide how to most efficiently distribute the Novell Messenger client software to users. See "Distributing the Messenger Client Software" in "Managing Messenger Client Users."

3.5 Novell Messenger Worksheet

The Novell Messenger Installation program helps you create your Messenger system and install the Messenger software. The Installation program prompts you for the information in the worksheet. Print the worksheet and fill in the information for your Messenger system before you start the Messenger Installation program.

Depending on the operating system you are installing to, some of these options might not apply.

Item	Explanation
1) Server Information ◆ Linux ◆ Microsoft Windows Server	Select the platform where you plan to install and run the Messenger agents. See "Agent Platform" on page 19.
2) Windows Server Options ◆ Install agents as Windows services ◆ Install and configure SNMP for Novell Messenger Agents	For a Windows server, specify the server options you plan to use. See "Windows Server Options for the Windows Messenger Agents" on page 21.
3) Installation Path	Specify a new directory path or browse to and select an existing directory where you plan to install the Windows agent software. If the directory does not exist, it will be created. If you are installing to Linux, the agents are always installed to /opt/novell/messenger/bin. See "Agent Software Location" on page 19.
4) Tree Name	Select the eDirectory tree where you want to create your Messenger system. Because Messenger introduces new objects into the tree, the schema must be extended. See "eDirectory" on page 13.
5) Messenger System Context	Browse to and select the context where you want to create the Messenger system container and objects. Ensure the context exists. See "eDirectory" on page 13.
6) Messenger System Objects ◆ MessengerService ◆ *server_name*SERVER	If you do not want to use the default Messenger object names, specify different object names as needed. See "eDirectory" on page 13.

Item	Explanation

7) Install Components
 	
    ◆ Messaging Agent
    ◆ Archive Agent
    ◆ Administrative Files
	For your initial installation, leave all components selected.

8) Windows Service Options
 	
    ◆ Use local system account
    ◆ Use this Windows user account:
    User Name:
    Password:
    ◆ Startup:
    Automatic
    Manual
	If you are installing the Windows Messenger agents as Windows services, provide the required service configuration information.
	
	See "Windows Server Options for the Windows Messenger Agents" on page 21.

9) Directory Access
 	
    ◆ Use direct access
    Replica IP address:
    (Windows only)
    ◆ Use LDAP to access the directory
    Host:
    Port:
    Root certificate:
	Select how you want the Messenger agents to access eDirectory and provide the information required for the selected access method.
	
	See "eDirectory Access and Authentication" on page 16.

10) Directory Authentication
 	
    ◆ User Name:
    ◆ Password:
	Provide the user name and password that will enable the Messenger agents to access eDirectory.
	
	See "eDirectory Access and Authentication" on page 16.

11) User Configuration
 	
    ◆ Contexts:
    ◆ Include Subcontexts?
	List the eDirectory contexts where User objects are located that you want to include in your Messenger system.
	
	See "Messenger User Locations" on page 15.

12) Server Address
 	
    ◆ IP Address or DNS hostname:
    ◆ Messaging Agent Port:
    (default=8300)
    ◆ Archive Agent Port:
    (default=8310)
	Specify the IP address or DNS hostname of the server where the Messenger agents will run. If you are using an IPV6 IP address, you must use the DNS hostname for the server instead of the IP address. If the default port numbers are already in use on the server, specify unique port numbers for the Messenger agents.
	
	See "Agent Network Address and Ports" on page 19.

13) Configure Agents for Clustering?
 	
    ◆ Yes
    ◆ No
	Mark whether or not you want to configure the Messenger agents for use with Novell Cluster Services.
	
	See "Clustering Option for the Messenger Agents" on page 20.

Item	Explanation
14) Admin Configuration ◆ Update ConsoleOne? ◆ Path to ConsoleOne Directory:	Specify the path to a ConsoleOne location (version 1.3.4 or later), either on the local workstation or on a network server. The Messenger Installation program installs the Messenger snap-in files in the specified location. See "ConsoleOne" on page 14.
15) Security Configuration ◆ Internal or External Certificate? ◆ Certificate file: Key file: Key password:	Choose whether you are going to use internal or external certificates for Messenger. If external, specify the certificate file, key file, and key password. See "Messenger System Security" on page 17.

4 Installing the Messenger Client

The Novell Messenger client can be easily installed from the Messenger client download page. After installation, it is easy to start the Messenger client from your desktop. Administrators can employ more automated installation methods if necessary.

- Section 4.1, "Downloading and Installing the Messenger Client from Your Web Browser," on page 39
- Section 4.2, "Starting the Messenger Client," on page 40
- Section 4.3, "Additional Client Installation Methods," on page 41

4.1 Downloading and Installing the Messenger Client from Your Web Browser

After you create your Messenger system, you can use the Novell Messenger Download page to install the Messenger client software.

1 Ensure you have installed the Messenger system. See Section 3.2, "Installing and Setting Up Your Novell Messenger System," on page 21.

2 Ensure you have started the Messaging Agent.

3 In your browser, enter the IP address of the Novell Messenger Download page.

This is the IP address and port of the Messaging Agent. By default, the Messaging Agent port is 8300. For example, if you installed to a server with an IP address of 172.16.5.18, the Novell Messenger download page would be http://172.16.5.18:8300.

The following download page displays:

    4 Follow the instructions to download and install the client.

    5 Skip to .

4.2   Starting the Messenger Client

    ◆
    ◆
    ◆

For the Windows Client

    1 Double-click the Messenger client icon on your Windows desktop.

    2 Specify your user name and password, then click *Advanced*.

    3 Specify the IP address and port number of your Novell Messenger server, then click *OK*.

    If you do not know the IP address or port number for your Novell Messenger server, contact your system administrator.

For the Linux Cross-Platform Client

1 Click the Novell Messenger icon on your Linux desktop.

2 Specify your user name and password, then click *Advanced*.

3 Specify the IP address and port number of your Novell Messenger server, then click *OK*.

If you do not know the IP address or port number for your Novell Messenger server, contact your system administrator.

For the Mac Cross-Platform Client

1 Click the Novell Messenger icon on your Mac desktop.

2 Specify your user name and password, then click *Advanced*.

3 Specify the IP address and port number of your Novell Messenger server, then click *OK*.

If you do not know the IP address or port number for your Novell Messenger server, contact your system administrator.

4.3 Additional Client Installation Methods

Other Messenger client installation methods, which require additional setup and configuration, include the following. These installation methods might not apply to all operating systems.

- "Configuring Your Web Server to Download the Messenger Client"
- "Using ZENworks Configuration Management to Distribute the Messenger Windows Client"
- "Using Red Carpet on Linux to Distribute the Cross-Platform Messenger Client Software"

These client installation alternatives are described in "Distributing the Messenger Client Software" in "Managing Messenger Client Users" in the *Novell Messenger 3.0 Administration Guide*.

5 Updates

5.1 What's New in Novell Messenger 3.0

Novell Messenger 3.0 provides the following key improvements over prior releases of Novell Messenger:

- **Mobile Applications:** Novell Messenger 3.0 provides native applications for iOS and Android devices. For more information, see "Using Novell Messenger on Your Mobile Device" in the *Novell Messenger 3.0 Client User Guide*.

  For information about the administrative tasks associated with Messenger mobile applications, see "Managing Messenger Mobile Applications" in the *Novell Messenger 3.0 Administration Guide*.

- **Simultaneous Client Connections:** Novell Messenger 3.0 allows you to maintain simultaneous connections to your Messenger client from multiple workstations or devices. For example, you can be connected to Messenger on your workstation, and then connect to Messenger from a mobile device without being logged out of Messenger on your workstation.

  For more information about this feature, see "Limiting Physical Access to Client Workstations" in "Securing Novell Messenger" in the *Novell Messenger 3.0 Administration Guide*.

- **Updated Clients (Look and Feel):** Novell Messenger 3.0 provides an updated look and feel for both the Windows and Linux/Mac client interfaces.

The Messenger 3.0 release also contains the following changes:

- **Removal of NetWare support:** With Messenger 3.0 and later, NetWare is no longer supported.
- **ConsoleOne download option:** GroupWise 2014 no longer requires ConsoleOne, and therefore it is not included in the GroupWise distribution. If you have not already installed ConsoleOne, it is available with the Messenger distribution.

5.2 Understanding the Update Process

You can update Novell Messenger *2.x* to Novell Messenger 3.0.

Before you begin updating your Novell Messenger system to Novell Messenger 3.0, you should review the following sections. These sections, which describe the process to follow when updating, help you plan and implement a successful update strategy:

5.2.1 Extending the NetIQ eDirectory Schema

Novell Messenger 3.0 includes new functionality that requires you to extend the schema of any NetIQ eDirectory trees where you have Novell Messenger objects. The Novell Messenger Setup automatically extends the schema for any trees you select.

5.2.2 Installing the Novell Messenger Software

The Novell Messenger 3.0 software requirements are different from previous Novell Messenger software requirements. To review the requirements, see Section 2.1, "Messenger System Requirements," on page 9.

ConsoleOne

Novell Messenger 3.0 is administered through ConsoleOne, using the version listed in Section 2.1, "Messenger System Requirements," on page 9. You can use the same version of ConsoleOne to administer earlier Novell Messenger components in your GroupWise system.

IMPORTANT: Earlier versions of ConsoleOne should not be used to administer Novell Messenger 3.0 objects.

If you do not already have it installed, ConsoleOne is available to install in the Messenger download file. Install it before starting to install Novell Messenger.

5.2.3 Updating the Novell Messenger Client

After you have updated the version of your agents, users can run the Novell Messenger 3.0 Windows client or Cross-Platform client on workstations listed in Section 2.2, "Messenger Client Workstation Requirements," on page 10. If necessary, they can also continue to run their older Novell Messenger clients, but they will not have Novell Messenger 3.0 functionality.

For a list of new features in the Novell Messenger 3.0 client, see Section 5.1, "What's New in Novell Messenger 3.0," on page 43.

5.2.4 Updating the Novell Messenger Agents

To update the Novell Messenger Agents, you need to run the setup program. For information on running the setup program, see Chapter 3, "Installing a Novell Messenger System," on page 13.

6 Migration

This section is designed for those who are moving existing Messenger 3.0 agents to Linux.

NOTE: If you have Messenger 2.x, review Section 5.2.4, "Updating the Novell Messenger Agents," on page 44 to acquaint yourself with the issues involved in updating from one version of Messenger to another. You should update your Messenger system to Messenger 3.0 before migrating to Linux.

- Section 6.1, "Migrating eDirectory to Linux," on page 45
- Section 6.2, "Moving Messenger Agents to Linux," on page 45
- Section 6.3, "Copying System Data," on page 48
- Section 6.4, "ConsoleOne Verification," on page 51

6.1 Migrating eDirectory to Linux

As part of the migration process, you might want to migrate eDirectory to Linux. Step-by-step instructions for migrating eDirectory to Linux are beyond the scope of this *Messenger Installation Guide*, but the following documentation can provide assistance:

- If you are migrating to OES Linux, review *Consolidating Data to OES Linux* and *Migrating Data from NetWare Servers* in the *Novell Server Consolidation and Migration Toolkit Administration Guide* (http://www.novell.com/documentation/scmt/index.html).
- For situations not covered in the above guide, the eDirectory migration process includes installing eDirectory on Linux, creating an eDirectory replica on one or more Linux servers, and ultimately making one of the Linux replicas the master replica so that you can phase out the replicas on other platforms. For guidance, see the documentation for your version of eDirectory:
    - eDirectory 8.8 (https://www.netiq.com/documentation/edir88/)

6.2 Moving Messenger Agents to Linux

Moving the Messenger Agents to Linux includes installing the agents to the Linux server, copying the data stores, and providing updated configuration information in ConsoleOne.

- Section 6.2.1, "Making a Windows Server Visible from Linux," on page 45
- Section 6.2.2, "Copying the Startup Files," on page 46
- Section 6.2.3, "Client/Server SSL Certificates," on page 46
- Section 6.2.4, "Trusted Root Certificates," on page 47
- Section 6.2.5, "Installing the Messenger Agents on Linux," on page 47
- Section 6.2.6, "Enabling Messenger Agent Monitoring on Linux," on page 48

6.2.1 Making a Windows Server Visible from Linux

To make a Windows server visible from Linux, you mount the directory you need access to as a Linux file system:

```
mount -t smbfs //Windows_server_name/sharename
                /Linux_mount_location/mount_point_directory
                -o username=Windows_username
```

To use this command, the WINS protocol must be functioning properly on your network. The specified Windows user must have sufficient rights to access the Messenger directories.

6.2.2 Copying the Startup Files

If you have made changes to the default startup files for Messenger, you need to copy the files to the Linux server before you install the Messenger system on Linux.

1 Copy the Messaging Agent and Archive Agent startup files to the default Linux location.

The default startup files are located in the following areas:

Windows:	`C:\novell\NM\`*`agent`*`\startup.`*`xx`*
Linux:	`/etc/opt/novell/messenger/strtup.`*`xx`*

2 From a terminal window on Linux, use the dos2unix program to convert the startup files to UNIX format by using the following commands:

```
dos2unix /etc/opt/novell/messenger/strtup.ma
```

```
dos2unix /etc/opt/novell/messenger/strtup.aa
```

3 Make the following edits to the startup files:

- Remove all paths from the startup files so they use the Linux default paths.

  or

  Change the paths to the correct location on Linux to use custom paths.
- Change the IP address or hostname to the IP address or hostname of the Linux server.
- Change the path to any certificates to the Linux path.
- If you have made any other custom changes to your startup file, adjust those changes for the Linux paths.

6.2.3 Client/Server SSL Certificates

If the Linux server has a different IP address than the Windows server, you need to generate new certificates. If the Linux server has the same IP address as the Windows server, you can copy the SSL certificates to the Linux server. When you copy the certificates to the Linux server, ensure that you copy the certificates to the path you specified in the startup files.

For instructions on how to create new SSL certificates, see "Configuring the Linux Messenger Agents for SSL" on page 30.

6.2.4 Trusted Root Certificates

If you want to use LDAP SSL to connect to your target eDirectory, a copy of the target directory's replica's trusted root certificate must be made available to the Messenger installation program.

If you previously used LDAP SSL with Messenger, a copy of the replica's trusted root certificate should exist at `c:\novell\nm\certs` for Windows. You need to be able to browse to this location from the Linux server. To do this, you must mount the Windows server. For information on how to create a mount to a Windows server, see Section 6.2.1, "Making a Windows Server Visible from Linux," on page 45.

If the certificate does not exist, you can export a trusted root certificate by performing the following steps, which require the eDirectory ConsoleOne snap-ins:

1 From the Linux server, run ConsoleOne and connect to the eDirectory replica server.

2 Browse to the LDAP Server object in the tree, right-click the LDAP Server object, then select *Properties*.

3 Click the *SSL/TLS Configuration* tab. The certificate name is displayed in the *Server Certificate* field.

4 In the ConsoleOne tree, browse to the certificate that was displayed in the *Server Certificate* field.

5 Right-click the certificate, then select *Properties*.

6 Click the *Certificate* tab, then select *Trusted Root Certificate*.

7 Click *Export*.

8 Select *No* to not export the private key, then click *Next*.

9 Select *File in binary DER format*.

10 Specify the location and file name to save the certificate as, then click *Next*.

11 Click *Finish* to export the trusted root certificate.

During the Messenger installation, you need to specify the path to the trusted root certificate to use LDAP SSL.

6.2.5 Installing the Messenger Agents on Linux

Before you can migrate your Messenger Agents to Linux, you must first install a Messenger system on Linux. During the configuration process of this installation, the startup files that you copied to the Linux server are read and the information from the startup files is included in the installation. For information on how to install a Messenger system on Linux, see Section 3.2.3, "Installing and Setting Up a Messenger System on Linux," on page 27.

If you use direct mode to access eDirectory, you must have eDirectory installed before you install the Messenger system.

When you have finished installing your Messenger system on Linux, do not start the agents. If you have already started your Messenger Agents, you can stop them by performing the following steps:

1 At the Linux server, become `root` by entering `su` and the root password.

2 Change to the `/etc/init.d` directory.

3 To stop the Messaging Agent, enter the following command:

```
./novell-nmma stop
```

4 To stop the Archive Agent, enter the following command:

```
./novell-nmaa stop
```

6.2.6 Enabling Messenger Agent Monitoring on Linux

There is no user interface for the Linux Messenger Agents. To monitor the Messenger agents and perform manual logging and archiving actions, you need to enable the Web Console for both the Messaging Agent and the Archive Agent. For information on how to enable the Web Console for your Messaging Agent, see "Setting Up the Messaging Agent Web Console" in the *Novell Messenger 3.0 Administration Guide*. For information on how to enable the Web Console for the Archive Agent, see "Using the Archive Agent Web Console and GroupWise Monitor" in the *Novell Messenger 3.0 Administration Guide*.

6.3 Copying System Data

Messenger system data consists of the following:

- **Archive Store:** Messages that have been added to the archive.
- **Archive Indexes:** Archive store indexes that have been created for faster searches.
- **Archive Queue:** Messages that are waiting to be archived.
- **Messaging Queue:** Messages that are waiting to be transferred to the Archive Agent.
- **Agent Logs:** All the log files for the agents.

Before copying your system data from the Windows server to the Linux server, you must first shut down the agents on the server. Before shutting down your system, you might want to send out a system broadcast informing users that the Messenger system will be shut down for a time. In addition, if you are changing the IP address, you might want to include the new IP address of the Linux server in the system broadcast.

- Section 6.3.1, "Copying the Archive Store and Archive Indexes," on page 48
- Section 6.3.2, "Copying the Archive Queue," on page 49
- Section 6.3.3, "Copying the Messaging Queue," on page 49
- Section 6.3.4, "Copying the Archive Agent Log Files," on page 50
- Section 6.3.5, "Copying the Messaging Agent Log Files," on page 50
- Section 6.3.6, "Deleting and Regenerating the Archive Agent Indexes," on page 51

6.3.1 Copying the Archive Store and Archive Indexes

1 From the Windows server, stop the Messaging Agent and Archive Agent.

For information on starting the Messaging Agent, see "Starting the Messaging Agent" in the *Novell Messenger 3.0 Administration Guide*.

For information on starting the Archive Agent, see "Starting the Archive Agent" in the *Novell Messenger 3.0 Administration Guide*.

2 From the Linux server, verify that the Messaging and Archive Agents are stopped. If they are running, stop both agents.

3 From the Linux server, copy the Archive Store and Archive Indexes from the Windows server to the Linux server.

For example, you could use the following command from a terminal window:

```
cp -r /mnt/winserver/C:/Novell/NM/aa/store/ /var/opt/novell/messenger/aa/
```

The following table displays the default store location for each operating system:

Operating System	Default Location
Windows	`C:\Novell\NM\aa\store`
Linux	`/var/opt/novell/messenger/aa/store`

4 If the user that the Messenger agents on the Linux server will run as is not `root`, you need to change the ownership of the files to the Messenger user. To change the ownership of the files, use the following command in a terminal window:

```
chown -R nvlmsgr:nvlmsgr /var/opt/novell/messenger/aa/store
```

6.3.2 Copying the Archive Queue

1 From the Windows server, stop the Messaging Agent and Archive Agent.

2 From the Linux server, verify that the Messaging and Archive Agents are stopped. If they are running, stop both agents.

3 From the Linux server, copy the Archive Queue from the Windows server to the Linux server.

For example, you could use the following command from a terminal window:

```
cp -r /mnt/winserver/C:/Novell/NM/aa/queue /var/opt/novell/messenger/aa/queue
```

The following table displays the default store location for each operating system:

Operating System	Default Location
Windows	`C:\Novell\NM\aa\queue`
Linux	`/var/opt/novell/messenger/aa/queue`

4 If the user that the Messenger agents on the Linux server will run as is not `root`, you need to change the ownership of the files to the Messenger user. To change the ownership of the files, use the following command in a terminal window:

```
chown -R nvlmsgr:nvlmsgr /var/opt/novell/messenger/aa/queue
```

6.3.3 Copying the Messaging Queue

1 From the Windows server, stop the Messaging Agent and Archive Agent.

2 From the Linux server, verify that the Messaging and Archive Agents are stopped. If they are running, stop both agents.

3 From the Linux server, copy the Messaging Queue from the Windows server to the Linux server.

For example, you could use the following command from a terminal window:

```
cp -r /mnt/winserver/C:/Novell/NM/ma/queue /var/opt/novell/messenger/ma/queue
```

The following table displays the default store location for each operating system:

Operating System	Default Location
Windows	`C:\Novell\NM\ma\queue`
Linux	`/var/opt/novell/messenger/ma/queue`

4 If the user that the Messenger agents on the Linux server will run as is not `root`, you need to change the ownership of the files to the Messenger user. To change the ownership of the files, use the following command in a terminal window:

`chown -R nvlmsgr:nvlmsgr /var/opt/novell/messenger/ma/queue`

6.3.4 Copying the Archive Agent Log Files

1 From the Windows server, stop the Messaging Agent and Archive Agent.

2 From the Linux server, verify that the Messaging and Archive Agents are stopped. If they are running, stop both agents.

3 From the Linux server, copy the Archive Agent log files from the Windows server to the Linux server.

For example, you could use the following command from a terminal window:

`cp -r /mnt/winserver/C:/Novell/NM/aa/logs /var/opt/novell/log/messenger/aa`

The following table displays the default store location for each operating system:

Operating System	Default Location
Windows	`C:\Novell\NM\aa\logs`
Linux	`/var/opt/novell/log/messenger/aa`

4 If the user that the Messenger agents on the Linux server will run as is not `root`, you need to change the ownership of the files to the Messenger user. To change the ownership of the files, use the following command in a terminal window:

`chown -R nvlmsgr:nvlmsgr /var/opt/novell/log/messenger/aa`

6.3.5 Copying the Messaging Agent Log Files

1 From the Windows server, stop the Messaging Agent and Archive Agent.

2 From the Linux server, verify that the Messaging and Archive Agents are stopped. If they are running, stop both agents.

3 From the Linux server, copy the Messaging Agent log files from the Windows server to the Linux server.

For example, you could use the following command from a terminal window:

`cp -r /mnt/winserver/C:/Novell/NM/ma/logs /var/opt/novell/log/messenger/ma`

The following table displays the default store location for each operating system:

Operating System	Default Location
Windows	`C:\Novell\NM\ma\logs`
Linux	`/var/opt/novell/log/messenger/ma`

4 If the user that the Messenger agents on the Linux server will run as is not `root`, you need to change the ownership of the files to the Messenger user. To change the ownership of the files, use the following command in a terminal window:

```
chown -R nvlmsgr:nvlmsgr /var/opt/novell/log/messenger/ma
```

6.3.6 Deleting and Regenerating the Archive Agent Indexes

After conducting the migration, ensure that the index files are correct and up to date.

1 From the agent server, start the Messaging Agent and the Archive Agent.

2 Open the Web Console for your Archive Aget.

For information on how to do this, see "Accessing the Messaging Agent Web Console from Your Web Browser" in the *Novell Messenger 3.0 Administration Guide*.

3 Click the *Configuration* tab.

4 Click *Archive Maintenance.*

5 Select *Delete & Regenerate Indexes*, then click *Submit.*

6 Wait for the archive agent to finish deleting and regenerating the indexes.

6.4 ConsoleOne Verification

When you have finished copying the last log files to the Linux server, you should verify that all the paths and IP address are correct for the Messenger objects.

1 In ConsoleOne, log in to your eDirectory tree.

2 Browse to and right-click the Messenger Server object, then click *Properties.*

3 On the *Server Identification* page, verify that the IP address or DNS hostname is correct for the Linux server.

4 Click the *Server* tab, then click *General.*

5 Verify that the software path and work path are correct for the Linux server.

6 Click the *Server* tab, then click *Security.*

7 If you are using Client/Server SSL, verify that the certificate path, SSL certificate, and SSL key are correct for the Linux server.

8 Browse to and right-click the Messaging Agent object, then click *Properties.*

9 On the *Agent Identification* page, verify that the IP address or DNS hostname is correct for the Linux server.

10 Click the *Agent* tab, then click *General.*

11 Verify that the work path is correct for the Linux server.

12 Click the *Agent* tab, then click *Security.*

13 If you are using Client/Server SSL, verify that the certificate path, SSL certificate, and SSL key are correct for the Linux server.

14 Click the *Agent* tab, then click *Log Settings*.

15 Verify that the log file path is correct for the Linux server.

16 Click the *Agent* tab, then click *Messaging*.

17 Verify that the messaging queue path is correct for Linux.

18 Browse to and right-click the Archive Agent object, then click *Properties*.

19 On the *Agent Identification* page, verify that the certificate path, SSL certificate, and SSL key are correct for the Linux server.

20 Click the *Agent* tab, then click *General*.

21 Verify that the work path is correct for the Linux server.

22 Click the *Agent* tab, then click *Security*.

23 If you are using Client/Server SSL, verify that the certificate path, SSL certificate, and SSL key are correct for the Linux server.

24 Click the *Agent* tab, then click *Log Settings*.

25 Verify that the log file path is correct for the Linux server.

26 Click the *Agent* tab, then click *Messaging*.

27 Verify that the queue path is correct for Linux.

28 Browse to and right-click the FileModule object, then click *Properties*.

29 On the *Module Store Settings* page, verify that the store path is correct for Linux.

30 Open the Web Console for your Archive Aget.

For information on how to do this, see "Accessing the Messaging Agent Web Console from Your Web Browser" in the *Novell Messenger 3.0 Administration Guide*.

31 Click the *Configuration* tab.

32 Click *Archive Maintenance*.

33 Select *Delete & Regenerate Indexes*, then click *Submit*.

34 Wait for the archive agent to finish deleting and regenerating the indexes.

When you have verified and made any changes to IP address and paths in ConsoleOne, you can then start the Messaging Agent and Archive Agent on the Linux server.

To start the Messaging Agent, enter the following command from a terminal window:

```
./novell-nmma start
```

To start the Archive Agent, enter the following command from a terminal window:

```
./novell-nmaa start
```

A Third-Party Materials

The following third-party software is included in Novell Messenger 3.0:

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