# VERITAS NetBackup 4.5 DataCenter™

## Installation Guide

**for Windows**

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VERITAS

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# Preface

The purpose of this guide is to help NetBackup system administrators install and configure NetBackup™ DataCenter. The NetBackup system administrator is responsible for maintaining backups and disaster recovery plans using NetBackup.

This guide assumes:

- A basic understanding of Microsoft Windows system administration.
- Experience with the system on which NetBackup is to be installed.
- Your SCSI devices are properly attached and configured for the operating system.

**Caution** If a device is not properly configured for the operating system, backups made to that device may lead to data loss.

## Organization

This manual steps through installing and configuring your NetBackup software by using a step-by-step checklist. The checklist appears on the first page of each chapter:

- Chapter 1, “Installation and Initial Configuration,” contains instructions for installing, upgrading, and configuring the software.
- Chapter 2, “Uninstall/Reinstall NetBackup and Clients” contains instructions for uninstalling and reinstalling the NetBackup software.

# Accessibility

NetBackup contains features that make the user interface easier to use by people who are vision impaired and by people who have limited dexterity. Accessibility features include:

- Support for assistive technologies such as screen readers and voice input (Windows servers only)
- Support for keyboard (mouse-less) navigation using accelerator keys and mnemonic keys

For more information, see the NetBackup system administrator's guide.

# Conventions

The following explains typographical and other conventions used in this guide.

## Type Style

Table 1. Typographic Conventions

| Typeface | Usage |
|---|---|
| **`Bold fixed width`** | Input. For example, type **`cd`** to change directories. |
| `Fixed width` | Paths, commands, filenames, or output. For example: The default installation directory is `/opt/VRTSxx`. |
| *Italics* | Book titles, new terms, or used for emphasis. For example: *Do not* ignore cautions. |
| *Sans serif* (italics) | Placeholder text or variables. For example: Replace *filename* with the name of your file. |
| **Serif** (no italics) | Graphical user interface (GUI) objects, such as fields, menu choices, etc.<br>For example: Enter your password in the **Password** field. |

## Notes and Cautions

**Note** This is a Note. Notes are used to call attention to information that makes using the product easier or helps in avoiding problems.

**Caution** This is a Caution. Cautions are used to warn about situations that could cause data loss.

## Key Combinations

Some keyboard command sequences use two or more keys at the same time. For example, holding down the **Ctrl** key while pressing another key. Keyboard command sequences are indicated by connecting the keys with a plus sign. For example:

Press Ctrl+t

## Command Usage

The following conventions are frequently used in the synopsis of command usage.

brackets [ ]

The enclosed command line component is optional.

Vertical bar or pipe (|)

Separates optional arguments from which the user can choose. For example, when a command has the following format:

`command` *arg1* | *arg2*

the user can use either the *arg1* or *arg2* variable.

## Terms

The terms listed in the table below are used in the VERITAS NetBackup documentation to increase readability while maintaining technical accuracy.

| Term | Definition |
|---|---|
| Microsoft Windows, Windows | Terms used as nouns to describe a line of operating systems developed by Microsoft, Inc.<br><br>A term used as an adjective to describe a specific product or noun. Some examples are: Windows 95, Windows 98, Windows NT, Windows 2000, Windows servers, Windows clients, Windows platforms, Windows hosts, and Windows GUI.<br><br>Where a specific Windows product is identified, then only that particular product is valid with regards to the instance in which it is being used.<br><br>For more information on the Windows operating systems that NetBackup supports, refer to the VERITAS support web site at `http://www.support.veritas.com`. |

| Term | Definition (continued) |
|---|---|
| Windows servers | A term that defines the Windows server platforms that NetBackup supports; those platforms are: Windows NT and Windows 2000. |
| Windows clients | A term that defines the Windows client platforms that NetBackup supports; those platforms are: Windows 95, 98, ME, NT, 2000, XP (for 32- and 64-bit versions), and LE. |

## Getting Help

For updated information about this product, including system requirements, supported platforms, supported peripherals, and a list of current patches available from Technical Support, visit our web site:

`http://www.support.veritas.com/`

VERITAS Customer Support has an extensive technical support structure that enables you to contact technical support teams that are trained to answer questions to specific products. You can contact Customer Support by sending an e-mail to support@veritas.com, or by finding a product-specific phone number from the VERITAS support web site. The following steps describe how to locate the proper phone number.

1. Open `http://www.support.veritas.com/` in your web browser.
2. Click **Contact Support**. The *Contacting Support Product List* page appears.
3. Select a product line and then a product from the lists that appear. The page will refresh with a list of technical support phone numbers that are specific to the product you just selected.

# NetBackup Basics 1

This chapter is designed to provide you with a basic understanding of the features and functions of your product. Included are definitions of a few key NetBackup terms to assist you in this process.

Installing NetBackup DataCenter software on the server and NetBackup client software on each of your remote computers provides an easy-to-use, reliable solution for backing up and restoring data.

## How does NetBackup DataCenter work?

NetBackup DataCenter has three primary functions, it:

- Enables users to create backup policies to back up your data
- Saves backup catalogs and stores the data until you need to retrieve it
- Retrieves the data you have stored while providing a robust recovery tool should a disaster occur.

### What is a backup policy?

A backup policy allows you to configure how and when backups are to be performed for your group of clients, all having similar backup requirements. Your backup policy will be configured when you determine:

- Which computers to back up
- Which files and folders to back up
- How often and when the backup takes place
- How long the backup will be retained
- Where the backups are stored
- Other attributes for customizing the backup

## What are Catalog Backups?

NetBackup keeps vital information about your (regular) backups in a set of files called a catalog. Catalogs can be in two formats, ASCII and binary, and contain information about configuration, status, errors, and the files and folders that have been backed up. The catalog also keeps track of the location of the backed-up data.

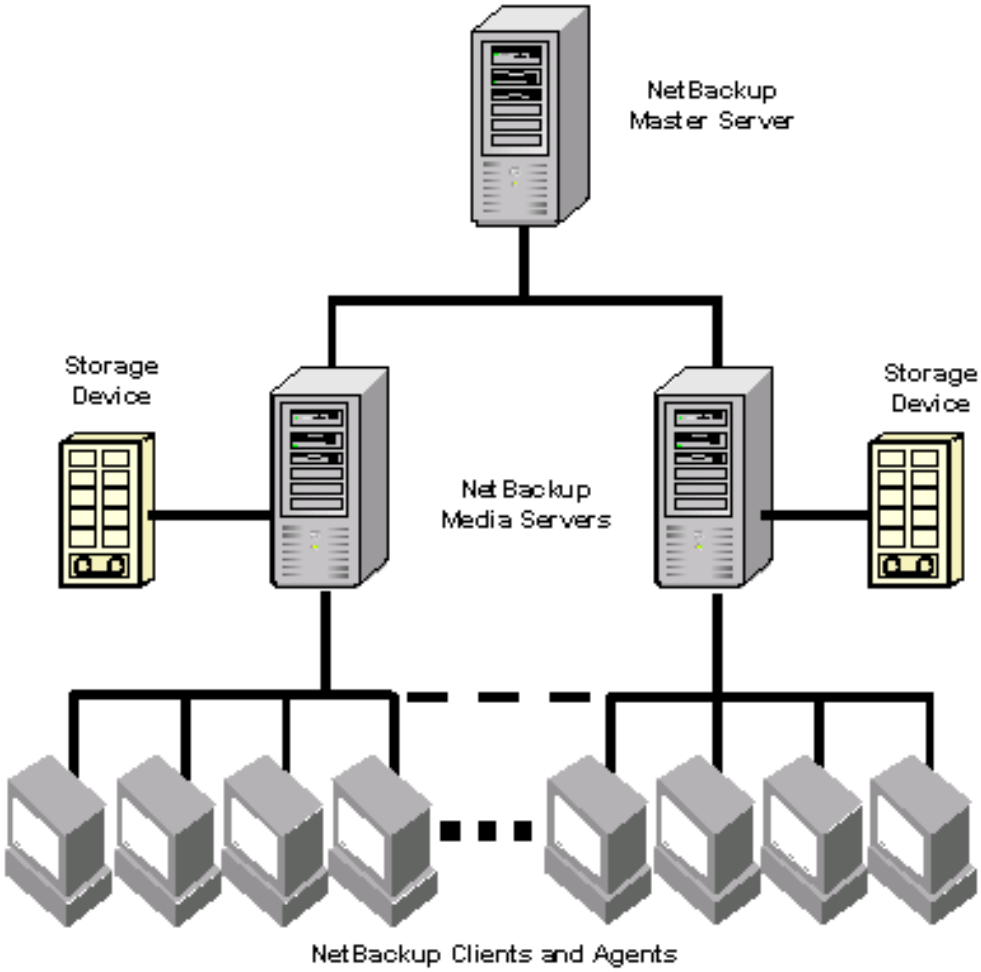
NetBackup provides an enhanced catalog format designed to improve the scalability and performance of catalog access in NetBackup. This binary catalog format feature will improve catalog performance for browsing and searching the on disk catalogs, and in some cases reduce the catalog file size. The new binary catalog format is written by NetBackup on all platforms except for NCR and Sequent. (For more information about the new catalog format feature, see the system administrator's guide.)

A catalog backup is a backup copy of the catalog, which is necessary for NetBackup operations. For example, if a disk failure results in the loss of your catalog files, the easiest way to recover is to restore the catalog from its backup copy. This copy allows you to restore previously backed up data and resume your regularly scheduled backups. The process of backing up a catalog is the same for either catalog format.

## What are the functional parts of NetBackup?

We will now describe the parts of NetBackup. The terms and features listed here are basic to your understanding of how NetBackup DataCenter works.

The following diagram shows the basic architecture of a DataCenter configuration. where your data goes, the backup and restore operations can be visualized in a diagram on the following three pages. The following subsections describe each of the major pieces within this configuration.




## Master Server

The *Master Server* is the computer where NetBackup DataCenter software is installed. There can be only one Master Server per backup domain. The Master Server, with NetBackup installed, is responsible for the following functions:

- Contains the back-up configurations and policies
- Runs the Scheduler that initiates the automated backups
- Maintains databases/catalogs that track the location and contents of all backups

- Communicates with Media Servers to initiate backups and restore processes
- Provides both a command line interface and a graphical user interface, which allow you to:
  - Configure the backup operations.
  - Schedule automatic, unattended backups (regular backups). For example, to prevent interference with normal daytime operations, you can schedule your automatic backups to occur only at night.
  - Perform manual backups of any client.
  - Allow client users to perform their own backups and restores.
  - Control where backups are stored.
  - Control how long backup data is retained.
  - Restore data to any client.
  - Run reports to verify, manage, and troubleshoot backups and restores. These reports show status or highlight problems with NetBackup servers and clients.
  - Monitor the status of backup and restore jobs.
  - Configure and manage your tapes and storage devices.

## Media Servers

A *Media Server*, in a DataCenter configuration, can be standalone server that receives requests for backup and restore operations from the Master Server. (A master server can also be configured as a media server.) There can be multiple Media Servers in a backup domain. Media Servers can:

- Communicate with the Media Manager (on the same system) to select media for backup and restore operations. Refer to “Media Manager” on page 7 for more information.
- Communicate with NetBackup Clients during a backup or restore operation
- Monitor the status of storage devices

## NetBackup Clients

*NetBackup Clients* are the remote computers that have NetBackup client software installed. There can virtually be an unlimited number of clients for each backup domain. With the proper conditions set, a client can direct a user request to the Master Server to perform a backup or restore operation. Clients can:

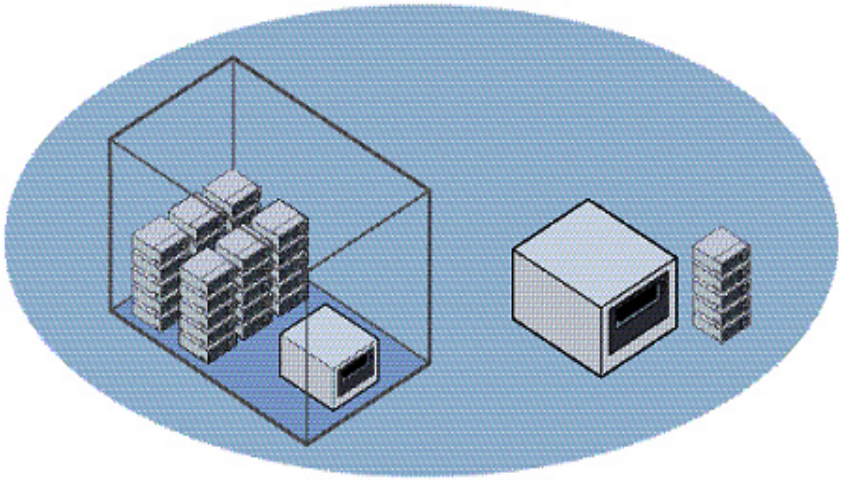
- Validate connection requests from the NetBackup server
- Support compression of backup stream
- Support include and exclude lists

In general, these computers can be any combination of the following:

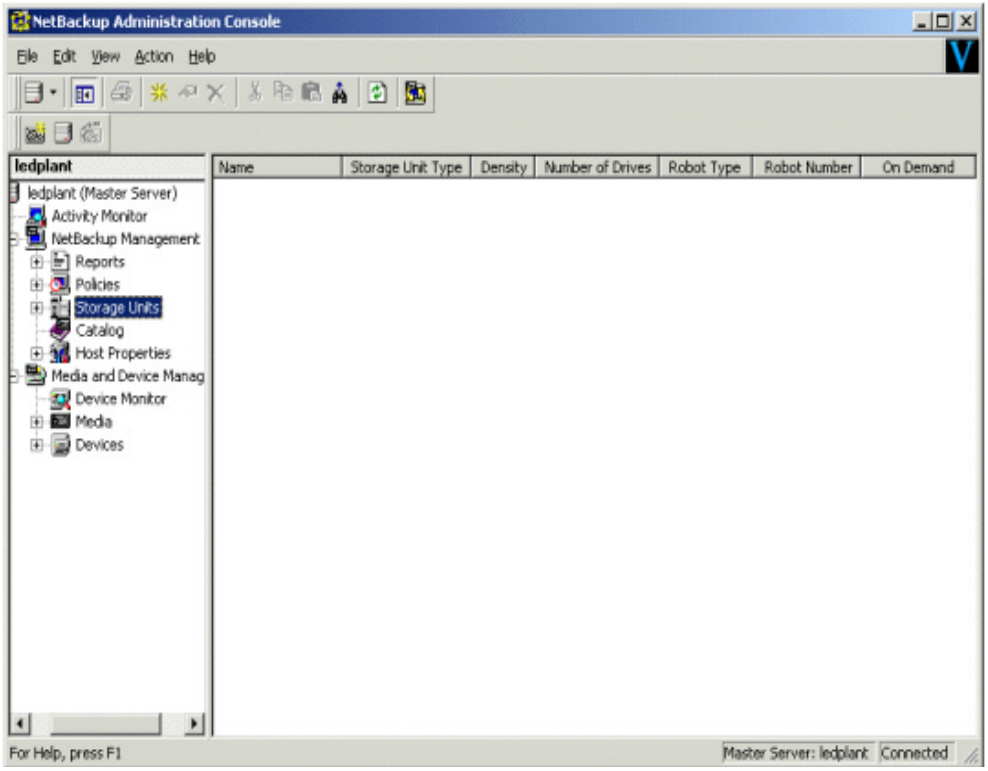
| | |
|---|---|
| AIX | Macintosh |
| Compaq Tru64 | NCR SVR4MP-RAS |
| DG/UX | NetWare |
| DYNIX/ptx | OS/2 |
| HP-UX | Solaris |
| IRIX | Windows 95/98/ME/NT/2000/XP (32 and 64 bit)/LE |
| Linux | |

## Disk Storage Unit

A disk storage unit is a term that describes a storage device where NetBackup or Storage Migrator stores files and data. A storage unit can be a location on a disk, a set of drives in a robot, or one or more single tape drives of the same type that connect to the same host.



In the following diagram, the storage unit node is listed in the tree in the left window pane and the specific units will appear in the right pane.




Storage units simplify administration because once they are defined the NetBackup configuration points to a storage unit rather than to the individual devices it contains. For example: if a storage unit contains two drives and one is busy, NetBackup can use the other drive without administrator intervention.

## Media

*Media* are physical magnetic tapes, magnetic disks (also called removable media), or optical disks where data can be stored. Non-removable media commonly referred to as “hard disk share” is usually a directory on a hard disk.

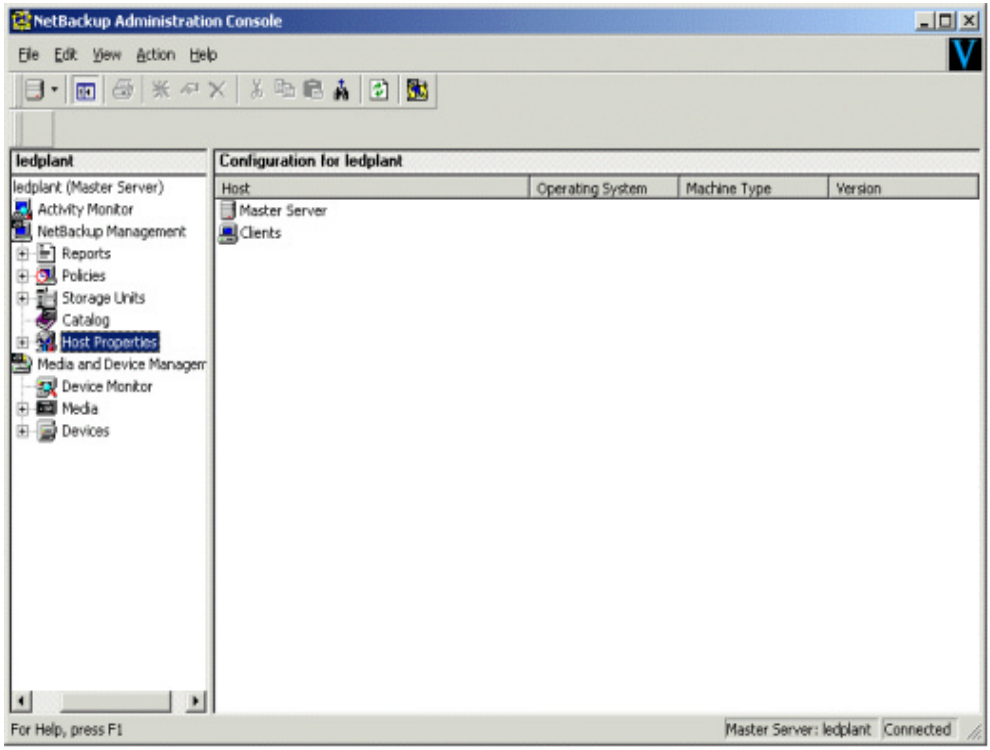
## Media Manager

Media Manager, which is part of NetBackup, manages the robots, tape drives, and their removable media. Media Manager primarily uses four tools:

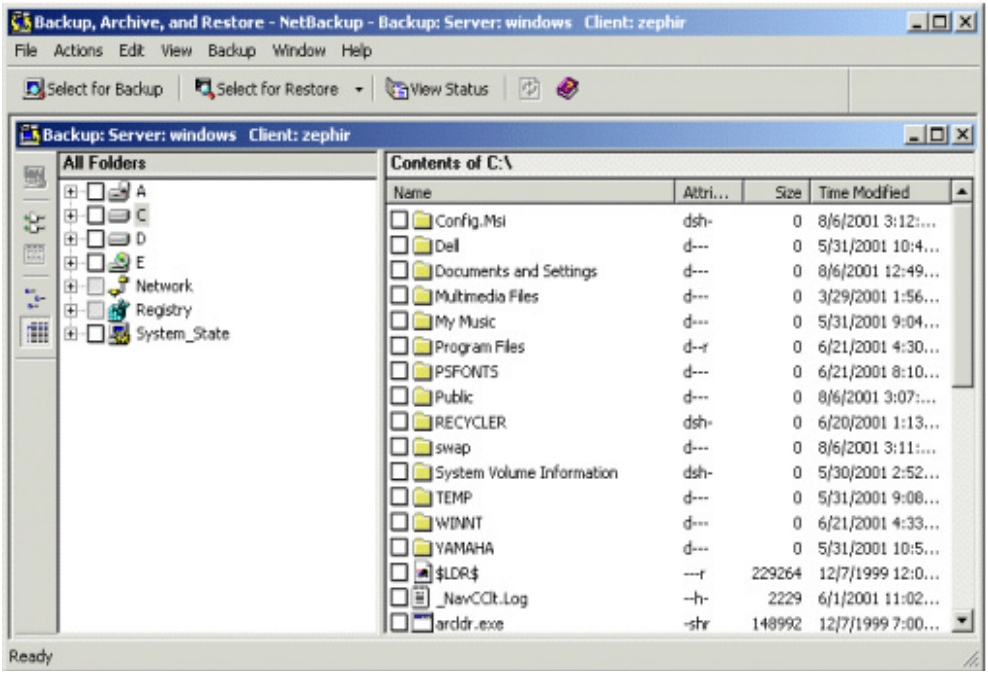
- The Device Configuration Wizard, which guides you through device configuration in a step-by-step manner.
- The Volume Configuration Wizard, which guides you through volume configuration in a step-by-step manner.
- The Media and Device Management graphical interface, which allows you to reconfigure storage devices and volumes separately.
- The Device Monitor graphical interface, which displays any pending requests for volumes and allows you to control and manage your devices.

## Graphical Interfaces

NetBackup uses the following graphical interfaces:



The NetBackup Administration Console is used for configuring, scheduling, monitoring, and managing NetBackup.




The NetBackup user interface, which is on each client, can be used for starting backups, managing archives, and initiating restores for that particular computer.

## NetBackup Wizards

NetBackup DataCenter provides the following wizards to assist you with installation and configuration. Once you have completed your initial setup with the Getting Started wizard, the individual configuration wizards allow you to reconfigure devices, volumes, catalog backups, and backup policies separately as needed.

| Wizards | Description |
|---|---|
| Getting Started | Provides step-by-step help for configuring NetBackup. By responding to a series of prompts, the Getting Started wizard guides you through the following procedures for initial setup:<br>◆ Device Configuration<br>◆ Volume Configuration<br>◆ Catalog Backup Configuration<br>◆ Backup Policy Configuration<br>◆ A test to verify your configuration |
| Configure Storage Devices | Helps you define robots and drives. |
| Configure Volumes | Helps you define volumes for robots and standalone drives. |
| Configure Catalog Backup | Helps you configure how and when the NetBackup catalog is backed up. |
| Create a Backup Policy | Helps you configure regular backups for a client or a set of clients. |
| Import Images | Assists you in stepping through an import. |
| Configure a Shared Drive | Helps you configure a new shared drive or reconfigure an existing shared drive. |

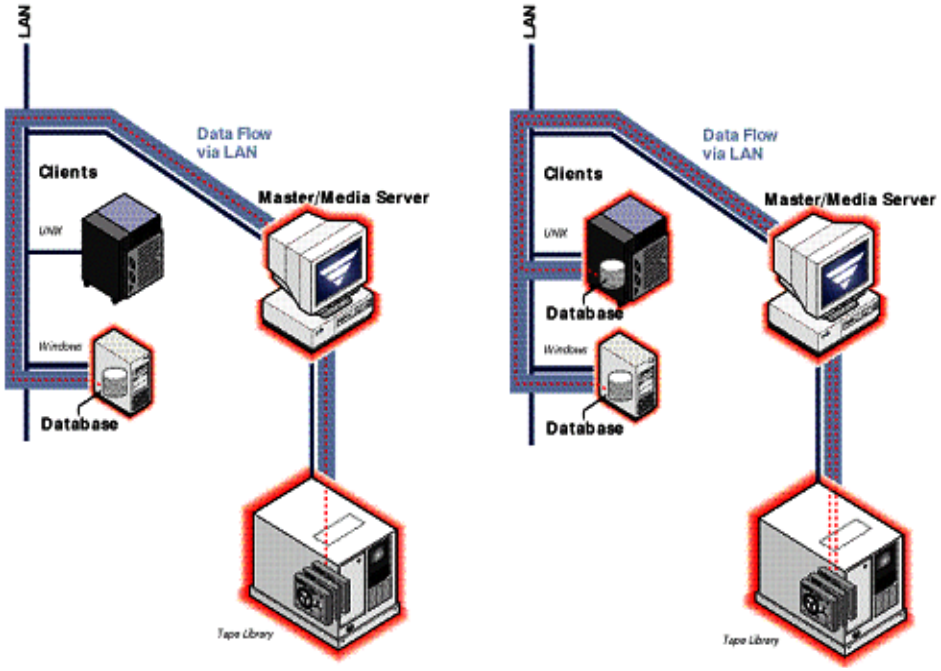
## Multiple Data Streams

NetBackup DataCenter can be configured to use *multiple data streams*, which allow you to back up more than one file or directory on a client at the same time, using a single backup policy.

For example: assume you have a remote computer with NetBackup client software installed and this computer has two hard drives. If you want to perform a fast nightly backup of these drives, you can configure NetBackup DataCenter to back up both drives at the same time.

## Multiplexing

*Multiplexing* allows backups from more than one client to be sent to the same storage device at the same time. Multiplexing interleaves each block of backup data onto a storage device. The figure on the left illustrates data being backed up for one client. The figure on the right illustrates how data streams from two clients are stored by multiplexing.



# Installation and Initial Configuration 2

Installing and configuring NetBackup involves the following steps as explained in this chapter:

- Configuring Storage Devices for Windows
- NetBackup Server Software
- Performing an Upgrade Installation
- Configuring NetBackup Server Software
- NetBackup Client Software
- Installing Alternative Administration Interfaces (Optional)
- Installing NetBackup Java Windows Display Console
- Installing NetBackup Agents and Options (Optional)

# Configuring Storage Devices for Windows

Reliable use of NetBackup depends on the proper configuration of your storage devices. To ensure reliable backups and restores, you must configure devices for Windows according to the instructions provided by the device vendor and by Microsoft. This should be completed *before* you configure NetBackup itself.

## Supported Robot Types

See "Robot Type Support By Platform" in the *NetBackup Release Notes* for a list of the supported robot types.

You can see a list of supported devices by vendor, by visiting the VERITAS support web site.

1. Open www.support.veritas.com in a web browser.
2. Click *SUPPORT* in the horizontal-navigation bar, near the top of web page. The VERITAS Support page appears.
3. Click *Compatibility Lists* in the left navigational field. The Online Compatibility Lists page appears.
4. Click *+NetBackup Products*. A list of NetBackup products appears below the NetBackup Product that you selected.
5. Select a NetBackup product from the list and click on the product name. The corresponding NetBackup page appears.
6. Click *Device Support Matrix* from within the Compatibility Lists - Version Selection field. A list of product releases appears.
7. Click on the product name and version for which you want information. A list of supported devices organized by vendor appears. You can also display all supported drives, libraries, and robot types.

**Caution** An improperly configured device may lead to loss of data during a restore.

## Storage Device Configuration

1. Complete all of the configuration steps specified by the storage device vendor and by Microsoft.

2. After you have configured your storage device you are ready to begin the installation of the NetBackup DataCenter software.

---

**Note** When installing NetBackup for the first time, VERITAS recommends that you install the latest device drivers for your storage device immediately after you install the NetBackup software and **before** you configure the product.

If you are upgrading NetBackup, you can install the latest device drivers before you upgrade NetBackup.

The VERITAS Tape Device Driver Install wizard (preloaded on your CD-ROM) will step you through the process of installing the latest device drivers. Steps a through c describe how to initiate this wizard.

If you do not have a CD-ROM, you can download the NetBackup Tape Device Driver Install software from the VERITAS support web site.

`http://www.support.veritas.com`

---

a. Log in as Administrator on the server where you will be installing NetBackup.

b. Insert the NetBackup CD-ROM in the drive.

   - On Windows systems with AutoPlay enabled for CD-ROM drives, the VERITAS NetBackup installation browser starts automatically.
   - On Windows systems that have AutoPlay disabled, run `Launch.exe` in the top-level directory on the CD-ROM.

c. In the VERITAS Browser, click **Additional Product Installations** > **NetBackup Tape Device Driver** link. The NetBackup Tape Installer wizard appears.

3. Follow the prompts throughout this wizard to install the latest device drivers for your storage device.

**Note** As VERITAS supports more devices, you can download the latest external device mapping files on the Updates and Patches web page on the VERITAS support web site: `http://www.support.veritas.com`.

4. After you complete this installation, you are ready to configure the NetBackup DataCenter software.

# NetBackup Server Software

This section prepares you for the installation of your NetBackup product. It is important that you ensure all NetBackup servers are at the same release level, and this release level is at least equal to the version level on the clients. (Older versions of server software can encounter problems with newer clients.)

VERITAS recommends that you upgrade in the following order:

a. Master Server

b. Media servers, if any

c. NetBackup Remote Administration Console, if any

d. NetBackup clients

e. Any NetBackup Add-on products (such as NetBackup for Oracle)

## Server Installation Requirements

Installing the server software takes approximately 10 minutes (additional time may be required to set up the product for your environment). Before installing, note the following requirements:

**Note** VERITAS recommends that you remove any other vendor's backup software currently configured on your system before installing this product. Other vendor's backup software can negatively effect how NetBackup installs and functions.

**Caution** Before installing your NetBackup product, make sure you have the most current operating system patches and updates applied to your system. If you are not certain of your OS level, contact your OS vendor and request the latest patches and upgrades.

- An Intel Pentium system running Microsoft Windows NT version 4.0 with service pack 6A installed, or Windows 2000 with a minimum of 64 MB of memory and service pack 2 installed.
- Requires a browser level of Internet Explorer 5.5 as a minimum.
- An administrator account and password for the server.
- Adequate disk space:
  - Intel server software requires approximately 180 megabytes.
  - On-line documentation, if you choose to install it, requires about 60 megabytes.
  - NetBackup catalogs contain information about your backups and will increase in size as you use the product. The amount of disk space the catalogs require depends primarily on the number of files backed up, the frequency of your backups, and the amount of time you chose to retain your backup data. VERITAS suggests that you allow a minimum of 250 megabytes.

**Note** VERITAS recommends that you have a total of 490 megabytes of storage space to accommodate the NetBackup server software as well as the NetBackup catalogs.

  - A NetBackup installation partition that supports long file names. VERITAS suggests an NTFS partition.
  - An additional 100MB of memory is necessary on the drive where Windows is installed during the installation or upgrade process. After the install or upgrade is complete, this additional space is no longer needed.
- Peripherals, such as robotic devices and stand-alone tape drives, installed according to the manufacturers' instructions and recognized by the Windows software.
- The network is configured so the computers recognize and communicate with one another. Generally, if you can reach the clients from the server by using the `ping` command, the setup will work with NetBackup.

# Server Installation Notes

### NetBackup Services and Port Numbers

VERITAS suggests that you use the default port settings for NetBackup services and Internet service ports. If you modify the port numbers, they must be the same for all NetBackup systems that communicate with each other (that is, all master servers, media servers, and clients). The port entries are in the following file:

```
%SYSTEMROOT%\system32\drivers\etc\services
```

To change the default settings, you must perform a Custom Installation of NetBackup.

### Client Software

Installing NetBackup server software also installs client software on the server system. However, installing NetBackup on client systems is done separately as described in the *NetBackup Installation Guide - PC Clients*.

### Add-on Products

If you are installing NetBackup add-on products, such as NetBackup for Microsoft SQL Server, refer to the installation instructions that came with the software.

### System Names

If you install NetBackup Remote Administration Consoles, the master server must have the system names of the NetBackup Administration Consoles in its server list to allow them access.

Additional Note to DataCenter Users:

- For instructions on verifying and changing the server list, and installing media servers, see Appendix C of your NetBackup administrator's guide: *NetBackup DataCenter System Administrator's Guide for Windows*
- If you are not adding any NetBackup media servers, ignore all references to media server throughout the installation process.

# Installing the Server Software

### ▼ To install NetBackup server software

1. When installing a NetBackup server, master or media, you must enter a NetBackup base product license key on the server. You will also enter license keys for any additional NetBackup software product options or agents used on the server or its clients. All product license keys must be entered on the master server.

   Check your order to make sure that you have license keys for all the NetBackup servers, clients, options, and agents that you requested.

   For more information on administering NetBackup licenses refer to *NetBackup DataCenter System Administrator's Guide for Windows*.

---

**Note** When making and saving any license key updates (including adding and deleting license keys) in the NetBackup Administration Console, you must restart the NetBackup Administration Console.

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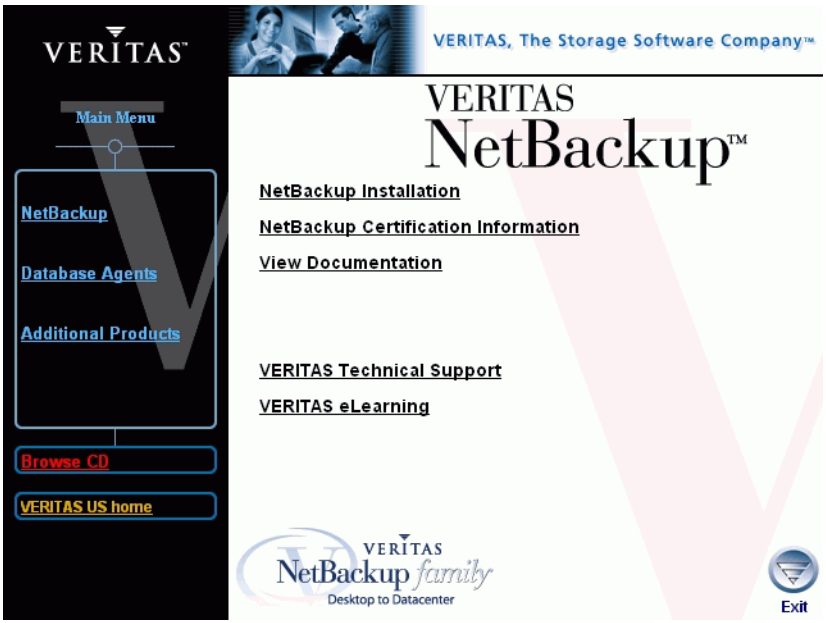
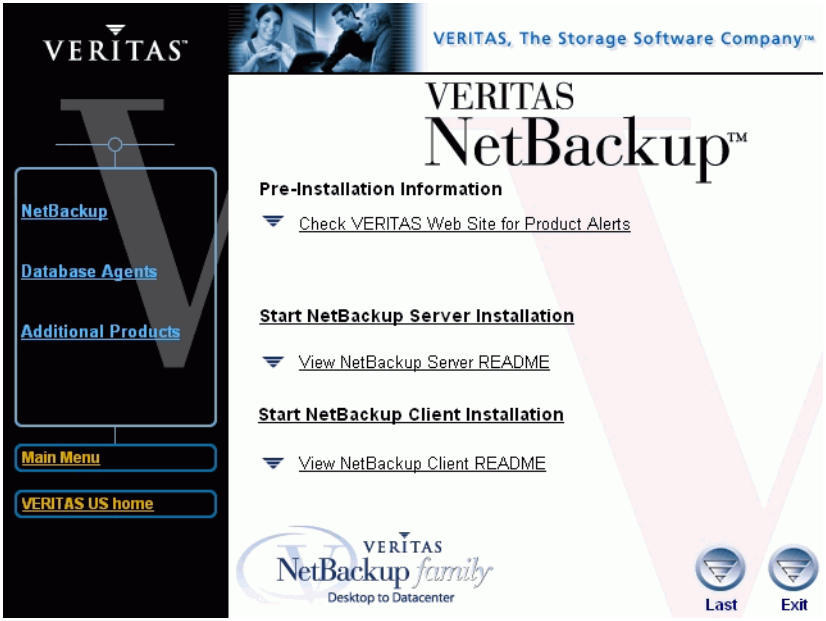
2. Log in as Administrator on the server where you will be installing NetBackup.

3. Insert the NetBackup CD-ROM in the drive.
   - On Windows systems with AutoPlay enabled for CD-ROM drives, the VERITAS NetBackup installation browser starts automatically.
   - On Windows systems that have AutoPlay disabled, run `Launch.exe` in the top-level directory on the CD-ROM.

4. On the NetBackup - CD browser, click on the **NetBackup Installation** option in the main window. The contents of the main browser window will display the following information and options:
   - Links on the left side of the browser that display information pertaining to **NetBackup**, **Database Agents**, and **Additional Products**.
   - Browse the CD
   - The NetBackup link selected (by default) and these available options:
     - Begin NetBackup Installation
     - View Certification Information
     - View available documentation
     - Link to VERITAS Technical Support
     - Link to VERITAS e-Learning

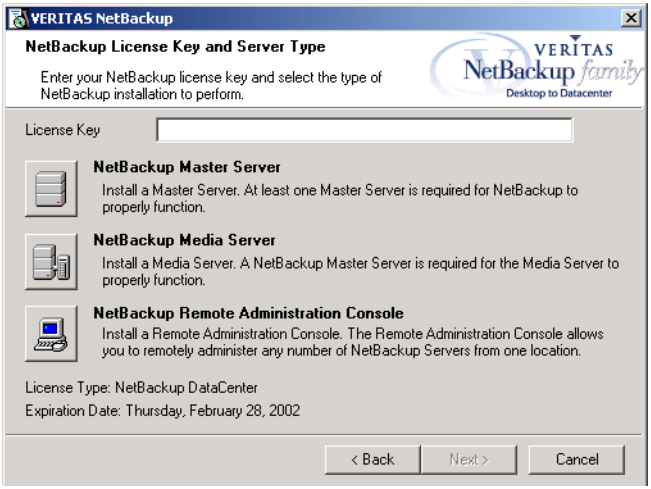



5. Click **NetBackup Installation**.The browser refreshes and displays pre-installation information.



6. Click the appropriate link of the installation (client or server) that you want to start. The NetBackup Setup wizard begins.

7. Click **Next.** The *NetBackup License Key and Server Type* window appears.




8. Enter the base product license key that you received when you purchased your product. The license key that you enter will determine which of the three installations are available for you to install.

9. Select the type of installation that you want to perform.

**Note** Installing NetBackup Remote Administration Console does not require a license key.

10. Click **Next**. The *Setup Type* window appears. You can elect to perform a typical or a custom installation. Refer to “Custom Installation Differences” to see the differences in the installation processes.

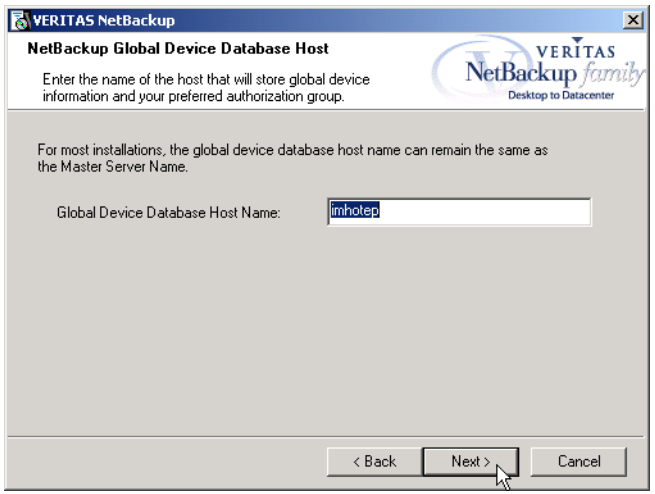
11. Select **Typical** and then click **Next**. The *NetBackup System Names* window appears.

    From this window you can enter the names of the systems that will have access to this current system.

**Note** If installing a media server, the *NetBackup System Names window* will have an additional line with the local media server filled in. You must enter a Master Server name that this media server is configured to.

**12.** Enter the server names and click **Next**. The *NetBackup Global Device Database Host* window appears.

**13.** Enter the name of the NetBackup Global Device Database Host, which serves as the repository for global device configuration information. For more information about the Global Device Database Host, see *NetBackup dataCenter Media Manager System Administrator's Guide for Windows*.




Under most circumstances, this can be left as the default, which is the master server. However, you may need to enter a different host name in the following situations:

- If the system shares drives with the Shared Storage Option (SSO), all NetBackup servers must use the same host for storing device information.
- If the system has multiple master servers, enter the name of the server that will store the global device configuration information. Conflicting host information may result in an error.

**Note** If you want to make changes to the installation settings, click the **Back** button until you reach the page where you can make the change, or click the **Cancel** button and exit the wizard.

**14.** Click **Install**. The installation process begins. This process could take several minutes.

**Note** After the installation completes, a NetBackup installation log file is generated. You can find this log file at your default `TEMP` directory. The following procedure explains how to verify your `TEMP` environment variable so you can locate the NetBackup Installation log file.

▼ **Locating the NetBackup Installation log file for Windows 2000 systems**

a. Select **Start > Programs > Accessories > Command Prompt**. A *Command Prompt* window appears.

b. Enter `echo %TEMP%` and press the **Return** key on your keyboard. The location of your TEMP directory will display.

▼ **Locating the NetBackup Installation log file for Windows NT systems**

a. Select **Start > Settings > Control Panel**. The *Control Panel* window appears.

**Note** Make sure you can view all hidden files and folders. To set this option, select **Tools > Folder Options...** in the *Control Panel* window. Then click the **View** tab; set the **Show hidden files and folders** option, and click the **OK** button.

b. Double-click the **System** icon. The *System Properties* window appears.

c. Click the **Environment** tab. The *Environment Variables* including the `TEMP` variable will appear along with the corresponding paths for each variable.

15. Prior to clicking **Finish**, the NetBackup installation prompts you to continue the setup process and configure your product. By default the **Launch NetBackup Administration Console now** check box is selected.

a. To continue this process and configure your product, click ***Finish***. For more information on how to configure your product, see "Configuring NetBackup Server Software" on page 30

b. To wait and configure your product at another time, uncheck the **Launch NetBackup Administration Console now** option and then click **Finish**.

**Note** VERITAS recommends that you continue with the product setup and configuration by clicking the **Getting Started** link in the right pane of the NetBackup Administration Console and continuing through the list until you have completed the production configuration.

## Custom Installation Differences

During the installation process of NetBackup you can chose between performing a typical or a custom installation. The typical installation uses predefined values and parameters when performing the installation. The custom installation enables the user to make modifications to specific parameters. This section briefly explains the changes that can be made.

A custom installation begins the same as a standard installation, therefore all steps prior the Setup Type window (Step 9 in the previous procedure) are identical. This procedure begins after you have selected the **Custom** radio button on the *Setup Type* window.

**1.** From the *Custom Setup* window you can:

- Change which features are installed, such as:
  - NetBackup
  - User Documentation
  - Open Transaction Manager Documentation
  - NetBackup Debugger Symbols
  - Backup Exec Tape Reader for NetBackup
- Change the installation location of the NetBackup product.

---

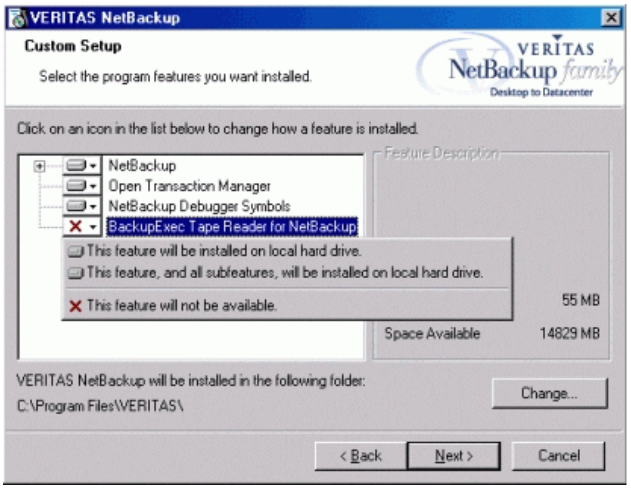
**Note** By default, the Backup Exec Tape Reader feature is marked not to be installed on initial installation.

---

From this window you can chose which product feature, and in some cases subfeatures, to install. To mark a feature as unavailable do the following:

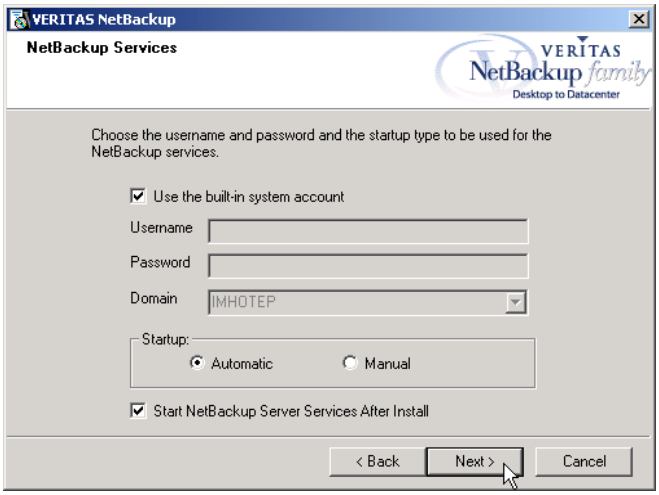
**a.** Select the icon next to the feature that you want to change. A pop-up window appears.

**b.** Click **This feature will not be available**. A red "X" appears in the icon signifying the feature will not be installed.



c. Click **Change** to select a new location to install NetBackup. The *Change Current Destination Folder* window appears. This window enables you to browse to a new location and designate a new folder where NetBackup will be installed.

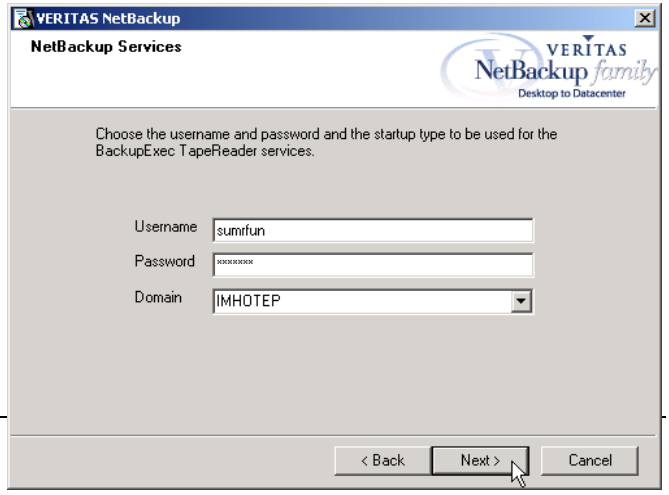
2. Click **Next**. The *NetBackup Services* window appears.




From this window you:

- Enter a **Username**, **Password**, and **Domain** or check the **Use the built-in system account** check box.
- Chose a startup type to use for the NetBackup services
- Elect to start the services after install by selecting the **Start NetBackup Server Services After Install** checkbooks.

3. Click **Next**. The *NetBackup Services* window for the Backup Exec Tape Reader services appears if **Backup Exec Tape Reader for NetBackup** is selected for installation.



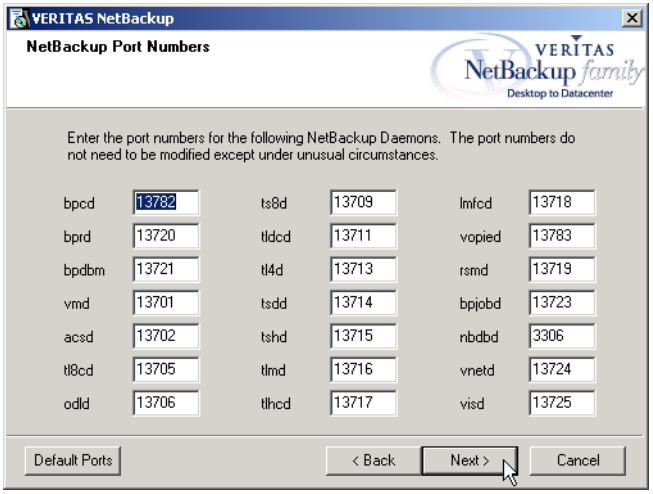

From this window you will enter a user name, password, and domain for the Backup Exec Tape Reader services.

**Note** By default, the Backup Exec Tape Reader feature is marked not available on initial installation. For more information about installing the NetBackup Tape Reader, refer to the *NetBackup DataCenter System Administrator's Guide for Windows.*

4. Click **Next**. The *NetBackup Port Numbers* window appears.

   This window enables users to change port numbers if that is necessary. Some reasons a user may change a port number is if:

   - A conflict exists between NetBackup and another industry product sharing the same port.
   - A port conflict occurs with a company's firewall causing security issues.




5. Click **Next**. The NetBackup System Names window appears. From this window you can define the master server and add additional servers that can access the system you are installing NetBackup on.

6. Click **Next**. The *NetBackup Global Device Database Host* window appears.

7. Enter the **NetBackup Global Device Database Host Name** and click **Next**. The *Ready to Install the Program* window appears.

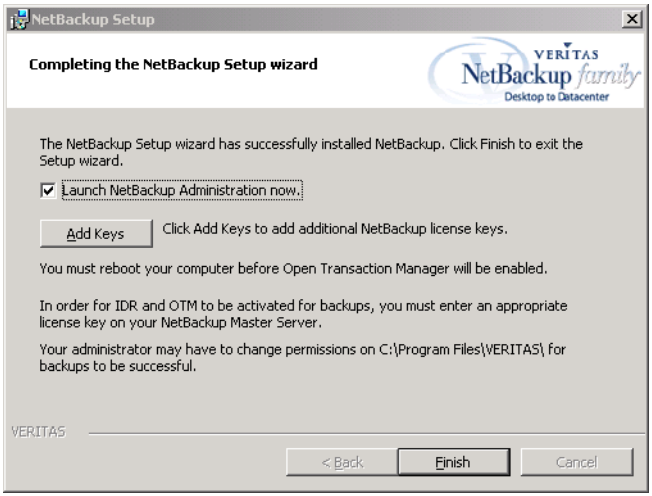
**Note** If you want to make changes to the installation settings, click the **Back** button until you reach the page where you can make the change, or click the **Cancel** button and exit the wizard.

8. Click **Install**. The installation process begins.

9. At the end of installation, the *Completing the NetBackup wizard* window appears. At this time you can click the **Add Keys** button to add additional NetBackup license keys.

10. Click **Finish**.

    By default, the NetBackup Administration interface automatically launches unless you uncheck the item labeled, **Launch NetBackup Administration now**.




For more detailed information about windows within this installation, refer to the *NetBackup DataCenter System Administrator's Guide for Windows.*

## Installing the Backup Exec Tape Reader for NetBackup

Backup Exec Tape Reader enables users to read media from VERITAS Backup Exec media. It enables you to import catalogs, browse and select images, and restore data from NetBackup Exec media using NetBackup 4.5.

**Caution** Before upgrading to NetBackup, the Backup Exec user interface should be used to attach to all the clients which may be restored from Backup Exec backups. This includes Windows machines which cannot be accessed by the user account under which the Backup Exec services are running, Netware machines, UNIX machines, the Exchange databases and mail boxes and SQL databases. Backup Exec will be able to restore file system backups to all those Windoows machines which can be accessed by the user account under which the Backup Exec services are running.

To install the Backup Exec Tape Reader you must perform a custom installation of NetBackup. As a part of the custom install, you will select Backup Exec Tape Reader. The installation will then prompt you to enter a user name and password to enable the services and install the feature.

**Note** When you elect to install Backup Exec Tape Reader, you will encounter a separate start menu item that requires you to configure this feature.

## Silent Installation Instructions

Performing a silent installation avoids the need for interactive input. In addition, this procedure will not allow you to change the install location. If you to change the install location you must go through the interactive installation described earlier in this document.

**Note** Silent installations of NetBackup are not supported if either of the following are true:

- You want to run the NetBackup services as a user rather than the local system.
- You want to install the BackupExec Tape Reader for NetBackup.

If you want to install NetBackup under either of these circumstances, you must go through the interactive installation described earlier in this document.

### ▼ To install NetBackup server software silently

1. Install the Windows Installer service by double-clicking on the following executable on the CDROM (except for Windows 2000):

   `.\x86\instmsiw.exe`

**Note** Skip this step for Windows 2000 systems. The Windows Installer service is already installed on these systems.

2. Copy the contents of the `.\Common` directory on the CD-ROM to a temporary directory on your hard drive.

3. In that temporary directory, modify the appropriate script. (The following list shows the available items and the corresponding commands.)

   - To install a master server, edit:

     `silentmaster.cmd`

   - To install a media server, edit:

     `silentmedia.cmd`

   - To install a NetBackup Remote Administration Console, edit:

     `silentadmin.cmd`

4. If only one master server will be accessing the machine, remove the following line from the script:

   ```
   SET ADDITIONALSERVERS=media1,media2,media3
   ```

5. Save and run the script.

6. Check the log file (`NetBackup Install.log` in the default `TEMP` directory) to verify that the install was successful.

**Note** After the installation completes, a NetBackup installation log file is generated. You can find this log file at the default temp directory. To determine where your TEMP directory is located, refer to "Locating the NetBackup Installation log file for Windows 2000 systems" on page 21 or "Locating the NetBackup Installation log file for Windows NT systems" on page 21.

**Note** If this installation is an upgrade, you **must** reboot the computer for the changes to take effect.

# Performing an Upgrade Installation

**Caution** Before you upgrade the NetBackup software on the master server:
– Back up your NetBackup catalogs.
– Verify that the backup was successful.

## Notes and Requirements About Upgrading to 4.5

- The NetBackup installation program detects an existing installation of NetBackup and allows you to upgrade or reinstall it as needed. A reinstall is useful if your installation is corrupted.
- You can upgrade to 4.5 only if you currently have NetBackup 3.4, 3.4.1, or 4.0V software installed.
- When installing Windows 2000 on a system that previously had a Windows 95, 98, or ME and NetBackup installed, VERITAS recommends that you reinstall NetBackup 4.5 using the Windows 2000 binaries to make sure you are using the correct set of binaries.
- Only certain types of upgrades are allowed (for example, changing a master server into a media server is not allowed). If the change is not allowed, uninstall the existing NetBackup software and then perform a new install as needed.
- All NetBackup servers must be at the same release level. VERITAS recommends that you upgrade in the following order:

  **a.** Master Server

  **b.** Media servers, if any

  **c.** NetBackup Remote Administration Console, if any

  **d.** NetBackup clients

  **e.** Any NetBackup Add-on products (such as NetBackup for Oracle)
- Make certain that the NetBackup release level on the server is at least equal to that on the clients. Older versions of server software can encounter problems with newer clients.
- Add-ons, with the exception of NetBackup Advanced Reporter, must be at the same level as the NetBackup client or Server on which they are installed.

- You can upgrade to NetBackup 4.5 on systems that support a clustered configuration. For detailed information about clustered configurations and upgrading NetBackup on these systems, see Using NetBackup with Microsoft Cluster Server in the *NetBackup System Administor's Guide for Windows*.

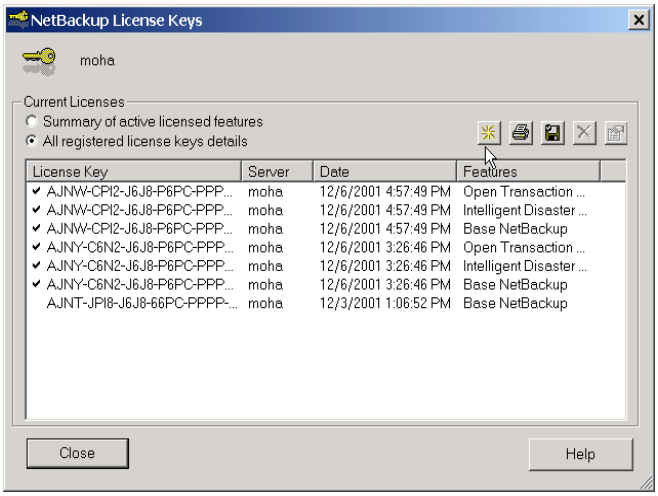
## Upgrading from NetBackup BusinesServer 4.5 to NetBackup DataCenter 4.5

Upgrading from NetBackup BusinesServer to NetBackup DataCenter requires entering the appropriate license key.

### ▼ To upgrade BusinesServer to DataCenter

1. Locate your NetBackup DataCenter license key.
2. Open the *NetBackup Administration Console* window. On the Help menu, click **License Keys**. The *NetBackup License Key* window appears.
3. Click on the **New** icon.
4. Type your license key in the **New license key** field and click **Add**.

   The new license key appears in the field in the lower part of the dialog box.

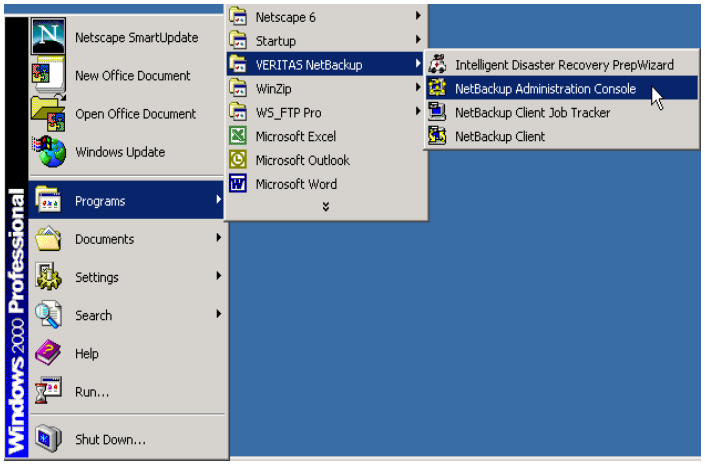



**Note** When upgrading from a BusinesServer evaluation license key to a permanent DataCenter base product license key on Windows, restart the NetBackup services. Restarting the services will ensure that the Help > About NetBackup menu displays the proper licensing information.

**Note** When making and saving any license key updates (including adding and deleting license keys) in the NetBackup Administration Console, you must restart the NetBackup Administration Console.

# Configuring NetBackup Server Software

By default, the NetBackup Administration Console launches automatically following installation. However, you can configure your server at another time by starting the NetBackup Administration Console by selecting **Start Programs > VERITAS NetBackup > NetBackup Administration Console**.




**Note** Before configuring NetBackup, make sure you have physically attached the storage devices to the server and performed all configuration steps specified by the device and operating system vendor (including installation of any required device drivers and software patches).

Once the server software and storage devices have been installed, select **Getting Started** on the NetBackup Administration Console to step through each process to configure your product.

The look and feel of this interface is similar to Windows Explorer interface and contains a group of NetBackup configuration wizards in the right window pane that enable you to do the following:

- Configure NetBackup using the Getting Started wizards
- Configure Storage Devices for NetBackup
- Configure Volumes
- Configure the Catalog Backup
- Create a Backup Policy

**Caution** If you are configuring NetBackup for the first time, we recommend that you click on the **Getting Started** icon and using this set of wizards to guide you through the process. If you have already configured NetBackup and you wish to make a change to particular area, you can click on the any of the remaining options.

## Things to Know When Configuring Master and Media Servers

The process of configuring a master or media server is very similar. And the versatility of NetBackup enables you to install either server first. However, VERITAS recommends that you install and configure the master server before you install and configure a media server. You can then configure the media server information (such as storage devices and volumes) on the master to ensure the master server will properly administer the media server. The following list contains some help tips when configuring a media server.

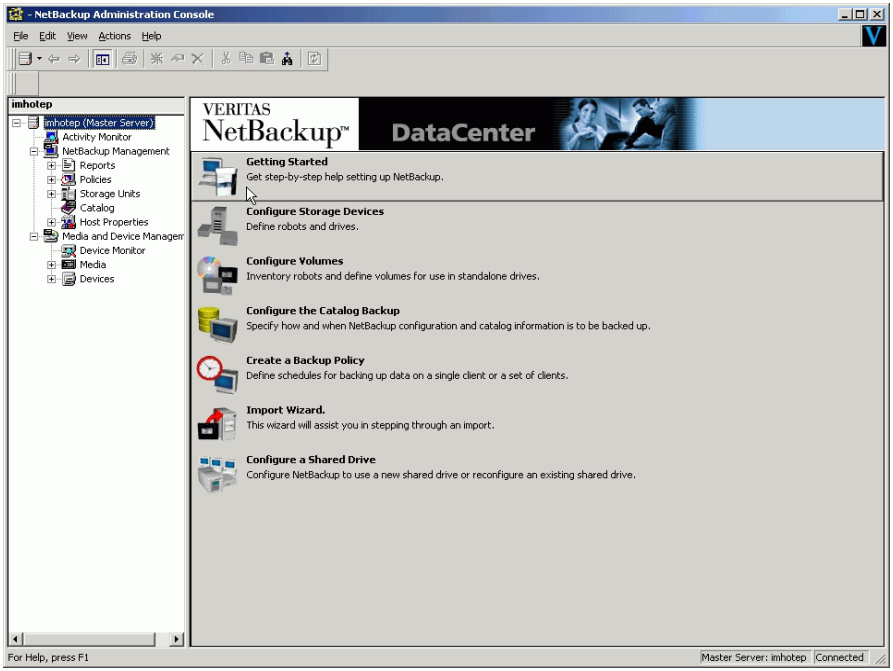
- The NetBackup Administration Console appears after you install the media server. The name of the master server will appear as the Host server name in the left window pane of the NetBackup Administration Console if the master server was installed before the media server.
- The name of the media server will appear as the Host server name in the left window pane of the NetBackup Administration Console if any of the following conditions exist:
  - The master server has not been installed.
  - The media server does not have permissions set on the master server.
  - A network problem exists blocking the media server from communicating with the master server.

**Caution** If any of these situations exist, you will still be presented with the opportunity to run three of the configuration wizards (Storage Device, Volumes, and Configure a Shared Drive). Do not run these wizards. If you run these wizards, the information that you enter will not be recognized by the master server. VERITAS recommends that you correct the problem (such as installing the master server, correcting the permission settings, or solving the network problem) and run the configuration wizards from the master server.

## Begin Configuring NetBackup

The following procedure guides you through a basic master server configuration process. As you can see from the figure below, the host name that appears in the NetBackup Administration Console is the name of the master server.

1. To begin configuring your product, click on the **Getting Started** icon in the main window of the *NetBackup Administration Console*.The *Getting Started - Welcome to NetBackup* window appears.



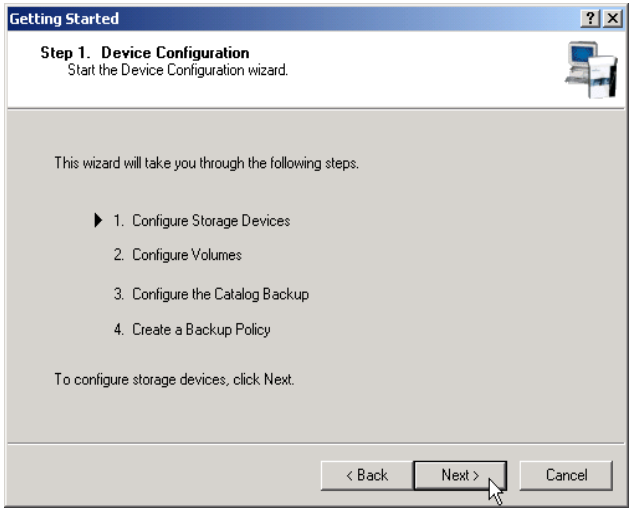

2. Click the **Next** button on the *Welcome to NetBackup* window. The Device Configuration window appears, and prompts you to begin the Storage Device configuration process.

## Configuring Storage Devices for NetBackup

Before you can run any backups, you must define your storage devices for NetBackup. The following wizard will step you through this process.

**Caution** It is assumed that you have correctly configured your storage devices for Windows. NetBackup cannot function reliably unless devices are correctly installed and configured.

1. From the *Configure Storage Device* window, click **Next** to start the Device Configuration wizard. The *Welcome to the Device Configuration Wizard* window appears. This wizard will step you through the process of:




   - Specifying device hosts
   - Scanning those hosts for back-up devices
   - Verifying the devices that were automatically detected
   - Verifying and correcting the drive configuration
   - Updating the drive configuration
   - Configuring storage units

2. From the Device Hosts window, click the **Add...** button to specify the hosts on which to auto-discover and configure devices.

3. Click **Next**. The *Scanning Hosts* window appears and displays all devices that were discovered for a specific host.

4. Click **Next**. The *Backup Devices* window appears.

5. From the *Backup Devices* window confirm the list of devices displayed in this window. If the list is complete and accurate, click the **Next** button. If a known backup device does not appear in this list, do the following:

   a. Click the **Cancel** button and close out of this wizard.

   b. Verify that the backup device is physically attached to the host.

   c. Verify all installation procedures specified by the device and operating system vendor have been performed successfully.

---

**Note** The VERITAS Tape Device Driver Install wizard (preloaded on your CD-ROM) will step you through the process of installing the latest device drivers. If you do not have a CD-ROM, you can download the NetBackup Tape Installer software from the VERITAS support web site.

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   d. Return to the NetBackup Administration Console and click the **Configure Storage Devices** link. Perform Steps 1 through 6 again.

   e. Click **Next**. The *Drag and Drop Configuration* window appears.

6. Verify that all drives are in their proper location. If you need to move a drive, simply select the drive and drag it to the location.

7. Click **Next**. NetBackup begins updating the device configurations and the *Updating Device Configuration* window appears. This update may take a few minutes to complete.

8. Click **Next** after the device configuration update completes. The *Configure Storage Units* window appears. Use this window to define storage units. If your system does not have a storage device, you can store data on a disk by defining disk storage units.

   When entering a path for a storage unit, the following rules apply:

   - Use the correct path separators (/ and \).
   - Use a colon (:) to specify a drive separation on Windows platforms.
   - Use the following characters only:
     - Alphabetic characters (ASCII A-X, a-z)
     - Numeric characters (0-9)
     - Miscellaneous characters: Plus (+), minus (-), underscore (_), or period (.)

9. Click **Next**. The *Finished* window appears.

10. Click **Finish**. The *Getting Started- Volume Configuration* window appears.

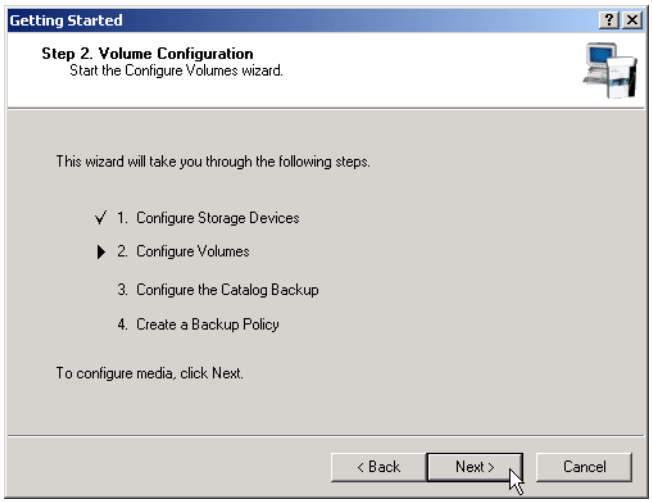
## Configuring Volumes

After you have configured your storage devices, the Getting Started wizard leads you into the Volume Configuration wizard. In this process, you initiate an inventory process of each configured robot. NetBackup automatically updates the volume database if it finds new robotic media during the inventory. You will also define new volumes for use in standalone drives. For more detailed information about volumes or configuring volumes for standalone drives, refer the to *Media Manager System Administrator's Guide*.

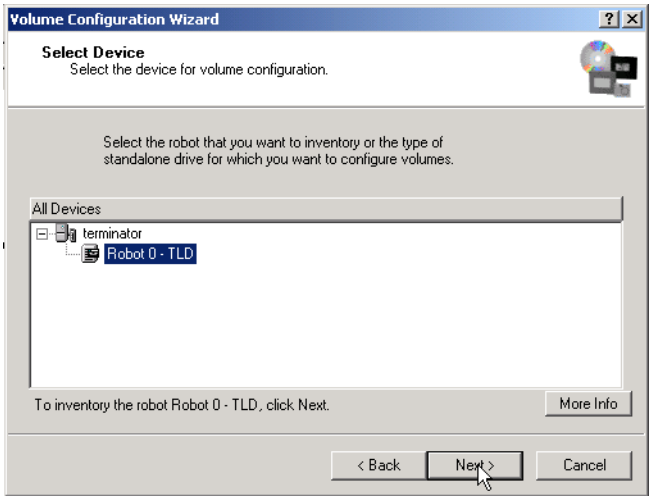
1. From the *Volume Configuration* window, click **Next**. The *Welcome to the Volume Configuration* wizard appears.

   This wizard will step you through the process of:

   - Selecting a device for volume configuration
   - Performing an inventory of the robot
   - Creating new volumes
   - Creating new volume groups




2. Click **Next**. The *Select Device* window appears.

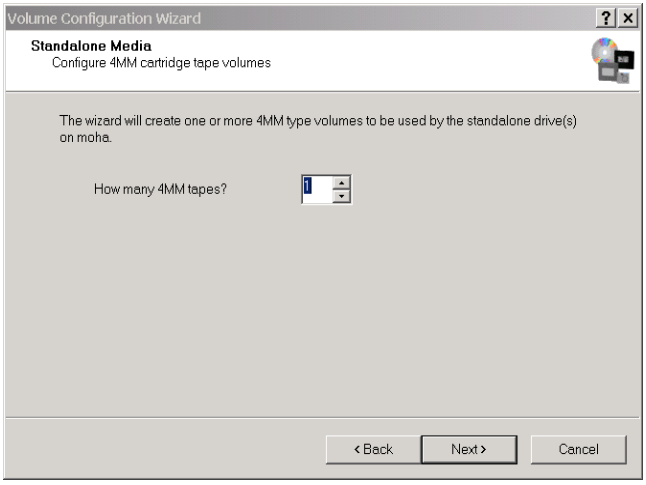


3. Select a robot that you want to inventory or the type of standalone drive for which you want to configure volumes. If you are configuring volumes for a robot proceed to Step 5. (Steps a. through d. describe the wizard if you select a standalone drive.)

   a. If you choose a standalone drive and click **Next.** The *Standalone Media* window appears. From this window you can decide on the number of volumes for your device.

   b. Select the number of volumes from the drop-down menu.

   c. Click **Next**. This conclude the *Volume Configuration* wizard.




   d. Click **Finish**. The *Getting Started - Catalog Backup Wizard* window appears.

4. Click **Next**. The *Specify if Multiple Drive Types Exist* window appears.

   From this window, you must specify if multiple drives exist. A robot is considered to have more than one type of drive if the media written in any one drive cannot be read or written in any other drive.

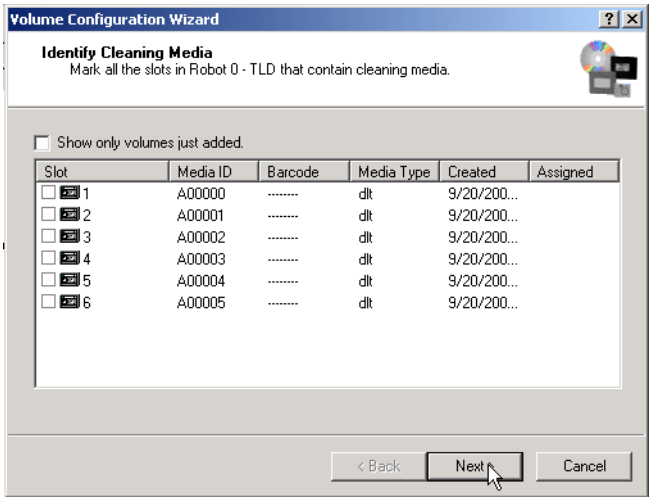
   If the robot has more than one type of drive, then the wizard cannot inventory the robot.

5. Select either the **Yes** or **No** option on this window, to determine if the robot has at least one of the drive on a different device host that is not of the same type.

6. Click **Next**. The *Robot Inventory* window appears.

   At this time the NetBackup software is conducting an inventory of the Robot that you previously selected. This window enables you to view the results of this inventory once the inventory completes. You can view these results in the **Results:** field.

7. Click **Next**. The *Identify Cleaning Media* window appears.




After the inventory process of your device completes, the software prompts you to identify which slots within your device contain cleaning media.

If you have just upgraded NetBackup and have pre-existing bar-code rules, then the bar-code reader will automatically detect slots designated for cleaning media. Otherwise, if you do not designate a cleaning slot(s), then NetBackup will consider all media (including cleaning media) as typical media and try to overwrite it.

8. Click **Next**. If you identified one or more tapes as cleaning tapes on the *Identify Cleaning Media* window, then the *Robot Inventory (Cleaning Media)* window will appear.

   This window displays the results of NetBackup after the software updates the media manager volume configuration.

9. Click **Next**. This concludes the Volume Configuration wizard.

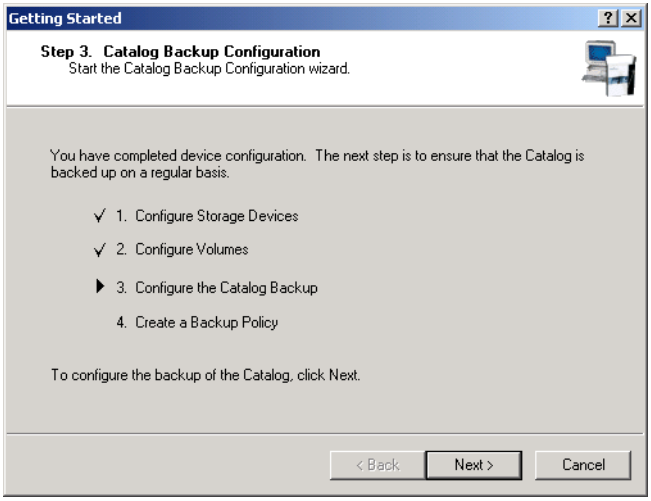
**Note** This wizard does not enable you to configure cleaning tapes for standalone drives.

10. Click **Finish**. The *Getting Started - Catalog Backup Wizard* window appears. You are now ready to configure the catalog backups for your system.

## Configure the Catalog Backup

After you have configured your storage devices and volumes, the wizard leads you into configuration of the catalog backup. The NetBackup Catalog contains information about your configuration and about the files and folders that have been backed up. In case a disk fails and your catalog is lost, a backup of your catalog makes it much easier to restore your backed-up data and resume your backup schedule. Therefore, it is imperative that you configure a catalog backup before backing up any other data.

1. From the *Configure the Catalog Backup* window, click **Next**. The Catalog Backup wizard begins. With this wizard you will:
   - Specify the media server that will perform the backup.
   - Specify the location of the NetBackup Catalog.
   - Specify one or two destinations for the catalog backup. A backup destination can be either removable media or a location on a hard drive.
   - Specify when a backup of the NetBackup Catalog will occur.




2. To begin, you must first select a media server. If you want to back up the catalog to removable media, select the media server that has the drive or drives you want to use to write the backup to the media. If you want to back up the catalog to a hard drive (not recommended), specify the computer that contains the hard drive.

3. Click **Next**. The *NetBackup Catalog Files* window appears.

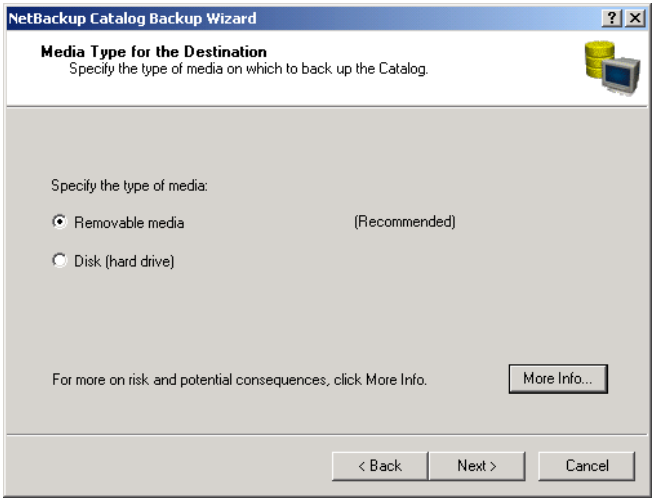
4. From the *NetBackup Catalog Files* window, verify that the master server's and each media server's catalogs are included in the list. Verify that the absolute pathnames are correct and are in the correct format.

   The pathnames of the catalogs on the master server are automatically added during installation and generally require no action on your part other than to ensure they are listed. However, if you have moved the location of your catalog on your master server, the new location must be specified. Pathnames to the NetBackup Catalog on

the media servers are not automatically added during installation and require that you add them to the file list. For more information on specifying the pathnames, see *NetBackup DataCenter System Administrator's Guide for Windows*.

**Caution** Make sure there are no invalid paths in the list of catalog files to be backed up, especially after moving catalog files, deleting old paths, or adding new paths to the catalog backup configuration as explained in this chapter. If NetBackup cannot find or follow a path, the entire catalog backup fails.

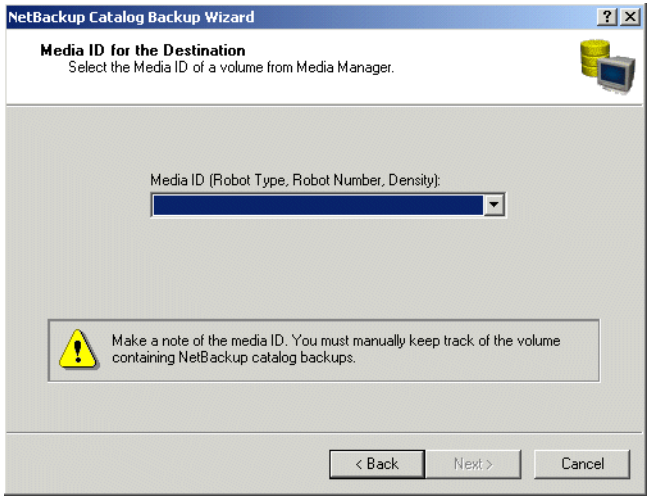
5. Click **Next**. The *Media Type for the Destination* window appears.



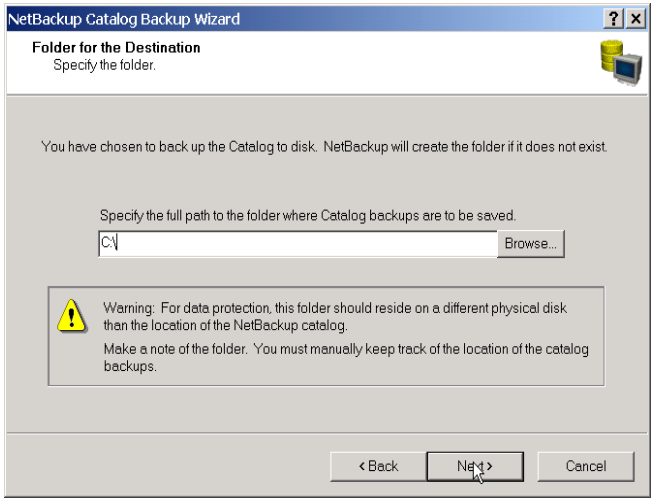

6. From the *Media Type for the Destination* window choose a media type and click **Next**.

   The **Removable media** option forces you to manually swap the scheduled backup tape with the catalog backup tape each time a scheduled backup is complete. The **Disk** option avoids this situation.

   a. .If you have configured a robot and / or a standalone drive and if you chose to back up the catalog to a tape, the Destination Volume window appears. Select the volume (for example, a removable media such as a tape) that you want to use for the backup on the Destination Volume window



**b.** If you do not have any robots or standalone drives configured, or if you selected to back up the catalog to a hard drive on the *Media Type for the Destination* page, the *Folder for the Destination* window appears. Enter the directory that you want NetBackup to use to save catalog backups in the text field on the page.




**7.** Click **Next**. The *Alternating Destinations* window appears.

**8.** The *Alternating Destinations* window enables you to specify a second location for backing up the Catalog.

❖ If you do not want to create an alternate destination:

**a.** Uncheck the **Alternate destinations when backing up the catalog** check box

**b.** Click **Next**. The *When to Back Up the Catalog* window appears, proceed to the next step.

❖ To create an alternate destination:

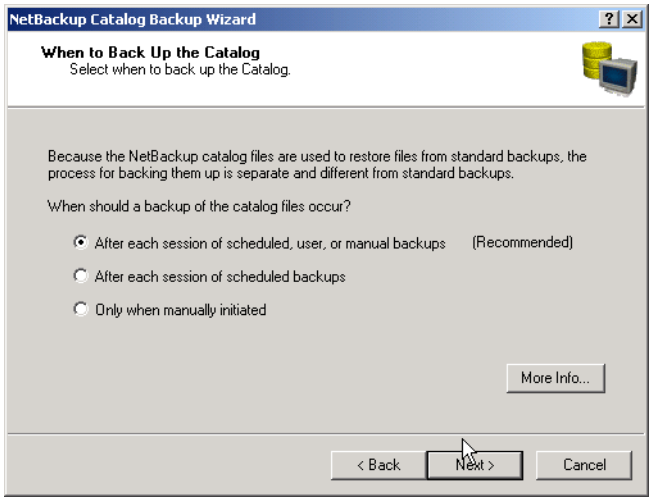
**a.** Verify that the **Alternate destinations when backing up the catalog** check box is selected.

**b.** Click **Next**. The *Media Type for the Alternate Destination* window appears.

**c.** The next sequence of windows that appear are similar to the steps you just performed.

**d.** After you have finished adding an alternate destination, click **Next**. The *When to Back Up the Catalog* window appears.

9. From the *When to Back Up the Catalog* window, select when you want to back up the NetBackup Catalog from the list of options. If you need help making a selection, click the **More Info...** button.




10. Click **Next**.

11. Click **Finish**. This completes the NetBackup Catalog configuration wizard and the *Policy Configuration* window appears.

## Create a Backup Policy

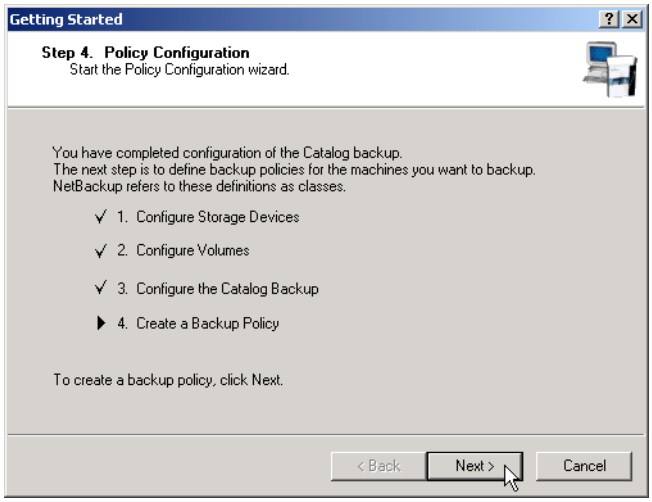
After you have configured your catalog backup, the wizard leads you into configuration of backup policies. In this step you define a backup policy for a group of one or more clients. This means specifying when the backups will take place, the files you want to back up, the clients you want to back up, and other general attributes that define how the backup is performed.

1. From the *Policy Configuration* window, click **Next**. The *Welcome to the Backup* Policy Configuration wizard appears.

2. Click **Next** to start the Backup Policy Configuration wizard. The *Policy Name and Type* window appears.

   This wizard will step you through the process of specifying:

   - Policy names and types
   - Clients
   - Files and folders to back up
   - Backup rotations
   - Starting times of backups



3. From the *Policy Name and Type* window:

   a. Enter a name in the **Policy Name** field.

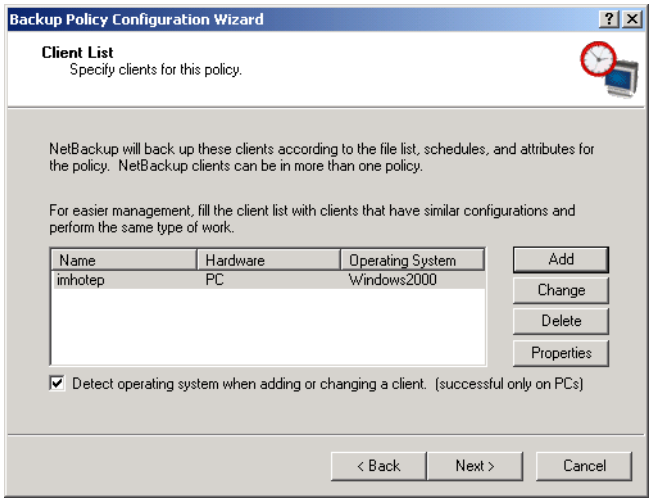
   b. Select a Policy type from the **Policy Type** drop-down box.

   c. Click **Next**. The *Client List* window appears.

4. Add, Change, or Delete clients to this policy. NetBackup will back up all clients added to this list. To add a client perform the following:

   a. Click **Add**. A text field appears that contains a browse icon.

   b. Enter the computer name in the text field or click the **Browse for Computer** icon and search for the computer.




   c. Repeat Steps a and b to add more computer clients to the list.

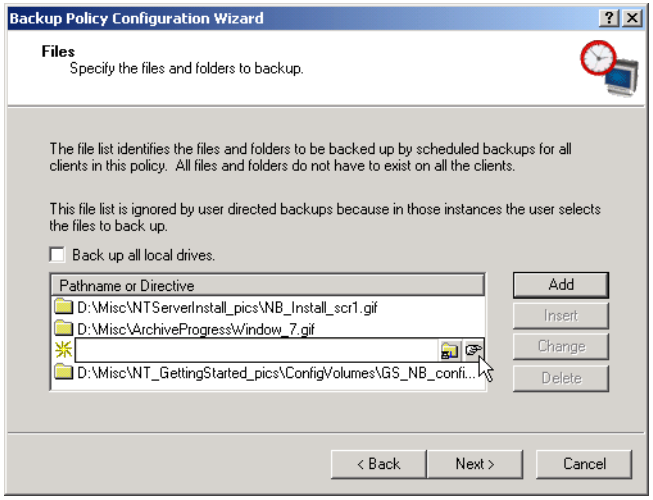
   d. Click **Next**. The *Files* window appears.

5. From the *Files* window you will identify which files and folders you want to back up. You can elect to back up all local drives by clicking the **Back up all local drives** check box. You can also administer the list of folders and files from this window by inserting new entries in the list, making changes, or deleting entries from the list.

   a. Click **Add**. A text field appears that contains a **Remote Folder** icon and a **Select Directive** icon.

   b. Enter the path of the folder or file that you want to back up in the text field or click the **Browse Folder** icon to search for the folder or file.

   c. Click the **Select Directives** icon. The *Select Directive* window appears and enables you to associate various directives to specific folders and files.




   d. Press **Enter** on your keyboard or click outside the edit box in the Files window.

   e. Repeat Steps a through d to add more folders and files to the list.

   f. Click **Next**. The *Backup Type* window appears.

6. Select the type of back up that you want this policy to perform.
   - Full Backup. Backs up all files specified in the file list.
   - Incremental Backup. Backs up all changed files specified in the file list.
     - Cumulative
     - Differential
   - User Backup. Enables the user to initiate a backup or archive on their own.

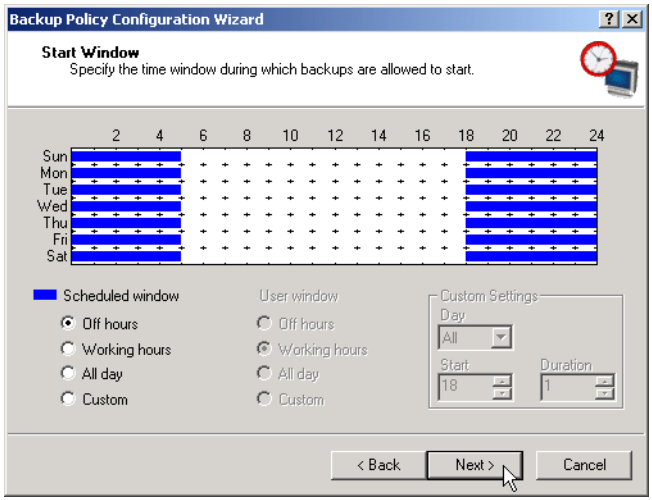
7. Click **Next**. The *Rotation* window appears.

8. Select how often you want this backup policy to run for a full or incremental backup. In addition, you can select the retention period for the backups.

9. Click **Next**. The *Start Window* interface appears.

10. The Start Window enables you to specify the window in which backups can start. From this window you can:

    - Select a range of hours (*Off hours*, *Working hours*, *All day*) to enable a backup to start.
    - Select **Custom** and adjust a the time slot for each day by selecting a day of the week, a start time, and a duration time.




11. Click **Next**. This completes the creation and configuration of a policy. To make changes to this policy or create another policy, open the NetBackup Administration Console and click the **Create a Backup Policy** wizard.

12. Click **Finish**. The *Policy Configuration* window appears again. This window enables you to create another NetBackup Policy.

    a. If you do not want to create another policy, click **Next**. The *NetBackup Installation Test* window appears.

    b. If you want to create another policy, check the **Create another NetBackup Policy (class)** check box and click **Next**. You will repeat the same procedure that you just completed.

## Testing NetBackup Installation

After you have finished configuring NetBackup, you have the opportunity to test your NetBackup configuration by initiating an immediate backup based on the installation process you just completed.

1. Click the **Start an immediate backup of NetBackup server to verify the installation** check box.

2. Click **Next**. The *Getting Started - Setup is Complete* window appears. You have completed a basic installation and configuration of NetBackup DataCenter.

   After you click the **Finish** button, NetBackup will begin the backup process according to your installation configuration. You can monitor the status of this backup by opening the NetBackup Administration Console and double-clicking the **Activity Monitor** icon in the left window pane.

   You can then right mouse click on the picture of the server in the Topology window pane and select **Job Details**. The *Job Details* window appears and provides a status of the current job.

# NetBackup Client Software

By definition, your NetBackup server is also a NetBackup client. When you installed the NetBackup server software, both the NetBackup *server* and NetBackup *client* software were installed on the server.

## Client Installation Requirements

To install NetBackup client software on a PC workstation, the workstation must meet the following configuration requirements.

**Microsoft Windows Clients**

- Microsoft Windows (95, 98, ME, NT, 2000, XP (32 and 64 bit), and LE)
  - Windows NT 4.0 (service pack 6A) or Windows 2000 (service pack 2) installed.
  - Windows 95 users must have the Windows Socket 2 Update for Windows 95. This download can be found at:

    `www.microsoft.com/windows95/downloads/contents`
- An Intel Pentium processor
- Internet Explorer 5.5 or greater
- Any TCP/IP transport that is Windows Sockets Compliant. (Use of the TCP/IP transport that comes with the server or operating system is recommended.)
- A network adapter supported by your TCP/IP transport.

### Remote Installation Requirements

To perform remote installations, there are several additional requirements:

- The source PC must have Windows NT or Windows 2000 installed.
- The destination PC must have Windows NT or Windows 2000 installed.
- The person performing the remote installation must have administrator privileges on all the client PCs.

**Note** The `rsh` mechanism for defining a *trusted remote host* does not work with SuSE Linux 7.2. VERITAS recommends that you use the `ftp` method of pushing the NetBackup client remotely instead of the `rsh` *trusted host* method for this platform.

# Installing NetBackup Client Software

The following are quick-start instructions for installing NetBackup client software. For further information on installing and configuring software on PC clients, see the *NetBackup Installation Guide - PC Clients*.

**Note** The 64-bit client installs are located in `\pc_clnt\ia64` folder, and is inaccessible from the launch screen.

The debug symbols are not on the CD-ROM and are not install if selected.

You will not have the ability to choose to not install the documentation.

## Install NetBackup Client Software Locally

You can stop the installation process at any time by clicking **Cancel** or return to a previous window by clicking **Back**.

1. If the system is Windows 95, 98, or ME, and NetBackup is currently installed, stop the NetBackup Client Service before continuing the installation.

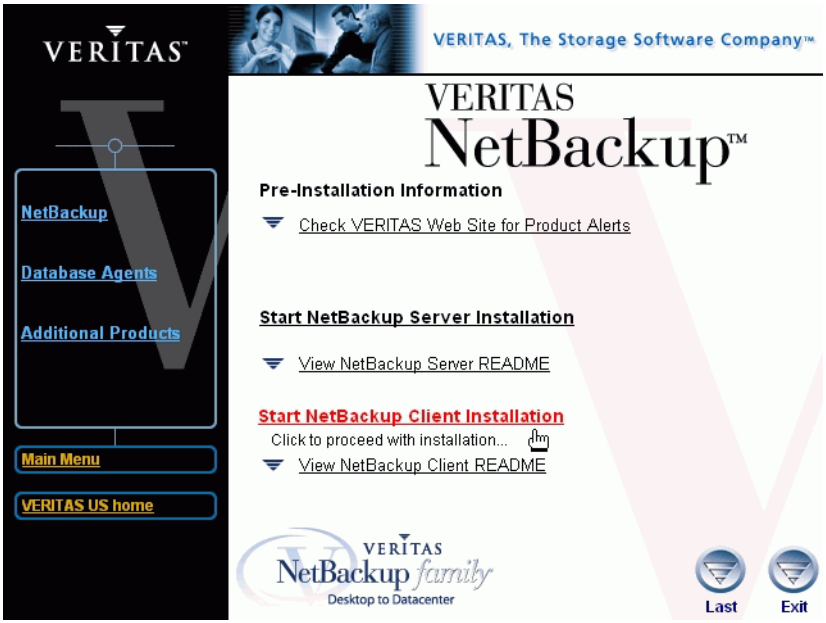
   Windows NT and Windows 2000 computers stop the service automatically.

2. Insert the NetBackup CD-ROM in the drive.

   - On Windows systems with AutoPlay enabled for CD-ROM drives, the VERITAS NetBackup installation browser starts automatically.
   - On Windows systems that have AutoPlay disabled, run `Launch.exe` in the top-level directory on the CD-ROM.

   The VERTIAS NetBackup installation browser appears.

3. Click the **NetBackup Installation** link. The browser refreshes and displays pre-installation information and NetBackup Installation links.




4. Click **Start NetBackup Client Intallation**. The *Welcome to the NetBackup Setup Wizard* window appears.

5. Click **Next**. The *NetBackup Installation Type* window appears.

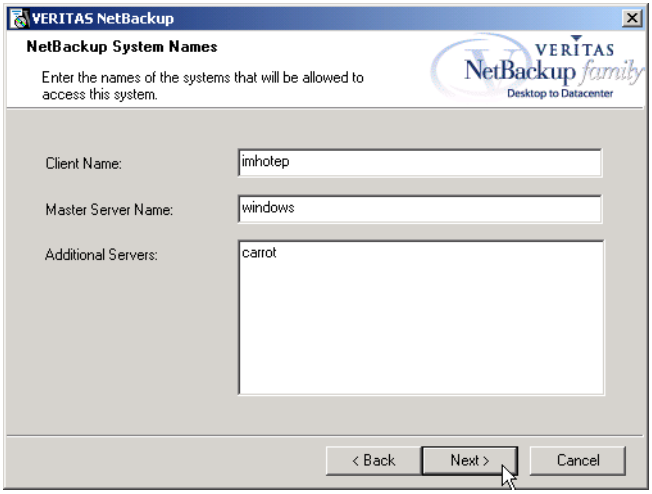
6. Select the **Install to this computer only**, option to install the client software locally.

**Note** You cannot do a remote install to or from these systems: Windows 95, 98, ME, or the 64-bit versions of XP and LE.

7. Click **Next** and continue the installation process. The *Setup Type* window appears.

   This window enables you to chose to perform a typical or custom installation. This procedure demonstrates the ease of a typical installation. To view the differences between a typical installation and a custom installation refer to “Custom Installation Differences for Client Software” on page 54.

8. Select the **Typical** option and click **Next**. The *NetBackup System Names* window appears. From this window you will enter the names of the systems that will have access to this local system.




9. Click **Next**. The *Ready to Install the Program* window appears.

10. Click the **Install** button. The installation process for the NetBackup Client Software begins.

11. The *Setup Complete* window is displayed. Click **Finish**.

**Note** You may need to reboot your PC for the changes to take effect.

## Install NetBackup Software Remotely

Follow these instructions to install the NetBackup client software on selected Windows NT and 2000 clients on your network (one of these clients can be your local PC). You may stop the installation process at any time by clicking **Cancel**.

### Remote Installation Requirements

To perform remote installations, there are several additional requirements:

- The source PC must have Windows NT or Windows 2000 installed.
- The destination PC must have Windows NT or Windows 2000 installed.
- The person performing the remote installation must have administrator privileges on all the client PCs.
- During remote installation, the client name is written to the registry in lower case. If the policies on the NetBackup server do not specify the client names in lower case, backups will fail because the names do not match.

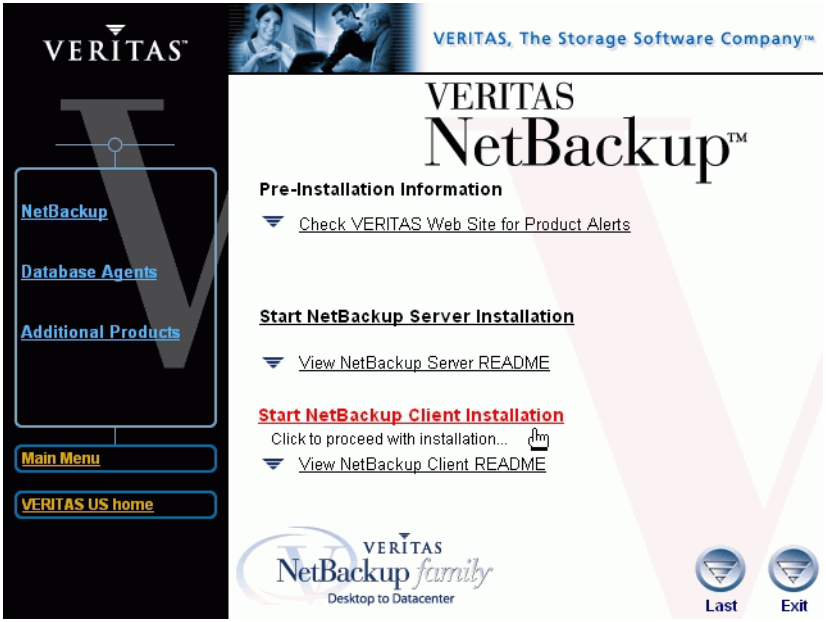
### To install NetBackup client software remotely

**Note** Clicking the **Cancel** button during a remote install process will not cancel the install on the remote system that is in progress at the time cancel is clicked. The installation will continue until it is finished. Any remote installs that remain will not be performed, and any remote installs that were successful to that point will continue to be successful.

1. Insert the NetBackup CD-ROM in the drive.
   - On Windows systems with AutoPlay enabled for CD-ROM drives, the VERITAS NetBackup Installation browser starts automatically.
   - On Windows systems that have AutoPlay disabled, run `Launch.exe` in the top-level directory on the CD-ROM.

   The VERTIAS NetBackup installation browser appears.

2. Click the **NetBackup Installation** link. The browser refreshes and displays pre-installation information and NetBackup Installation links.




3. Click **Start NetBackup Client Intallation**. The *NetBackup Client Installation* wizard window appears.

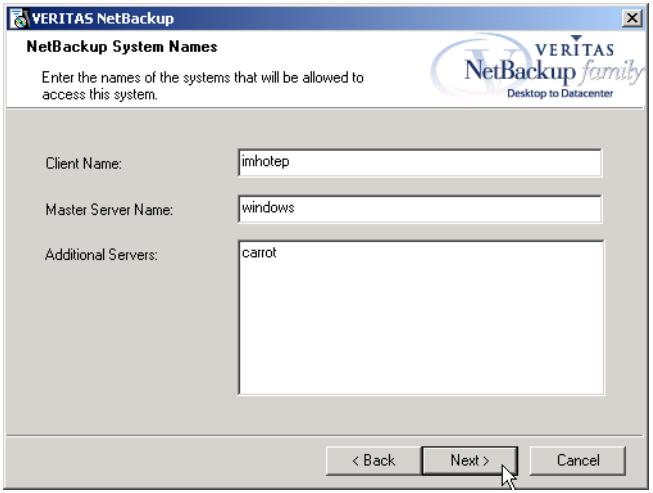
4. Click **Next**. The *NetBackup Installation Type* window appears.

5. Select the **Select from available computers on the network**, option to install the client software remotely. (The Setup software will scan the network for available clients.)

6. Click **Next** and continue the installation process. The *Setup Type* window appears.

   This window enables you to chose to perform a typical or custom installation. This procedure demonstrates the ease of a typical installation. To view the differences between a typical installation and a customer installation refer to "Custom Installation Differences for Client Software" on page 54.

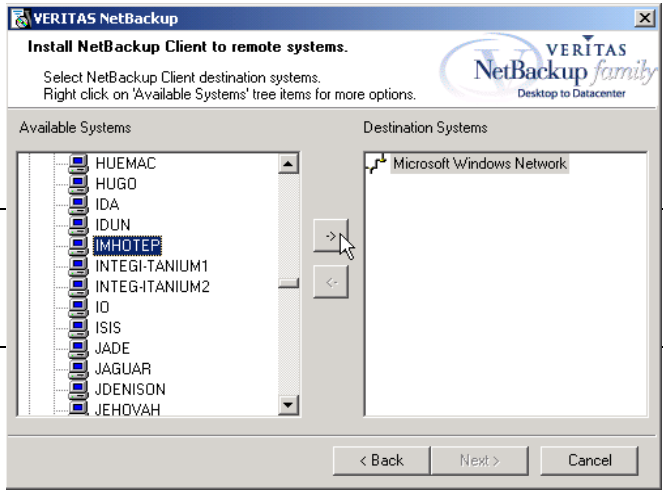
7. Select the **Typical** option and click **Next**. The *NetBackup System Names* window appears. From this window you will enter the names of the systems that will have access to this local system. You must enter a master server name in the window.




8. Click **Next**. The *Install NetBackup Client to remote systems* window appears.

   From this window you will select the NetBackup Client destination systems from the list of available systems.

9. Select a system from the Available Systems window and click the right-arrow button to move this system to the Destination Systems window.




**Note** Multiple systems can be added by using the CRTL or shift keys when selecting them with your mouse.

10. Repeat Step 9 until you have identified all destination systems.

    In some instances, an *Enter Network Password* dialog window will appear when you select a system from the **Available Systems** window.

    a. Provide the user name, password and domain of an administrator on the remote system.

    b. Select the **Remember User Name and Password** box to apply the same user name and password to all of the systems yet to be selected.

    c. Click **OK**. This system will then be added to the **Destination Systems** window.

11. Click **Next**. The *Ready to Install the Program* window appears.

12. Click the **Install** button. The installation process for the NetBackup Client Software begins.

13. The *Setup Complete* window is displayed. Click **Finish**.

**Note** You may need to reboot your PC or the remote systems for the changes to take effect.

## Installing NetBackup client software silently

**Note** Silent installations of NetBackup Client software are not supported if you want to run the NetBackup services as a user rather than the local system. If you want to install NetBackup under this circumstance you must go through the interactive installation described earlier in this document.

1. If you are running Windows, start the Windows Installer from the following locations:
   - Windows NT Systems using an Intel Pentium processor:

     `PC_Clnt\Win32\X86\instmsiw.exe`
   - Windows 95 and 98 systems using an Intel Pentium processor:

     `PC_Clnt\Win32\X86\instmsia.exe`

**Note** Do not run `instmsiw.exe` or `instmsia.exe` on Windows ME and Windows 2000 systems.

2. Copy the contents of `PC_Clnt\Win32\Common` to a temporary directory on your hard drive.
3. In the temporary directory, use a text editor to edit `silentclient.cmd` (on Windows NT, 2000, XP, and LE systems) and `silentclient.bat` (on Windows 95, 98, and ME systems) so the script will install the client software as you wish.
4. Run the script.
5. Check the `NetBackup Install.log` log file to verify that the install was successful. On Windows 2000 systems, the location may be different.

**Note** After the installation completes successfully, a NetBackup installation log file is generated. You can find this log file at the default temp directory. To determine where your TEMP directory is located, refer to “Locating the NetBackup Installation log file for Windows 2000 systems” on page 21 or “Locating the NetBackup Installation log file for Windows NT systems” on page 21.

**Note** You may need to reboot the computer for the changes to take effect.

## Custom Installation Differences for Client Software

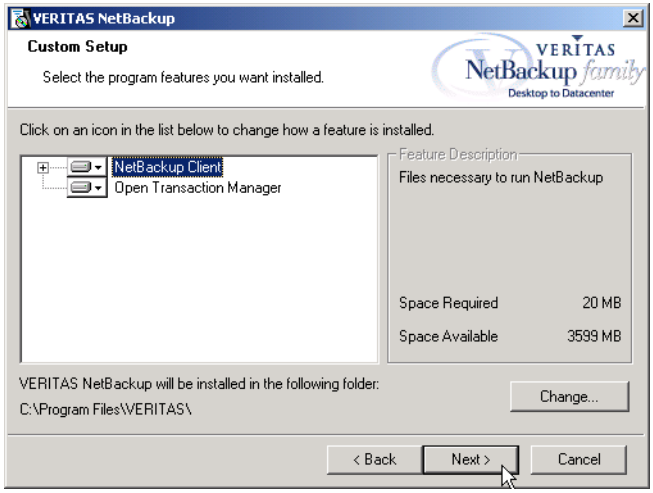
During the installation of NetBackup Client software you can chose between performing a typical or a custom installation. The typical installation uses predefined values and parameters when performing the installation. The custom installation enables the user to make modifications to specific parameters. This section briefly explains the changes that can be made.

A customer installation begins the same as a standard installation, therefore all steps prior the *Setup Type* window are identical. This procedure begins after you have clicked on the **Custom** link on the *Setup Type* window.

1. Select the **Custom** radio button and click **Next**. The *Custom Setup* window appears. From this window you can elect to change the location of the installation for the following products:

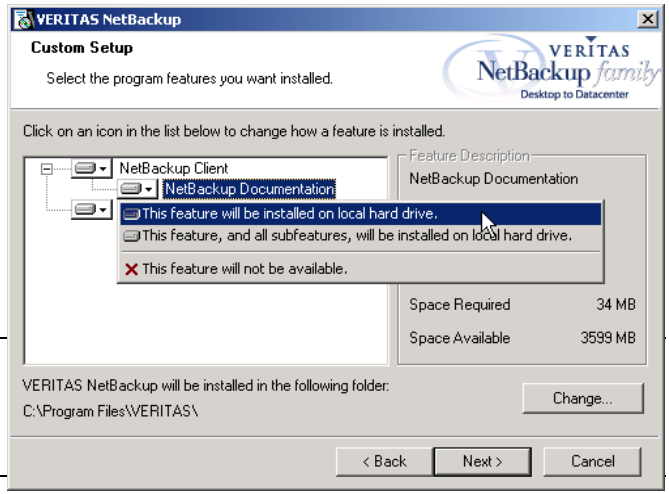
   - NetBackup
   - User Documentation
   - Open Transaction Manager

   From this window you can chose which product feature, and in some cases subfeatures, to install. In the figure above, all items are selected to be installed. To mark a feature as unavailable do the following:



**a.** Select the icon next to the feature that you want to change.A pop-up window appears.

**b.** Click **This feature will not be available**. A red "X" appears in the icon signifying the feature will not be installed.

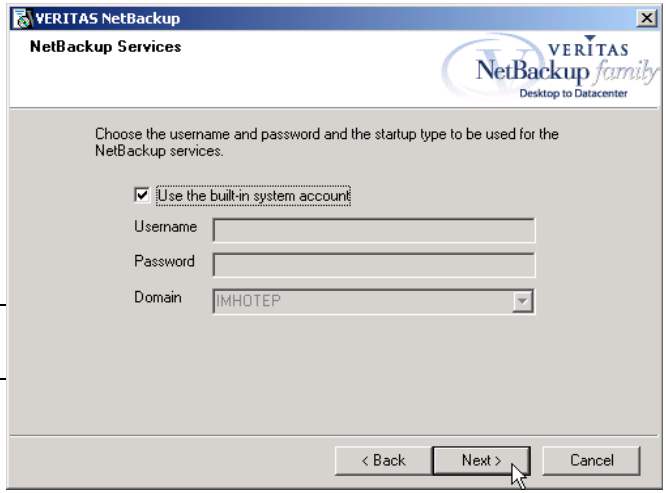



**Note** You cannot change the install location when performing a silent installation.

**2.** Click **Next**. The *NetBackup Services* window appears.

From this window, you:

- Enter a user name and password or elect to the built-in system account information that already exists.

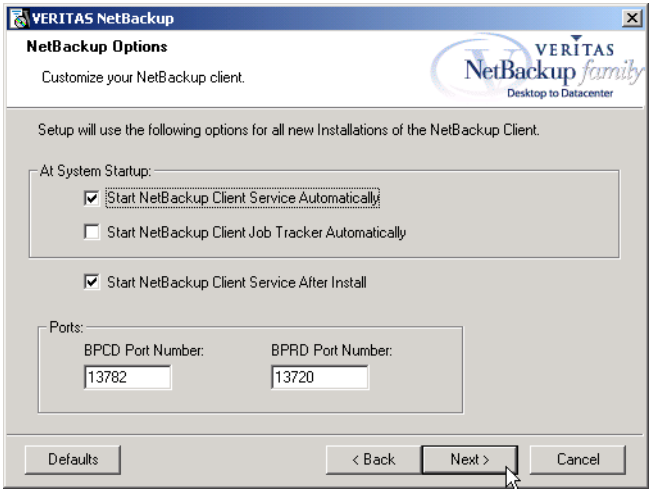



**Note** This step is not available during a silent installation.

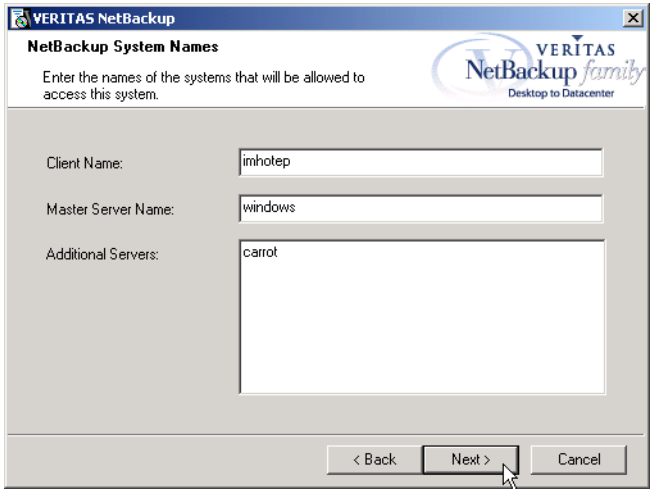
3. Click **Next**. The *NetBackup Options* window appears.

   From this window enables you to customize your NetBackup client.

   - Select if you would like the client services to start automatically at system start-up.
   - Decide whether to stat NetBackup Client Service after install.
   - Modify ports should there be a conflict.




4. Click **Next**. The *NetBackup System Names* window appears. From this window you will enter the names of the systems that will have access to this local system. You must enter a master server name in this window.




5. Click **Next**. The *Ready to Install the Program* window appears.

6. Click **Install**. The installation process for the NetBackup Client Software begins.

7. The *Setup Complete* window is displayed. Click **Finish**.

**Note** If this is an upgrade procedure, you **must** need to reboot your computer for the changes to take effect.

If you want to make changes to the installation settings, click the **Back** button until you reach the page where you can make the change, or click the **Cancel** button and exit the wizard.

# Other Client Software Installations

## Netware Target and Nontarget

For detailed instructions on how to install Netware Target and Nontarget clients, refer to the NetBackup Installation Guide - PC Clients.

## Macintosh

For Macintosh installation instructions, refer to the NetBackup Installation Guide - PC Clients.

**Note** You can install Macintosh clients from the NetBackup 4.5 CDROM.

## UNIX

1. Insert the NetBackup CD-ROM into the drive on the client computer.

   HP systems only: Because the NetBackup CD-ROM is Rockridge formatted, it must be mounted by entering the following commands:

   ```
   nohup pfs_mountd &
   nohup pfsd &
   pfs_mount -o xlat=unix /dev/dsk/device-ID /cdrom
   ```

   Where *device_ID* is the ID of your CD-ROM drive.

2. Change your working directory to the CD-ROM directory:

   `cd` ***cd_rom_directory***

   Where *cd_rom_directory* is the path to the directory where you can access the CD-ROM. On some platforms, it may be necessary to mount the directory.

3. Start the install program.

   ```
   ./install
   ```

4. Choose option 2, **NetBackup Client Software**.

**Note** The choices provided for OS level represent the OS Level on which the binaries were compiled. Often the binaries will function perfectly on newer versions of the operating system. For example, Solaris 2.6 binaries also are used on Solaris 7 and Solaris 8 levels of the operating system. So, if you wish to install on a Solaris 8 system, choose the Solaris 2.6 binaries.

5. Follow the prompts to complete the installation.

6. On HP systems only—to unmount the CD-ROM:

   - Execute the `pfs_umount` command

   - Use the `kill` command to kill the following processes:

     **`pfs_mountd`**
     **`pfsd`**
     **`pfs_mountd.rpc`**
     **`pfsd.rpc`**

# Installing Alternative Administration Interfaces

You can install a NetBackup user interface on a different computer. (This will be necessary if your server computer has no graphics display capabilities.)

| System | Install this user interface |
|---|---|
| Windows | NetBackup Remote Administration Console |
| UNIX | UNIX (NetBackup-Java capable) client |

## NetBackup Remote Administration Console for Windows

You can skip this section if you do not want to remotely administer a NetBackup server from a Windows NetBackup client.

The NetBackup Remote Administration Console for Windows servers is a version of NetBackup for Windows that can be used to remotely administer one or more UNIX or Windows NetBackup servers. It provides all of the standard NetBackup Server for Windows interfaces and can be used to create backup policies, manage volumes, view status, monitor tape drives, etc., on a remote NetBackup server. It cannot be used as a NetBackup master or media server itself—only for the remote administration of other 4.5 NetBackup UNIX or Windows servers.

**Note** The Windows NetBackup servers that support the NetBackup Remote Administration Console are Windows NT and Windows 2000. For information about the supported platforms for the NetBackup 4.5 release, refer to the Supported Platforms and Peripherals chapter in *NetBackup Release Notes for UNIX and Windows*.

Although the NetBackup Remote Administration Console cannot be used as a master or media server, in order for it to remotely administer a NetBackup server, it must be added to the server list on that server in the same way that other NetBackup servers are added to the server list to give them access to that server.

The NetBackup manuals and on-line help do not, in most cases, specifically refer to the NetBackup Remote Administration Console since, for all practical purposes, using the NetBackup Server for Windows interfaces on the NetBackup Remote Administration Console is identical to using them locally on the server that is being administered. Of course, the master server or device host shown in the interface will be the server name that is being administered instead of the local server name.

▼ **The following steps describe how to install the remote server:**

1. Go to the computer on which you want to install the NetBackup Remote Administration Console and insert the CD-ROM that contains the NetBackup server software.
   - On Windows systems with AutoPlay enabled for CD-ROM drives, the VERITAS NetBackup installation browser starts automatically.
   - On Windows systems that have AutoPlay disabled, run `Launch.exe` in the top-level directory on the CD-ROM.
2. On the NetBackup - Install screen, click the **Install** option beneath NetBackup Server.
3. Click **Next**.
4. Select **NetBackup Remote Administration Console**.
5. Follow the prompts to complete the installation.

**Note** On the *NetBackup System Names* screen, the name of the NetBackup Remote Administration Console should be in the first entry field. You must enter the name of the remote NetBackup DataCenter computer in the Master Server field.

When the software is installed, a set of NetBackup documents are also installed in the following directory:

*install_path*`\Help`

By default, *install_path* is `C:\Program Files\VERITAS`.

By default, the NetBackup Remote Administration Console will automatically begin as soon as you click **Finish** in the installation program. (If you did not choose that default, go to the Windows **Start** menu on the NetBackup Remote Administration Console computer and select **Start > Programs > VERITAS NetBackup > NetBackup Administration > Console**.)

▼ **The following steps will add the NetBackup Remote Administration Console host to the server list of the remote DataCenter server.**

**Note** On a UNIX system, there are two procedures that you can use to add the host to the server list; you can use the NetBackup-Java GUI (if your system is NetBackup-Java Console compatible) or you can edit the `bp.conf` file. Step 1 describes this process using the NetBackup-Java GUI and Step 2 describes how to add the edit the `bp.conf` file.

1. Use the NetBackup-Java GUI to specify and add the remote UNIX DataCenter to the server list. (If you perform this step you can proceed to step 3.)

   a. In the left pane of the NetBackup-Java GUI, select **Host Properties > Master Servers**. The host server appears in the main window.

   b. Right click on the name of the host server in the *Master servers* **window in the right pane.**

   c. Select **Properties**. The *Master Server Properties* window appears.

   d. In the *Master Server Properties* window, select the **Servers** icon from the tree in the left window pane.

   e. In the *Servers* window, click the **New** button.

   f. Type the name of the host that is to run the NetBackup Remote Administration Console.

   g. Then click the **OK** button. The name of the host appears in the *Additional Servers* list.

   h. Click **OK**.

2. Edit the bp.conf file to add the remote UNIX DataCenter to the server list.

   a. Go to the remote NetBackup UNIX server.
   In the `/usr/openv/netbackup/bp.conf` file, at the end of the SERVER = lines, add the following line:

   ```
   SERVER = name-of-Administration-Console-machine
   ```

   Where *name-of-Administration-Console-machine* is the name of the machine where the NetBackup Remote Administration Console will be installed.

3. If you have an existing NetBackup Remote Administration Console installed and you want to add a remote master server, perform the following steps.

   a. Go to the remote NetBackup Windows Server and start the NetBackup Administration Console.

   b. In the left pane of the NetBackup Remote Administration Console, select **Host Properties > Master Server**. The host server appears in the main window.

   c. Right click on the name of the host server in the *Configuration for servers of (host server name)* **window.**

**d.** Select **Properties (Read/Write)**. The **Master Server Properties** window appears.

**e.** In the Master Server Properties window, click the **Servers** tab.

**f.** In the **Global Operations** box, in the field labeled **Add to all lists**, type the name of the host that is to run the NetBackup Remote Administration Console. Then click the "**+**" button. (The name of the host appears in the Additional Servers list.)

**g.** Click **OK**.

## NetBackup Remote Administration Console for UNIX

You can skip this section if you do not want to remotely administer a NetBackup server from a UNIX NetBackup client.

The NetBackup Remote Administration Console for UNIX can be used to remotely administer one or more UNIX or Windows NetBackup servers. It provides all of the standard NetBackup Server for Windows interfaces and can be used to create backup policies, manage volumes, view status, monitor tape drives, etc., on a remote NetBackup server. It cannot be used as a NetBackup server—only for the remote administration of other 4.5 NetBackup UNIX or Windows servers.

**Note** Remote administration of Windows servers using the NetBackup Remote Administration Console for UNIX is done via the "change server" functionality in the console. You cannot specify the Windows server host in the console login dialog to administer it directly. The UNIX server host specified in the login dialog must be in the server list of all NetBackup servers that you want to administer via the "change server" capability in the console. For more detail, refer to the *NetBackup System Administrator's Guide for UNIX*.

To use the NetBackup Remote Administration Console to remotely administer a NetBackup server, it must be added to the server list on that server in the same way that other NetBackup servers are added to the server list to give them access to that server.

▼ **The following steps describe how to install a remote server:**

**1.** Go to the computer on which you want to install the NetBackup Remote Administration Console.

**2.** Insert the NetBackup CD-ROM into the drive on the client computer and following the procedure for locally installing software. Refer to "Install NetBackup Client Software Locally" on page 47.

▼ **The following steps will add the NetBackup Remote Administration Console host to the server list of the remote DataCenter server.**

**Note** On a UNIX system, there are two procedures that you can use to add the host to the server list; you can use the NetBackup-Java GUI (if your system is NetBackup-Java Console compatible) or you can edit the `bp.conf` file. Step 1 describes this process using the NetBackup-Java GUI and Step 2 describes how to edit the `bp.conf` file.

1. Use the NetBackup-Java GUI to specify and add the remote UNIX DataCenter to the server list. (If you perform this step you can proceed to step 3.)

   a. In the left pane of the NetBackup-Java GUI, select **Host Properties > Master Servers**. The host server appears in the main window.

   b. Right click on the name of the host server in the *Master servers* **window in the right pane.**

   c. Select **Properties**. The *Master Server Properties* window appears.

   d. In the *Master Server Properties* window, select the **Servers** icon from the tree in the left window pane.

   e. In the *Servers* window, click the **New** button.

   f. Type the name of the host that is to run the NetBackup Remote Administration Console.

   g. Then click the **OK** button. The name of the host appears in the *Additional Servers* list.

   h. Click **OK**.

2. Edit the `bp.conf` file to add the remote UNIX DataCenter to the server list.

   a. Go to the remote NetBackup UNIX server.
   In the `/usr/openv/netbackup/bp.conf` file, at the end of the SERVER = lines, add the following line:

   ```
   SERVER = name-of-Administration-Console-machine
   ```

   Where *name-of-Administration-Console-machine* is the name of the machine where the Administration Console will be installed.

3. If you have an existing NetBackup Remote Administration Console installed and you want to add a remote master server, perform the following steps.

   a. Go to the Remote NetBackup Windows server and open the NetBackup Remote Administration Console.

**Note** If this is a clean installation, you can add the masters that you want to administer as additional servers during the install.

   b. In the left pane of the NetBackup Remote Administration Console, select **Host Properties > Master Server**. The host server appears in the main window.

   c. Right click on the name of the host server in the **Configuration for servers of (host server name)** field.

   d. Select **Properties (Read/Write)**. The *Master Server Properties* window appears.

   e. In the Master Server Properties window, click the **Servers** tab.

   f. In the **Global Operations** box, in the field labeled **Add to all lists**, type the name of the host that is to run the NetBackup Remote Administration Console. Then click the "+" button.

      The name of the host appears in the Additional Servers list.

   g. Click **OK**.

# Installing NetBackup Java Windows Display Console

The NetBackup Java Windows Display Console enables you to run the NetBackup Java (UNIX) interfaces on any supported Windows server platforms. This interface enables you to backup, archive, and restore data remotely.

You can skip this section if you do not want to remotely administer your UNIX NetBackup servers using the NetBackup Java Windows Display Console on a Windows server.

**Note** You can install the NetBackup Java Windows Display Console from the NetBackup CD-ROM.

## Requirements

For the computer on which you want to run the NetBackup Java Windows Display Console, VERITAS recommends 256 MB of physical memory.

▼ **To install the NetBackup Java Windows Display Console:**

1. On the system where you are performing the install, insert the CD-ROM that contains the NetBackup server software.
   - On Windows systems with AutoPlay enabled for CD-ROM drives, the NetBackup install program starts automatically.
   - On Windows systems that have AutoPlay disabled, run `Launch.exe` in the top-level directory on the CD-ROM.
2. On the NetBackup Install browser, click the **Additional Products** link in the left column on browser. The main window updates and enables you to install additional products or view documentation.
3. Click the **Additional Products Installation** link. The browser refreshes and displays the current list of products available for installation.
4. Click on the **NetBackup Java Windows Display Console** link. A welcome dialog box appears.
5. Continue the installation by following the prompts to install the NetBackup Java Windows Display Console.

6. When the software is installed, see the following document for information on using the display console (this document is installed with the software):

   *install_path*`\Java\Readme.txt`

   Where, by default, *install_path* is `C:\Program Files\VERITAS`.

# Installing NetBackup Agents and Options

After your initial installation is complete, you can install any other NetBackup agents and options (such as NetBackup for Oracle) by following the instructions in the NetBackup guide that comes with that product.

# Uninstall/Reinstall NetBackup and Clients 3

This chapter gives instructions for uninstalling and reinstalling NetBackup software.

## Uninstalling NetBackup Server Software

**Caution** This procedure removes the NetBackup catalogs. If you intend to do a reinstall, be certain to save the configuration, catalog, and log file information before proceeding (see "Uninstall NetBackup server software and save catalog data for Windows 2000 users" on page 68).

**Note** If you are uninstalling NetBackup from a machine that has NetBackup-Java Display Console loaded, the Console will be removed. You will need to install the Console to continue using it on the machine.

▼ **Uninstall NetBackup server software**

**Note** It is always good practice to backup your NetBackup catalogs before uninstalling.

1. From the **Start** menu, click **Settings**, then **Control Panel**. The Control Panel window appears.
2. From the Control Panel window, double click the **Add/Remove Programs** icon. The Add/Remove Programs window appears.
3. Select **VERITAS NetBackup** from the **Currently Installed Programs** list.
4. Click the **Remove** button.

▼ **Uninstall NetBackup server software and save catalog data for Windows 2000 users**

**Note** For Windows 2000 users. clicking the **Remove** button during a product uninstall will, by default, remove all NetBackup configuration and catalog information. The following procedure explains the necessary steps to retain this information for future reinstalls.

1. From the **Start** menu, click **Settings**, then **Control Panel**. The Control Panel window appears.
2. From the Control Panel window, double click the **Add/Remove Programs** icon. The Add/Remove Programs window appears.
3. Select **VERITAS NetBackup** from the **Currently Installed Programs** list.
4. Click the **Change** button. This action enables you to modify, repair, or remove NetBackup.
5. Select **Remove** on the *Program Maintenance Dialog*.
6. Click in the **Remove all NetBackup Congifuration, Catalog, and Log files** check box to disable this function. (This check box contains a check mark by default.)
7. Click the **Remove** button.

# Reinstalling NetBackup Server Software

This procedure describes how to install NetBackup after you have uninstalled the product, but saved your configuration, catalog, and log files.

▼ **Reinstall NetBackup server software with saved configuration and catalog information**

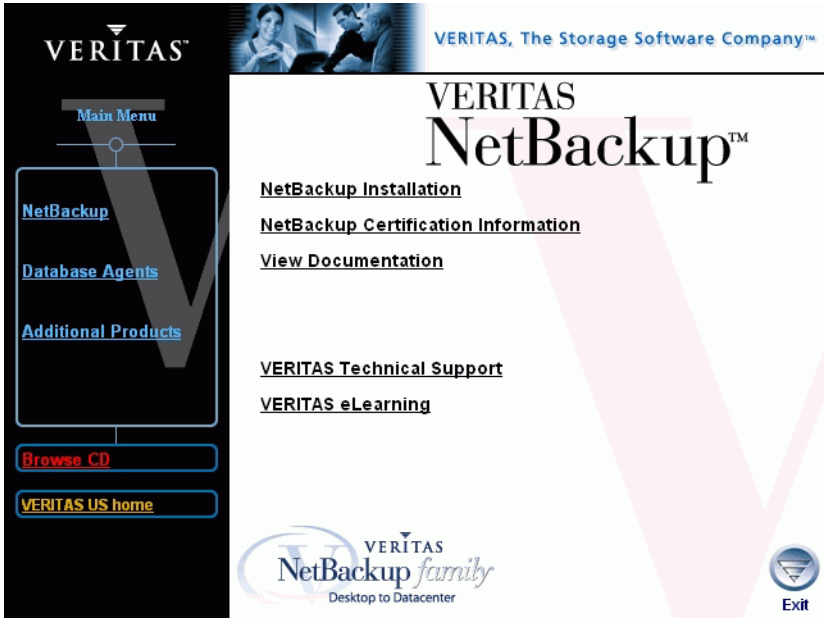
1. When reinstalling a NetBackup product, you should have your license key(s) available throughout the installation process.

**Caution** You must reinstall this product in the exact location as the previous installation to ensure your saved configuration, catalog, and log files will function properly with the new product.

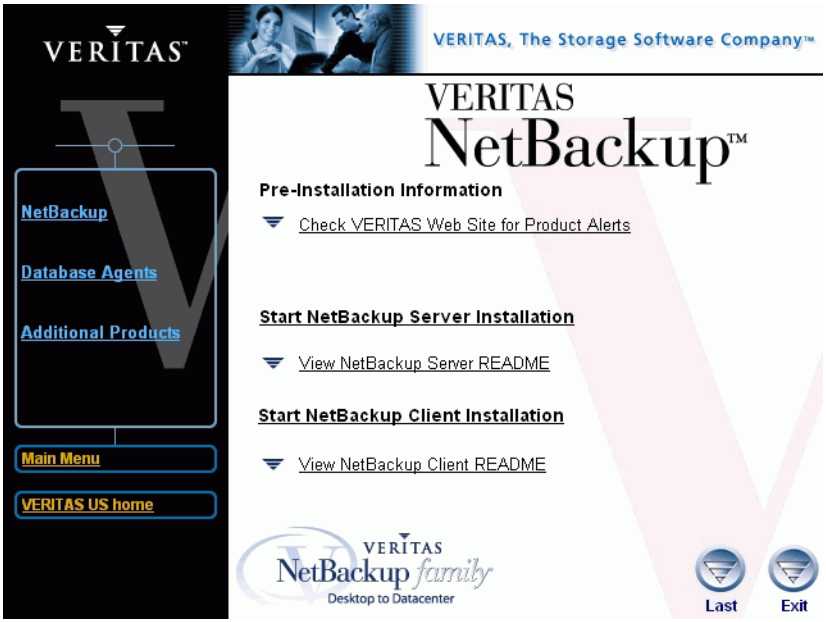
2. Log in as Administrator on the server where you will be installing NetBackup.

3. Insert the NetBackup CD-ROM in the drive.
   - On Windows systems with AutoPlay enabled for CD-ROM drives, the VERITAS NetBackup installation browser starts automatically.
   - On Windows systems that have AutoPlay disabled, run `Launch.exe` in the top-level directory on the CD-ROM.

4. On the NetBackup - CD browser, click on the **NetBackup Installation** option in the main window. The contents of the main browser window will display the following information and options:
   - Links on the left side of the browser that display information pertaining to **NetBackup**, **Database Agents**, and **Additional Products**.
   - Browse the CD
   - The NetBackup link selected (by default) and these available options:
     - Begin NetBackup Installation
     - View Certification Information
     - View available documentation
     - Link to VERITAS Technical Support
     - Link to VERITAS e-Learning

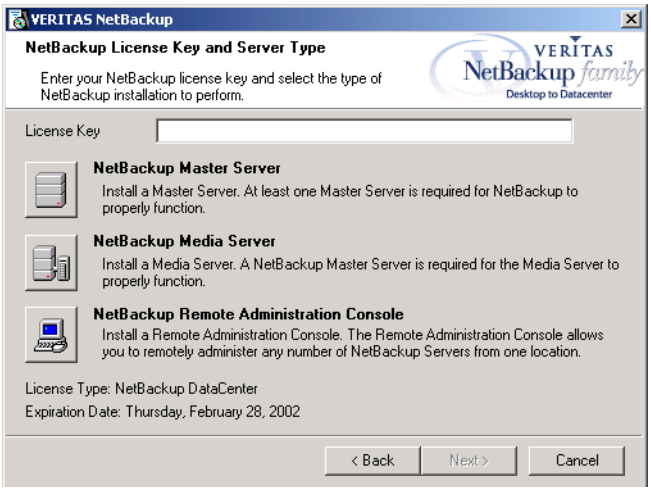


5. Click **NetBackup Installation**.The browser refreshes and displays pre-installation information.




6. Click the appropriate link of the installation (client or server) that you want to start. The NetBackup Setup wizard begins.

7. Click **Next.** The *NetBackup License Key and Server Type* window appears.



8. Enter the base product license key that you received when you purchased your product. The license key that you enter will determine which of the three installations are available for you to install.

9. Select the type of installation that you want to perform.

**Note** Installing NetBackup Remote Administration Console does not require a license key.

10. Click **Next**. The *Setup Type* window appears. You can elect to perform a typical or a custom installation. Refer to "Custom Installation Differences" to see the differences in the installation processes.

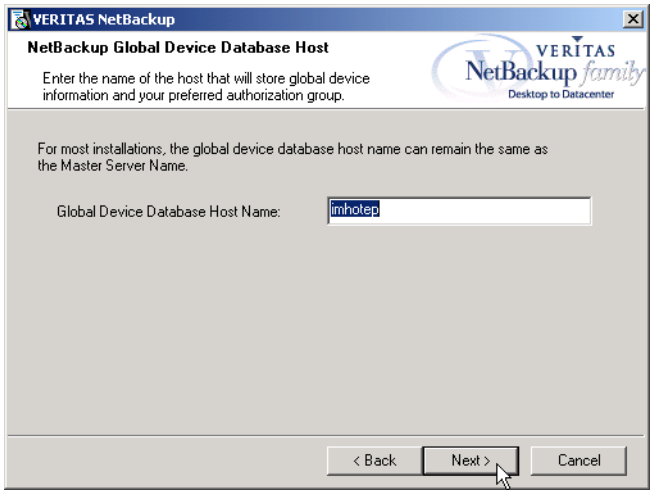
11. Select **Typical** and then click **Next**. The *NetBackup System Names* window appears.

    From this window you can enter the names of the systems that will have access to this current system.

**Note** If installing a media server, the *NetBackup System Names window* will have an additional line with the local media server filled in. You must enter a Master Server name that this media server is configured to.

12. Enter the server names and click **Next**. The *NetBackup Global Device Database Host* window appears.

13. Enter the name of the NetBackup Global Device Database Host, which serves as the repository for global device configuration information. For more information about the Global Device Database Host, see *NetBackup dataCenter Media Manager System Administrator's Guide for Windows*.



Under most circumstances, this can be left as the default, which is the master server. However, you may need to enter a different host name in the following situations:

- If the system shares drives with the Shared Storage Option (SSO), all NetBackup servers must use the same host for storing device information.
- If the system has multiple master servers, enter the name of the server that will store the global device configuration information. Conflicting host information may result in an error.

**Note** If you want to make changes to the installation settings, click the **Back** button until you reach the page where you can make the change, or click the **Cancel** button and exit the wizard.

**14.** Click **Install**. The installation process begins. This process could take several minutes.

**Note** After the installation completes, a NetBackup installation log file is generated. You can find this log file at your default `TEMP` directory. The following procedure explains how to verify your `TEMP` environment variable so you can locate the NetBackup Installation log file.

### ▼ Locating the NetBackup Installation log file for Windows 2000 systems

**a.** Select **Start > Programs > Accessories > Command Prompt**. A *Command Prompt* window appears.

**b.** Enter `echo %TEMP%` and press the **Return** key on your keyboard. The location of your TEMP directory will display.

### ▼ Locating the NetBackup Installation log file for Windows NT systems

**a.** Select **Start > Settings > Control Panel**. The *Control Panel* window appears.

**Note** Make sure you can view all hidden files and folders. To set this option, select **Tools > Folder Options...** in the *Control Panel* window. Then click the **View** tab; set the **Show hidden files and folders** option, and click the **OK** button.

**b.** Double-click the **System** icon. The *System Properties* window appears.

**c.** Click the **Environment** tab. The *Environment Variables* including the `TEMP` variable will appear along with the corresponding paths for each variable.

**Note** Remember to install this product in the exact location as the previous product.

# Uninstalling NetBackup Client Software

For instructions on uninstalling NetBackup client software for the following platforms, refer to the *NetBackup Installation Guide - PC Clients.*

- Microsoft Windows
- Macintosh
- Novell NetWare

**Note** Microsoft Windows clients include 95/98/ME/NT/2000/XP (32 and 64 bit)/LE.

### ▼ To uninstall UNIX NetBackup client software

1. Log on to the client system as the root user.

2. Remove the `/usr/openv` directory.

   If `/usr/openv` is a physical directory, execute:

   ```
   rm -rf /usr/openv
   ```

   If `/usr/openv` is a link, execute:

   ```
   cd /usr/openv
   rm -rf *
   cd /
   rm -f /usr/openv
   ```

3. Remove NetBackup entries in the `/etc/services` file, as follows.

   a. Edit the client's `/etc/services` file.

   b. Locate the lines marked by the following and remove them:

   ```
   # NetBackup services#
   .....
   # End NetBackup services #
   # Media Manager services #
   ....
   # End Media Manager services #
   ```

4. Remove the NetBackup entries in the `/etc/inetd.conf` file. For NCR this file is called `inetd.local`.

   a. Edit the client's `/etc/inetd.conf` file.

   b. Delete the lines for `bpcd`, `vnetd`, `vopied`, and `bpjava-msvc`.

5. Execute the following two shell commands to cause `inetd` to read the updated `inetd.conf` (or `inetd.local`) file.

   a. Enter the following.

      For most UNIX clients:

      ```
      ps -ea | grep inetd
      ```

      For MacOS X 10.0, 10.1, and FreeBSD:

      ```
      ps -ax | grep inetd
      ```

   b. Run the `kill` command as follows. The process ID is the first number displayed in the output from the `ps` command.

      ```
      kill -1 process ID
      ```

      The `ps` command options may vary from one client platform to another.

6. For NetBackup-Java capable clients running the NetBackup-Java Administration Console, remove the NetBackup-Java state data by executing the following:

   ```
   /bin/rm -rf /.nbjava
   ```

7. Inform users of this machine that they can remove their `$HOME/.nbjava` directory.

   The `$HOME/.nbjava` directory contains application state information (for example, table column order and size) that is saved when the user exits NetBackup-Java applications.

# Related Documents A

This appendix lists and describes the technical manuals that pertain to NetBackup.

The CD-ROM for each NetBackup product has a copy of the related manuals in Adobe Portable Document Format (PDF). The PDF files are either in the root directory or the `Docs` directory on the CD-ROM.

To view the PDF copies of the manuals, you need an Adobe Acrobat reader, which you can download from the Adobe web site at `www.adobe.com`. VERITAS assumes no responsibility for the correct installation or use of the reader.

## Release Notes

*NetBackup Release Notes for UNIX and Windows*

Provides important information about NetBackup DataCenter and BusinesServer products on UNIX- and Windows-based servers, such as the platforms and operating systems that are supported and operating notes that may not be in the NetBackup manuals or the online help.

## Getting Started Guides

*NetBackup BusinesServer Getting Started Guide for Windows*

Explains how to get NetBackup BusinesServer software installed and running on Windows-based platforms.

## Installation Guides

- *NetBackup Installation Guide for PC Clients*

  Explains how to install NetBackup PC client software. The supported PC clients are Microsoft Windows, Macintosh, and Novell NetWare.

- *NetBackup DataCenter Installation Guide for Windows*

  Explains how to install NetBackup DataCenter software on Windows-based platforms.

## System Administrator's Guides - Basic Product

- *NetBackup DataCenter System Administrator's Guide for Windows*

  Explains how to configure and manage NetBackup DataCenter on a Windows server.

- *NetBackup BusinesServer System Administrator's Guide for Windows*

  Explains how to configure and manage NetBackup BusinesServer on a Windows server.

- *NetBackup DataCenter Media Manager System Administrator's Guide for Windows*

  Explains how to configure and manage the storage devices and media on Windows servers running NetBackup DataCenter. Media Manager is part of NetBackup DataCenter.

- *NetBackup BusinesServer Media Manager System Administrator's Guide for Windows*

  Explains how to configure and manage the storage devices and media on Windows servers running NetBackup BusinesServer. Media Manager is part of NetBackup BusinesServer.

## System Administrator's Guides - Agents and Options

- *NetBackup for DB2 on Windows System Administrator's Guide*

  Explains how to install, configure, and use NetBackup for DB2 on Windows.

  For IBM DB2 version 5.2, you may also need the following manuals from IBM:

  *IBM DB2 Universal Database for NT Quick Beginnings Version 5.2*

  *IBM DB2 Universal Database for NT Extended Enterprise Edition Quick Beginnings Version 5.2*

  *Cmd Ref IBM DB2 Universal Database Command Reference*

  For IBM DB2 version 6.1, you may also need the following manuals from IBM:

  *IBM DB2 Universal Database for NT Quick Beginnings Version 6*

  *IBM DB2 Universal Database for NT Extended Enterprise Edition Quick Beginnings Version 6*

*Administration Guide:Design and Implementation Version 6*

*Administrative API Reference Version 6*

*Command Reference Version 6*

*Troubleshooting Guide Version 6*

*Quick Beginnings: Enterprise Extended Edition for Windows NT Version 6*

*Quick Beginnings for Windows NT Version 6*

- *NetBackup Encryption System Administrator's Guide*

  Explains how to install, configure, and use NetBackup encryption software to provide file-level encryption of backups and archives.

- *NetBackup for Informix System Administrator's Guide*

  Explains how to install, configure, and use NetBackup for Informix to back up and restore Informix databases that are on a UNIX NetBackup client.

  For this product, you may also need the following manual from Informix Software Incorporated:

  *Informix-Online Dynamic Server Backup and Restore Guide*

  *Informix-Online Dynamic Server Administration Guide*

- *NetBackup for Lotus Notes System Administrator's Guide for Windows*

  Explains how to install, configure, and use NetBackup for Lotus Notes to back up and restore Lotus Notes databases and transaction logs.

- *NetBackup for Microsoft Exchange Server System Administrator's Guide for Windows*

  Explains how to configure and use NetBackup for Microsoft Exchange Server to perform online backups and restores of Microsoft Exchange Server.

  You may also need the following resources from Microsoft Corporation:

  Microsoft Exchange Server whitepapers and FAQs (go to `http://www.microsoft.com/exchange` and search for "Disaster Recovery")

  *Microsoft Exchange Administrator's Guide*

  *Microsoft Exchange Concepts and Planning Guide*

  *Microsoft TechNet*

  *Microsoft BackOffice Resource Kit*

  `http://www.msexchange.org`

- *NetBackup for Microsoft SQL Server System Administrator's Guide for Windows*

  Explains how to install, configure, and use NetBackup for Microsoft SQL Server to back up and restore Microsoft SQL Server databases and transaction logs.

  For this product, you may also need the following manual from Microsoft Corporation:

  *Administrator's Companion - Microsoft SQL Server*

- *NetBackup for NDMP System Administrator's Guide*

  Explains how to install, configure, and use NetBackup for NDMP to control backups on an NDMP host.

- *NetBackup for Oracle on Windows System Administrator's Guide*

  Explains how to install, configure, and use NetBackup for Microsoft Oracle to back up and restore Oracle databases that are on a Windows NetBackup Client.

  For this product, you may also need the following manuals from Oracle Corporation:

  *Oracle Enterprise Manager Administrator's Guide*

  *Oracle7 Enterprise Backup Utility Administrator's Guide*

  *Oracle8 Server Backup and Recovery Guide*

  *Oracle7 Enterprise Backup Utility Installation and Configuration Guide*

- *NetBackup for SAP on Windows System Administrator's Guide*

  Explains how to install, configure, and use NetBackup for SAP on Windows-based servers.

  For this product, you may also need the following manuals from Oracle Corporation:

  *Oracle Enterprise Backup Utility Installation and Configuration Guide*

  *BC SAP Database Administration : Oracle*

  You may also need the following manual from SAP AG:

  *BC-BRI BACKINT Interface R/3 System*, Release 3.x and 4.x

- *NetBackup for SYBASE on Windows System Administrator's Guide*

  Explains how to install, configure, and use NetBackup for SYBASE to back up and restore Sybase databases that are on a Windows NT NetBackup client.

  For this product, you may also need the following manuals from SYBASE Incorporated:

  *SYBASE SQL Server Installation and Configuration Guide*

  *SYBASE SQL Server System Administration Guide*

  *SYBASE SQL Server Utility Programs for Windows 95, Windows 98, and Windows NT*

  *SQL Server Configuration Guide*

- *NetBackup Global Data Manager System Administrator's Guide for UNIX and Windows*

  Explains how to install, configure, and use Global Data Manager (GDM) for NetBackup DataCenter and BusinesServer products on UNIX and Windows-based operating systems.

- *NetBackup Vault System Administrator's Guide for UNIX and Windows*

  Describes how to configure and use logical vaults and profiles to duplicate backups, perform catalog backups, eject media, and generate reports.

- NetBackup Advanced Reporter System Administrator's Guide

  NetBackup Advanced Reporter (NBAR) is a backup and storage management monitoring tool designed to simplify the task of monitoring and reporting on an organization's VERITAS NetBackup activities.

## User's Guides

- *NetBackup User's Guide for Mac OS*

  Explains how to use NetBackup on a Macintosh client to perform backups, archives, and restores. This guide also contains some configuration instructions for the NetBackup client software.

- *NetBackup User's Guide for Windows*

  Explains how to use NetBackup on a Microsoft Windows clients to perform backups, archives, and restores. This guide also contains some configuration instructions for the NetBackup Backup, Archive, and Restore software.

- *NetBackup User's Guide for Novell NonTarget*

  Explains how to use NetBackup nontarget software on a Novell NetWare server to perform backups and restores. The nontarget version of NetBackup has a Microsoft Windows interface. This guide also contains some configuration instructions for the NetBackup Backup and Restore software.

- *NetBackup User's Guide for Novell NetWare Target*

  Explains how to use NetBackup target software on a Novell NetWare server to perform backups and restores. The target version of NetBackup has a menu driven interface that runs under DOS. This guide also contains some configuration instructions for the NetBackup client software.

- *NetBackup Vault 4.5 Operator's Guide for UNIX and Windows*

  Describes procedures for sending tapes offsite, receiving tapes on site, and running reports on offsite media and vault jobs.

# Troubleshooting Guides

- *NetBackup Troubleshooting Guide for Windows*

  Provides troubleshooting information for Windows-based NetBackup DataCenter and BusinesServer products, including Media Manager.

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