EMC® Legato NetWorker®
Module for Lotus
Release 3.0
Multiplatform Version

INSTALLATION GUIDE
P/N E6-1784-01

Contents

As part of an effort to improve and enhance the performance and capabilities of its product line, EMC from time to time releases revisions of its hardware and software. Therefore, some functions described in this EMC Legato NetWorker Module for Lotus Installation Guide may not be supported by all revisions of the software or hardware currently in use. For the most up-to-date information on product features, refer to your product release notes.

If this product does not function properly, or does not function as described in this installation guide, go to http://softwaresupport.EMC.com.

Audience This guide is part of the NetWorker Module for Lotus (NML) documentation set, and is intended for use by system administrators who are responsible for installing software and maintaining the servers and clients on a network. Operators who monitor the daily backups may also find this manual useful.

Readers of this guide are expected to be familiar with the following functions:

◆ Backup, recovery, and maintenance of a Lotus Notes client
◆ Backup, recovery, and maintenance of a Lotus Domino server
◆ Disaster recovery procedures on a Lotus Domino server

Organization This guide is organized as shown in the following table.

Chapter or Appendix	Describes
Chapter 1, "Introduction"	Overview of NML installation and configuration, an installation roadmap and checklist, and information on updating the NML software.
Chapter 2, "Installation on UNIX and Linux"	Instructions for installing and uninstalling NML software on a supported UNIX or Linux platform.
Chapter 3, "Installation on Windows"	Instructions for installing and uninstalling NML software on a supported Windows platform.
Chapter 4, "Enabling, Registering, and Authorizing the Software"	Information on the evaluation and licensing procedures for NetWorker software.
Appendix A, "Configuration Wizard Registration"	Information on registration of the NML configuration wizard libraries.

Related documentation Documentation related to the use of this product can be found at the EMC Legato website, www.Legato.com, including:

- The NetWorker Module for Lotus release 3.0 documentation set:
  - Administration guide
  - Release notes
  - Command reference guide
- The NetWorker documentation set:
  - Administration guide
  - Installation guide
  - Release notes
  - Command reference guide
- Other EMC documentation:
  - Software compatibility guide
  - UNIX man pages

Conventions used in this guide EMC uses the following conventions for notes and cautions.

Note: A note presents information that is important, but not hazard-related.

⚠ **CAUTION**

A caution contains information essential to avoid data loss or damage to the system or equipment. The caution may apply to hardware or software.

Typographical conventions

EMC uses the following style conventions in this guide:

bold	• User actions (what the user clicks, presses, or selects) • Interface elements (button names, dialog box names) • Names of keys, commands, programs, scripts, applications, utilities, processes, notifications, system calls, services, applications, and utilities in text
italic	• Book titles • New terms in text • Emphasis in text
Courier	• Prompts • System output • Filenames • Pathnames • URLs • Syntax when shown in command line or other examples
Courier, bold	• User entry • Options in command-line syntax
Courier italic	• Arguments in examples of command-line syntax • Variables in examples of screen or file output • Variables in pathnames
<>	Angle brackets for parameter values (variables) supplied by user.
{}	Braces for mandatory values.
[]	Square brackets for optional values.
|	Vertical bar symbol for alternate selections. The bar means or.
...	Ellipsis for nonessential information omitted from the example.

Where to get help   EMC support, product, and licensing information can be obtained as follows.

Technical support
For information about software patches, technical documentation, and support programs:

◆ Customers with an active support agreement, go to:

http://softwaresupport.EMC.com

◆ Customers without an active support agreement, please contact Support Sales and Renewals.

Support sales, renewals, and licensing
◆ For additional information about EMC storage products and services, go to:

http://www.Legato.com/support/contact/index.htm

◆ To license and register this product, go to:

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1. Go to:

http://softwaresupport.EMC.com

2. Navigate to the Product Documentation page.

    • To comment on a particular guide, click the **Comments** link next to the guide's title.
    • To tell us how you prefer to use documentation, click **Document Survey**.

1

Introduction

This installation guide describes how to install and enable the EMC® Legato NetWorker® Module for Lotus (NML) release 3.0 on a supported UNIX, Linux, or Microsoft Windows operating system that is running Lotus Domino or Notes software.

This chapter provides an overview of the NML installation and configuration, an installation roadmap and checklist, and instructions for updating to NML 3.0 from a previous release.

This chapter includes the following sections:

Overview of installation and configuration

The NML software supports the following features that require special installation considerations:

- Lotus backups and restores of Lotus Notes client or Domino server data.
- Use of the NML configuration wizard for configuration of scheduled Lotus backups.

The following sections describe the installation considerations.

Note: The *Software Compatibility Guide* provides details on the specific operating system versions and Lotus Domino and Notes releases that NML supports.

After the installation is complete, the software components must be properly configured to enable the backups and restores. The *NetWorker™ Module for Lotus Administration Guide* provides information on the configuration procedures.

Considerations for Lotus backups and restores

The NML software works with NetWorker software to provide Lotus backups and restores of:

- Lotus Domino server data on UNIX and Linux.
- Lotus Notes client and Domino server data on Windows.

To enable the Lotus backups and restores, the following software must be installed on the Lotus Notes or Domino computer:

- NML software
- NetWorker client software

Note: The NetWorker server software may be installed on the the Lotus Notes or Domino computer.

Considerations for the NML configuration wizard operations

The NML configuration wizard can be used on Solaris (SPARC) or Windows *only* to configure the scheduled Lotus backups that NML supports for NML client computers.

The configuration wizard can be located either on the same computer as the NML software or on a separate Solaris or Windows computer. A single configuration wizard can be used to configure multiple NML client computers.

To enable use of the NML configuration wizard:

◆ The required NML and NetWorker software must be installed on the appropriate computers, as described in "Considerations for Lotus backups and restores" on page 1-2.

Note: The NML software installation *automatically* installs a wizard client-side component (**libnmldc32.***x* on UNIX and Linux, **libnmldc.dll** on Windows) on the NML client computer.

◆ The NetWorker server and client software installed on all hosts (NetWorker server host, Lotus Notes or Domino host, wizard computer) must be release 7.2 or later.

◆ The NetWorker Configuration Wizard release 1.0 (packaged with NetWorker 7.2 or later) must be installed on the Solaris or Windows wizard computer according to the instructions in the *NetWorker Release Supplement.*

Note: For the best results, the configuration wizard should be installed on the same computer as the NetWorker server.

◆ A configuration wizard component (**libnmlwiz.so** on Solaris, **libnmlwiz.dll** on Windows) must be installed separately on the wizard computer according to the instructions in:

  • "How to install on Solaris" on page 2-11
  • "Task 3: Install the NML software on Windows" on page 3-6

◆ The user that runs the wizard must be:

• The root user on Solaris, or in the Administrators group on Windows.

• In the NetWorker Administrators group in the NetWorker server configuration.

The following sections provide information on the NML configuration wizard installation requirements on Solaris and Windows, respectively:

◆ "NML configuration wizard requirements" on page 2-2

◆ "NML configuration wizard requirements" on page 3-2

Installation roadmap

Use the following roadmap when installing the NML software on each Lotus Notes client or Domino server that requires backup and restore services.

1. Review the "Installation checklist" on page 1-5 and verify that you have all the required installation media, pathnames, and license information.

2. Install the NML software according to the instructions in the appropriate chapter:

• Chapter 2, "Installation on UNIX and Linux"

• Chapter 3, "Installation on Windows"

Note: If updating from a previous NML release, follow the instructions in "Updating from a previous release" on page 1-6.

3. Enable and register the NML software according to the instructions in Chapter 4, "Enabling, Registering, and Authorizing the Software".

After the installation is complete, the software components must be properly configured according to the instructions in the *NetWorker Module for Lotus Administration Guide.*

Installation checklist

Review the following checklist to ensure that you have the required materials for the installation procedures.

Installation media

The NML software is distributed in the following formats:

- On the NetWorker Modules CD, which is included in the EMC Information Protection Product Family Media Kit that contains the software and online documentation for related products.

- In the downloadable file of the *evaluation* software, available from the EMC Legato website at www.legato.com.

Pathnames

The following pathnames are required for the installation:

- Path to the NetWorker binaries.

- Path to the Lotus Notes or Domino data directory and Lotus program directories.

License information

One of following might be required after the installation:

- NML temporary evaluation enabler code

- NML license enabler code

Note: NML release 3.0 has separate license enablers for UNIX (including Linux) and Windows platforms, and the license enablers are *not* interchangeable.

Chapter 4, "Enabling, Registering, and Authorizing the Software" provides more information on enablers and licensing.

Updating from a previous release

To update the NML software from a previous release to release 3.0:

1. Verify that NML backups are *not* currently running.

2. If you did *not* rename the following files and want to use them after the software update, make a copy of the files:

   • On UNIX and Linux:

     – nsrnml_remrecov

     – nsrnote

Note: NML 3.0 supports the **nsrnote** script for backwards compatibility only.

   • On Windows:

     – nsrnml_remrecov.bat

3. Uninstall the NML software from the Lotus Notes client or Domino server according to the instructions in the previous release of the *NetWorker Module for Lotus Installation Guide*.

Note: Previous releases of installation guides are available on the documentation website.

4. Install NML release 3.0 on the Lotus Notes client or Domino server according to the instructions for the operating system:

   • Chapter 2, "Installation on UNIX and Linux"

   • Chapter 3, "Installation on Windows"

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Installation on UNIX and Linux

This chapter provides instructions for installing and uninstalling NetWorker Module for Lotus (NML) release 3.0 on a supported AIX, Linux, or Solaris (SPARC) computer.

This chapter includes the following sections:

Installation requirements

Ensure that the installation requirements in the following sections are met:

- "NML requirements" on page 2-2
- "NML configuration wizard requirements" on page 2-2

NML requirements

Ensure that the computer with the NML software is equipped with the following:

- One of the following supported operating systems:
  - AIX
  - Linux (x86)
  - Solaris (SPARC)
- Lotus Domino server release 6.0.1 or later
- NetWorker client release 7.*x* or later

  Note: If you plan to use the NML configuration wizard, NetWorker client release 7.2 or later must be installed.

- For double-byte character set (DBCS) support on Solaris only, the NetWorker software for Solaris Simplified Chinese Locale, LGTOzh

The current *Software Compatibility Guide* provides more information on the supported operating systems, Lotus software, and NetWorker software.

NML configuration wizard requirements

The NML configuration wizard can be used on Solaris (SPARC) or Windows *only* to configure the scheduled Lotus backups that NML supports. "Considerations for the NML configuration wizard operations" on page 1-3 provides more information on the NML configuration wizard.

To enable use of the NML configuration wizard, ensure that the following requirements are met:

- The required NetWorker server and client software is installed:
  - NetWorker server release 7.2 or later on the server computer.
  - NetWorker client release 7.2 or later on the other computers (Lotus Notes or Domino host, wizard computer).

  The *NetWorker Installation Guide* provides details on how to install the NetWorker software.

- The NetWorker Configuration Wizard release 1.0 (packaged with NetWorker 7.2 or later) is installed on the wizard computer.

  Note: For the best results, the configuration wizard should be installed on the same computer as the NetWorker server.

  The *NetWorker, Release 7.2.x, Release Notes* provides details on how to install the wizard.

Files installed during installation

During the NML 3.0 software installation on the Lotus Domino server compute:

- NML binaries, configuration files, and scripts are installed in the same directory as the NetWorker client executables, typically /usr/bin or /usr/sbin:
  - **nsrdocrc** — NML document-level recovery program.
  - **nsrnml_config.template** — Template for the NML configuration file.
  - **nsrnml_remrecov** — Script that allows the NML software to perform a remote recovery from the NetWorker User for Lotus program on Windows.
  - **nsrnotesrc** — NML recovery program.
  - **nsrnotesv** — NML backup program.
- A template for the **nsrnml_remrecov** script (**nsrnml_remrecov.sh**) is typically installed in the /etc directory.
- An NML client-side component for the configuration wizard (**libnmldc32.x**) is typically installed in the /usr/lib/nsr directory.

- NML man pages are installed in the same directory as the NetWorker client man pages, as shown in Table 2-1 on page 2-4.

Table 2-1   NML man pages

Operating system	NML man pages	Default directory
AIX	nsrdocrc.8 nsrnotesrc.8 nsrnotesv.8	/usr/man/man8
Linux	nsrdocrc.1 nsrnotesrc.1 nsrnotesv.1	/usr/share/man/man1
Solaris	nsrdocrc.1m nsrnotesrc.1m nsrnotesv.1m	/usr/share/man/man1m

To complete the installation of the NML configuration wizard on the Solaris wizard computer, the library **libnmlwiz.so** must be installed, typically in the /usr/lib/nsr directory. (The wizard can be located on the Domino server if it is a Solaris computer.)

Installation procedures on UNIX and Linux

To install NML release 3.0 on a UNIX or Linux computer, complete the following tasks:

-
-

Task 1: Access the installation files on UNIX or Linux

Access the installation files from one of the following sources:

From a local CD-ROM

To access the NML installation software from a local CD-ROM:

1. Log in as root on the computer that is running the Lotus Domino server software.

2. Insert and mount the NetWorker Module CD-ROM in the CR-ROM drive:

   mount /dev/*cd_drivename /mount_point*

3. Change to the appropriate directory on the CD-ROM, as shown in Table 2-2 on page 2-5.

Table 2-2   Accessing the correct directory on the local CD-ROM

Operating system	Directory on the local CD-ROM
AIX	/*mount_point*/lotus/aix_32
Linux	/*mount_point*/lotus/linux_x86
Solaris	/*mount_point*/*volume_label*/lotus/solaris_32

Note: The NML installation software for Solaris includes both the NML and configuration wizard packages.

From a remote CD-ROM

To access the NML installation software from a remote CD-ROM:

1. Insert and mount the NetWorker Module CD-ROM in the CD-ROM drive on the remote computer:

   mount /dev/*cd_drivename /mount_point*

2. Mount the CD-ROM on the Lotus Domino server:

   a. Make the CD-ROM on the remote computer exportable through the network file system (NFS).

b. Log in as root on the Lotus Domino server where you want to install the NML software.

c. Create a mount point:

mkdir */tmpmntdir*

d. Mount the remote CD-ROM on the Lotus Domino server by using the **mount** command, as shown in Table 2-3 on page 2-6.

Table 2-3   NFS-mounting the remote CD-ROM

Operating system	Command to mount the remote CD-ROM
AIX	**mount** *remote_host:/mount_point/***lotus/aix_32** */tmpmntdir*
Linux	**mount** *remote_host:/mount_point/***lotus/linux_x86** */tmpmntdir*
Solaris	**mount** *remote_host:/mount_point/volume_label/***lotus/solaris_32** */tmpmntdir*

Note: The NML installation software for Solaris includes both the NML and configuration wizard packages.

3. Change to the mounted directory:

cd */tmpmntdir*

From the EMC Legato website

To access the *evaluation* version of the NML software from the EMC Legato website:

1. At www.legato.com, click the **Download** link.

2. On the Evaluation Software Request page, select **NetWorker Module for Lotus** from the products list and click version 3.0 for the AIX, Linux, or Solaris platform.

3. Complete and submit the Evaluation Request Form with the contact information. An EMC Legato Inside Sales Representative will send you an email with a URL to the NML download file on the EMC Legato FTP site.

4. Log in as root on the computer running the Lotus Domino server software.

5. Create a temporary installation directory in a local file system with sufficient free disk space (8 MB) to contain and extract the downloaded software. For example:

    mkdir /usr/nsr_extract_nml

6. Click the URL received in step 3 to download the NML software to the temporary directory.

7. Go to the temporary installation directory. For example:

    cd /usr/nsr_extract_nml

8. Uncompress the downloaded software file by using the **gunzip** command, as shown in Table 2-4 on page 2-7.

Table 2-4   Uncompressing the downloaded software file

Operating system	Command to uncompress the downloaded software file
AIX	**gunzip nml30_aix_32.tar.gz**
Linux	**gunzip nml30_linux_x86.tar.gz**
Solaris	**gunzip nml30_solaris_32.tar.gz**

9. Extract the NML software from the uncompressed download file by using the **tar** command, as shown in Table 2-5 on page 2-7.

Table 2-5   Extracting the software from the downloaded software file

Operating system	Command to extract the software from the download file
AIX	**tar xvpBf nml30_aix_32.tar**
Linux	**tar xvpBf nml30_linux_x86.tar**
Solaris	**tar xvpBf nml30_solaris_32.tar**

Note: The NML installation software for Solaris includes both the NML and configuration wizard packages.

10. To continue with the installation, go to "Task 2: Install the NML software on UNIX or Linux" on page 2-8.

Task 2: Install the NML software on UNIX or Linux

Once you have accessed the software files, you are ready to begin the installation.

To install NML release 3.0 on a UNIX or Linux computer:

1. Ensure that all the installation requirements have been met, as described in "Installation requirements" on page 2-2.

2. Ensure that you are logged in as the root user on the computer running the Lotus Domino server.

3. Ensure that you are in the correct directory, as described in "Task 1: Access the installation files on UNIX or Linux" on page 2-5.

   Note: If the installation is *not* started from the correct directory, the installation might fail.

4. Install the software by using the instructions in the appropriate section:

   • "How to install on AIX" on page 2-9
   • "How to install on Linux" on page 2-10
   • "How to install on Solaris" on page 2-11

   Note: The configuration wizard library (**libnmldc32.x**) is *automatically* installed on the NML client during the software installation.

5. If the NML client is on AIX or Linux and the NML configuration wizard is on Solaris, ensure that the configuration wizard library is installed on the Solaris computer according to the instructions in "How to install on Solaris" on page 2-11.

6. If the MANPATH environment variable does not include the pathname of the directory that contains the NML man pages, modify the variable to include the correct pathname, to enable access to the man pages with the **man** command.

   The NML man pages are installed in the same location as NetWorker client man pages. For example, if you relocated the NML software to the *relocation_path* directory during the installation on Linux or Solaris, ensure that the MANPATH variable includes the *relocation_path*/share/man pathname.

7. Enable and register the NML software according to the instructions in Chapter 4, "Enabling, Registering, and Authorizing the Software".

8. Ensure that the hostname of the computer running the wizard is included in the file /nsr/res/servers on the NML client (or the servers file is empty). If the servers file is *not* empty, it must also include the hostnames of all the NetWorker servers authorized to back up the NML client. The servers file is a text file, which can be modified by using a text editor.

How to install on AIX

To install NML release 3.0 on an AIX computer running Lotus Domino server software, invoke either the **installp** command-line interface or the **System Management Interface Tool** (**SMIT**) at the shell prompt.

By using installp
To install NML with the **installp** command-line interface:

1. Invoke the command-line interface by entering the following command:

   installp -a -d */dir_pathname* **LGTOnml.rte**

   where */dir_pathname* is the complete pathname of the directory containing the **LGTOnml.rte** package.

2. To verify that the installation was successful, enter the following command:

   lslpp -L all | grep -i lgtonml

   If the **lslpp** command output includes LGTOnml.rte 3.0, the installation was successful.

By using SMIT
To install NML with the **SMIT** program:

1. Start the **SMIT** program by entering the following command:

   smit

2. In the **System Management** list of the main window, select **Software Installation and Maintenance**.

3. In the **Software Installation and Maintenance** list, select **Install and Update Software**.

4. In the **Install and Update Software** list, select **Install and Update from ALL Available Software**.

5. In the **INPUT device/directory for software** field, enter the complete pathname of the directory containing the **LGTOnml.rte** package, and click **OK**.

   Note: Do *not* add the **LGTOnml.rte** package name at the end of the directory pathname.

6. In the **Software to Install** field, enter **LGTOnml.rte**, and click **OK**.

7. When prompted to continue, click **OK**.

8. When the installation is complete, click **Done**.

How to install on Linux

⚠ **CAUTION**

The software must be installed in the same base directory as the NetWorker client software. The software is *relocatable* during the installation on Linux (*except* on Red Hat Linux 8), but *only* to the same relocation path as the NetWorker client. For example, if the NetWorker client software is installed in the /disk1 (nondefault) directory, NML must also be installed in the /disk1 directory.

To install NML release 3.0 on a Linux computer running Lotus Domino server software:

1. Enter one of the following **rpm** commands at the shell prompt:

   • To install the software in the default directory:

   ```
   rpm -i lgtonml-3.0-1.i686.rpm
   ```

   • To relocate the software to the same relocation path as the NetWorker client:

   ```
   rpm -i lgtonml-3.0-1.i686.rpm --relocate
   /usr=NetWorker_base_directory
   ```

2. To verify that the installation was successful, enter the following command:

   ```
   rpm -q -a | grep -i lgtonml
   ```

   If the **rpm** command output includes lgtonml-3.0-1, the installation was successful.

How to install on Solaris

To install *either* NML release 3.0 *or* the NML configuration wizard component or *both* on Solaris, use the appropriate instructions:

- To install NML release 3.0 on a Solaris computer running Lotus Domino server software:

    1. Verify the *basedir* variable setting in the /var/sadm/install/admin/default file. The *basedir* variable in this file can be set to one of three possible values:

        – If *basedir*=default, the software will be installed in the same directory as the NetWorker client software.

        – If *basedir*=ask, you will be prompted for the name of the base directory where the software will be installed.

        – If *basedir*=/*dirpath*, the software will be installed in the /*dirpath* directory. The /*dirpath* must be the pathname of the NetWorker client software base directory, as determined by this **pkgparam** command:

        pkgparam LGTOclnt BASEDIR

    ⚠ **CAUTION**

    The software must be installed in the same base directory as the NetWorker client software. The software is *relocatable* during the installation on Solaris, but *only* to the same relocation path as the NetWorker client. For example, if the NetWorker client software is installed in the /disk1 (nondefault) directory, NML must also be installed in the /disk1 directory.

    2. Install the NML software with the following **pkgadd** command:

        pkgadd -d */dir_pathname* **LGTOnml**

        where /*dir_pathname* is the complete pathname of the directory containing the **LGTOnml** package.

    3. Complete the NML installation, depending on the *basedir* variable setting in the /var/sadm/install/admin/default file:

        – If *basedir*=default in the file, enter **y** when prompted whether to continue the installation.

        The software is installed in the same directory as the NetWorker client software.

– If *basedir*=ask in the file, perform the following:

    a. Enter the result of the **pkgparam LGTOclnt BASEDIR** command when prompted for the pathname of the base directory.

    b. Enter **y** when prompted whether to continue the installation.

The software is installed in the specified base directory.

Note: If an incorrect pathname is entered at the prompt, the installation displays an error and the software is installed in the incorrect directory. In this case:
a. Uninstall the software by entering the **pkgrm LGTOnml** command.
b. Reinstall the software by entering the correct pathname at the first **pkgadd** prompt.

– If *basedir*=*/dir_pathname* in the file, enter **y** when prompted whether to continue the installation.

The software is installed in the specified */dirpath* directory.

Note: If */dirpath* is *not* the base directory where the NetWorker client software is installed, the installation displays an error and the software is installed in the incorrect directory. In this case:
a. Uninstall the software by entering the **pkgrm LGTOnml** command.
b. Correct *basedir*=*/dirpath* in the /var/sadm/install/admin/default file.
c. Reinstall the software.

4. If required, register the configuration wizard libraries, as described in Appendix A, "Configuration Wizard Registration".

• To install the NML configuration wizard component on the Solaris wizard computer, follow steps 1 to 4 (same as for installing NML 3.0 on the Domino server) *except* replace **LGTOnml** with **LGTOnmlwz** in the **pkgadd** and **pkgrm** commands.

For example, in step 2, install the wizard component with the following **pkgadd** command:

```
pkgadd -d /dir_pathname LGTOnmlwz
```

where */dir_pathname* is the complete pathname of the directory containing the **LGTOnmlwz** package.

provides more information about NML support for the configuration wizard.

Uninstall procedures on UNIX and Linux

To uninstall NML release 3.0 on a UNIX or Linux computer, follow the instructions in the appropriate section:

-
-
-

Note: To uninstall a previous release of the NML software, follow the instructions in the appropriate *NetWorker Module for Lotus Installation Guide.*

How to uninstall on AIX

Uninstall NML release 3.0 on AIX by using either the **installp** command or the **SMIT** program.

Using installp To uninstall NML with the **installp** command:

1. Log in as root on the computer that is running the Lotus Domino server software.

2. Enter the following at the command line:

   ```
   installp -u LGTOnml.rte
   ```

Using SMIT To uninstall NML with the **SMIT** program:

1. Log in as root on the computer that is running the Lotus Domino server software.

2. Enter the following at the command line:

   ```
   smit
   ```

3. In the **System Management** list of the main window, select **Software Installation and Maintenance**.

4. In the **Software Installation and Maintenance** list, select **Software Maintenance and Utilities**.

5. In the **Software Maintenance and Utilities** list, select **Remove Installed Software**.

6. In the **Software Name** field, enter **LGTOnml.rte**, and click **OK**.

7. When prompted to continue, click **OK**.

8. When the uninstall is complete, click **Done**.

How to uninstall on Linux

To uninstall NML release 3.0 on Linux:

1. Log in as root on the computer that is running the Lotus Domino server software.

2. Determine the name of the installed NML 3.0 package by entering the following command:

   rpm -q -a | grep -i lgto

3. Uninstall the NML software by entering the following command:

   rpm -e *NML3.0_package_name*

   where *NML3.0_package_name* is the package name obtained in step 2.

How to uninstall on Solaris

To uninstall NML release 3.0 on Solaris:

1. Log in as root on the computer that is running Lotus Domino server software.

2. Enter one or both of the following commands, depending on the packages installed:

   pkgrm LGTOnml
   pkgrm LGTOnmlwz

3. Complete the uninstall according to the *basedir* variable setting in the /var/sadm/install/admin/default file:

   • If *basedir*=default in the file, enter **y** when prompted.

   The software is uninstalled from the directory that contains the NetWorker client software.

- If *basedir*=ask in the file, enter the result of the **pkgparam LGTOnml BASEDIR** command when prompted for the pathname of the base directory.

  The software is uninstalled from the specified base directory.

- If *basedir*=*/dirpath* in the file, enter **y** when prompted.

  The software is uninstalled from the specified */dirpath* directory.

3

Installation on Windows

This chapter provides instructions for installing and uninstalling NetWorker Module for Lotus (NML) release 3.0 on a supported Microsoft Windows 2000 or 2003 computer.

This chapter includes the following sections:

Installation requirements

Ensure that the installation requirements in the following sections are met:

◆ "NML requirements" on page 3-2

◆ "NML configuration wizard requirements" on page 3-2

NML requirements

Ensure that the computer with the NML software is equipped with the following:

◆ A supported Windows operating system

◆ Lotus Notes client or Domino server release 6.0.1 or later

◆ NetWorker client release 7.*x* or later

Note: If you plan to use the NML configuration wizard, NetWorker client release 7.2 or later must be installed.

The current *Software Compatibility Guide* provides more information on the supported operating systems, Lotus software, and NetWorker software.

NML configuration wizard requirements

The NML configuration wizard can be used on Solaris (SPARC) or Windows *only* to configure the scheduled Lotus backups that NML supports. "Considerations for the NML configuration wizard operations" on page 1-3 provides more information on the NML configuration wizard.

To enable use of the NML configuration wizard, ensure that the following requirements are met:

◆ The required NetWorker server and client software is installed:

• NetWorker server release 7.2 or later on the server computer.

• NetWorker client release 7.2 or later on the other computers (Lotus Notes or Domino host, wizard computer).

The *NetWorker Installation Guide* provides details on how to install the NetWorker software.

◆ The NetWorker Configuration Wizard release 1.0 (packaged with NetWorker 7.2 or later) is installed on the wizard computer.

Note: For the best results, the configuration wizard should be installed on the same computer as the NetWorker server.

The *NetWorker, Release 7.2.x, Release Notes* provide details on how to install the wizard.

Files installed during installation

The NML 3.0 software is installed on the Lotus Notes client or Domino server computer in the same directory as the NetWorker client executables, typically one of the following:

◆ *%SystemDrive%*\Program Files\Legato\nsr\bin (NetWorker 7.x default location)

◆ *%SystemDrive%*\Program Files\nsr\bin

During the NML software installation, the following files are installed:

◆ **dgnotes.hlp**, **ugnotes.cnt**, **ugnotes.hlp** — Help files for the NetWorker User for Lotus graphical user interface program.

◆ **libnmldc.dll** — Library for the NML configuration wizard.

◆ **nsrdoclb.dll** — Library for the NML document-level recovery program for Lotus Notes clients.

◆ **nsrdocrc.exe** — NML document-level recovery program.

◆ **nsrnml_config.template** — Template for the NML configuration file.

◆ **nsrnml_remrecov.bat** — Script that allows the NML software to perform a remote recovery from the NetWorker User for Lotus program on Windows.

◆ **nsrnotesrc.exe** — NML recovery program.

◆ **nsrnotesv.exe** — NML backup program.

◆ **nwbml.dll** — Library for the NetWorker User for Lotus program.

◆ **nwbml.exe** — NetWorker User for Lotus graphical user interface program.

To complete the installation of the NML configuration wizard on the Windows wizard computer, the library **libnmlwiz.dll** must be installed. (The wizard can be located on the Notes client or Domino server if it is a Windows computer.)

Installation procedures on Windows

To install NML release 3.0 on a Windows computer, complete the following steps:

Task 1: Uninstall the previous NML software on Windows

To uninstall a previous release of the NML software:

1. Open the directory on the CD-ROM or hard drive from which you installed the previous NML release.

2. Run **setup.exe** to start the NML Setup program.

3. Click **Uninstall**, and click **Next**.

Note: When uninstalling the NML software from a cluster, perform this procedure on each cluster node.

provides instructions on how to remove the document-level recovery feature.

Task 2: Access the installation files on Windows

Access the installation files from one of the following sources:

From a local CD-ROM

To access the NML installation software from a local CD-ROM:

1. Log in as administrator or equivalent on the Lotus Notes client or Domino server.

2. Insert the NetWorker Module CD-ROM into the CD-ROM drive.

3. Select the CD-ROM drive from the File Manager or Windows Explorer.

4. Change to the following directory:

   ```
   lotus\win_x86\networkr
   ```

From a remote CD-ROM

To access the NML installation software from a remote CD-ROM:

1. Insert the NetWorker Module CD-ROM into the CD-ROM drive on a Windows computer located on the network.

2. Mount the CD-ROM drive as a shared network volume.

   The Windows documentation provides instructions on mounting and sharing volumes over a network.

3. Log in as administrator or equivalent on the Lotus Notes client or Domino server.

4. Map a drive to the shared volume created on the remote computer.

5. On the mapped drive, change to the following directory:

   ```
   lotus\win_x86\networkr
   ```

From the EMC Legato website

To access the *evaluation* version of the NML software from the EMC Legato website:

1. At www.legato.com, click the **Download** link.

2. On the Evaluation Software Request page, select **NetWorker Module for Lotus** from the products list and click version 3.0 for the Windows platform.

3. Complete and submit the Evaluation Request Form with the contact information. An EMC Legato Inside Sales Representative will send you an email with a URL to the NML download file on the EMC Legato FTP site.

4. Log in as administrator or equivalent on the Lotus Notes client or Domino server.

5. Create a temporary installation directory in a local file system with sufficient free disk space (8 MB) to contain the downloaded software file. For example:

   mkdir c:\instdir

6. Click the URL received in step 3 to download the NML software file to the temporary directory.

7. Extract the downloaded file to the temporary directory.

8. Change to the networkr directory that was created by extracting the downloaded file.

Task 3: Install the NML software on Windows

Once you have accessed the NML software files, you are ready to begin the installation.

To install NML release 3.0 on a Windows computer running Lotus Notes client or Domino server software:

1. Run the appropriate program from the networkr directory to launch the NML Setup program:

   • If installing from the NetWorker Module CD-ROM, run **setup.exe**.

   • If installing from a file downloaded from the EMC Legato website, run n**ml30_win_x86.exe**.

2. In the **Setup** dialog box, click **Next**.

3. In the **License Agreement** dialog box, scroll down to read the license agreement. If you accept the terms, select the appropriate option and click **Next**.

   The **Setup Type** dialog box appears, as shown in Figure 3-1 on page 3-7.
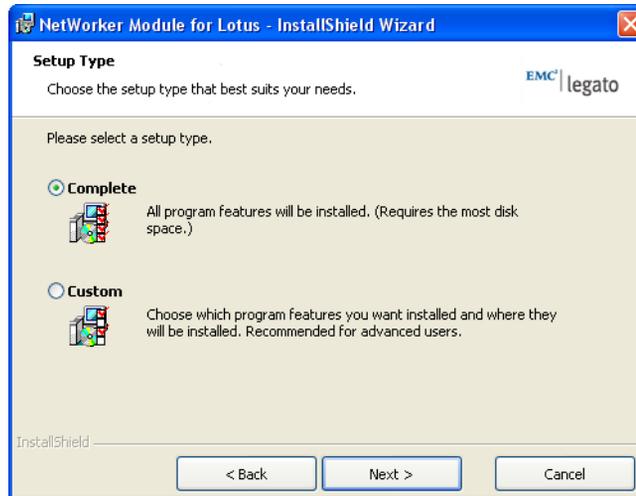
Figure 3-1   Setup Type dialog box

4. In the **Setup Type** dialog box, select one of the following and click **Next**.

    •   **Complete** — Allows you to install both NML and the configuration wizard library.

    •   **Custom** — Allows you to select either NML or the configuration wizard library, or to select both for installation. If you select this option, the **Custom Setup** dialog box appears.

    Note: If you use the **Custom** option to install NML *only,* you can rerun the Setup program later in maintenance mode to install the configuration wizard library by following the instructions in "Maintaining the installation on Windows" on page 3-9.

5. If you selected **Complete** in the previous step, continue to step 6.

    If you selected **Custom** in the previous step, specify each NML component to be installed by clicking each icon and selecting the appropriate menu option. Click **Next**.

For example, to install NML only *without* the configuration wizard library:

a. Click the **NML Module** icon, and select **This feature will be installed on local hard drive**.

b. Click the **NML Configuration Wizard** icon, and select **This feature will not be available**, as shown in .

c. Click **Next**.

⚠️ **CAUTION**

If the NML configuration wizard is located on a separate computer, install NML only on the Lotus Notes client or Domino server. Install the NML configuration wizard component on the computer that contains the wizard.
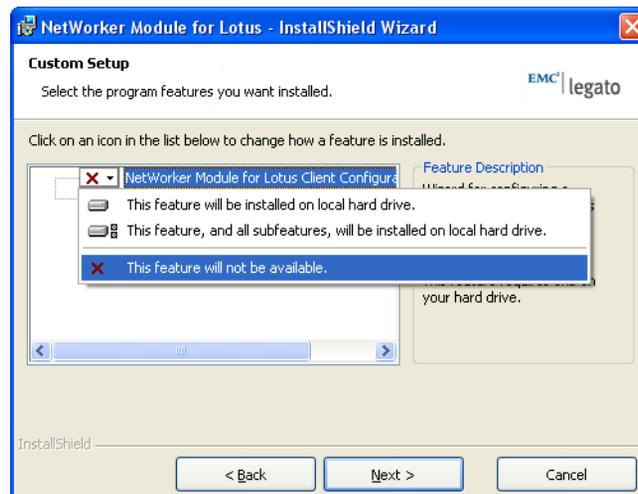
Figure 3-2   Custom Setup dialog box: NML configuration wizard component

6. In the **Ready to Install** dialog box, click **Install**.

The Setup program installs the NML binaries in the same directory as the NetWorker client binaries (the *NetWorker_install_path*\bin directory) by default.

Note: If the Setup program detects *no* NetWorker client binaries, it displays an error message and exits *without* installing the NML software.

7. In the **Completing the NML 3.0 Setup** dialog box, click **Finish** to exit the wizard.

8. Verify that the system PATH environment variable includes the NetWorker client installation directory. If required, add the NetWorker client installation directory to the system PATH variable and reboot the Windows system.

⚠ **CAUTION**

The NetWorker client directory pathname may include spaces. Do *not* include any spaces *before* or *after* the NetWorker client directory pathname in the system PATH environment variable.

9. Enable and register the NML software according to Chapter 4, "Enabling, Registering, and Authorizing the Software".

10. Ensure that the hostname of the computer running the wizard is included in the file *NetWorker_install_path*\res\servers on the NML client (or the servers file is empty). If the servers file is *not* empty, it must also include the hostnames of all the NetWorker servers authorized to back up the NML client. The servers file is a text file, which can be modified by using a text editor.

11. If required, register the configuration wizard libraries, as described in Appendix A, "Configuration Wizard Registration".

Maintaining the installation on Windows

After the NML software is installed, you can run the Setup program in maintenance mode to modify, repair, or remove the existing installation.

How to run the Setup program in maintenance mode

To run the Setup program in maintenance mode:

1. Log in as administrator or equivalent on the Lotus Notes client or Domino server.

2. Change to the directory containing the NML installation files, as described in "Task 2: Access the installation files on Windows" on page 3-4, and run the program that is used to install NML.

3. In the **Welcome** dialog box, click **Next**.

   The Setup program detects the existing NML installation and displays the **Program Maintenance** dialog box, as shown in Figure 3-3 on page 3-10.
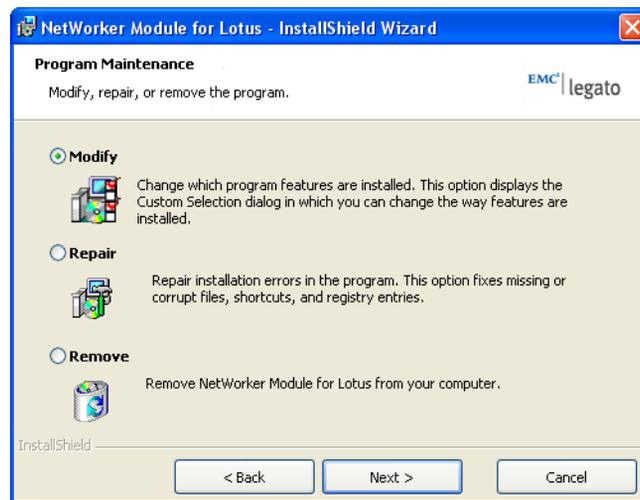
Figure 3-3   Program Maintenance dialog box

4. Select the maintenance task to perform, and click **Next** to proceed to the task:

   • **Modify** — Allows you to add and remove the NML software components in the existing installation. For details, see "How to add and remove NML components" on page 3-11.

   • **Repair** — Allows you to replace missing or corrupted files in the existing NML installation. For details, see "How to repair an NML installation" on page 3-13.

• **Remove** — Allows you to remove the entire NML installation, including any installed configuration wizard libraries. You can also use the Windows Control Panel Add/Remove program to remove the NML installation. "Uninstall procedures on Windows" on page 3-14 provides more details.

How to add and remove NML components

To add and remove components in the existing NML installation:

1. Start the Setup program in maintenance mode. "How to run the Setup program in maintenance mode" on page 3-10 provides more details.

2. In the **Program Maintenance** dialog box, select **Modify** and click **Next**.

3. In the **Custom Setup** dialog box, click the icon of each NML component and select the appropriate menu option. Click **Next**.

   • To specify that a component is to be installed, click its icon and select **This feature will be installed on local hard drive**.

   • To specify that a component is to be uninstalled, click its icon and select **This feature will not be available**.

   For example, Figure 3-4 on page 3-12 shows how to specify that the NML configuration wizard library is to be installed.

   Note: The NML configuration wizard library is available for installation only if the NetWorker release 7.2 or later software has been installed. "Considerations for the NML configuration wizard operations" on page 1-3 provides more information about NML support for the configuration wizard.
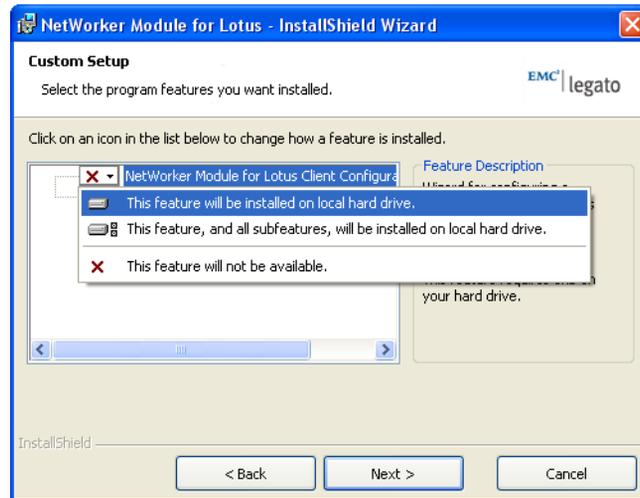
Figure 3-4 Custom Setup dialog box: Installing the NML configuration wizard library

4. In the **Ready to Install** dialog box, click **Install**.

    The Setup program installs NML binaries in the same directory as the NetWorker client binaries (the *NetWorker_install_path*\bin directory) by default.

    Note: If the Setup program detects *no* NetWorker client binaries, it displays an error message and exits *without* installing the NML software.

5. In the **Completing the NML 3.0 Setup** dialog box, click **Finish** to exit the wizard.

6. Reboot the Windows system.

7. Ensure that the NML software is enabled and registered according to Chapter 4, "Enabling, Registering, and Authorizing the Software".

8. Ensure that the hostname of the computer running the wizard is included in the file *NetWorker_install_path*\res\servers on the NML client (or the servers file is empty). If the servers file is *not* empty, it must also include the hostnames of all the NetWorker

servers authorized to back up the NML client. The servers file is a text file, which can be modified by using a text editor.

9. If required, register the configuration wizard libraries, as described in Appendix A, "Configuration Wizard Registration".

How to repair an NML installation

To repair an existing NML installation:

1. Start the Setup program in maintenance mode. "How to run the Setup program in maintenance mode" on page 3-10 provides more details.

2. In the **Program Maintenance** dialog box, select **Repair** and click **Next**.

3. In the **Ready to Install** dialog box, click **Install** to begin the installation. The Setup program reinstalls the NML software files as required.

4. Reboot the Windows system.

Document-level recovery feature

Document-level recovery enables Lotus Notes users to recover individual Notes documents. On Windows computers, document-level recovery can be performed from one of the following:

◆ From within the Lotus Notes client software

◆ From the command line

The *NetWorker Module for Lotus Administration Guide* provides more information.

How to add the document-level recovery feature

To add the document-level recovery feature to Lotus Notes client software:

1. Close the Lotus Notes client software.

2. Copy the nsrdoclb.dll file from the NML software directory to the Notes directory, which is typically *%SystemDrive%*\Lotus\Notes.

3. Add the following line to the notes.ini file located in the Notes directory:

   AddInMenus=nsrdoclb.dll

   If the AddInMenus line already exists, place a comma after the existing entry and add nsrdoclb.dll after the comma, as follows:

   AddInMenus=command.dll, nsrdoclb.dll

4. Restart the Lotus Notes client software.

After you open the Lotus database, the following menu choices are accessible from the **Actions** menu in the Lotus Notes client:

◆ NML - Restore Selected Documents

◆ NML - Restore Deleted Documents

How to remove the document-level recovery feature

To remove the document-level recovery feature:

1. Close the Lotus Notes client software.

2. Remove the nsrdoclb.dll entry from the notes.ini file located in the Notes directory.

3. Delete the nsrdoclb.dll file from the Notes directory.

4. Restart the Lotus Notes client software.

Uninstall procedures on Windows

Uninstall NML release 3.0 on a Windows computer by using either the Setup program or the Add/Remove Programs tool in the Windows Control Panel.

Note: If uninstalling the NML software from a cluster, perform the uninstall procedure on *each* required node of the cluster.

How to uninstall with the Setup program

To uninstall NML with the Setup program:

1. Log in as administrator or equivalent on the Lotus Notes client or Domino server.

2. Ensure that no Lotus database backups are running.

3. Start the the Setup program in maintenance mode. provides details.

4. In the **Program Maintenance** dialog box, select **Remove** and click **Next**.

5. In the **Ready to Remove** dialog box, click **Remove** to start the uninstall process.

6. When the following message appears in the **InstallShield Wizard Completed** dialog box, click **Finish**:

   ```
   The InstallShield Wizard has successfully uninstalled
   NetWorker Module for Lotus. Click Finish to exit the
   wizard.
   ```

How to uninstall with the Control Panel

To uninstall NML with the Control Panel:

1. Log in as administrator or equivalent on the Lotus Notes client or Domino server.

2. Ensure that no Lotus database backups are running.

3. From the Windows **Start** menu, select **Control Panel**.

4. In the **Control Panel** dialog box, double-click **Add/Remove Programs**.

5. In the **Add/Remove Programs** dialog box, select **NetWorker Module for Lotus** and click **Remove**.

6. When a confirmation dialog box appears with the following message, click **Yes**:

   ```
   Are you sure you want to remove NetWorker Module for
   Lotus from your computer?
   ```

7. Wait until the uninstall is completed.

8. Close the **Control Panel** dialog box.

Enabling, Registering, and Authorizing the Software

This chapter provides information on how to enable the NetWorker software (including NetWorker Modules and additional features) for the purpose of evaluating and licensing the software for permanent use.

This chapter includes the following sections:

How NetWorker software is licensed

Licensing NetWorker software means entering enabler and authorization codes on the server for the NetWorker environment. Without these codes, the software or added features will *not* run beyond the evaluation period.

Each installation of NetWorker server software must be licensed with a base enabler that "turns on" the software and allows you to use a particular bundle of features, such as a specified number of clients and devices. All licensing takes place on the server: The licenses are entered and stored on the server, and the server enforces the licensing.

Base enablers come in different editions, which enable varying degrees of functionality. Add-on enablers allow a broader scope of features.

The evaluation process

Evaluating NetWorker software can take place in two ways:

◆ By evaluating a new installation of the software on a NetWorker server

◆ By evaluating NetWorker features on an existing NetWorker installation

Evaluating a new installation

When you first install the NetWorker software, you can evaluate it with all the modules and features for 30 days free without entering any codes.

By the end of the evaluation period, you must purchase, enter, and authorize a base enabler to continue to use the NetWorker software to back up data. The base enabler is the license that enables the edition purchased. For contact information, refer to "Where to get help" on page -viii. For more information about entering and authorizing the enabler, refer to "The licensing process" on page 4-5.

To continue to use some of the modules and features that were available with the evaluation software, you may need to purchase add-on enablers, depending on the edition of the base enabler.

Evaluating features on an existing installation

If you are evaluating one or more NetWorker modules or features on an edition of NetWorker software that has already been installed and enabled, you must enter a temporary enabler for each module or feature. The temporary enabler is valid for 45 days.

◆ To obtain a temporary enabler code, refer to the Contents documentation in the EMC Information Protection Media Kit, or refer to "Where to get help" on page -viii.

◆ To enter the temporary enabler code, refer to "How to enter a temporary enabler code" on page 4-3.

By the end of the evaluation period, you must purchase, enter, and authorize the corresponding license enablers to continue to use modules or features you have evaluated. For instructions, refer to "The licensing process" on page 4-5. For more information on the different NetWorker features, refer to "Multiplatform licensing" on page 4-11.

How to enter a temporary enabler code

⚠ **CAUTION**

The temporary enabler code is valid on only one computer in a network. If you enter the same code on more than one computer in a network, a copy protection violation error occurs and the NetWorker server software is disabled on all NetWorker servers with duplicate enablers.

To enter the temporary enabler code, follow the appropriate instructions, depending on the release of NetWorker server software:

◆ "NetWorker server release 7.2.x and earlier" on page 4-3

◆ "NetWorker server release 7.3 and later" on page 4-4

NetWorker server release 7.2.x and earlier
To enter the temporary enabler code:

On UNIX

1. Log in as root or as NetWorker administrator on the NetWorker server.

2. Start the NetWorker Administrator program:

   nwadmin &

3. From the **Server** menu, select **Registration**.

   The **Registration** window opens.

4. Click **Create**.

5. In the **Enabler Code** attribute, enter the enabler code.

6. (Optional) In the **Comment** attribute, enter a description of the license.

7. Click **Apply**.

On Windows

1. Log in with administrator privileges to the NetWorker server.

2. Start the NetWorker Administrator program.

3. On the **Configure** tab, click **Registration**.

   The **Registration** window opens.

4. Right-click **Registration** and select **Create**.

5. In the **Create Registration** window, enter the enabler code in the **Enabler Code** attribute.

6. (Optional) In the **Comment** attribute, enter a description of the license.

7. Click **OK**.

NetWorker server release 7.3 and later

To enter the temporary enabler code:

1. Start the NetWorker Administration Console software.

2. In the **Administration** window, click **Configuration**.

3. In the left pane, select **Registration**.

4. From the **File** menu, select **New**.

5. In the **Enabler Code** attribute, enter the enabler code.

6. In the **Name** attribute, enter the name of the license.

7. (Optional) In the **Comment** attribute, enter a description of the license.

8. Click **OK**.

The licensing process

To permanently use NetWorker software, you must purchase and enter a license enabler code, and then authorize it. This licensing process is the same for all editions of NetWorker software as well as for individual modules and features. To purchase the license enabler, refer to "Where to get help" on page -viii.

The license enabler code that you purchase is valid for 45 days, as a registration period. During the registration period, you must obtain and enter a corresponding authorization code.

The following sections explain how to enter and authorize the license enabler:

◆ "Task 1: Enter the license enabler code" on page 4-5

◆ "Task 2: Obtain an authorization code" on page 4-7

◆ "Task 3: Enter the authorization code" on page 4-9

Task 1: Enter the license enabler code

License enabler codes are included in either the letter announcing the updated or upgraded software, or on the Enabler Certificate you receive when you purchase a software license. This depends on whether the software purchased is a first-time purchase or an updated or upgraded version.

Note: To save time when entering multiple licenses, enter the base enabler last. Otherwise, once a base enabler is entered, devices that do not yet have licenses entered may be disabled. Those devices would have to be reenabled manually after their licenses are installed.

To enter the license enabler code, follow the appropriate instructions, depending on the release of NetWorker server software:

◆ "NetWorker server release 7.2.x and earlier" on page 4-6

◆ "NetWorker server release 7.3 and later" on page 4-7

NetWorker server release 7.2.x and earlier
To enter the license enabler code:

On UNIX

1. Log in as root or as NetWorker administrator on the NetWorker server.

2. Start the NetWorker Administrator program:

   nwadmin &

3. From the **Server** menu, select **Registration**.

   The **Registration** window opens.

4. If the **Registration** list displays a temporary enabler for the product or feature being licensed, select the enabler and click **Delete**.

5. In the **Registration** window, click **Create**.

6. In the **Enabler Code** attribute, enter the enabler code.

7. (Optional) In the **Comment** attribute, enter a description of the license.

8. Click **Apply**.

On Windows

1. Log in with administrator privileges to the NetWorker server.

2. Start the NetWorker Administrator program.

3. On the **Configure** tab, click **Registration**.

   The **Registration** window opens.

4. If a temporary enabler is listed, right-click the enabler and select **Delete**.

5. In the **Registration** window, right-click **Registration** and select **Create**.

6. In the **Create Registration** window, enter the enabler code in the **Enabler Code** attribute.

7. (Optional) In the **Comment** attribute, enter a description of the license.

8. Click **OK**.

Repeat the procedure to add any additional enabler codes.

After you enter a license enabler code, you have 45 days as a registration period to authorize the NetWorker software.

NetWorker server release 7.3 and later
To enter the license enabler code:

1. Start the NetWorker Administration Console software.

2. In the **Administration** window, click **Configuration**.

3. In the left pane, select **Registration**.

4. From the **File** menu, select **New**. The **Create Registration** dialog box appears.

5. In the **Enabler Code** attribute, enter the enabler code.

6. In the **Name** attribute, enter the name of the license.

7. (Optional) In the **Comment** attribute, enter a description of the license.

8. Click **OK**.

The new license is added and appears in the right pane. Repeat the procedure to add any additional enabler codes.

After you enter a license enabler code, you have 45 days as a registration period to authorize the NetWorker software.

Task 2: Obtain an authorization code

Registration of NetWorker software takes place by obtaining an authorization code. Obtain a unique authorization code through one of the following methods:

◆ "Using the EMC Legato website" on page 4-8

◆ "Using email" on page 4-8

⚠ **CAUTION**

If the software or feature is *not* authorized by the end of the 45-day registration period, the NetWorker backup function or feature is disabled. However, data that was backed up during the registration period can still be recovered from local devices.

Using the EMC Legato website

Register products and obtain authorization codes online by completing a registration form on the EMC Legato website at www.Legato.com. Web registration takes just a few minutes and is available 24 hours a day, 7 days a week.

An authorization code that permanently enables the NetWorker license will be sent by email. If you have any questions about software updates, refer to "Where to get help" on page -viii.

Using email

To register the software and obtain an authorization code by email, follow the appropriate instructions, depending on the release of NetWorker server software:

◆ "NetWorker server release 7.2.x and earlier" on page 4-8

◆ "NetWorker server release 7.3 and later" on page 4-9

NetWorker server release 7.2.x and earlier
To register the software and obtain an authorization code by email:

On UNIX

1. Log in as root or as NetWorker administrator on the NetWorker server.

2. Start the NetWorker Administrator program:

   nwadmin &

3. Complete your contact information:

   a. From the **Server** menu, select **Server Setup**.

   b. Complete the contact information and click **Apply**.

4. Email the registration information. For contact information, refer to "Where to get help" on page -viii.

On Windows

1. Log in with administrator privileges to the NetWorker server.

2. Start the NetWorker Administrator program.

3. Complete your contact information:

   a. On the **Configure** tab, click **Set Up Server**.

   b. On the **Company Information** tab, complete the contact information and click **OK**.

4. Email the registration information. For contact information, refer to "Where to get help" on page -viii.

An authorization code that permanently enables the updated NetWorker software will be sent to you.

NetWorker server release 7.3 and later

To register the software and obtain an authorization code by email:

1. Start the NetWorker Administration Console software.

2. In the **Administration** window, click **Configuration**.

3. In the left pane, select the NetWorker server.

4. From the **File** menu, select **Properties**.

   The **Properties** dialog box appears.

5. Select the **Customer Information** tab and complete your contact information.

6. Email your registration information. For contact information, refer to "Where to get help" on page -viii.

An authorization code that permanently enables the updated NetWorker software will be sent to you.

Task 3: Enter the authorization code

To complete the licensing process, you must enter the unique authorization code on the NetWorker server within 45 days of entering the license enabler code.

If the authorization process is successful, the expiration date for the license displays "Authorized - No expiration date." If the authorization is not verified in this way, contact http://softwaresupport.EMC.com.

To avoid an interruption in scheduled backups if you move the NetWorker software from one computer to another, or to change the network address of a computer after the software is installed, perform one of the following:

◆ Obtain a new authorization code. You need the host ID of the original server as well as the new server. The host ID appears in the server's Registration window. For contact information, refer to "Where to get help" on page -viii.

◆ Install and configure the Legato License Manager software. For more information on using the License Manager, refer to "Managing EMC Legato licenses" on page 4-14 and the latest *Legato License Manager Installation and Administrator's Guide.*

How to enter the authorization code

To enter the authorization code, follow the appropriate instructions, depending on the release of NetWorker server software:

◆ "NetWorker server release 7.2.x and earlier" on page 4-10

◆ "NetWorker server release 7.3 and later" on page 4-11

NetWorker server release 7.2.x and earlier
To enter the authorization code:

On UNIX

1. Log in as root or as NetWorker administrator on the NetWorker server.

2. Start the NetWorker Administrator program:

   nwadmin &

3. From the **Server** menu, select **Registration**.

   The **Registration** window opens.

4. Select the appropriate license.

5. In the **Auth Code** field, enter the authorization code.

6. Click **Apply**.

On Windows

1. Log in with administrator privileges to the NetWorker server.

2. Start the NetWorker Administrator program.

3. On the **Configure** tab, click **Registration**.

   The **Registration** window opens.

4. Right-click the appropriate license and select **Edit**.

5. In the **Auth Code** field, enter the authorization code.

6. Click **OK**.

The license is now permanently enabled.

NetWorker server release 7.3 and later
To enter the authorization code:

1. Start the NetWorker Administration Console software.

2. In the **Administration** window, click **Configuration**.

3. In the left pane, click **Registration**.

4. In the right pane, right-click the license to be authorized, and then select **Properties**.

    The **Properties** dialog box appears.

5. In the **Auth Code** attribute, enter the authorization code for the product (the authorization code assigned to the specified permanent enabler or update enabler code).

6. Click **OK**.

The license is now permanently enabled.

Multiplatform licensing

The client connections that come with a NetWorker server can be used for only that server platform. A ClientPak® license allows the NetWorker server to back up clients of different platforms. For example:

◆   The client connections accompanying a NetWorker server for Windows can be used for Windows client computers only.

◆   The client connections accompanying a NetWorker server for Solaris can be used for Solaris clients only.

With a ClientPak for UNIX, other UNIX platforms can be enabled for use with a NetWorker server for Solaris. The ClientPak for UNIX supports all UNIX platforms. The UNIX ClientPak is sufficient for all UNIX clients (backed up by a UNIX or Windows server).

Note: The NetWorker software treats Linux as a separate operating system. A ClientPak for Linux is necessary to back up Linux clients by either UNIX or Windows servers.
NML release 3.0 has separate license enablers for UNIX (including Linux) and Windows platforms, and the license enablers are *not* interchangeable.

Example 4-1   Multiplatform licensing schemes

A company was using a Linux server to back up Solaris, Linux, and Windows clients. It needed two ClientPak licenses, one for Solaris and one for Windows. The company added HP-UX and AIX clients, which required the addition of a ClientPak license for UNIX.

As the company grew and needed to add a server, it added a Windows 2000 server, which backed up the Windows and subsequent Windows 2000 clients without requiring a ClientPak. The company assigned the NetWorker server to a Solaris computer to back up the HP-UX, Solaris, and AIX clients by using a single ClientPak for UNIX.

Update enablers

To update existing NetWorker software to a major release (one that introduces important new features), an update enabler is necessary. Update enablers are required for any major NetWorker software update from release 4.0 and later, including the current NetWorker release. To use the License Manager, the NetWorker server must be release 5.0 or later.

With a first-time purchase of NetWorker software, a one-year update agreement may be included. After a year, an update enabler may be acquired with a new update agreement purchase.

Required update enablers

Table 4-1 on page 4-12 lists the NetWorker releases that require update enablers.

Table 4-1   NetWorker releases that require update enablers (Sheet 1 of 2)

Update from	to 5.0	to 5.5	to 5.5.*x*	to 5.6	to 5.7	to 6.*x*	to 7.0	to 7.1	to 7.2	to 7.3
Any release prior to 5.0	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
5.0		yes	yes	yes	yes	yes	yes	yes	yes	yes
5.5			yes	yes (UNIX only)	yes (NT only)	yes	yes	yes	yes	yes
5.5.*x*				yes (UNIX only)	yes (NT only)	yes	yes	yes	yes	yes
5.6					NA*	yes	yes	yes	yes	yes
5.7						yes	yes	yes	yes	yes

Table 4-1   NetWorker releases that require update enablers (Sheet 2 of 2)

Update from	to 5.0	to 5.5	to 5.5.*x*	to 5.6	to 5.7	to 6.*x*	to 7.0	to 7.1	to 7.2	to 7.3
6.0						no	yes	yes	yes	yes
6.*x*							yes	yes	yes	yes
7.0								yes	yes	yes
7.1									yes	yes
7.2										yes
* Release 5.6 is UNIX only, and release 5.7 is Microsoft Windows only. NT refers to Windows NT.										

Additional licenses

This section describes a few of the additional licenses required to operate some of the NetWorker features.

Client connection licenses

Every computer to be backed up in a NetWorker datazone requires a client connection license, even the NetWorker server. The client connection license may be one of the licenses supplied with the base enabler or purchased separately. A cluster client or NDMP data server requires a special type of client connection license, as described in "Cluster clients" on page 4-14 or "NDMP licensing" on page 4-14, respectively.

Storage nodes

Each storage node requires a storage node license in addition to its client connection license. A dedicated storage node, which allows the storage node to back up only itself, is licensed separately.

NetWorker Application Modules

NetWorker Application Modules are licensed on the basis of one enabler per database type host. For example, to back up the Oracle database on two hosts, two NetWorker Module for Oracle enablers are required, even if the two hosts are backed up by the same server. However, if multiple database instances are running on a NetWorker client host, only one NetWorker Module enabler is required for that one host.

Cluster clients

For each physical node in a cluster, you must purchase a Cluster Client Connection, which takes the place of one standard client connection. For more information on licensing computers in a cluster, refer to the *NetWorker Administration Guide*.

NDMP licensing

NDMP licensing requires one NDMP Client Connection per NDMP data server. The NDMP Client Connection is valid for any supported NDMP data server. The NDMP data server does not require a standard client connection.

Managing EMC Legato licenses

The Legato License Manager provides centralized license management, allowing you to maintain all of an enterprise's NetWorker licenses from a single computer. With the License Manager, you can move NetWorker software from one computer to another, or change the IP address on an existing NetWorker server without having to reauthorize the software. The License Manager can be installed as an option during NetWorker software installation.

To begin to implement the License Manager:

1. Contact Licensing to obtain bulk enabler codes. For contact information, refer to "Where to get help" on page -viii.

2. Install the License Manager software.

3. Configure the License Manager software.

4. Configure the NetWorker servers to access the License Manager for their licenses.

For details on installing and using the License Manager, refer to the latest *Legato License Manager Installation and Administrator's Guide*.

A

Configuration Wizard Registration

This appendix describes the registration requirements for the libraries that are used with the NetWorker Module for Lotus (NML) configuration wizard.

This appendix contains the following sections:

Registering the wizard libraries on UNIX and Linux

The configuration wizard libraries (on both the NML client and wizard computers) must be registered if the NML configuration wizard on Solaris is to be used to configure scheduled backups.

◆ If the wizard libraries were installed on a computer that contains NetWorker release 7.1.*x* or earlier, the libraries were *not* registered automatically during the install. They must be registered *manually* after the NetWorker software has been updated to release 7.2 or later.

> **Note:** The configuration wizard supports only NetWorker release 7.2 and later.

◆ If the wizard libraries were installed on a computer that contains NetWorker release 7.2 or later software, the libraries were registered *automatically* during the install, and no further action is required.

To enable the configuration wizard on Solaris to configure scheduled backups, the following libraries must be registered:

◆ On the NML client, **libnmldc32.*x***, where the variable *x* is the letter **o** or **so** depending on the operating system. (This library is installed with the NML software package.)

◆ On the Solaris computer where the configuration wizard is located, **libnmlwiz.so**. (This library is installed with the **LGTOnmlwz** package.)

To confirm that a library is registered, review the contents of the corresponding resource files in /nsr/res.

◆ The file /nsr/res/nsrwizclnt.res corresponds to **libnmldc32.*x***.

◆ The file /nsr/res/nsrwizcon.res corresponds to **libnmlwiz.so**.

If the resource file contains the following line for the plug-in type NML (showing the version as 3.0), then the corresponding library is properly registered:

```
Library versions: 3.0;
```

If 3.0 is missing from this line in the resource file, the corresponding library is *not* registered. In this case, the library must be registered *manually* before the configuration wizard can be used to configure scheduled backups.

To manually register a library file, enter the appropriate command:

◆ To register **libnmldc32.*x***, enter this command on the NML client computer:

```
"NetWorker_install_path/nsrwizreg" -t NML
-n "NetWorker Module for Lotus"
-p "complete_library_path/libnmldc32.x" -v 3.0
-f nsrwizclnt.res -a
```

◆ To register **libnmlwiz.so**, enter this command on the wizard computer:

```
"NetWorker_install_path/nsrwizreg" -t NML
-n "NetWorker Module for Lotus"
-p "complete_library_path/libnmlwiz.so" -v 3.0
-f nsrwizcon.res -a
```

For more information on the **nsrwizreg** command, refer to the following:

◆ The **nsrwizreg** entry in the *NetWorker Command Reference Guide.*

◆ The **nsrwizreg** man page.

Registering the wizard libraries on Windows

The configuration wizard libraries (on both the NML client and wizard computers) must be registered if the NML configuration wizard on Windows is to be used to configure scheduled backups.

◆ If the wizard libraries were installed on a computer containing NetWorker release 7.1.*x* or earlier, the libraries were *not* registered automatically during the install. They must be registered *manually* after the NetWorker software has been updated to release 7.2 or later.

Note: The configuration wizard supports only NetWorker release 7.2 and later.

◆ If the wizard libraries were installed on a computer containing NetWorker release 7.2 or later software, the libraries were registered *automatically* during the install, and no further action is required.

To enable the configuration wizard on Windows to configure scheduled backups, the following libraries must be registered:

◆ On the NML client, **libnmldc.dll**.

◆ On the Windows computer where the configuration wizard is located, **libnmlwiz.dll**.

To confirm that a library is registered, review the contents of the corresponding resource files in *NetWorker_install_path*\nsr\res.

◆ The file *NetWorker_install_path*\nsr\res\nsrwizclnt.res corresponds to **libnmldc.dll**.

◆ The file *NetWorker_install_path*\nsr\res\nsrwizcon.res corresponds to **libnmlwiz.dll**.

If the resource file contains the following line for the plug-in type NML (showing the version as 3.0), then the corresponding library is properly registered:

```
Library versions: 3.0;
```

If 3.0 is missing from this line in the resource file, the corresponding library is *not* registered. In this case, the library must be registered *manually* before the configuration wizard can be used to configure scheduled backups.

To manually register a library file, enter the appropriate command:

◆ To register **libnmldc.dll**, enter this command on the NML client computer:

```
"NetWorker_install_path\nsrwizreg.exe" -t NML
-n "NetWorker Module for Lotus"
-p "complete_library_path\libnmldc.dll" -v 3.0
-f nsrwizclnt.res -a
```

◆ To register **libnmlwiz.dll**, enter this command on the wizard computer:

```
"NetWorker_install_path\nsrwizreg.exe" -t NML
-n "NetWorker Module for Lotus"
-p "complete_library_path\libnmlwiz.dll" -v 3.0
-f nsrwizcon.res -a
```

For more information on the **nsrwizreg** command, refer to the *NetWorker Command Reference Guide.*