

Symantec NetBackup™ Getting Started Guide

Release 7.1

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NetBackup Getting Started Guide

About NetBackup

NetBackup provides a complete, flexible data protection solution for a variety of platforms. The platforms include Microsoft Windows, UNIX, and Linux systems.

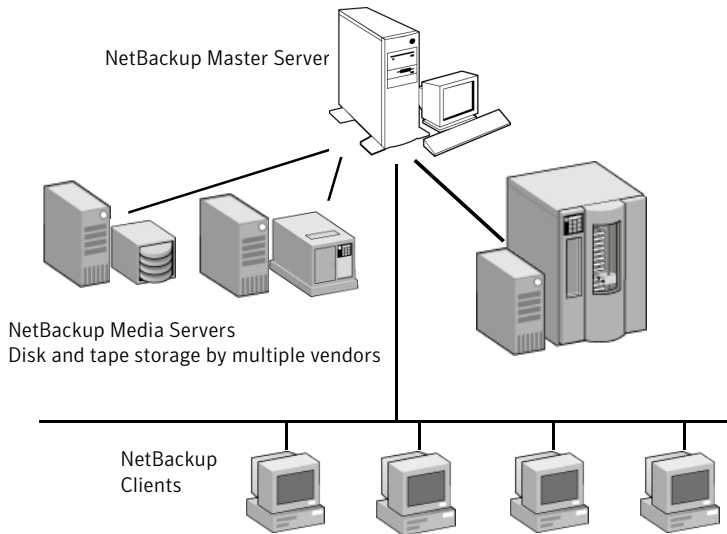
NetBackup lets you back up, archive, and restore files, folders or directories, and volumes or partitions that reside on your computer.

NetBackup includes the server and the client software as follows:

- Server software resides on the computer that manages the storage devices.
 - The master server manages backups, archives, and restores. The master server is responsible for media and device selection for NetBackup. Typically, the master server contains the NetBackup catalog. The catalog contains the internal databases that contain information about NetBackup backups and configuration.
 - Media servers provide additional storage by allowing NetBackup to use the storage devices that are attached to them. Media servers can also increase performance by distributing the network load. Media servers can also be referred to as device hosts.
- Client software resides on the computers that contain data to back up. (Servers also contain client software and can be backed up.)

NetBackup also accommodates multiple servers that work together under the administrative control of one NetBackup master server (see [Figure 1](#)).

Figure 1 Example of a NetBackup environment



See the *NetBackup Release Notes* for lists of supported platforms for NetBackup servers and clients.

How a NetBackup system works

During a backup or archive, the client sends backup data across the network to a NetBackup server. The NetBackup server manages the type of storage that is specified in the backup policy.

During a restore, users can browse, then select the files and directories to recover. NetBackup finds the selected files and directories and restores them to the disk on the client.

How to make a NetBackup system work for you

Policies determine when backups occur. Policies include schedules for automatic, unattended backups of the NetBackup clients (server-directed backups). Policies also define when you can back up and restore files manually (user-directed operations).

NetBackup administrators can set up periodic or calendar-based schedules to perform automatic, unattended backups for clients across a network. An administrator can carefully schedule backups to achieve systematic and complete backups over a period of time, and optimize network traffic during off-peak hours.

The backups can be full or incremental. Full backups back up all client files. Incremental backups back up only the files that have changed since the last backup.

The NetBackup administrator can allow users to back up, restore, or archive the files from their computer. (An archive operation backs up a file, then deletes the original file from the source disk if the backup is successful.)

About NetBackup 7.1 availability

NetBackup 7.1 is available in the following formats:

- DVD media kit
All necessary software and documentation files are provided on several DVDs. See “[About the NetBackup media kit](#)” on page 7.
- Electronic Software Distribution (ESD) images
The DVD image files are posted and available for download on the **FileConnect** Website. See “[About the NetBackup Electronic Software Distribution \(ESD\) images](#)” on page 9.

About the NetBackup media kit

The media kit includes a DVD for each supported UNIX platform or operating system and one DVD for Windows. The label on each DVD provides a brief description of its contents.

NetBackup documentation is also included. All documentation for the NetBackup software products in this release is included.

Printed materials include a getting started guide. Documentation on the DVDs is in Portable Document Format (PDF). You can use Acrobat Reader to open, view, and print the files.

If Autorun is enabled on your Windows system, you see a Web page that lists the documents that you can select to view. On UNIX or Linux systems, or if Autorun is disabled on the Windows system, navigate to the DVD drive to view the DVD contents. From that drive, you can select the documents to view or copy them to a local drive.

The following table describes the contents of each DVD.

Table 1 NetBackup 7.1 DVD contents

DVD No.	Platform OS	Contents
1	AIX 64-bit	<ul style="list-style-type: none"> ■ Server and supported options ■ NetBackup documentation
2	HP-UX IA64	<ul style="list-style-type: none"> ■ Server and supported options ■ NetBackup documentation
3	HP-UX PA-RISC	<ul style="list-style-type: none"> ■ Server and supported options ■ NetBackup documentation
4	Linux RedHat x86_64	<ul style="list-style-type: none"> ■ Server and supported options ■ NetBackup documentation
5	Linux SUSE x86_64	<ul style="list-style-type: none"> ■ Server and supported options ■ NetBackup documentation
6	Solaris SPARC64	<ul style="list-style-type: none"> ■ Server and supported options ■ NetBackup documentation
7	Solaris x86-64	<ul style="list-style-type: none"> ■ Server and supported options ■ NetBackup documentation
8	Windows x86 and x64	<ul style="list-style-type: none"> ■ Server and supported options ■ All x86, x64, and IA64 clients ■ NetBackup documentation
9	Linux zSeries RedHat x64	<ul style="list-style-type: none"> ■ Server and supported options ■ NetBackup documentation
10	Linux zSeries SUSE x64	<ul style="list-style-type: none"> ■ Server and supported options ■ NetBackup documentation
11	UNIX clients	<ul style="list-style-type: none"> ■ All UNIX clients ■ NetBackup documentation
12	Clients in LiveUpdate format	<ul style="list-style-type: none"> ■ All UNIX and Windows clients in LiveUpdate format ■ Readme document
13	OpsCenter (1 of 3)	<ul style="list-style-type: none"> ■ All Windows platforms ■ ICS (NBAC)

Table 1 NetBackup 7.1 DVD contents (*continued*)

DVD No.	Platform OS	Contents
14	OpsCenter (2 of 3)	<ul style="list-style-type: none"> ■ RedHat ■ SUSE ■ Solaris x86 ■ ICS (NBAC)
15	OpsCenter (3 of 3)	<ul style="list-style-type: none"> ■ AIX ■ HP-UX IA64 ■ Solaris SPARC ■ ICS (NBAC)

In addition to NetBackup DVDs, the media kit also includes the following items:

- OpenVMS Client (CD)
- RealTime 7.1 (DVD)

See “[About the NetBackup Electronic Software Distribution \(ESD\) images](#)” on page 9.

See “[About NetBackup 7.1 availability](#)” on page 7.

About the NetBackup Electronic Software Distribution (ESD) images

The ESD images for NetBackup 7.1 are available for download from the **FileConnect** Web page. The images adhere to a 1.8G size limitation.

The following describes how the images for each platform can be downloaded:

UNIX

Compressed `.tar` files (`gzip`) are posted.

A `Readme` file on **FileConnect** describes the following points:

- The images you must download to install NetBackup or OpsCenter.
- How to create a local file share with a directory structure that allows installation of NetBackup, OpsCenter, and clients on multiple platforms.

Windows

The DVD image is broken down into smaller files.

You must download all files that are associated with the Windows image.

A `Readme` file on **FileConnect** describes how to assemble these files into a single `.zip` file.

See “[About NetBackup 7.1 availability](#)” on page 7.

See “[About the NetBackup media kit](#)” on page 7.

About NetBackup license key requirements

To install NetBackup master server or media server software, you must enter a NetBackup product license key.

To obtain license keys, you must order a license SKU when you order your NetBackup products.

After you place your order, Symantec sends you an email with a license certificate that includes the following information:

List of NetBackup licenses purchased	This list includes all of the licenses for the products that you ordered.
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Keep this list in a secure location. You may be asked for a product license key if you ever need to contact technical support for assistance.

Serial number for access to download NetBackup products	Instead of a DVD media kit, you can use this serial number to download the Electronic Software Distribution (ESD) images for NetBackup product installation.
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Go to the following Web site and enter this serial number to download the ESD images to your system:

<https://fileconnect.symantec.com/LangSelection.jsp>

When you install NetBackup, Symantec recommends that you enter all other product license keys on the master server when you are prompted. Although you can add these license keys later, it is easier to enter them when you install the master server software.

For detailed information on how to administer NetBackup license keys, refer to the *NetBackup Administration Guide, Volume I*.

About installation requirements for UNIX and Linux systems

[Table 2](#) describes the requirements to prepare your UNIX and Linux systems for NetBackup installation. Use this table as a checklist to address each item.

Table 2 NetBackup installation requirements for UNIX and Linux

Check	Requirements
	<p>Operating system:</p> <ul style="list-style-type: none"> ■ For a complete list of compatible UNIX and Linux operating systems, refer to the <i>NetBackup 7.1 Operating System Compatibility List</i> at the following Web site: http://www.symantec.com/business/support/overview.jsp?pid=15143 In the section Common Topics, under Compatibility List, click NetBackup 7.1 Operating System.
	<p>Memory:</p> <ul style="list-style-type: none"> ■ Master and media servers in a production environment with several database agents enabled, should have a minimum of 2 GB of memory each. ■ Any client in a production environment should have a minimum of 512 MB of memory. ■ For reasonable performance of the NetBackup-Java interfaces, you need 512 MB of RAM. Of that space, 256 MB must be available to the interface program (jnbSA or jbpSA). <p>For additional information about memory requirements, refer to the <i>NetBackup Backup Planning and Performance Tuning Guide</i>.</p>
	<p>Disk space:</p> <ul style="list-style-type: none"> ■ At the time of installation, you must have at least 1 GB of storage space to accommodate the server software (512 MB) and the NetBackup catalogs (at least 512 MB). <p>NetBackup catalogs contain information about your backups that become larger as you use the product. The disk space that the catalogs require depends primarily on the following aspects of your backup configuration:</p> <ul style="list-style-type: none"> ■ The number of files that are backed up. ■ The frequency of your backups. ■ The amount of time that you set to retain your backup data
	<p>gzip and gunzip commands:</p> <ul style="list-style-type: none"> ■ Ensure that the gzip and the gunzip commands are installed on the local system. The directories where these commands are installed must be part of the root user's path environment variable setting.

Table 2 NetBackup installation requirements for UNIX and Linux (*continued*)

Check	Requirements
	<p>Clustered systems:</p> <ul style="list-style-type: none"> ■ Ensure that each node in the NetBackup cluster can run the <code>rsh</code> command or its equivalent (on HP-UX, the command is <code>remsh</code>). The root user must be able to perform a remote login to each node in the cluster without entering a password. This remote login is necessary for installation and configuration of the NetBackup server and any NetBackup agents and options. After installation and configuration are complete, it is no longer required. ■ You must install, configure, and start the cluster framework before you install NetBackup. ■ You must have defined a virtual name using DNS, NIS, or <code>/etc/hosts</code>. The IP address is defined at the same time. (The virtual name is a label for the IP address.)

About installation requirements for Windows systems

[Table 3](#) describes the requirements to prepare your Windows systems for NetBackup installation. Use this table as a checklist to address each item.

Table 3 NetBackup installation requirements for Windows

Check	Requirements
	<p>Operating system:</p> <ul style="list-style-type: none"> ■ For a complete list of compatible Windows operating systems, refer to the <i>NetBackup 7.1 Operating System Compatibility List</i> at the following Web site: http://www.symantec.com/business/support/overview.jsp?pid=15143 In the section Common Topics, under Compatibility List, click NetBackup 7.1 Operating System.
	<p>Memory:</p> <ul style="list-style-type: none"> ■ As a general rule, the minimum memory requirement for master servers is 2GB RAM per processor. For additional information about memory requirements, refer to the <i>NetBackup Backup Planning and Performance Tuning Guide</i>.
	An NTFS partition.

Table 3 NetBackup installation requirements for Windows (*continued*)

Check	Requirements
	<p>Disk space:</p> <ul style="list-style-type: none"> ■ At the time of installation, you must have at least 1 GB of storage space to accommodate the server software (512 MB) and the NetBackup catalogs (at least 512 MB). <p>NetBackup catalogs contain information about your backups that become larger as you use the product. The disk space that the catalogs require depends primarily on the following aspects of your backup configuration:</p> <ul style="list-style-type: none"> ■ The number of files that are backed up. ■ The frequency of your backups. ■ The amount of time that you set to retain your backup data <ul style="list-style-type: none"> ■ Symantec recommends that you have a minimum available disk space of 5% in any Disk Storage Unit volume or file system.
	<p>Clustered systems:</p> <ul style="list-style-type: none"> ■ All nodes in the cluster must run the same operating system version, service pack level, and NetBackup version. You cannot mix versions of server operating systems. ■ The installation account must have administrator privileges on all remote systems or on all nodes in the cluster.
	<p>Services and port numbers:</p> <ul style="list-style-type: none"> ■ NetBackup services and port numbers must be the same across the network. ■ Symantec 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 master servers, media servers, and clients. The port entries are in the following file: <code>%SYSTEMROOT%\system32\drivers\etc\services</code>. To change the default settings, you must perform a custom installation of NetBackup or manually edit the services file.
	<p>Remote Administration Console host names:</p> <ul style="list-style-type: none"> ■ You must provide the names of the Remote Administration Console hosts during master server installation.

How to prepare for NetBackup installation

The following tables describe the key points that should be addressed before NetBackup installation. Use these tables as a checklist to address each item.

Table 4 describes the tasks that you should perform on your backup environment before you install NetBackup.

Table 4 Preinstallation tasks

Check	Preinstallation task
	Remove any backup software from other vendors.
	Install the latest operating system (OS) updates for all computers in your backup environment.
	Install and configure the latest updates for all storage devices and make sure that they work with your OS.
	Set your screen resolution to a minimum of 1024x768, 256 colors.

Table 5 describes the information you should have available when you install NetBackup.

Table 5 NetBackup installation information

Check	Required information
	<ul style="list-style-type: none"> ■ NetBackup Media Kit or the ESD images ■ License keys for NetBackup and all other NetBackup products that you purchased ■ NetBackup Installation Guides
	Master server names (fully qualified domain names and short names) Note: When you are prompted for server names, always enter the appropriate host names. Do not enter IP addresses.
	Media server names (fully qualified domain names and short names) Note: When you are prompted for server names, always enter the appropriate host names. Do not enter IP addresses.
	Client names (fully qualified domain names and short names)
	User names and passwords
	Credentials for an administrator account Backup administrators must have administrator privileges to install NetBackup.
	Names of the Remote Administration Console hosts that you plan to install (during master server installation).

When you have checked all items in the tables that pertain to your backup environment, you are ready to install NetBackup.

About NetBackup configuration

After you install the software on the servers and the clients, you must set up or configure where your backups are stored. The NetBackup Administration Console provides several configuration wizards. These wizards help you configure where you want files to be stored and which media device is used for storage.

NetBackup Administration Console	The NetBackup Administration Console is the graphical user-interface that assists you with NetBackup configuration and operation. Anytime the console is open, you can press the F1 key on your keyboard to launch the help.
Device Configuration Wizard	Use this wizard to configure NetBackup to use shared drives or to reconfigure an existing shared drive.
Disk Group Configuration Wizard	<p>This wizard appears only if the Shared Storage Capacity license is installed.</p> <p>Use this wizard to accomplish the following:</p> <ul style="list-style-type: none">■ Discover a disk array.■ Create a disk group from the logical unit numbers (LUNs) allocated for NetBackup.■ Configure NetBackup to use the disk group.
Volume Configuration Wizard	Use this wizard to configure removable media to use for backups.
Catalog Backup Wizard	Use this wizard to specify how and when NetBackup configuration and catalog information are to be backed up. Catalog backups are essential to recovery of your data, in case of a server failure or crash.

Where to find NetBackup documentation

You can find copies of NetBackup documentation in the following places:

- Each NetBackup DVD includes a copy of the related manuals in Adobe Portable Document Format (PDF). Contact your NetBackup administrator to obtain the location of the DVD or to have the files installed on your computer.

To view the PDF copies of the manuals, you need Adobe Acrobat Reader which you can download from the following site:

<http://www.adobe.com>

Symantec assumes no responsibility for the correct installation or use of the reader.

- The **FileConnect** Web page includes NetBackup documentation that you can download. A `Readme` file on the site describes how to assemble the files for downloading.

A list of the entire NetBackup documentation set appears as an appendix in the *NetBackup Release Notes*.

[Table 6](#) describes the names of the technical manuals that relate to NetBackup.

Table 6 NetBackup documentation

Document type	Document title
Installation guides	NetBackup Installation Guide for UNIX and Linux
	NetBackup Installation Guide for Windows
	NetBackup Security Services Installation Guide
Administrator's guides (basic product)	NetBackup Administrator's Guide for UNIX and Linux, Volume I
	NetBackup Administrator's Guide for UNIX and Linux, Volume II
	NetBackup Administrator's Guide for Windows, Volume I
	NetBackup Administrator's Guide for Windows, Volume II
	NetBackup Security Services Administrator's Guide
	NetBackup Clustered Master Server Administrator's Guide
	NetBackup OpsCenter Administrator's Guide

Table 6 NetBackup documentation (*continued*)

Document type	Document title
Guides for agents and options	NetBackup LiveUpdate Guide
	NetBackup Snapshot Client Administrator's Guide
	NetBackup SnapShot Quick Start Guide
	NetBackup for Hyper-V Guide
	NetBackup for VMware Guide
	NetBackup for DB2 Administrator's Guide for UNIX and Linux
	NetBackup for DB2 Administrator's Guide for Windows
	NetBackup for Informix Administrator's Guide
	NetBackup for Lotus Notes Administrator's Guide
	NetBackup for Microsoft Exchange Server Administrator's Guide
	NetBackup for Microsoft SQL Server Administrator's Guide
	NetBackup for NDMP Administrator's Guide
	NetBackup for Oracle Administrator's Guide for UNIX and Linux
	NetBackup for Oracle Administrator's Guide for Windows
	NetBackup for SAP Administrator's Guide for UNIX and Linux
	NetBackup for SAP Administrator's Guide for Windows
	NetBackup for Microsoft SharePoint Server Administrator's Guide
	NetBackup for Sybase Administrator's Guide for UNIX and Linux
	NetBackup for Sybase Administrator's Guide for Windows
	NetBackup Bare Metal Restore Administrator's Guide
NetBackup Vault Administrator's Guide	
NetBackup for Enterprise Vault Agent Administrator's Guide for Windows	
NetBackup Vault Operator's Guide	
Getting started guides	NetBackup Getting Started Guide
	NetBackup Backup, Archive, and Restore Getting Started Guide
Storage and device guides	NetBackup Shared Storage Guide
	NetBackup Device Configuration Guide
	NetBackup SAN Client and Fibre Transport Guide

Table 6 NetBackup documentation (*continued*)

Document type	Document title
Other guides	NetBackup Commands Reference Guide
	NetBackup Security and Encryption Guide
	NetBackup in Highly Available Environments Guide
	NetBackup Deduplication Guide
	NetBackup Troubleshooting Guide
	NetBackup Status Codes Reference Guide

About NetBackup service and support information

You can get technical assistance from Symantec technical support either by phone or on our Website. Log on to the following Website for technical support, customer care, or to download NetBackup documentation:

<http://entsupport.symantec.com>

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