



January 19, 2005

NetWorker™

Module for Microsoft® Exchange Server

Release 4.1

Installation Guide

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Preface

This guide provides instructions on how to install the LEGATO NetWorker[®] Module for Microsoft[®] Exchange Server, Release 4.1 software.

After installing the NetWorker[™] Module software, refer to the *NetWorker Module for Microsoft Exchange Server Administrator's Guide* and the program's Online Help for detailed instructions on how to configure, administer, and use the NetWorker Module software.

Post-release information is contained in the Release Supplement for this product. This document is available at www.legato.com. Refer to the web site periodically to view the latest Release Supplement.

Audience


The information in this guide is intended for administrators and others responsible for data management on Exchange servers. This guide assumes that you have a working knowledge of Microsoft Exchange Server and the LEGATO NetWorker client and server software

Product Documentation

For a complete list of documentation related to this product, see "[Related Documentation](#)" on page 13. Most of the documents are Adobe Acrobat PDFs, and can be viewed by downloading and installing the Adobe Acrobat Reader. The Reader is available in the */viewers/acroread* directory on the LEGATO Documentation Suite CD-ROM, or directly from Adobe. To install and use the Reader on the preferred platform, refer to the instructions in the CD-ROM's */viewers/acroread/readme.txt* file or at the Adobe web site.

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This document uses the following typographic conventions and symbols to make information easier to access and understand.

Convention	Indicates	Example
boldface	Names of line commands, daemons, options, programs, or scripts	The nsradmin command starts the command line version of the NetWorker Administrator program.
<i>italic in text</i>	Pathnames, filenames, computer names, new terms defined in the Glossary or within the chapter, or emphasized words	Displayed messages are also written to <i>/nsr/logs/daemon.log</i> . The specifications are created, one for each swap file, in <i>c:\pagefile.sys</i> .
<i>italic in command line</i>	A variable that must be provided in the command line	nwadmin -s <i>server_name</i>
fixed-width	Examples and information displayed on the screen	media waiting: recover waiting for 8mm 5GB tape volume name
fixed-width, boldface	Commands and options that must be entered exactly as shown	nsr_shutdown -a
Menu_Name> Command	A path or an order to follow for making selections in the user interface	Volume>Change Mode>Appendable
Important:	Information that must be read and followed to ensure successful backup and recovery of data	 <hr/> Important: Use the no_verify option with extreme caution. <hr/>

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Chapter 1: Introduction

This chapter provides a brief description of the NetWorker Module for Microsoft Exchange Server software. It includes the following sections:

- ["About This Guide" on page 12](#)
- ["About the NetWorker Module" on page 12](#)
- ["NetWorker PowerSnap Module Support" on page 12](#)
- ["Related Documentation" on page 13](#)

About This Guide

Use the information in this guide to:

- Install or update the NetWorker Module software.
- Install or update the NetWorker Module software using Microsoft Systems Management Server (SMS).
- Install the NetWorker Module in a Microsoft Cluster Server (MSCS) environment.
- Enable the NetWorker Module.
- Uninstall the NetWorker Module software.

About the NetWorker Module

This product is an add-on, client-side module that works with the LEGATO NetWorker software to provide backup and recovery capability for Microsoft Exchange Server. Together, the NetWorker Module and NetWorker software provide reliable, high-performance data protection for Exchange Server databases and mailboxes.

NetWorker PowerSnap Module Support

This NetWorker Module supports NetWorker PowerSnap™ Module software, which provides enhanced data protection through *snapshot* technology.

PowerSnap Modules serve as the interface between a snapshot-capable storage subsystem and the NetWorker and NetWorker Module software. You can create and manage *point-in-time* (PIT) copies, or snapshots, of Microsoft Exchange 2000 Server and Exchange Server 2003 data.

Once you have installed and configured the appropriate PowerSnap Module for the Exchange server's primary storage subsystem, you can perform snapshot backup and recovery operations in addition to using the NetWorker Module's traditional backup and recovery capabilities.

For more information about using PowerSnap Module software with this NetWorker Module, refer to the *NetWorker Module for Microsoft Exchange Server Administrator's Guide*.

For details about installing and configuring PowerSnap Module software, refer to the appropriate *NetWorker PowerSnap Module Installation and Administrator's Guide*.

Related Documentation

The following sources provide additional information specific to this NetWorker Module:

- *NetWorker Module for Microsoft Exchange Server Administrator's Guide*
- *NetWorker Module for Microsoft Exchange Server Release Supplement*
- NetWorker User for Exchange Server Online Help

These sources—specific to the NetWorker server version—are also available:

- *NetWorker Administrator's Guide*
- *NetWorker Installation Guide*
- *NetWorker Release Supplement*
- NetWorker Administrator Online Help

Other documentation sources that provide helpful information include:

- *NetWorker Command Reference Guide*
- *NetWorker Error Message Guide*
- *NetWorker Disaster Recovery Guide*
- *PowerSnap Module Installation and Administrator's Guide* (for the appropriate PowerSnap Module)
- Microsoft Exchange Server documentation

For information about locating LEGATO documentation, see "[Product Documentation](#)" on page 8.

Chapter 2: Installation

This chapter describes how to install the NetWorker Module software. It includes the following sections:

- ["Installation Roadmap" on page 14](#)
- ["Installation Requirements" on page 15](#)
- ["Installation Prerequisites" on page 17](#)
- ["Where to Install the NetWorker Module Software" on page 18](#)
- ["Accessing the NetWorker Module Installation Files" on page 19](#)
- ["Installing the NetWorker Module Software" on page 20](#)
- ["Maintaining a NetWorker Module Installation" on page 24](#)
- ["Using SMS to Automate a Large Installation" on page 27](#)
- ["Installing NetWorker Module Software in a Microsoft Cluster" on page 27](#)
- ["Removing the NetWorker Module Software" on page 28](#)

Installation Roadmap

The following roadmap provides an overview of the NetWorker Module software installation tasks:

1. Review ["Installation Requirements" on page 15](#).
2. Review ["Installation Prerequisites" on page 17](#).
3. Review ["Where to Install the NetWorker Module Software" on page 18](#).
4. Access the installation files. For instructions, see ["Accessing the NetWorker Module Installation Files" on page 19](#).
5. Install the NetWorker Module software. For instructions, see ["Installing the NetWorker Module Software" on page 20](#).
6. Enable and register the NetWorker Module for Microsoft Exchange Server. For instructions, see ["Chapter 3: Evaluating and Licensing the Software" on page 30](#).

Installation Requirements

This section specifies the Microsoft Windows, Microsoft Exchange Server, NetWorker PowerSnap Module, and NetWorker client and server software requirements for this NetWorker Module.

Supported Operating Systems

This NetWorker Module supports all language versions of the following editions of Microsoft Windows:

- Windows 2000 editions (with the latest service pack installed):
 - Windows 2000 Server
 - Windows 2000 Advanced Server
 - Windows 2000 Datacenter
- Windows Server 2003 editions (32-bit versions only):
 - Windows Server 2003 Standard
 - Windows Server 2003 Enterprise
 - Windows Server 2003 Datacenter

Microsoft Exchange Server

This NetWorker Module supports all language versions of the following editions of Microsoft Exchange Server:

- Microsoft Exchange 2000 Server
- Microsoft Exchange Server 2003

This release of the NetWorker Module does *not* support Microsoft Exchange Server 5.x.

Note: The NetWorker Module for Exchange Server does not support use of nondefault database filename extensions. By default, Exchange database filenames end with *.edb* and *.stm* extensions. This NetWorker Module cannot back up or recover Exchange database filenames that do not end with these standard extensions.

Traditional and Snapshot Operations Requirements

[Table 1 on page 15](#) specifies the Microsoft Windows and Exchange Server version requirements for this NetWorker Module's traditional and snapshot backup and recovery operations.

Table 1. Platform Requirements for Traditional and Snapshot Operations

Microsoft Windows Version	Microsoft Exchange Version	Traditional	Snapshot
Windows 2000	Exchange 2000 Server	√	√
	Exchange Server 2003	√	√
Windows Server 2003	Exchange Server 2003	√	√

LEGATO NetWorker PowerSnap Module

Note: Snapshot backup support (not recovery) requires a supported, snapshot-capable, primary storage subsystem. For more information, refer to the *NetWorker Compatibility Guides*, available at www.legato.com.

NetWorker PowerSnap Module software is required only if the NetWorker Module for Exchange Server is to perform snapshot backup and recovery operations. PowerSnap Module software requirements are as follows:

- The Exchange server host must have the appropriate PowerSnap Module installed.
- If a computer other than the Exchange server host is configured as the *PowerSnap data mover* (proxy client), the data mover host must have the following software installed:
 - NetWorker software release 7.1 or later
 - The appropriate PowerSnap Module
 - Either a full Microsoft Exchange Server software installation, or an installation of the Microsoft Exchange System Management Tools

For instructions on installing PowerSnap Module software, and more information about configuring a PowerSnap data mover, refer to the appropriate *NetWorker PowerSnap Module Installation and Administrator's Guide*.

NetWorker Software

The NetWorker client software must be installed on the Exchange server host computer. For more information about the installation requirements, refer to the *NetWorker Installation Guide*.

The NetWorker software requirements for this NetWorker Module are as follows:

- NetWorker client and server software release 6.0 or later for traditional backups of Exchange data
- NetWorker client and server software release 7.1 or later for snapshot backup and recovery of Exchange data

Note: This NetWorker Module can connect to and interact with a NetWorker server that is running on *any* supported operating system. For more information about the installation requirements, refer to the appropriate *NetWorker Installation Guide*.

NetWorker Module Backward Compatibility

This release of the NetWorker Module can successfully recover backups of all types made by release 3.0 or later of the NetWorker Module. This includes backups of:

- Exchange Information Store (IS), Key Management Server (KMS), and Site Replication Server (SRS) databases
- Individual mailboxes or mailbox items
- Individual public folders or public folder items

The NetWorker Installation Path

This guide refers to the root directory of the NetWorker installation path by using the variable *NetWorker_install_path*. The actual location this variable represents depends on when and how the NetWorker software was installed.

For new installations of NetWorker release 7.0 and later, the default location is *%SystemDrive%\Program Files\Legato\nsr*.

Note: During NetWorker software installation, you can specify a nondefault location.

The installation path does not change during a NetWorker update. For example, a NetWorker release 6.x installation that is updated to release 7.1 has the default installation path *%SystemDrive%\Program Files\nsr*.

In NetWorker and NetWorker Module documentation, references to locations under the installation root use *NetWorker_install_path* in the path statement. For example, the NetWorker Module log files are located in the *<NetWorker_install_path>\applogs* directory.

Installation Prerequisites

Before installing the NetWorker Module software, verify that the following prerequisites are met:

- The target Exchange server must meet the installation requirements. For details, see ["Installation Requirements" on page 15](#).
- The Exchange server host must have enough disk space available for the NetWorker Module installation:
 - Complete installation (includes NetWorker Module software, Windows Performance Monitor counters, and the configuration wizard) requires approximately 6.8 MB.
 - NetWorker Module software installation requires approximately 6 MB.
 - Windows Performance Monitor counter installation requires approximately 117 KB.
 - Configuration wizard installation requires approximately 564 KB.
- The installation operator must have Windows domain administrator privileges.

Note: Before you can perform a backup or recovery of Exchange data, the Microsoft Exchange System Management Tools must also be installed on the Exchange server.

Where to Install the NetWorker Module Software

The NetWorker client software and the NetWorker Module for Exchange Server software must both be installed on the Exchange server. The NetWorker server software may be installed on the Exchange server, or on a separate computer.

Installing the NetWorker Server and Exchange Server on the Same Computer

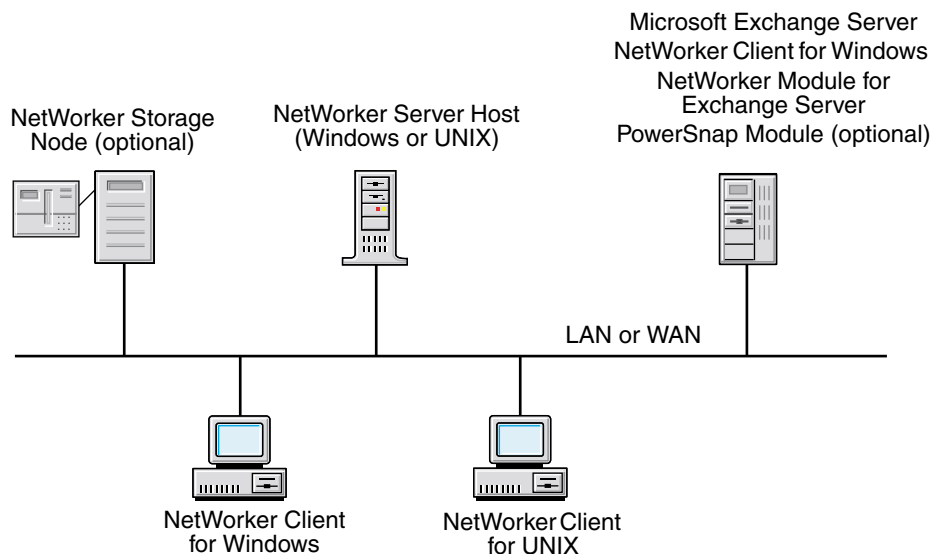
To take advantage of NetWorker immediate-save technology, you can install the NetWorker Server software on the Exchange server. Immediate saves improve backup performance because the data is not moved over the network. However, do not install the NetWorker Server software on the Exchange server if the NetWorker server supports a large numbers of clients. Exchange Server software and NetWorker Server software compete for the same system resources in this configuration.

Note: In this configuration, consider using a NetWorker storage node. For instructions on configuring and using a storage node, refer to the *NetWorker Administrator's Guide*.

Installing the NetWorker Server and Exchange Server on Separate Computers

Typically, the NetWorker Server software resides on one computer and the Exchange Server software on another, as shown in [Figure 1 on page 18](#).

Figure 1. Example Configuration



Accessing the NetWorker Module Installation Files

This section explains how to access the NetWorker Module installation files from the following locations:

- ["Local CD-ROM" on page 19](#)
- ["Remote CD-ROM" on page 19](#)
- ["LEGATO Web Site" on page 20](#)

Local CD-ROM

To access the NetWorker Module installation files from a local CD-ROM:

1. Log on to the computer with administrative privileges.
2. Load the NetWorker Module CD-ROM in the CD-ROM drive.
3. Start Windows Explorer and select the CD-ROM drive.
4. To complete the installation, see ["Installing the NetWorker Module Software" on page 20](#).

Remote CD-ROM

To access the NetWorker Module installation files from a remote CD-ROM:

1. Load the NetWorker Module CD-ROM in a CD-ROM drive of a Windows computer on the network.
2. On the remote computer, create a share for the CD-ROM drive.
3. Log on to the Exchange server.

Note: Do not log on to the Exchange server from a Terminal Server session. Doing so results in an installation failure. For more details, refer to Microsoft Knowledge Base article 255582, *Bug: Error Running Windows Installer Installation on Terminal Server*.

4. On the Exchange server host, map a network drive to the shared volume you created on the remote system.
5. To complete the installation, see ["Installing the NetWorker Module Software" on page 20](#).

LEGATO Web Site

To access the NetWorker Module installation files from the web site:

1. Request the NetWorker Module software:
 - a. Using a web browser, navigate to www.legato.com.
 - b. Click the Downloads link.
 - c. On the Evaluation Software Request page, select NetWorker Module for Microsoft Exchange Server from the list. Then select release 4.1 from the list of releases.
 - d. Complete the Evaluation Request form with your contact information and submit it. An Inside Sales Representative will send you an e-mail with a URL to the NetWorker Module download file on the FTP site.
2. Access the software:
 - a. Log on to the computer with administrative privileges.
 - b. Create a temporary directory where you can download the software.
 - c. Browse to the web site specified in the e-mail you received from the LEGATO sales representative and log on with your assigned user name and password.
 - d. Download the NetWorker Module evaluation software to the temporary directory.
 - e. Double-click the self-extracting executable file (*nmexch41_win_x86.exe*) to extract the installation files.
3. To complete the installation, see "[Installing the NetWorker Module Software](#)" on page 20.

Installing the NetWorker Module Software

Note: If you plan to use the NetWorker Configuration Wizard to configure NetWorker Module for Exchange Server scheduled backups, you must first install the NetWorker release 7.2 or later client software, and then separately install the NetWorker Configuration Wizard. You can then proceed to install the NetWorker Module software. For NetWorker Configuration Wizard installation instructions, refer to the *NetWorker, Release 7.2, Release Supplement*.

To install the NetWorker Module software:

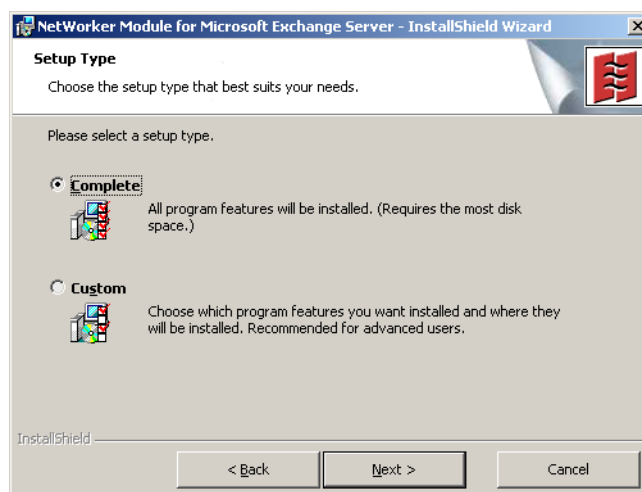
1. Verify that the target computer satisfies the requirements. For details, see "[Installation Requirements](#)" on page 15.
2. Ensure that prerequisite steps have been performed. For details, see "[Installation Prerequisites](#)" on page 17.
3. Log on with administrator privileges to the target computer for the NetWorker Module installation.

4. Exit all NetWorker programs.
5. Access the installation files. For instructions, see ["Accessing the NetWorker Module Installation Files"](#) on page 19.
6. In Windows Explorer, go to the directory containing the NetWorker Module installation files.

Note: This directory contains a *setup.exe* file, if you are installing the NetWorker Module software from the CD-ROM, or *nmexch41_win_x86.exe* if you downloaded the NetWorker Module software from the LEGATO web site.
7. Double-click *setup.exe* or *nmexch41_win_x86.exe*.
8. In the Welcome dialog box, click Next.
9. 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.
10. If the NetWorker Configuration Wizard is *not* installed, skip this step and proceed to [step 13](#).

If the NetWorker Configuration Wizard is installed, the Setup Type dialog box appears, as shown in [Figure 2 on page 21](#).

Figure 2. Setup Type Dialog Box



In the Setup Type dialog box, select one of the following and click Next:

- **Complete** — Installs the NetWorker Module software, the Windows Performance Monitor counters for the NetWorker Module, and the NetWorker Module for Exchange Server component of the NetWorker Configuration Wizard.

Note: To use the configuration wizard to schedule a backup of Exchange Server data on a Solaris computer, you must install the NetWorker Module for Exchange Server component of the wizard on the Solaris computer. This component resides in a separate package. For package installation instructions, see ["How to Install the NetWorker Module Component of the NetWorker Configuration Wizard on a Solaris Computer"](#) on page 24.

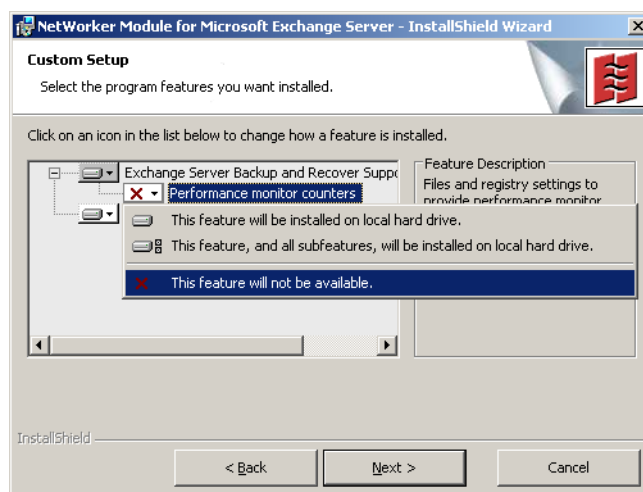
- Custom — Enables you to install only the NetWorker Module software, without the Windows Performance Monitor counters and without the NetWorker Module wizard component.

Note: If you opt to install only the NetWorker Module software (without the Windows Performance Monitor counters and the NetWorker Module wizard component) during the initial installation, you can run *setup.exe* in Maintenance mode later and install the counters and the wizard component. For instructions, see "[Maintaining a NetWorker Module Installation](#)" on page 24.

11. If you selected Complete in [step 10](#), skip this step and proceed to [step 13](#).

If you selected Custom, the Custom Setup dialog box appears. To exclude the Windows Performance Monitor counters from the installation, click the Performance Monitor counters icon and select "This feature will not be available," as shown in [Figure 3 on page 22](#).

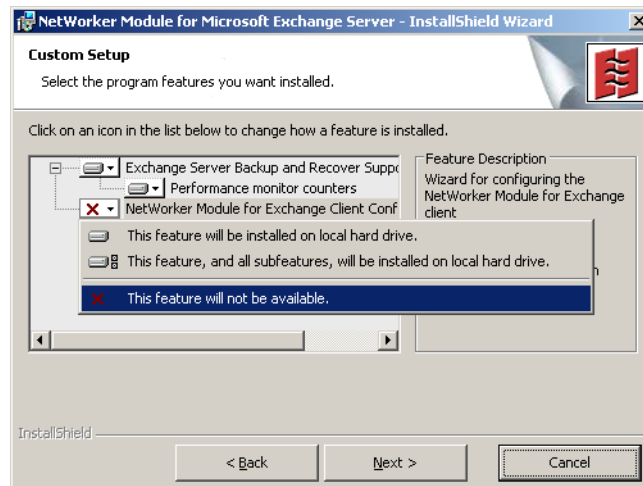
Figure 3. Custom Setup Dialog Box: Performance Monitor Counters



12. To exclude the NetWorker Module for Exchange Server component of the NetWorker Configuration Wizard from the installation, click the NetWorker Module for Exchange Client Configuration Wizard icon and select "This feature will not be available," as shown in [Figure 4 on page 23](#). Click Next.

The NetWorker Module for Exchange Server component of the NetWorker Configuration Wizard enables you to use the NetWorker Configuration Wizard to configure scheduled backups of Exchange server data.

Figure 4. Custom Setup Dialog Box: NetWorker Module Wizard Component



13. In the Server dialog box, you can optionally enter the hostname of the default NetWorker server to which the NetWorker User for Exchange Server program will connect when started. If you do not enter a default NetWorker server, NetWorker User for Exchange Server attempts to connect to the local host.
14. In the Ready to Install dialog box, click Install to begin the installation. The setup program does the following:
- Adds NetWorker User for Exchange Server to the NetWorker Group in the Windows Start menu.
 - Installs the NetWorker Module to the `<NetWorker_installation_path>\bin` directory.

The default NetWorker installation path is `%SystemDrive%\Program Files\Legato\nsr`. Therefore, the default installation path for this NetWorker Module is: `%SystemDrive%\Program Files\Legato\nsr\bin`.

Note: For more information about the NetWorker installation path, see "[The NetWorker Installation Path](#)" on page 17.

15. In the InstallShield Wizard Completed dialog box, click Finish to exit the wizard.

How to Install the NetWorker Module Component of the NetWorker Configuration Wizard on a Solaris Computer

To use the NetWorker Configuration Wizard on a Solaris computer to schedule a backup of Exchange Server data, you must first install the NetWorker Module for Exchange Server component of the wizard on the Solaris computer. This component resides in a separate package.

To install the NetWorker Module configuration wizard component on a Solaris computer:

1. Confirm that the following are installed on the Solaris computer:
 - NetWorker client software, release 7.2 or later
 - NetWorker Configuration Wizard
2. Confirm that the following are installed on the same computer that is running the Exchange Server software:
 - NetWorker client software, release 7.2 or later
 - NetWorker Module for Microsoft Exchange Server software

Note: The configuration wizard will not recognize the Exchange client if the NetWorker Module is not installed.

3. Enter the following command:

```
pkgadd -d /mount_point/volume_label/MSEXCHNG/4.1/wizard/  
solaris_32/LGTOexch
```

For additional installation information, refer to the *NetWorker Installation Guide, Release 7.2, Solaris Version*.

Maintaining a NetWorker Module Installation

After NetWorker Module 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

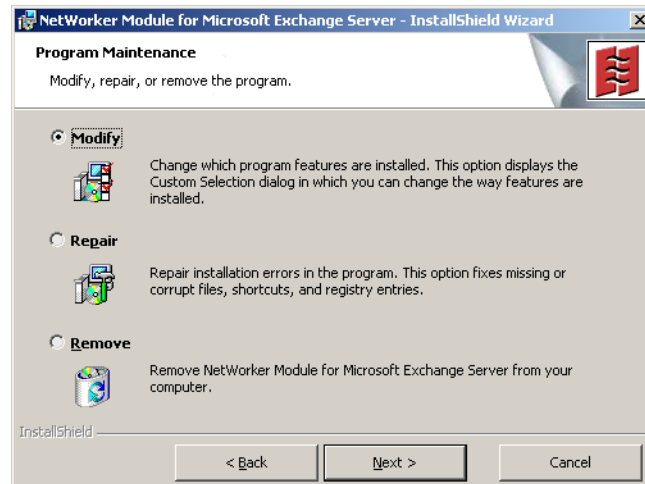
To run the Setup program in Maintenance mode:

1. Log on with administrator privileges to the target computer.
2. Exit all NetWorker programs.
3. In Windows Explorer, go to the directory containing the NetWorker Module installation files and double-click *setup.exe*.

Note: For information about accessing the installation files, see "[Accessing the NetWorker Module Installation Files](#)" on page 19.

The Setup program detects the existing NetWorker Module installation and automatically displays the Program Maintenance dialog box, as shown in [Figure 5 on page 25](#).

Figure 5. Program Maintenance Dialog Box



4. Select the task you want to perform, then proceed to the appropriate procedure to complete the maintenance task:
 - **Modify** — Displays the Custom Setup dialog box, where you can add the Performance Monitor counters and/or the NetWorker Module for Exchange Server component of the NetWorker Configuration Wizard to an existing NetWorker Module installation. For instructions, see ["How to Add Program Features to an Installation" on page 25](#).
 - **Repair** — Replace missing or corrupted program files in the existing NetWorker Module installation. For instructions, see ["How to Repair a NetWorker Module Installation" on page 26](#).
 - **Remove** — Use the Setup program's installation removal function to uninstall the NetWorker Module software. Alternatively, you can use the Windows Control Panel Add/Remove program to uninstall the NetWorker Module. For instructions, see ["Removing the NetWorker Module Software" on page 28](#).

How to Add Program Features to an Installation

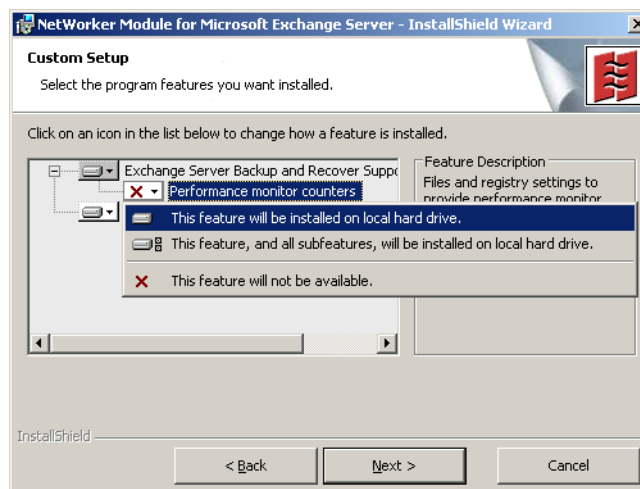
To add program features to an existing NetWorker Module installation:

1. Start the Setup program in maintenance mode. For instructions, see ["How to Run the Setup Program in Maintenance Mode" on page 24](#).
2. In the Program Maintenance dialog box, select Modify, and click Next.

3. In the Custom Setup dialog box, click the icon of each program feature you want to install and select "This feature will be installed on local hard drive."

For example, [Figure 6 on page 26](#) shows how to install the Performance Monitor counters.

**Figure 6. Custom Setup Dialog Box:
Installing Performance Monitor Counters**



Note: The NetWorker Module for Exchange Server component of the NetWorker Configuration Wizard is available for installation only if you installed the NetWorker release 7.2 or later client software, and then separately installed the NetWorker Configuration Wizard.

4. Click Next. The Server dialog box appears.
5. In the Server dialog box, you can optionally enter the hostname of the default NetWorker server to which the NetWorker User for Exchange Server program will connect when started. If you do not enter a default NetWorker server, NetWorker User for Exchange Server attempts to connect to the local host.
6. In the Ready to Modify dialog box, click Install to begin the installation. The setup program then adds the selected program features to the existing installation.

Note: For more information about NetWorker Module support for Windows Performance Monitor and the NetWorker Configuration Wizard, refer to the *NetWorker Module for Microsoft Exchange Server Administrator's Guide*.

How to Repair a NetWorker Module Installation

To repair an existing NetWorker Module installation:

1. Start the Setup program in maintenance mode. For instructions, see ["How to Run the Setup Program in Maintenance Mode" on page 24](#).
2. In the Program Maintenance dialog box, select Repair, and click Next.
3. In the Ready to Repair dialog box, click Install to begin the installation. The setup program reinstalls the NetWorker Module files as necessary.

Using SMS to Automate a Large Installation

You can use Microsoft System Management Server (SMS) 2.0 to install NetWorker Module release 4.1 automatically over an entire network. For best results with an SMS installation:

1. Do not install SMS on a NetWorker Module server host. However, it is acceptable to install and configure SMS on a system that has *only* the NetWorker client software installed.
2. Before you install the NetWorker Module software:
 - a. Set up the Microsoft Exchange Server software.
 - b. Set up and test the SMS software.

To install the NetWorker Module, complete the following two tasks.

Task 1: Create an Application Source Directory

To create the NetWorker Module software application source directory:

1. Create a shared directory on a local disk of the SMS site server, for example, *nwme41*.
2. Copy the installation files from the `\MSEXCHNG\I386\NETWORKR` directory on the NetWorker Module CD-ROM to the shared directory you created on the SMS site server disk.

Task 2: Create the SMS Installation Package

Use the SMS Administrator console to select the package definition file *nwmexch.sms* from the shared directory you created on the SMS site server. To perform this step and for instruction on distributing the software, refer to the Microsoft SMS documentation.

Installing NetWorker Module Software in a Microsoft Cluster

The NetWorker Module for Exchange Server can be configured to perform backup and recovery operations in an MSCS environment. For information about system requirements, see ["Installation Requirements" on page 15](#).

Note: The number of physical nodes supported in a cluster is dependent on the Microsoft Windows version. For details, refer to the Microsoft documentation.



Important: For each physical cluster node, the NetWorker client and NetWorker Module software must be installed on a private disk owned by the node. Do *not* install this software on a shared cluster disk.

To install the NetWorker Module in an MSCS cluster:

1. Install the NetWorker client software on a local disk of each physical node in the cluster. Installing into the default NetWorker installation directory is recommended.

During the installation, you are prompted to specify the hostnames of NetWorker servers that are authorized to back up the client's data. The list of authorized servers is stored in the `<NetWorker_install_path>\res\servers` file on the NetWorker client. To perform *snapshot* backups in a Microsoft cluster, the *servers* file on each cluster node must either contain the hostnames of all nodes in the cluster, or be blank (contain no hostnames). This does not apply to *traditional* backup operations, which do not require the cluster nodes to be listed in the *servers* file. For instructions on editing the *servers* file after the NetWorker software installation, refer to the *NetWorker Module for Microsoft Exchange Server Administrator's Guide*.



Important: If a NetWorker client's *servers* file contains no hostnames, then *any* NetWorker server can access the client's data for backup and recovery. This could be a potential security risk.

2. Install the NetWorker Module for Exchange Server software on the local disk of each physical node in the cluster. The NetWorker Module software is automatically installed at the same location as the NetWorker client software. For installation instructions, see "[Installing the NetWorker Module Software](#)" on page 20.
3. Install the enabler for this NetWorker Module on the NetWorker server. For more information, see "[Chapter 3: Evaluating and Licensing the Software](#)" on page 30.
4. (Optional) If the Exchange server has a snapshot-capable storage subsystem, install the appropriate NetWorker PowerSnap Module. For instructions on installing and configuring the PowerSnap Module software in a Microsoft cluster, refer to the appropriate *NetWorker PowerSnap Module Installation and Administrator's Guide*.

Removing the NetWorker Module Software

You can remove an existing installation of the NetWorker Module software by using either the Setup program or the Windows Control Panel Add/Remove Programs tool.

Note: When removing the NetWorker Module software from a cluster, you must perform the procedure on each cluster node.

How to Remove an Installation Using the Setup Program

To remove a NetWorker Module installation using the Setup program:

1. Start the Setup program in maintenance mode. For instructions, see "[Run the Setup Program in Maintenance Mode](#)" on page 24.
2. In the Program Maintenance dialog box, select Remove, and click Next.
3. In the Ready to Remove dialog box, click Remove. The Setup program removes all NetWorker Module program files and registry settings.

How to Remove an Installation Using the Control Panel

To remove a NetWorker Module installation using the Windows Control Panel:

1. Start the Control Panel.
2. From the Control Panel, select Add/Remove Programs.
3. From the Add/Remove Programs window, select the NetWorker Module for Microsoft Exchange Server, and then click the Remove button.

Chapter 3: Evaluating and Licensing the Software

When the NetWorker software is installed, it is in a temporary evaluation mode with all of the features available. This chapter explains how to enable the NetWorker software and features for permanent use. The chapter also describes the NetWorker licensing model and provides a basic explanation of licensing for the different NetWorker editions, modules, clientpaks, and features. However, it does not provide a comprehensive description of every possible licensing scenario. For specific licensing questions, contact a NetWorker Sales Representative.

The chapter includes the following sections:

- ["How NetWorker Software Is Licensed" on page 30](#)
- ["The Evaluation Process" on page 31](#)
- ["The Licensing Process" on page 32](#)
- ["NetWorker Licenses" on page 36](#)
- ["Managing LEGATO Licenses" on page 39](#)

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 which "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 four editions:

- Power Edition
- Network Edition
- Workgroup Edition
- Business Edition

These four editions enable varying degrees of functionality. Add-on enablers allow a broader scope of features. For more information about the editions and different functionality, see ["NetWorker Licenses" on page 36](#).

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 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 using the NetWorker software to back up data. The base enabler is the license that enables the edition purchased. For purchasing information, see ["Information and Services" on page 10](#). For more information about entering and authorizing the enabler, see ["The Licensing Process" on page 32](#).

To continue using some of the features that were available with the evaluation software, you may need to purchase add-on enablers, depending on the edition of base enabler you purchase. For more information about the different NetWorker editions and features, see ["NetWorker Licenses" on page 36](#).

Evaluating Features on an Existing Installation

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

- To obtain a temporary enabler code, refer to the Contents documentation in the LEGATO Media Kit, or contact LEGATO Sales or a LEGATO Reseller.
- To enter the temporary enabler code, see ["How to Enter a Temporary Enabler Code" on page 31](#).

Note: If the Business, Network, or Workgroup edition is already installed and enabled on a computer, and you want to evaluate Power Edition, use a different computer as a temporary NetWorker server for evaluation purposes.

By the end of the evaluation period, you must purchase, enter, and authorize the corresponding license enablers to continue using features you have evaluated. For instructions, see ["The Licensing Process" on page 32](#). For more information about the different NetWorker editions and features, see ["NetWorker Licenses" on page 36](#).

How to Enter a Temporary Enabler Code

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 the Create button.
5. Enter the enabler code in the Enabler Code attribute.
Filling in the Comment attribute is optional.
6. Click Apply.

On Windows:

1. Log on with administrator privileges to the NetWorker server.
2. In the NetWorker Administrator program, click the Registration button.
3. In the Registration window, right-click and select Create.
4. In the Create Registration window, enter the enabler code in the Enabler Code attribute.
Filling in the Comment attribute is optional.
5. Click OK.



Important: 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.

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 features, such as modules or clientpaks. To purchase the license enabler, contact a LEGATO Sales Representative.

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 33](#)
- ["Task 2: Obtain an Authorization Code" on page 34](#)
- ["Task 3: Enter the Authorization Code" on page 35](#)

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 a number of 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 re-enabled manually after their licenses were installed.

For this task, follow the procedure that is appropriate for your NetWorker environment.

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, highlight the enabler and click the Delete button.
5. In the Registration window, click the Create button.
6. Enter the enabler code in the Enabler Code attribute.

Filling in the Comment attribute is optional.
7. Click Apply.

On Windows:

1. Log on with administrator privileges to the NetWorker server.
2. In the NetWorker Administrator program, click the Registration icon on the Configure tab.
3. If a temporary enabler is listed, right-click the enabler and select Delete.
4. In the Registration window, right-click Registration and select Create.
5. In the Create Registration window, enter the enabler code in the Enabler Code attribute.

Filling in the Comment attribute is optional.
6. Click OK.

After you enter the 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:

- ["By Using the LEGATO Web Site" on page 34](#)
- ["By Fax or E-mail" on page 34](#)



Important: 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.

By Using the LEGATO Web Site

Register LEGATO products and obtain authorization codes online by completing a registration form 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 e-mail.

If you have any questions regarding software updates, contact LEGATO Licensing. For contact information, see ["Licensing and Registration" on page 11](#).

By Fax or E-mail

To register the software and obtain an authorization code by fax or e-mail:

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 name, company, address, phone, and e-mail information requested and click Apply.
4. Print the registration information sheet.
 - a. From the Server menu, select Registration.
 - b. From the View menu, select Tabular.
 - c. From the File menu, select Print.
5. Send your contact information to LEGATO Licensing. You can either:
 - Fax the printed registration information sheet.
 - E-mail the registration information.

For contact information, see ["Licensing and Registration" on page 11](#).

On Windows:

1. Log on with administrator privileges to the NetWorker server.
2. Complete your contact information:
 - a. In the NetWorker Administrator program, on the Configure tab, select Set Up Server.
 - b. In the Set Up Server dialog box, select the Company Information tab.
 - c. Complete the contact information and click OK.
3. Print the registration information sheet:
 - a. In the NetWorker Administrator program, on the Configure tab, select Registration.
 - b. In the Registration window, right-click the appropriate license and select Print Registration Information.
4. Send your contact information to LEGATO Licensing. You can either:
 - Fax the printed registration information sheet
 - E-mail the registration informationFor contact information, see ["Licensing and Registration" on page 11](#).

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.



Important: 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, you must either:

- Contact LEGATO Licensing to obtain a new authorization code. LEGATO requires the host ID of the original server as well as the new server. The host ID is displayed in the server's Registration window.
For contact information, see ["Licensing and Registration" on page 11](#).
 - Install and configure the LEGATO License Manager software. For more information on using the License Manager, see ["Managing LEGATO Licenses" on page 39](#); also refer to the *License Manager Installation and Administrator's Guide*.
-

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.
4. In the Registration window, highlight the appropriate license.
5. In the Auth Code text box, enter the authorization code, and then click Apply.

On Windows:

1. Log on with administrator privileges to the NetWorker server.
2. In the NetWorker Administrator program, on the Configure tab, select Registration.
3. Right-click the appropriate license and select Edit.
4. In the Auth Code text box, enter the authorization code, and then click OK.

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 LEGATO Support.

NetWorker Licenses

There are four different levels, or editions, of base enabler:

- NetWorker Power Edition — For high-demand data centers and large, complex environments
- NetWorker Network Edition — For high-volume, enterprise-level environments
- NetWorker Workgroup Edition — For branch offices and small departmental environments
- NetWorker Business Edition — For businesses that require a full-function, entry-level backup software that includes a bundled library module.

Each edition permits you to use the software for a specified number of clients and devices. These four editions also enable different degrees of parallelism and support different add-on modules, including extra client connections, devices, or features.



Important: An HP Superdome computer requires a separate enabler for each partition on which a NetWorker server or storage node runs.

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 only for Windows client computers; similarly, the client connections that come with 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 the NetWorker Server for Solaris. The ClientPak for UNIX supports all UNIX platforms; therefore, 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, so a ClientPak for Linux is necessary to back up Linux clients by either UNIX or Windows servers.



Example: Multiplatform Licensing Schemes

A company was using a Linux server to back up Solaris, Linux, and Windows NT 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 NT and subsequent Windows 2000 clients without requiring a ClientPak. The company also made the Solaris computer a NetWorker server to back up the HP-UX, Solaris, and AIX clients, 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 upgrade from release 4.0 and later, including NetWorker release 7.0. 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 2 on page 38 lists the NetWorker releases that require update enablers.

Table 2. NetWorker Releases Requiring Update Enablers

Upgrade 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
Any release prior to 5.0	yes	yes	yes	yes	yes	yes	yes	yes
5.0		yes	yes	yes	yes	yes	yes	yes
5.5			yes	yes (UNIX only)	yes (NT only)	yes	yes	yes
5.5.x				yes (UNIX only)	yes (NT only)	yes	yes	yes
5.6					NA*	yes	yes	yes
5.7						yes	yes	yes
6.0						no	yes	yes
6.x							yes	yes
7.0								yes
* Release 5.6 is UNIX only, and release 5.7 is Windows only.								

Additional Licenses

This section describes a few of the additional licenses required to operate some of the NetWorker features. For a complete list, contact a LEGATO Sales Representative.

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 39 or "[NDMP Licensing](#)" on page 39.

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.

LEGATO 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. To place a NetWorker server in a cluster, you must have Power Edition. For more information on licensing computers in a cluster, refer to the *NetWorker Administrator's 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 LEGATO Licenses

The 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.

The general steps to begin implementing the License Manager are to:

1. Contact LEGATO Licensing to obtain bulk enabler codes. For contact information, see "[Licensing and Registration](#)" on page 11.
2. Install the License Manager software.
3. Configure the License Manager and configure the NetWorker servers to access the License Manager for their licenses.

Note: Currently, you must manage NetWorker ClientPak licenses with the License Manager on a supported UNIX, Linux, or Windows version NetWorker server.

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