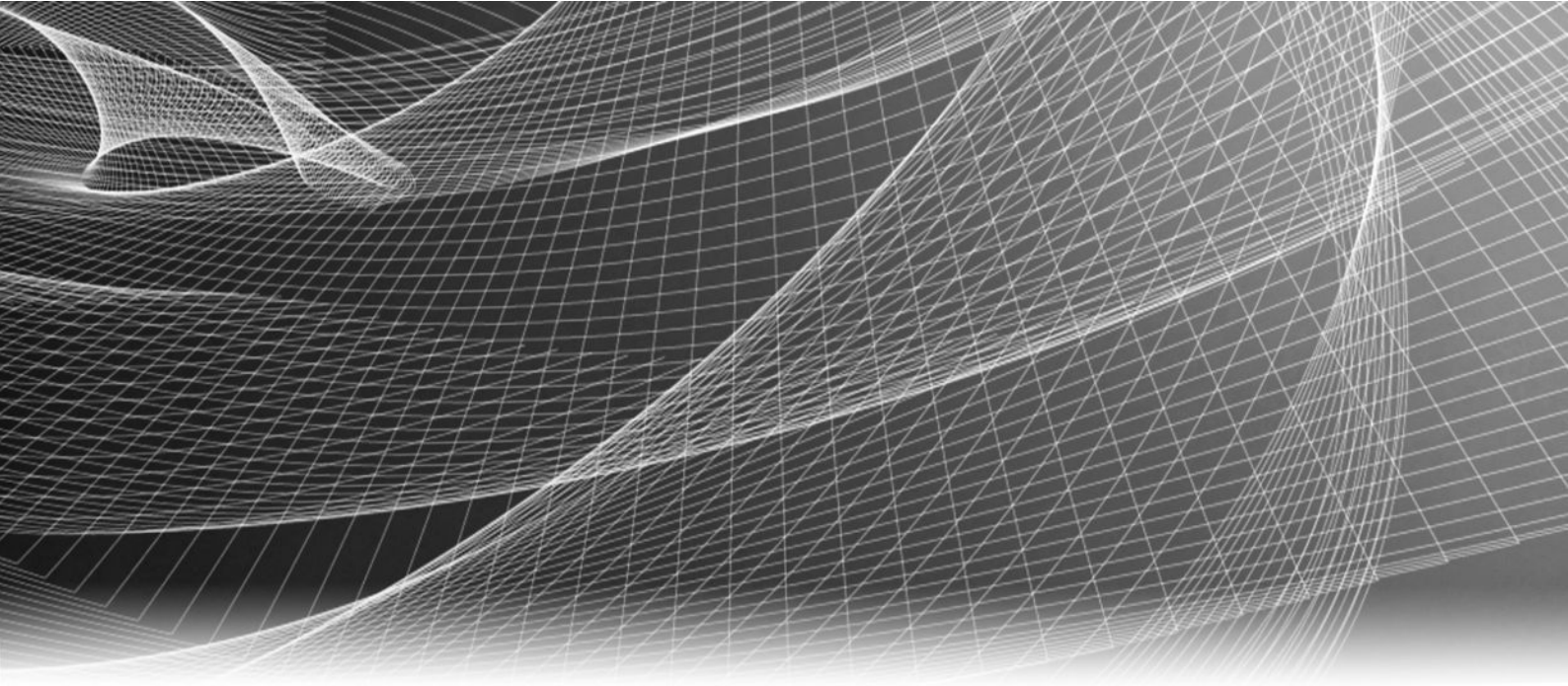

EMC® NetWorker® for Windows

Version 8.2 SP1

Installation Guide

EMC²

Published January, 2015

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Preface

As part of an effort to improve its product lines, EMC periodically releases revisions of its software and hardware. Therefore, some functions described in this document might not be supported by all versions of the software or hardware currently in use. The product release notes provide the most up-to-date information on product features.

Contact your EMC technical support professional if a product does not function properly or does not function as described in this document.

Note

This document was accurate at publication time. Go to EMC Online Support (https://support.emc.com) to ensure that you are using the latest version of this document.

Note

This document was accurate at publication time. Go to EMC Online Support (https://support.emc.com) to ensure that you are using the latest version of this document.

Purpose

This document describes how to uninstall and install the NetWorker software.

Audience

This document is part of the NetWorker documentation set and is intended for use by system administrators during the installation and setup of the NetWorker software.

Revision history

The following table presents the revision history of this document.

Table 1 Revision history

Revision	Date	Description
01	Jan 28, 2015	First release of this document for EMC NetWorker 8.2 SP1

Related documentation

The NetWorker documentation set includes the following publications:

- *EMC NetWorker Online Software Compatibility Guide*
  Provides a list of client, server, and storage node operating systems supported by the EMC information protection software versions. You can access the Online Software Compatibility Guide on the EMC Online Support site at https://support.emc.com. From the Support by Product pages, search for NetWorker using "Find a Product", and then select the Install, License, and Configure link.
- *EMC NetWorker Administration Guide*
  Describes how to configure and maintain the NetWorker software.
- *EMC NetWorker Cluster Installation Guide*
  Contains information related to configuring NetWorker software on cluster servers and clients.
- *EMC NetWorker Installation Guide*
  Provides information on how to install, uninstall and update the NetWorker software for clients, storage nodes, and servers on all supported operating systems.

- *EMC NetWorker Updating from a Previous Release Guide*
  Describes how to update the NetWorker software from a previously installed release.
- *EMC NetWorker Release Notes*
  Contains information on new features and changes, fixed problems, known limitations, environment and system requirements for the latest NetWorker software release.
- *EMC NetWorker Avamar Devices Integration Guide*
  Provides planning and configuration information on the use of Avamar devices in a NetWorker environment.
- *EMC NetWorker Command Reference Guide*
  Provides reference information for NetWorker commands and options.
- *EMC NetWorker Data Domain Deduplication Devices Integration Guide*
  Provides planning and configuration information on the use of Data Domain devices for data deduplication backup and storage in a NetWorker environment.
- *EMC NetWorker Error Message Guide*
  Provides information on common NetWorker error messages.
- *EMC NetWorker Licensing Guide*
  Provides information about licensing NetWorker products and features.
- *EMC NetWorker Management Console Online Help*
  Describes the day-to-day administration tasks performed in the NetWorker Management Console and the NetWorker Administration window. To view Help, click Help in the main menu.
- EMC NetWorker User Online Help
  The NetWorker User program is the Windows client interface. Describes how to use the NetWorker User program which is the Windows client interface connect to a NetWorker server to back up, recover, archive, and retrieve files over a network.

Special notice conventions used in this document

EMC uses the following conventions for special notices:

NOTICE

Addresses practices not related to personal injury.

Note

Presents information that is important, but not hazard-related.

Typographical conventions

EMC uses the following type style conventions in this document:

Italic	Use for full titles of publications referenced in text
`Monospace`	Use for: • System code • System output, such as an error message or script • Pathnames, file names, prompts, and syntax • Commands and options
Monospace italic	Use for variables
`Monospace bold`	Use for user input
[ ]	Square brackets enclose optional values

|	Vertical bar indicates alternate selections - the bar means “or”
{ }	Braces enclose content that the user must specify, such as x or y or z
...	Ellipses indicate non-essential information omitted from the example

Where to get help

EMC support, product, and licensing information can be obtained as follows:

Product information

For documentation, release notes, software updates, or information about EMC products, go to EMC Online Support at https://support.emc.com.

Technical support

Go to EMC Online Support and click Service Center. You will see several options for contacting EMC Technical Support. Note that to open a service request, you must have a valid support agreement. Contact your EMC sales representative for details about obtaining a valid support agreement or with questions about your account.

Online communities

Visit EMC Community Network at https://community.emc.com for peer contacts, conversations, and content on product support and solutions. Interactively engage online with customers, partners, and certified professionals for all EMC products.

Your comments

Your suggestions will help us continue to improve the accuracy, organization, and overall quality of the user publications. Send your opinions of this document to DPAD.Doc.Feedback@emc.com

CHAPTER 1

Software Requirements

Multi-locale datazone requirements

This section provides information to consider when using the NetWorker software in a multi-locale datazone.

In a multi-locale datazone, you can configure hosts to run in different locales. The NetWorker software supports a multi-locale datazone. The NetWorker software includes language pack support for the French, the Japanese, the Simplified Chinese, the Korean, and the English locales.

The NetWorker command line interface (CLI), the NMC server graphical user interface (NMC GUI), and the NetWorker User program are I18N compliant.

In a multi-locale datazone, users can display data and remotely manage their NetWorker environment in the locale defined on their local host. NetWorker supports different locales on the local host, the NetWorker server, and the NMC server.

The NetWorker software supports:

- The languages and the character sets that the underlying OS supports.
- UTF-8 encoded input and output files.
- Non-English scheduled backup and archive requests.
- Non-English mounts on UNIX hosts. The NetWorker software detects these mounts during a “All” save set backup.
- A directed recover to a non-English relocation directory.
- A save set recover of a non-English save set, independent of the locale of the source host.
- The *NetWorker Administration Guide* describes how to perform NetWorker tasks in a multi-locale datazone.

Before you configure the NetWorker software in a multi-locale datazone, review the following considerations.

General multi-locale considerations

This section describes general considerations to review before installing the NetWorker software in a multi-locale datazone.

To view localized textual elements, for example, radio buttons and menu options, the dates, the times, and the numbers in the CLI, the NMC server GUI, and the NetWorker User application, ensure that you:

- Install the required language font on the operating system of the host that is accessing the application interface.
- Enable the corresponding language locale on the operating system of the host that accesses the application interface.
- Enable the corresponding language locale on the NMC server.
- Install the corresponding language pack included with the NetWorker software package on the NetWorker client, server, storage node, and NMC server.

The NetWorker software does not support locales that the operating system defines or code sets that remap characters that have a special meaning for file systems, for example De_DE.646. Depending on the file system, these special characters might include the forward slash (/), the backward slash (\), the colon (:), or the period(.).

When the appropriate non-English font is not available on the NMC client, the NMC GUI renders the localized textual elements in English or the elements might appear as illegible.

The CLI displays the data correctly when the current locale supports the characters and the encoding. However, when the user and system locales do not match on a Windows host, characters might display incorrectly.

The `nsr_render_log` command enables you to render English log file messages into the locale of the user that runs `nsr_render_log` command. The *NetWorker Command Reference Guide* or the UNIX man pages describe how to use the `nsr_render_log` program.

Message files that support localization include:

- `daemon.raw` file
- `nsrcpd.raw` file — the client push log
- `gstd.raw` file — the NMC server log file
- `networkr.raw` file — the Windows recovery log file

The *NetWorker Administration Guide* on the EMC Online Support Site describes how to view raw log files.

Windows requirements

Consider these general locale requirements when using a Windows Console client or the **NetWorker User** program in a multi-locale NetWorker datazone.

When non-UTF8 data from a UNIX host uses encoding that Windows does not support natively, for example, euc-jp, the UNIX host data will not appear correctly on the Windows host.

The **NetWorker User** program displays the textual elements, dates, times, and numbers based on the **Regional and Language Options** settings in the **Control Panel**.

UNIX requirements

Consider these general locale requirements when using a UNIX Console client in a multi-locale NetWorker datazone.

NetWorker does not support a non-ASCII installation directory. Create a symbolic link of the /nsr folder to a non-ASCII directory.

To display non-English textual elements, the dates, the times, and the numbers in the NMC GUI ensure that you:

- Install the appropriate NetWorker language package on the client.
- Define the *LC_ALL* and *LANG* environment variables to match the NetWorker language pack installed.
  For example, on Solaris:
  - To use the French NetWorker language pack, type:

    ```
    setenv LANG fr
    setenv LC_ALL fr
    ```

  - To use the Japanese NetWorker language pack, type:

    ```
    setenv LANG ja
    setenv LC_ALL ja
    ```

- To use the Simplified Chinese NetWorker language pack, type:

```
setenv LANG zh
setenv LC_ALL zh
```

- To use the Korean NetWorker language pack, type:

```
setenv LANG ko
setenv LC_ALL ko
```

TCP/IP requirements

The NetWorker software requires that you install and configure TCP/IP on each host.

Before you install the NetWorker software, ensure that:

- The `/etc/hosts` file on each Solaris and Linux NetWorker host contains an entry for the IPv4 loopback address:

```
127.0.0.1        localhost.localdomain localhost
```

- The NetWorker server, when configured as a DHCP client, uses a reserved address that is synchronized with DNS.
- The name of the host that the `hostname` command returns on the system must match the name that the IP address resolves to when using `nslookup`.
- When using OS tools, for example, `nslookup`, the IP address of the host must resolve to the same hostname defined for the NIC used by NetWorker.
- The hostname does not contain an underscore character (_).

IPv6 protocol

Internet Protocol version 6 (IPv6) is a next generation Internet protocol used concurrently with IPv4 or in a pure IPv6 environment. IPv6 increases the number of available IP addresses and adds improvements in the areas of routing and network autoconfiguration.

Consider the following:

- IPv6 addresses are represented by 8 groups of 16-bit hexadecimal values that are separated by colons (:).
  For example:

```
2001:0db8:85a3:0000:0000:8a2e:0370:7334
```

- Most newer operating systems configure the IPv6 loopback interface by default.
  To determine if the IPv6 loopback interface is configured on the host, use operating system tools such as `ifconfig` on UNIX and `ipconfig` on Windows. On UNIX systems, the device name of the loopback interface is usually `lo` or `lo0`.
- NetWorker does not support temporary or link-local IPv6 addresses.
- The client backup fails when the IPv6 address for the client is not:
  - Stored in DNS or in the hosts file.
  - Added to the client resource.

  When the operating system configures the IPv6 loopback interface, ensure that:

- The hosts file on each NetWorker host has an entry that associates the IPv6 loopback interface (::1) with the localhost. Add the IPv6 loopback interface entry before the IPv4 loopback entry (127.0.0.1 localhost)
  For example:

```
::1 localhost
127.0.0.1        localhost.localdomain localhost
```

- The IPv6 loopback entry must remain in the hosts file when the host is operating in a pure IPv4, pure IPv6, or dual stack configuration.

CHAPTER 2

Microsoft Windows Installation

Roadmap for installing the NetWorker and NMC software on Windows

Use this roadmap to install the NetWorker software on a host that does not have a previous version of the NetWorker software installed.

Procedure

1. The Software Requirements chapter provides the general requirements and considerations relevant to each supported Windows operating systems.
2. Reviewing the NetWorker requirements for Windows on page 16 details the NetWorker software requirements.
3. Install the NetWorker software:
   - Installing NetWorker client, server, and storage node software on page 18 describes how to install the NetWorker server, storage node, and client software.
   - Installing the NMC server software on page 22 describes how to install the NMC server software.
4. The Verify the Installation chapter describes how to test the NetWorker software functionality.
5. Enable and register the NetWorker products. The *NetWorker Licensing Guide* provides information.

Reviewing the NetWorker requirements for Windows

Review the information in this section before you install NetWorker on the Windows 2008, or the Windows 2012 operating systems.

General considerations

Review the following requirements before you install the NetWorker software on a Windows host.

- You cannot recover backups performed by using NetWorker 8.2.x to a pre-NetWorker 8.1 client.
- When the NetWorker software is installed on a File Allocation Table (FAT) partition, do not disable long name support.
- InstallShield stores the entire installation program in memory, even to install a single NetWorker software component.
- Install the latest Microsoft Windows update and critical patches.

Package disk space requirements

Ensure that there is sufficient disk space on the host to contain both the compressed NetWorker software package and the fully uncompressed files.

This table lists the NetWorker packages and the compressed and uncompressed file sizes.

Table 2 Size of compressed and uncompressed files

Operating system	Compressed file	Uncompressed file
Windows x64	212 MB	213 MB
Windows x86	101 MB	102 MB

Location and disk space requirements

Before you install the NetWorker software, review the disk space and location requirements.

This table specifies the default location and space requirements for the NetWorker software in a Microsoft Windows environment.

Table 3 Microsoft Windows default file locations and space requirements

NetWorker files	Location	Space for x86	Space for x64
Client files	`Program Files\EMC NetWorker \nsr`	264 MB	383 MB
Console	`Program Files\EMC NetWorker \Management`	n/a	148 MB
Storage node	`Program Files\EMC NetWorker \nsr`	n/a	319 MB
Server	`Program Files\EMC NetWorker \nsr`	n/a	439 MB

Client file index, media database and resource database files	`Program Files\EMC NetWorker \nsr\index`
	`Program Files\EMC NetWorker \nsr\mm`
	`Program Files\EMC NetWorker \nsr\res`
		varies	varies

The *Online Software Compatibility Guide* on the EMC Online Support Site, provides the most up to date information on supported operating systems.

Windows 2012 requirements

The NetWorker server, storage node, and client software does not support Windows 2012 R2 Foundation Edition as a guest operating system on Hyper-V.

http://technet.microsoft.com/en-us/library/jj679892.aspx provides more information.

Windows 2008 requirements

Review these requirements before you install the NetWorker 8.1 and later software on a Windows 2008 and Windows 2008 R2 server.

- NetWorker 8.1 and later supports Windows 2008 64-bit and Windows 2008 R2 64-bit as a NetWorker server, storage node, and client. NetWorker 8.1 and later supports a Windows 2008 32-bit storage node and client.
- Use NetWorker Module for Microsoft Applications to backup Hyper-V hosts.
- Enable Windows Error Reporting (WER).
  WER replaces the Dr. Watson user dumps used in earlier releases of Windows and provides the ability to collect full User-Mode Dumps after an application crash. MSDN describes how to configure WER to collect User-Mode Dumps.
- The Microsoft Visual C++ 2005 Redistributable software (vcredist_x64.exe and vcredist_x86.exe) is included with the x64 and x86 NetWorker packages. During the NetWorker software installation process, the Microsoft Visual C++ 2005 Redistributable software is installed. Do not remove the Microsoft Visual C++ 2005 Redistributable software.
- Enable Data Execution Prevention to protect essential Windows programs and services:
  1. Navigate to **Start › Control Panel › System and Security › System › Advanced system settings**.
  2. Select **Advanced › Performance › Settings › Data Execution Prevention**.
  3. Select **Turn on DEP for essential Windows programs and services only**.
  4. Click **OK**.

NetWorker server and storage node tape device requirements

When you configure a SAN tape device on a Windows NetWorker server or a storage node, disable Test Unit Ready (TUR). Microsoft kb article 842411 describes how to disable TUR.

Installing the NetWorker client, server, and storage node software

This section describes how to install the client, the storage node, and the server software as well as the optional NetWorker software packages such as the language packages on Windows 2008 or Windows 2008 Server Core server.

Installing the software

Follow these steps to install the NetWorker software.

Procedure

1. Log on to the target host with a user that has administrator privileges by using the setup installation process.
2. ~~Download the NetWorker software package from the EMC Online Support Site.~~
3. Extract the NetWorker packages to a temporary location on the target host.
4. The procedure to install the NetWorker software on a Microsoft Windows host differs from the installation on a Windows 2008 Server Core host:

Descarga el software desde http://sistemas.uc3m.es/servicio_backup/cliente_networker/

- For a Windows Microsoft host, in the directory that contains the extracted NetWorker software:
  a. Click **autorun.exe**.
  b. Select **Install EMC NetWorker 8.1.1 software**.
  c. If a Windows security warning appears, click **Run**.
  d. If you receive a warning message asking you trust running EMC components, click **Yes**.
- For a Windows 2008 Server Core host, run `setup.exe` from the appropriate subdirectory to which the NetWorker installation software was extracted:
  - On 32-bit hosts: ...\win_x86\networkr
  - On 64-bit hosts: ...\win_x64\networkr
  - On 64-bit Itanium hosts: ...\win_ia64\networkr

Note

Do not use `autorun.exe` to install NetWorker on a Windows 2008 Server Core host. The `autorun.exe` program requires Windows Explorer, which is not available with a Windows core installation.

5. On the **Choose Setup Language** window, select a language and click **OK**.
6. On the **Welcome to NetWorker › Installation** window, click **Next**.
7. On the **Customer Information** window, fill in the appropriate information, click **Next**.
8. On the **Windows Firewall** window, select **Configure the Windows firewall**, click**Next**.

El cortafuegos debe permitir el tráfico TCP y UDP desde/hacia el servidor de backup (backup-l.uc3m.es o backup-g.uc3m.es).

NOTICE

If you do not configure the firewall to allow inbound and outbound NetWorker software traffic, scheduled backups might fail.

9. On the **Installation Type** window, select the NetWorker software packages that you want to install.

   This table provides a description of the NetWorker software that is installed with each selection.

Table 4 Available NetWorker software packages on Windows

Seleccione únicamente la opción Client.

El resto de paquetes software no son necesarios.

Selection	Description
Client	Installs the NetWorker client software package. Choose this component when the target host is a NetWorker client.
Storage node	Installs the NetWorker client and the storage node software packages. Choose this component when the target host is a NetWorker storage node.
Server and client	Installs the NetWorker server, the storage node and the client software packages. Choose this installation type when the target host is a NetWorker server.
NetWorker Management Console	Installs the Console server software. Choose this component to install the Console server software. The Console server software installation process starts automatically, after the NetWorker software installation completes.

Table 4 Available NetWorker software packages on Windows (continued)

Selection	Description
Language packs	Install additional language packs. During the NetWorker software installation, optional language packs are selected and installed.
NetWorker License Manager	Installs the License Manager server software. Choose this option when the target host is the License Manager server. Do not install NetWorker License Manager on a NetWorker server. During the NetWorker software installation, the License Manager software is installed. The *NetWorker License Manager Installation and Administration Guide* describes how to install and configure the NetWorker License Manager software.

10. Click **Next** to accept the default installation location.

    NOTICE

    To install the NetWorker software in a location other than the default location, click **Change**, and then specify the installation path.

11. If the optional **Language Packs** component was selected previously, the **Feature Selection** window appears.

    On the **Feature Selection** window:

    a. Select the required language packs.

    b. Select **This feature will be installed on local hard drive**, and click **Next**.

    NOTICE

    The English language pack is required and the selection cannot be cleared.

12. On the **Ready to Install the Program** window, review the settings and click **Install**.

13. If the NetWorker server and client installation type was selected previously, the **License Agreement** window appears.

    On the **License Agreement** window:

    a. Review the license agreement.

    b. Select **I accept the terms in this license agreement**.

    c. Click **Next**.

Specifying the list of trusted servers

Follow these steps to specify the list of trusted servers and to complete the installation.

Procedure

1. On the **NetWorker Server Selection** window, specify the shortname and FDQN for each NetWorker server, one per line, that require access to the NetWorker host. The first entry becomes the default NetWorker server.

   - To add a NetWorker server that is not listed in the **Available Servers** list:

Teclee:
backup-l.uc3m.es si su servidor se encuentra en el campus de Leganés.
backup-g.uc3m.es si su servidor se encuentra en el campus de Getafe.

a. Type the name of the server in the **Enter a server name** text box.
b. Click **Add**.

- To browse for available NetWorker servers:
  a. Click **Update List**.
  b. Select a NetWorker server from the **Available Servers** list.
- To add or remove NetWorker servers from the **Available Servers** list to the **Selected Servers** list, use the arrow buttons.

Note

The list of trusted NetWorker servers is stored in the *NetWorker_installation_directory*`\res\servers` file. When no servers are specified, any NetWorker server can backup or perform a directed recovery to the host.

2. Click **Next**.
3. Click **OK** to complete the install.
4. Open **Task Manager** and ensure that the appropriate NetWorker daemons are started.

   The NetWorker daemons chapter provides a list of the NetWorker daemons.

Adjusting antivirus software settings

Undesirable behavior might occur if you do not tune the antivirus software installed on a Windows host for backup environments.

Configure the antivirus software to:

- Avoid scanning files that the backup software opens for backup.
  For example:
  - Clear the `Opened for Backup in the Advanced Auto-Protect` option for Norton Antivirus.
  - Clear the **Opened for Backup in the Scan Items tab of McAfee's On-Access Scan Properties** window.
- Not monitor the following directories:
  - `C:\Program Files\EMC or C:\Program files\Legato`
  - `C:\Program Files\EMC NetWorker\nsr\res or C:\Program Files \Legato\nsr\res`
  - `C:\Program Files\EMC NetWorker\nsr\mm or C:\Program Files \Legato\nsr\mm`
  - `C:\Program Files\EMC NetWorker\nsr\Index or C:\Program Files\Legato\nsr\index`
- Not monitor AFTD directories.

Deploying a VMware template for the host

Puede omitir este paso si no está desplegando una plantilla de VMware.

Review this section if you will cerate a VMware template of the host, which you will use to deploy multiple virtual machines.

When the NetWorker daemons start on the host, NetWorker creates resources in the NSRLA database. NetWorker operations require that each host in a data zone contain unique information in the database. To ensure that each VM will have a unique

information in the NSRLA database, perform the following steps after you complete the NetWorker software installation and before you create the VMware template.

Procedure

1. Right-click **My Computer** and select **Mange**.
2. Expand **Services and Applications** and select **Services**.
3. Right-click the `NetWorker Remote Exec` service and select **Stop**.
4. Delete the `C:\Program Files\EMC NetWorker\nsr\res\nsrladb` directory.

Results

After you deploy the VMware template and start the VM, NetWorker will generate unique values in the NSRLA resource for the VM.

Installing the NMC server software

Puede omitir este paso.
El software NMC no es necesario en su caso.

Install the NMC server software package and the optional NetWorker software packages on a Microsoft Windows host or Windows Server Core host.

NOTICE

The Console client GUI is not supported on the Windows 2008 Server Core. You can install the NMC server on a Windows 2008 Server Core host, but you cannot launch the Console client to connect to the NMC server.

Installing the software

Follow these steps to install the NetWorker software.

Procedure

1. Log on to the target host with a user that has administrator privileges by using the setup installation process.
2. Download the NetWorker software package from the EMC Online Support Site.
3. Extract the NetWorker packages to a temporary location on the target host.
4. The procedure to install the NetWorker software on a Microsoft Windows host differs from the installation on a Windows 2008 Server Core host:
   - For a Windows Microsoft host, in the directory that contains the extracted NetWorker software:
     a. Click **autorun.exe**.
     b. Select **Install EMC NetWorker 8.1.1 software**.
     c. If a Windows security warning appears, click **Run**.
     d. If you receive a warning message asking you trust running EMC components, click **Yes**.
   - For a Windows 2008 Server Core host, run `setup.exe` from the appropriate subdirectory to which the NetWorker installation software was extracted:
     - On 32-bit hosts: ...\win_x86\networkr
     - On 64-bit hosts: ...\win_x64\networkr
     - On 64-bit Itanium hosts: ...\win_ia64\networkr

Note

Do not use `autorun.exe` to install NetWorker on a Windows 2008 Server Core host. The `autorun.exe` program requires Windows Explorer, which is not available with a Windows core installation.

5. On the **Choose Setup Language** window, select a language and click **OK**.
6. On the **Welcome to NetWorker › Installation** window, click **Next**.
7. On the **Customer Information** window, fill in the appropriate information, click **Next**.
8. On the **Windows Firewall** window, select **Configure the Windows firewall**, click**Next**.

NOTICE

If you do not configure the firewall to allow inbound and outbound NetWorker software traffic, scheduled backups might fail.

9. On the **Installation Type** window, select the NetWorker software packages that you want to install.

   This table provides a description of the NetWorker software that is installed with each selection.

Table 5 Available NetWorker software packages on Windows

Selection	Description
Client	Installs the NetWorker client software package. Choose this component when the target host is a NetWorker client.
Storage node	Installs the NetWorker client and the storage node software packages. Choose this component when the target host is a NetWorker storage node.
Server and client	Installs the NetWorker server, the storage node and the client software packages. Choose this installation type when the target host is a NetWorker server.
NetWorker Management Console	Installs the Console server software. Choose this component to install the Console server software. The Console server software installation process starts automatically, after the NetWorker software installation completes.
Language packs	Install additional language packs. During the NetWorker software installation, optional language packs are selected and installed.
NetWorker License Manager	Installs the License Manager server software. Choose this option when the target host is the License Manager server. Do not install NetWorker License Manager on a NetWorker server. During the NetWorker software installation, the License Manager software is installed. The *NetWorker License Manager Installation and Administration Guide* describes how to install and configure the NetWorker License Manager software.

10. Click **Next** to accept the default installation location.

NOTICE

To install the NetWorker software in a location other than the default location, click **Change**, and then specify the installation path.

11. If the optional **Language Packs** component was selected previously, the **Feature Selection** window appears.

    On the **Feature Selection** window:

    a. Select the required language packs.

    b. Select **This feature will be installed on local hard drive**, and click **Next**.

    NOTICE

    The English language pack is required and the selection cannot be cleared.

12. On the **Ready to Install the Program** window, review the settings and click **Install**.
13. If the NetWorker server and client installation type was selected previously, the **License Agreement** window appears.

    On the **License Agreement** window:

    a. Review the license agreement.

    b. Select **I accept the terms in this license agreement**.

    c. Click **Next**.

Specifying the list of trusted servers and configuring the Console

Follow this procedure to specify the list of trusted servers and to complete the installation.

Procedure

1. On the **NetWorker Server Selection** window, specify the shortname and FDQN for each NetWorker server, one per line, that require access to the NetWorker host. The first entry becomes the default NetWorker server.
   - To add a NetWorker server that is not listed in the **Available Servers** list, type the name of the server in the **Enter a server name** text box, and then click **Add**.
   - To browse for available NetWorker servers, click **Update List**. Select a NetWorker server from the **Available Servers** list.
   - To add or remove NetWorker servers from the **Available Servers** list to the **Selected Servers** list, use the arrow buttons.

   Note

   The list of trusted NetWorker servers is stored in the *NetWorker_installation_directory*`\res\servers` file. When no servers are specified, any NetWorker server can back up or perform a directed recovery to the host.
2. On the **Welcome to NetWorker Management Console Installation** window, click **Next**.
3. On the **Customer Information** window, fill in the appropriate information, and click **Next**.
4. On the **Product Setup** window, click **Next** to install the Console server software in the default directory.

- To install the software in a different directory, click **Change** and specify a new location.
- If the Console server database and configuration files were moved from a different Console server to this host, specify the location of the database and configuration files.
- If the Setup wizard detects that there is insufficient disk space to install the NetWorker software, another dialog box appears listing the local drives, and highlights the drive with insufficient disk space. The list also displays disk size, available space, and required space. Use this information to select an appropriate drive on which to install the software.

5. On the **Configuration Options** window, type the following:
   - **Database Destination path**
   - **Web server port** for the embedded HTTP server
   - **Client Service port**

   When you define the configuration options, consider the following:
   - To change the default **Database Destination path**, select **Change**.
   - To use the default port numbers, type **9000** for the HTTP server and **9001** for the Client Service port.
   - To use different port numbers, type the new port numbers (between **1024** and **49151**).

     NOTICE

     Do *not* use port numbers that are already in use. For example: The Console server uses port **2638** for TDS protocol communications with the Console database. The preferred port for EMC Data Protection Advisor product is **9002**.
6. Click **Next**.
7. In the **Customer Database Maintenance** window:
   a. Leave the default option **Keep the database** selected.
   b. Click **Next**.
8. On the **NetWorker Management Console Setup Completed** window:
   a. Clear **Launch the console client in the default browser immediately after exiting the InstallShield Wizard**.
   b. Click **Next**.
9. Click **OK** to complete the install.
10. Open **Task Manager** and ensure that the appropriate NetWorker daemons are started.

    The NetWorker daemons chapter provides a list of the NetWorker daemons.

Adjusting antivirus software settings

Undesirable behavior might occur if you do not tune the antivirus software installed on a Windows host for backup environments.

Configure the antivirus software to:

- Avoid scanning files that the backup software opens for backup.
  For example:

- Clear the `Opened for Backup in the Advanced Auto-Protect` option for Norton Antivirus.
- Clear the **Opened for Backup in the Scan Items tab of McAfee's On-Access Scan Properties** window.

- Not monitor the following directories:
  - `C:\Program Files\EMC or C:\Program files\Legato`
  - `C:\Program Files\EMC NetWorker\nsr\res or C:\Program Files \Legato\nsr\res`
  - `C:\Program Files\EMC NetWorker\nsr\mm or C:\Program Files \Legato\nsr\mm`
  - `C:\Program Files\EMC NetWorker\nsr\Index or C:\Program Files\Legato\nsr\index`
- Not monitor AFTD directories.

Uninstalling the NetWorker and Console software on Windows

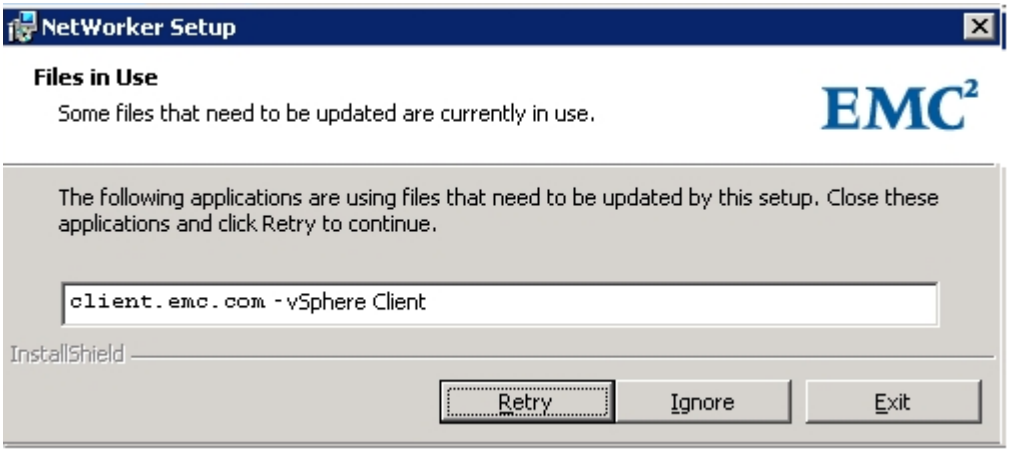
Use Control Panel to uninstall the NetWorker software, Console server software, and language pack software on a Windows host.

As the local administrator on the Windows host, perform the following steps to uninstall the NetWorker and Console server software packages.

Procedure

1. Ensure that there are no programs, such as Windows Explorer, accessing the directories or the files in `NetWorker_install_path` directory. Prior to NetWorker 8.1, the default `NetWorker_install_path` is `C:\Program Files\Legato`.
2. From the **Control Panel**, select the appropriate program to uninstall application software.
   - When the host is the NMC server, uninstall the NMC server software package before the NetWorker software package:
     - Select **NetWorker Management Console** and click **Uninstall**.
     - Select **NetWorker Management NMC server** and click **Uninstall**.
   - Select **NetWorker** and click **Uninstall**.
   - When the following window appears on a Windows systems with the Client application running, click **Ignore**.

Figure 1 NetWorker Setup



3. If you will not update or reinstall the NMC or NetWorker software packages, remove the `NetWorker_install_path` directory.
4. On all of the NetWorker console clients, delete the NetWorker Management Console desktop shortcut.

Uninstalling the software on Windows 2008 Core Server

Use one of the following methods to uninstall the NetWorker software from a Windows 2008 Server Core host.

Uninstalling the software by using setup.exe

This procedure describes how to remove the NetWorker and NMC server software when the NetWorker installation package is available.

Procedure

1. From the networkr subdirectory in the temporary NetWorker installation directory, run `setup.exe`:
   - On 32-bit hosts: `...\win_x86\networkr`
   - On 64-bit hosts: `...\win_x64\networkr`
   - On 64-bit Itanium hosts: `...\win_ia64\networkr`
2. On the **Choose Setup Language** window, select a language and click **OK**.
3. On the **Welcome to NetWorker Maintenance** window, click **Next**.
4. On the **Maintenance Type** window, click **Remove›Next**.

   When Maintenance Mode is used to uninstall the NetWorker software on a system that has the NMC server software installed, the NMC server software is removed first, and then the NetWorker software is removed.
5. In the **Ready to Remove** window, do not select the `Remove NetWorker Metadata` option.

   The Remove NetWorker Metadata option should not be used under the following scenarios:
   - During a NetWorker or NMC server software update.

- When reinstalling the NetWorker software.

By default, the **Remove NetWorker Metadata** checkbox is clear. This ensures that all of the NetWorker configuration files, such as client file indexes, media database, logs, and resource files are retained for a future installation of the NetWorker software package.

When the Remove NetWorker Metadata checkbox is cleared, the following NetWorker files remain in the `NetWorker_installation_dir\nsr` directory after the software is uninstalled:

- All log files
- All deduplication data
- All index entries
- All mm entries
- All res files
- All files in the directory
- All files in the debug directory

6. Click **Remove**, and then click **Finish**.

Uninstalling the software by using wmic

Use the Windows Management Instrumentation command-line utility, `wmic.exe` to uninstall the NetWorker and NMC server software when the extracted NetWorker software package is not available on the Windows system.

Procedure

1. Log in to the Windows computer with a local administrator user and open a command prompt window.
2. When the host is an NMC server, uninstall the NMC server software before the NetWorker software:

```
c:\>wmic product where name="NetWorker Management NMC server"
uninstall
```

3. Review the output to confirm the uninstall is successful. The message `Method execution successful` indicates a successful uninstall.

   For example:

```
Executing (\\NW-host\ROOT
\CIMV2:Win32_Product.IdentifyingNumber="{980A983E-160C-4FFD-890A-
F4877066B679}",Name="NetWorker Management
 NMC server",Version="8.1.1")->Uninstall()
Method execution successful.
Out Parameters:
instance of __PARAMETERS
{
        ReturnValue = 0;
};
```

4. Uninstall the NetWorker software:

```
c:\>wmic product where name="NetWorker" uninstall
```

5. Review the output to confirm the uninstall is successful. The message `Method execution successful` indicates a successful uninstall.

For example:

```
Executing (\\BV-TLCSC\ROOT
\CIMV2:Win32_Product.IdentifyingNumber="{74B15CCE-98DB-46F5-
B634-5BE07C7FC85A}",Name="NetWorker",Version="
8.1.1")->Uninstall()
Method execution successful.
Out Parameters:
instance of __PARAMETERS
{
        ReturnValue = 0;
};
```

Detailed information about the `wmic.exe` utility is available in the Microsoft kb article 290216.

CHAPTER 3

Microsoft Windows Silent and SMS Installations

Installing the software

Follow these steps to install the software.

Procedure

1. From a command prompt, navigate to the `setup.exe` program in the directory where you extracted the NetWorker installation software.
2. Use the `setup.exe` command to install the software:

```
setup.exe /S /v" /qn /l*v filename.log
INSTALLLEVEL=Type_of_Install NW_INSTALLLEVEL=Type_of_Install
INSTALLDIR=directory NW_FIREWALL_CONFIG=[0/1] STARTSVC=[0/1]
setuptype=Install”
```

   where:

   - `filename.log` is the name of the file to log installation messages.

     The installation process creates the log file in the same directory that you run `setup.exe`. When you omit `/l*v filename.log`, the installation process does not log messages.
   - *Type_of_install* specifies the level associated with the NetWorker installation type:
     - 100 is the install level for a client
     - 200 is the install level for a storage node
     - 300 is the install level for a server
   - *directory* specifies the location to install the NetWorker software.
     - Create this directory location before you run the silent install.
     - When you omit **INSTALLDIR=***directory*, the NetWorker software uses the default installation directory:`C:\Program Files\EMC NetWorker\nsr`.
   - **NW_FIREWALL_CONFIG=***[0/1]* determines whether or not the installation process configures firewall rules for NetWorker.
     - To configure firewall rules, specify a value of 1.
     - To instruct the installation process to not configure firewall rules, specify a value of 0.
     - When you do not specify this option, the installation process defaults to a value of 0.
3. To start the NetWorker services, specify a value of 1.

   STARTSVC*=[0/1]* determines whether or not the installation process starts the NetWorker services after the installation completes.
4. To instruct the installation process to not start the NetWorker services, specify a value of 0.

   If you do not specify this option, the installation process defaults to a value of 0.

Uninstalling the NetWorker software by using a silent uninstall

Use the `msiexec.exe` program to perform a silent or unattended uninstall of the NetWorker client and storage node software.

Procedure

1. From a command prompt, navigate to the folder that contains the `NetWorker.msi` file.

   NOTICE

   The `NetWorker.msi` file is in the networkr subfolder in the folder where you extracted the NetWorker installation software.

2. Use the `msiexec.exe` command to uninstall the software:

   ```
   msiexec /quiet /uninstall "NetWorker"
   ```

Using SMS to install or uninstall the NetWorker software

Use the Microsoft Systems Management Server (SMS) to perform a push installation and removal of the NetWorker software.

NOTICE

For best results, do not use a computer that is running the NetWorker server software as the SMS server host. Configure the SMS server software on a NetWorker client. Refer to the Microsoft SMS documentation for detail information about how to perform SMS procedures, such as creating an installation package or deploying an installation job.

Follow this procedure to use the SMS software to install or remove the NetWorker software.

Procedure

1. Create a shared directory on a local disk on the SMS server.

   For example, create a shared directory called `networkr`.

2. Copy all of the files from the appropriate directory on the NetWorker CD-ROM to the directory created in the previous step.

   For example, copy all of the files from `\win_x86\networkr` on the CD-ROM to the `networkr` directory on the SMS server.

3. Use the **SMS Administrator Console** to create an installation package from the `NetWorker.sms` package definition file. The definition file is located in the `networkr` directory.

   NOTICE

   The `NetWorker.sms` file is intended to be used as a starting point for a package definition. The Microsoft SMS documentation provides complete instructions on how to customize the package definition for a specific environment.

4. Use the **SMS Administrator Console** to create an installation or uninstallation job for the package you created in the previous step.

5. Deploy the installation or uninstallation job created in the previous step.

CHAPTER 4

Modifying the Microsoft Windows Installation

Installing the NMC server software on an existing NetWorker host

After you install the NetWorker software on a host, you can add the NMC server software.

Installing the software

Follow this procedure to install the NMC software.

Procedure

1. Log in to the target host with a local administrator user.
2. From **Control Panel**, select the appropriate program to install application software.
3. Select **NetWorker** and click **Change**.
4. On the **Windows Firewall** window:
   a. Click **Configure the Windows firewall**.
   b. Click **Next.**
5. On the **Install Type** window:
   a. Click **NetWorker Management Console**.
   b. Click **Next**.
6. On the **Ready to Change** window, click **Change**.

Specifying the list of trusted servers

Follow these steps to specify the list of trusted servers and to complete the installation.

Procedure

1. On the **NetWorker Server Selection** window, specify the shortname and FDQN for each NetWorker server, one per line, that require access to the NetWorker host. The first entry becomes the default NetWorker server.
   - To add a NetWorker server that is not listed in the **Available Servers** list:
     a. Type the name of the server in the **Enter a server name** text box.
     b. Click **Add**.
   - To browse for available NetWorker servers:
     a. Click **Update List**.
     b. Select a NetWorker server from the **Available Servers** list.
   - To add or remove NetWorker servers from the **Available Servers** list to the **Selected Servers** list, use the arrow buttons.

     Note

     The list of trusted NetWorker servers is stored in the *NetWorker_installation_directory*\res\servers file. When no servers are specified, any NetWorker server can backup or perform a directed recovery to the host.
2. Click **Next**.
3. Click **OK** to complete the install.

4. Open **Task Manager** and ensure that the appropriate NetWorker daemons are started.

   The NetWorker daemons chapter provides a list of the NetWorker daemons.

Specifying the list of trusted servers and configuring the Console

Follow this procedure to specify the list of trusted servers and to complete the installation.

Procedure

1. On the **NetWorker Server Selection** window, specify the shortname and FDQN for each NetWorker server, one per line, that require access to the NetWorker host. The first entry becomes the default NetWorker server.
   - To add a NetWorker server that is not listed in the **Available Servers** list, type the name of the server in the **Enter a server name** text box, and then click **Add**.
   - To browse for available NetWorker servers, click **Update List**. Select a NetWorker server from the **Available Servers** list.
   - To add or remove NetWorker servers from the **Available Servers** list to the **Selected Servers** list, use the arrow buttons.

   Note

   The list of trusted NetWorker servers is stored in the *NetWorker_installation_directory*\res\servers file. When no servers are specified, any NetWorker server can back up or perform a directed recovery to the host.
2. On the **Welcome to NetWorker Management Console Installation** window, click **Next**.
3. On the **Customer Information** window, fill in the appropriate information, and click **Next**.
4. On the **Product Setup** window, click **Next** to install the Console server software in the default directory.
   - To install the software in a different directory, click **Change** and specify a new location.
   - If the Console server database and configuration files were moved from a different Console server to this host, specify the location of the database and configuration files.
   - If the Setup wizard detects that there is insufficient disk space to install the NetWorker software, another dialog box appears listing the local drives, and highlights the drive with insufficient disk space. The list also displays disk size, available space, and required space. Use this information to select an appropriate drive on which to install the software.
5. On the **Configuration Options** window, type the following:
   - **Database Destination path**
   - **Web server port** for the embedded HTTP server
   - **Client Service port**

   When you define the configuration options, consider the following:
   - To change the default **Database Destination path**, select **Change**.
   - To use the default port numbers, type **9000** for the HTTP server and **9001** for the Client Service port.

- To use different port numbers, type the new port numbers (between **1024** and **49151**).

  NOTICE

  Do *not* use port numbers that are already in use. For example: The Console server uses port **2638** for TDS protocol communications with the Console database. The preferred port for EMC Data Protection Advisor product is **9002**.

6. Click **Next**.
7. In the **Customer Database Maintenance** window:
   a. Leave the default option **Keep the database** selected.
   b. Click **Next**.
8. On the **NetWorker Management Console Setup Completed** window:
   a. Clear **Launch the console client in the default browser immediately after exiting the InstallShield Wizard**.
   b. Click **Next**.
9. Click **OK** to complete the install.
10. Open **Task Manager** and ensure that the appropriate NetWorker daemons are started.

    The NetWorker daemons chapter provides a list of the NetWorker daemons.

Installing additional language packs

Use the following procedure to install the additional language packs.

Procedure

1. Log in to the target host with a local administrator user.
2. From **Control Panel**, select the appropriate program to install the application software.
3. Select **NetWorker** and click **Change**.
4. On the **Welcome to NetWorker Maintenance** window, click **Next**.
5. On the **Maintenance Type** window:
   a. Select **Change**.
   b. Click **Next**.
6. Click **Configure the Windows firewall** and then click **Next**.
7. Click **Language Packs** and then click **Next**.
8. On the **Feature Selection** window:
   a. Select the required language packs, select **This feature will be installed on a local hard drive**.
   b. Click **Next**.

      The English language pack is required and cannot be unselected.
9. On the **Ready to Change** window:
   a. Review the settings.
   b. Click **Change**.

10. On the **NetWorker Server Selection** window, specify the shortname and FDQN for each NetWorker server, one per line, that require access to the NetWorker host. The first entry becomes the default NetWorker server.
    - To add a NetWorker server that is not listed in the **Available Servers** list, type the name of the server in the **Enter a server name** text box, and then click **Add**.
    - To browse for available NetWorker servers, click **Update List**. Select a NetWorker server from the **Available Servers** list.
    - To add or remove NetWorker servers from the **Available Servers** list to the **Selected Servers** list, use the arrow buttons.

    Note

    The list of trusted NetWorker servers is stored in the *NetWorker_installation_directory*\res\servers file. When no servers are specified, any NetWorker server can back up or perform a directed recovery to the host.

11. Click **Next**.
12. Click **OK** to complete the install.

Changing the installation type

You can change a host set up as a NetWorker client, NetWorker server, or NetWorker storage node to another type.

For example, you can change the installation type from the following options:

- A NetWorker client to a NetWorker storage node
- A NetWorker client to a NetWorker server
- A NetWorker server to a NetWorker client
- A NetWorker server to a NetWorker storage node
- A NetWorker storage node to a NetWorker server
- A NetWorker storage node to a NetWorker client

Use the following procedure to change the installation type:

Procedure

1. Log in to the target host with a local administrator user.
2. From **Control Panel**, select the appropriate program to install application software.
3. Select **NetWorker** and click **Change**.
4. On the **Welcome to NetWorker Maintenance** window, click **Next**.
5. On the **Maintenance Type** window:
    a. Select **Change.**
    b. Click **Next**.
6. On the **Windows Firewall** windows:
    a. Click **Configure the Windows firewall.**
    b. Click **Next.**
7. On the **Installation Type** window:

a. Choose an **Installation Type.**

b. Click **Next.**

8. On the **Ready to Change** window, click **Change**.
9. On the **NetWorker Server Selection** window, specify the shortname and FDQN for each NetWorker server, one per line, that require access to the NetWorker host. The first entry becomes the default NetWorker server.
   - To add a NetWorker server that is not listed in the **Available Servers** list, type the name of the server in the **Enter a server name** text box, click **Add**.
   - To browse for available NetWorker servers, click **Update List**. Select a NetWorker server from the **Available Servers** list.
   - To add or remove NetWorker servers from the **Available Servers** list to the **Selected Servers** list, use the arrow buttons.

   Note

   The list of trusted NetWorker servers is stored in the *NetWorker_installation_directory*\res\servers file. When no servers are specified, any NetWorker server can back up or perform a directed recovery to the host.

10. Click **Next**.
11. Click **OK** to complete the install.

Post Installation steps

After changing the installation type, complete the following procedure.

- When a NetWorker client or storage node is changed to a NetWorker server, ensure that the servers file for all of the NetWorker clients that will be backed up by the new NetWorker server is updated to reflect the new NetWorker server. The *NetWorker Administration Guide* provides information on how to modify the servers file.
- When a NetWorker server is changed to a NetWorker client or storage node:
  - In the **Client Properties** window under the **Globals (1 of 2)** tab, update the `Server network Interface` attribute for each client configuration, as required, with the network interface of the new NetWorker server.
  - Manually remove the following directories:
    - `C: \Program Files\EMC NetWorker\nsr\mm`
    - `C:\Program Files\EMC NetWorker\nsr\index`
    - `C:\Program Files\EMC NetWorker\nsr\res\resdb`
- When a NetWorker storage node is changed to a NetWorker client, modify the following resource attributes on the NetWorker server:
  - Remove the Media Pool device restrictions that are defined for devices on the storage node.
  - On the **Devices** window of NMC, remove all of the storage node devices.
  - On the **Client Properties** window, under the **Globals (2 of 2)** tab, update the following attributes for each client, as required:
    - `Storage nodes`
    - `Recover storage nodes`

- On the **Storage node** properties window under the **Configuration** tab, update the `Clone storage nodes` attribute for all of the storage nodes, as required.

CHAPTER 5

Verifying the Installation

Roadmap for using NetWorker for the first time

Follow these procedures to connect to configure the Console server GUI, configure the Console server to manage a NetWorker server, to verify that the NetWorker software can perform management and backup tasks, and to start the console client after the fist time.

Starting the Console server GUI for the first time

The Console server is a Java web-based application that manages NetWorker server operations. A Console client is a host that connects to the Console server through a supported web browser, to display the Console server GUI.

These sections outline how to prepare the Console client and how to connect to the Console server GUI.

Configuring the Administrators list

When the Console server and the NetWorker server are on separate hosts, add the owner of the `gstd` process and the NMC administrator user to the Administrators list on the NetWorker server. This allows the NMC administrator user to administer and monitor the NetWorker server. The owner of the `gstd` process is the user that starts the `gstd` daemon on UNIX or the EMC GST service on Windows.

Note

When the Console server and the NetWorker server are the same host, the NetWorker server install automatically adds the owner of the `gstd` process and the NMC administrator user to the administrators list of the NetWorker server.

Use the following procedure to update the Administrators list.

Procedure

1. Log in to the NetWorker server as an administrator on Windows or as root on UNIX.
2. From a command prompt, use the `nsraddadmin` command to add the `gstd` process owner to the administrators list of the NetWorker server.

   By default, the process owner is the SYSTEM user on Windows and is the root user on UNIX. For example:

   - On a Windows NetWorker server, type:

     ```
     nsraddadmin -u "user=SYSTEM, host=console_host"
     ```

   - On a UNIX NetWorker server, type:

     ```
     nsraddadmin -u "user=root, host=console_host
     ```

3. Add the NMC administrator user to the Administrators list on the NetWorker server:

   ```
   nsraddadmin -u "user=administrator, host=console_host"
   ```

   where *console_host* is the Console server hostname.

Enabling temporary internet file caching

Enable the `Temporary internet file caching` attribute in the **Java Control Panel** of the Console client. When you do not enable this option in JRE, `Java WebStart` fails to start.

For Windows Console clients:

1. Browse to **Control Panel › Java › General › Temporary Internet Files › Settings**
2. Select **Keep temporary files on my computer**.

For UNIX Console clients:

1. Start the Java Web Start Application Manager, `javaws`.
2. Select **Enable temporary internet file caching**.

Ensuring required daemons are running

Ensure that the console processes `gstd`, `dbsrv12`, and `httpd` are running on the Console server.

For UNIX Console servers, follow this procedure to ensure that the Console is running.

Procedure

1. Type the following command:

   ```
   ps -ef | grep gstd ps -ef | grep dbsrv12 ps -ef | grep httpd
   ```

   Note

   Two or more `httpd` processes appear. The parent `httpd` process runs as root and the child process(es) run as the username specified during the installation.

2. Start the `gstd` daemon, if it is not started. This will also start the `dbsrv12` and `httpd` processes:

   - On Solaris and Linux: `/etc/init.d/gst start`
   - On AIX: `/etc/rc.gst start`

     NOTICE

     If the `/etc/init.d/gst` file on Linux or `/etc/rc.gst` file on AIX does not exist, run the `/opt/lgtonmc/bin/nmc_config` script.

3. For Windows Console servers:

   a. In **Task Manager**, confirm the `gstd`, `httpd`, and `dbsrv12` processes are running. On Windows, the Console server software registers the `httpd` as the EMC GST Web Service. Two `httpd` processes start when the Console server is active.

   b. Start the EMC GST Service service if the `gstd` process is not started. This will also start the `dbsrv12` and `httpd` processes.

Windows only, confirming JRE version

For Windows hosts only, ensure that you install the correct JRE program for the installed version of Microsoft Internet Explorer.

- For the 32-bit version of Microsoft Internet Explorer, install the 32-bit version of JRE.
- For the 64-bit version of Microsoft Internet Explorer, install the 64-bit version of JRE.

Use the following procedure to determine the Microsoft Internet Explorer version on the Windows Console client.

Procedure

1. Right-mouse click the Microsoft Internet Explorer shortcut and select **Properties**.
2. Review the **Target Path** field.

   The Target Path is:

   - `C:\Program Files (x86)\Internet Explorer\` for the 32-bit version of Microsoft Internet Explorer.
   - `C:\Program Files\Internet Explorer\` for the 64-bit version of Microsoft Internet Explorer.

Connecting to the Console server GUI

Use this procedure to connect to the Console server GUI from a Console client.

Note

The Console server can also be a Console client.

Procedure

1. From a supported web browser session, type the URL of the Console server:

   **`http://`*`server_name`*`:`*`http_service_port`*
   where:

   - *server_name* is the name of the Console server.
   - *http_service_port* is the port for the embedded HTTP server. The default HTTP port is 9000.

     For example: **`http://houston:9000`**
2. On the **Welcome** window, click **Start**.
3. On the **Security Warning** window, click **Start** to install and run **NetWorker Console**.
4. On the **Licensing Agreement** window, select **Accept**.
5. If you did not install the appropriate JRE version on the system, a prompt to install JRE appears. Follow the onscreen instructions to install JRE.
6. On the **Welcome to the Console Configuration Wizard** window, click **Next**.
7. On the **Set Administrator password** window:

   a. Type the NMC password.

   b. Click **Next**.
8. On the **Set Database Backup Server** window:

   a. Specify the name of the NetWorker server that will backup the Console server database.

b. Click **Next**.

9. On the **Add NetWorker servers** window:

   a. Specify the names of the NetWorker server that the Console server will manage, one name per line.

   b. Leave the default options `Capture Events` and `Gather Reporting Data` enabled.

   Consider the following:

   - Enable the `Capture Events` option to allow the Console server to monitor and record alerts for events that occur on the NetWorker server.
   - Enable the `Gather Reporting Data` option to allow the Console server to automatically collect data about the NetWorker server and generate reports.

10. Click **Finish**. The **Console** window and the **Getting Started** window appear.

11. In the **Enterprise** window:

    a. Right click the NetWorker server.

    b. Select **Launch Application**.

    The *NetWorker Administration Guide* describes how to perform common NetWorker tasks.

Changing the NetWorker servers with access to the host

Use this procedure to define the NetWorker servers that can perform backups and directed recoveries on this host for the listed platforms.

- AIX
- HP-UX
- Linux

By default, any NetWorker server can:

- Backup this host.
- Perform a directed recover to this host.

Use the following procedure to change the NetWorker servers that can access the host.

Procedure

1. Shutdown the NetWorker daemons:

   `nsr_shutdown`

2. Edit or create the following file:

   `/nsr/res/servers`

3. Specify the shortname and FDQN for each NetWorker server, one per line, that require access to the NetWorker host. The first entry in this file becomes the default NetWorker server.

   NOTICE

   When you do not specify any servers, any NetWorker server can backup or perform a directed recovery to the host.

4. Start the NetWorker daemons:

- AIX: `/etc/rc.nsr`
- HP-UX: `/sbin/init.d/networker start`
- Linux: `/etc/init.d/networker start`

5. For AIX and HP-UX only, confirm that the NetWorker daemons started:

   ```
   ps -ef | grep nsr
   ```

Starting the Console client after the first time

After the Console client has connected to the Console server once, use one of the following methods to access the Console server again.

Procedure

- Point the browser to the following url:

  `http://server_name:http_service_port`

- Double-click **NetWorker Console** in the Java Web Start Application Manager.
- On Windows Console clients, double-click the **NetWorker Management Console** desktop icon.