

Symantec NetBackup™ Getting Started Guide

Release 7.6

The software described in this book is furnished under a license agreement and may be used only in accordance with the terms of the agreement.

Documentation version: 7.6

PN: 21317370

Legal Notice

Copyright © 2013 Symantec Corporation. All rights reserved.

Symantec, the Symantec Logo, the Checkmark Logo and are trademarks or registered trademarks of Symantec Corporation or its affiliates in the U.S. and other countries. Other names may be trademarks of their respective owners.

This Symantec product may contain third party software for which Symantec is required to provide attribution to the third party ("Third Party Programs"). Some of the Third Party Programs are available under open source or free software licenses. The License Agreement accompanying the Software does not alter any rights or obligations you may have under those open source or free software licenses. Please see the Third Party Legal Notice Appendix to this Documentation or TPIP ReadMe File accompanying this Symantec product for more information on the Third Party Programs.

The product described in this document is distributed under licenses restricting its use, copying, distribution, and decompilation/reverse engineering. No part of this document may be reproduced in any form by any means without prior written authorization of Symantec Corporation and its licensors, if any.

THE DOCUMENTATION IS PROVIDED "AS IS" AND ALL EXPRESS OR IMPLIED CONDITIONS, REPRESENTATIONS AND WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT, ARE DISCLAIMED, EXCEPT TO THE EXTENT THAT SUCH DISCLAIMERS ARE HELD TO BE LEGALLY INVALID. SYMANTEC CORPORATION SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES IN CONNECTION WITH THE FURNISHING, PERFORMANCE, OR USE OF THIS DOCUMENTATION. THE INFORMATION CONTAINED IN THIS DOCUMENTATION IS SUBJECT TO CHANGE WITHOUT NOTICE.

The Licensed Software and Documentation are deemed to be commercial computer software as defined in FAR 12.212 and subject to restricted rights as defined in FAR Section 52.227-19 "Commercial Computer Software - Restricted Rights" and DFARS 227.7202, "Rights in Commercial Computer Software or Commercial Computer Software Documentation", as applicable, and any successor regulations. Any use, modification, reproduction release, performance, display or disclosure of the Licensed Software and Documentation by the U.S. Government shall be solely in accordance with the terms of this Agreement.

Symantec Corporation
350 Ellis Street
Mountain View, CA 94043

<http://www.symantec.com>

Printed in the United States of America.

10 9 8 7 6 5 4 3 2 1

Technical Support

Symantec Technical Support maintains support centers globally. Technical Support's primary role is to respond to specific queries about product features and functionality. The Technical Support group also creates content for our online Knowledge Base. The Technical Support group works collaboratively with the other functional areas within Symantec to answer your questions in a timely fashion. For example, the Technical Support group works with Product Engineering and Symantec Security Response to provide alerting services and virus definition updates.

Symantec's support offerings include the following:

- A range of support options that give you the flexibility to select the right amount of service for any size organization
- Telephone and/or Web-based support that provides rapid response and up-to-the-minute information
- Upgrade assurance that delivers software upgrades
- Global support purchased on a regional business hours or 24 hours a day, 7 days a week basis
- Premium service offerings that include Account Management Services

For information about Symantec's support offerings, you can visit our website at the following URL:

www.symantec.com/business/support/

All support services will be delivered in accordance with your support agreement and the then-current enterprise technical support policy.

Contacting Technical Support

Customers with a current support agreement may access Technical Support information at the following URL:

www.symantec.com/business/support/

Before contacting Technical Support, make sure you have satisfied the system requirements that are listed in your product documentation. Also, you should be at the computer on which the problem occurred, in case it is necessary to replicate the problem.

When you contact Technical Support, please have the following information available:

- Product release level
- Hardware information

- Available memory, disk space, and NIC information
- Operating system
- Version and patch level
- Network topology
- Router, gateway, and IP address information
- Problem description:
 - Error messages and log files
 - Troubleshooting that was performed before contacting Symantec
 - Recent software configuration changes and network changes

Several tools and commands for collecting this information are available. Refer to the *Symantec NetBackup Troubleshooting Guide* found at <http://www.symantec.com/docs/DOC5332>.

Licensing and registration

If your Symantec product requires registration or a license key, access our technical support Web page at the following URL:

www.symantec.com/business/support/

Customer service

Customer service information is available at the following URL:

www.symantec.com/business/support/

Customer Service is available to assist with non-technical questions, such as the following types of issues:

- Questions regarding product licensing or serialization
- Product registration updates, such as address or name changes
- General product information (features, language availability, local dealers)
- Latest information about product updates and upgrades
- Information about upgrade assurance and support contracts
- Information about the Symantec Buying Programs
- Advice about Symantec's technical support options
- Nontechnical presales questions
- Issues that are related to CD-ROMs, DVDs, or manuals

Support agreement resources

If you want to contact Symantec regarding an existing support agreement, please contact the support agreement administration team for your region as follows:

Asia-Pacific and Japan customercare_apac@symantec.com

Europe, Middle-East, and Africa semea@symantec.com

North America and Latin America supportsolutions@symantec.com

Contents

Technical Support	4
NetBackup Getting Started Guide	8
About NetBackup	8
How a NetBackup system works	9
How to make a NetBackup system work for you	10
About NetBackup software availability	10
About the NetBackup media kit	10
About the NetBackup Electronic Software Distribution (ESD) images	12
About NetBackup license key requirements	12
About Symantec Operations Readiness Tools	13
Installation requirements for UNIX and Linux systems	14
Installation requirements for Windows systems	16
NetBackup 7.6 binary sizes	18
How to prepare for NetBackup installation	22
About NetBackup configuration	23
Where to find NetBackup documentation	24
About NetBackup service and support information	26

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.

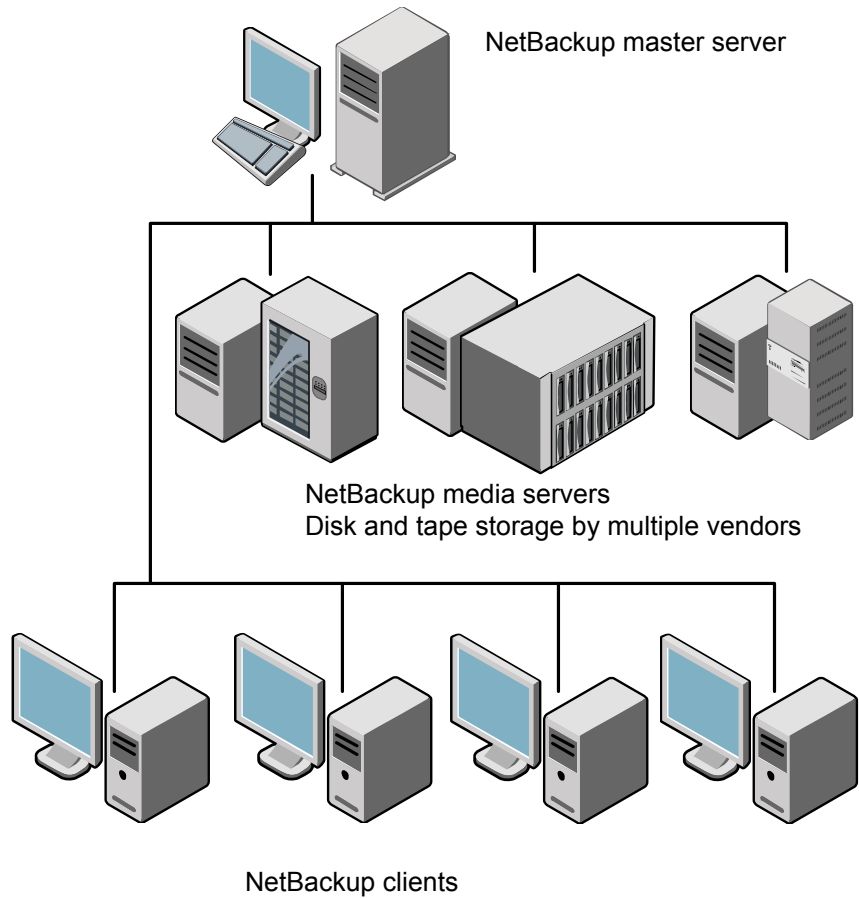
NetBackup includes the server and the client software as follows:

- Server software resides on the computer that manages the storage devices.
 - The master server manages backups, archives, and restores. You configure backup policies on the master server to determine the computers (clients) and the files that you want to back up. The master server is also responsible for media and device selection for NetBackup. 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



How a NetBackup system works

During a backup or an 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 software availability

NetBackup 7.6 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 10.
- 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 12.

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. Printed materials in the kit include a Getting Started Guide.

Starting with NetBackup 7.6, NetBackup documentation is no longer included on the DVDs. You can access and download NetBackup documentation from the following website:

<http://www.symantec.com/docs/DOC5332>

To view the PDF copies of the manuals, you need Adobe Acrobat reader. You can download a copy of this product from the Adobe website at the following URL:

<http://www.adobe.com>

Symantec assumes no responsibility for the correct installation or use of the reader. The following table describes the contents of each DVD.

Table 1 NetBackup 7.6 DVD contents

DVD No.	Platform OS	Contents
1	AIX 64-bit	Server and supported options
2	HP-UX IA64	Server and supported options
3	HP-UX PA-RISC 64-bit	Media server and supported options
4	Linux RedHat x86_64	Server and supported options
5	Linux SUSE x86_64	Server and supported options
6	Solaris SPARC64	Server and supported options
7	Solaris x86-64	Server and supported options
8	Windows x64	<ul style="list-style-type: none"> ■ Server and supported options ■ All x64 clients
9	Linux zSeries RedHat x64	Media server and supported options
10	Linux zSeries SUSE x64	Media server and supported options
11	UNIX clients 1	<ul style="list-style-type: none"> ■ AIX ■ FreeBSD ■ HP PA-RISC and IA64 ■ Mac ■ Solaris SPARC and X86
12	UNIX clients 2	All Linux platforms
13	Clients in LiveUpdate format 1	<ul style="list-style-type: none"> ■ AIX ■ HP IA64 ■ All Linux platforms ■ Solaris SPARC and X86
14	Clients in LiveUpdate format 2	<ul style="list-style-type: none"> ■ HP PA-RISC ■ FreeBSD ■ Mac ■ All Windows platforms
15	Plug-ins	NetBackup vCenter plug-in for ESX

Table 1 NetBackup 7.6 DVD contents (*continued*)

DVD No.	Platform OS	Contents
16	OpsCenter for Windows	All Windows platforms
17	OpsCenter for UNIX/Linux	All UNIX/Linux platforms
18	OpenVMS (CD format)	NetBackup Client for OpenVMS

See “[About the NetBackup Electronic Software Distribution \(ESD\) images](#)” on page 12.

About the NetBackup Electronic Software Distribution (ESD) images

The ESD images for NetBackup 7.6 are available for download from the **FileConnect** webpage. The images adhere to a 1.8G size limitation.

Starting with NetBackup 7.6, NetBackup documentation is no longer included in the ESD images. You can access and download NetBackup documentation from the following website:

<http://www.symantec.com/docs/DOC5332>

To view the PDF copies of the manuals, you need Adobe Acrobat reader. You can download a copy of this product from the Adobe website at the following URL:

<http://www.adobe.com>

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

To ensure the accuracy of the ESD download, some of the product images have been split into smaller, more manageable files. Before you uncompress any file, you must first join the split image files that you can identify as 1 of 2 and 2 of 2. A `Download Readme.txt` file on **FileConnect** describes how to join the files together.

See “[About NetBackup software availability](#)” on page 10.

See “[About the NetBackup media kit](#)” on page 10.

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.

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.

Go to the following website 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 Administrator's Guide, Volume I*.

<http://www.symantec.com/docs/DOC5332>

About Symantec Operations Readiness Tools

Symantec Operations Readiness Tools (SORT) is a set of web-based tools that supports Symantec enterprise products. For NetBackup, SORT provides the ability to collect, analyze, and report on host configurations across UNIX/Linux or Windows environments. This data helps to assess whether your systems are ready for an initial NetBackup installation or for an upgrade from your current version.

To access SORT, go to the following webpage:

<https://sort.symantec.com/netbackup>

Once you get to the SORT page, more information is available as follows:

- **Installation and Upgrade Checklist**
Use this tool to create a checklist to see if your system is ready for a NetBackup installation or an upgrade.
- **Hot fix and EEB Release Auditor**
Use this tool to find out whether a release that you plan to install contains the hot fixes that you need.
- **Custom Reports**

Use this tool to get recommendations for your system and Symantec enterprise products, tips for risk assessment, and product license tracking.

- **NetBackup Future Platform and Feature Plans**

Use this tool to get information about what items Symantec intends to replace with newer and improved functionality, and what items Symantec intends to discontinue without replacement. Some of these items include certain NetBackup features, functionality, 3rd-party product integration, Symantec product integration, applications, databases, and the OS platforms.

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.x Operating System Compatibility List</i> at the following website: http://www.symantec.com/business/support/overview.jsp?pid=15143 In the section Common Topics, under Compatibility List, click NetBackup 7.x Operating System.
	<p>Memory:</p> <ul style="list-style-type: none"> ■ Master servers in a production environment should have a minimum of 8 GB of memory each. ■ Media servers in a production environment should have a minimum of 4 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>. http://www.symantec.com/docs/DOC5332</p>

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

Check	Requirements
	<p>Disk space:</p> <ul style="list-style-type: none"> ■ The exact amount of space that is required depends on the hardware platform. More information about this topic is available. See Table 4 on page 18. ■ 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: <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>Note: The value for disk space is for initial installation only. The NetBackup catalog requires considerably more space once the master server is placed in a production environment. For additional information on sizing requirements for the NetBackup catalog, refer to the <i>NetBackup Backup Planning and Performance Tuning Guide</i>.</p> <p>http://www.symantec.com/docs/DOC5332</p>
	<p><code>gzip</code> and <code>gunzip</code> commands:</p> <ul style="list-style-type: none"> ■ Ensure that the <code>gzip</code> and the <code>gunzip</code> 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.
	<p>Clustered systems:</p> <ul style="list-style-type: none"> ■ Ensure that each node in the NetBackup cluster can run the <code>ssh</code> command, 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 the <code>/etc/hosts</code> file. The IP address is defined at the same time. (The virtual name is a label for the IP address.) <p>More information about cluster requirements is available.</p> <p><i>Symantec NetBackup Clustered Master Server Administrator's Guide</i></p> <p>http://www.symantec.com/docs/DOC5332</p>

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.x Operating System Compatibility List</i> at the following website: http://www.symantec.com/business/support/overview.jsp?pid=15143 In the section Common Topics, under Compatibility List, click NetBackup 7.x Operating System.
	<p>Memory:</p> <ul style="list-style-type: none"> ■ Master servers in a production environment should have a minimum of 8 GB of memory each. ■ Media servers in a production environment should have a minimum of 4 GB of memory each. <p>For additional information about memory requirements, refer to the <i>NetBackup Backup Planning and Performance Tuning Guide</i>. http://www.symantec.com/docs/DOC5332</p>
	<p>An NTFS partition.</p>

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

Check	Requirements
	<p>Disk space:</p> <ul style="list-style-type: none"> ■ The exact amount of space that is required to accommodate the server software and the NetBackup catalogs depends on the hardware platform. More information about this topic is available. See Table 4 on page 18. ■ 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: <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. ■ Symantec recommends that you have a minimum available disk space of 5% in any Disk Storage Unit volume or file system. <p>Note: The value for disk space is for initial installation only. The NetBackup catalog requires considerably more space once the master server is placed in a production environment. For additional information on sizing requirements for the NetBackup catalog, refer to the <i>NetBackup Backup Planning and Performance Tuning Guide</i>.</p> <p>http://www.symantec.com/docs/DOC5332</p>
	<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>More information about cluster requirements is available.</p> <p><i>Symantec NetBackup Clustered Master Server Administrator's Guide</i></p> <p>http://www.symantec.com/docs/DOC5332</p>
	<p>The 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.

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

Check	Requirements
	Remote Administration Console host names: <ul style="list-style-type: none"> You must provide the names of the Remote Administration Console hosts during master server installation.

NetBackup 7.6 binary sizes

The information in this section helps you determine if you have allocated the proper amount of disk space to your servers to safely and efficiently back up and restore all of the data in your NetBackup environment.

For the current information on operating system version support, consult the SORT *Installation and Upgrade Checklist* or the *NetBackup Enterprise Server and Server 7.x OS Software Compatibility List*.

<https://sort.symantec.com/netbackup>.

NetBackup Enterprise Server and Server 7.x OS Software Compatibility List

- <http://www.symantec.com/docs/TECH76648>

Table 4 shows the approximate binary size of the NetBackup master and media server software, and the NetBackup client software requirements for each operating system that is compatible with NetBackup.

Table 4 NetBackup binary sizes for compatible platforms

OS/Version	CPU Architecture	32-bit client	64-bit client	32-bit server	64-bit server	Notes
AIX 6.1, 7.1	POWER		2430MB		6880MB	
Asianux 3	x86-64		1580MB		6350MB	
Canonical Ubuntu 9.04, 9.10, 10.04, 11.10, 12.04	x86-64		1580MB			
CentOS 5	x86-64		1580MB		6350MB	Media server or client compatibility only.
CentOS 6	x86-64		1580MB		6350MB	Media server or client compatibility only.
Debian GNU/Linux 5, 6	x86-64		1580MB			

Table 4 NetBackup binary sizes for compatible platforms (*continued*)

OS/Version	CPU Architecture	32-bit client	64-bit client	32-bit server	64-bit server	Notes
FreeBSD 6.1, 6.2, 6.3, 7.x, 8.x, 9.x	x86-32	290MB				
FreeBSD 6.3, 7.x, 8.x, 9.x	x86-64	290MB				
HP-UX 11.11, 11.23, 11.31	PA-RISC		955MB		2395MB	Media server or client compatibility only.
HP-UX 11.31	IA-64		2460MB		6910MB	
Mac OS X 10.6	x86-32	272MB				
Mac OS X 10.6, 10.7, 10.8	x86-64	272MB				
Novell Open Enterprise Server 2	x86-64		1576MB		6352MB	
Novell Open Enterprise Server 11	x86-64		1576MB		6352MB	
OpenVMS 5.5, 6.2, 7.3	HP VAX	128MB				The listed sizes are for the NetBackup 7.5 binaries. No NetBackup 7.6 binaries for OpenVMS are provided.
OpenVMS 6.1, 6.2, 7.3, 8.2, 8.3, 8.4	HP Alpha		128MB			The listed sizes are for the NetBackup 7.5 binaries. No NetBackup 7.6 binaries for OpenVMS are provided.
OpenVMS 8.2, 8.3, 8.3-1H1, 8.4	HP IA64		128MB			The listed sizes are for the NetBackup 7.5 binaries. No NetBackup 7.6 binaries for OpenVMS are provided.
Oracle Linux 5	x86-64		1580MB		6350MB	
Oracle Linux 6	x86-64		1580MB		6350MB	
Red Flag Linux 5	x86-64		1580MB		6350MB	
Red Hat Enterprise Linux 5	x86-64		1580MB		6350MB	
Red Hat Enterprise Linux 6	x86-64		1580MB		6350MB	

Table 4 NetBackup binary sizes for compatible platforms (*continued*)

OS/Version	CPU Architecture	32-bit client	64-bit client	32-bit server	64-bit server	Notes
Red Hat Enterprise Linux Desktop 5	x86-64		1580MB			
Red Hat Enterprise Linux 4	POWER		466MB			
Red Hat Enterprise Linux 5	POWER		466MB			
Red Hat Enterprise Linux 5	z/Architecture		1070MB		4920MB	Media server or client compatibility only.
Red Hat Enterprise Linux 6	z/Architecture		1070MB		4920MB	Media server or client compatibility only.
Solaris 10	SPARC		1552MB		4623MB	
Solaris 11	SPARC		1552MB		4623MB	
Solaris 10	x86-64		1250MB		4510MB	
Solaris 11	x86-64		1250MB		4510MB	
SUSE Linux Enterprise Server 10 (SP2)	x86-64		1576MB		6352MB	
SUSE Linux Enterprise Server 11	x86-64		1576MB		6352MB	
SUSE Linux Enterprise Server 9	POWER		473MB			Compatible with client only.
SUSE Linux Enterprise Server 10 (SP2)	POWER		473MB			Compatible with client only.
SUSE Linux Enterprise Server 10 (SP2)	z/Architecture		1050MB		4911MB	Media server or client compatibility only.
SUSE Linux Enterprise Server 11	z/Architecture		1050MB		4911MB	Media server or client compatibility only.
Windows	x86-32	750MB				Covers all compatible Windows x86 platforms
Windows	x86-64		975MB		2375MB	Covers all compatible Windows x64 platforms

Note: Unless stated otherwise in the table above, NetBackup is supported on all editions (Advanced, Base, DC, etc.) and on all vendor GA updates (n.1, n.2, etc.) or service packs (SP1, SP2, etc.) for the following Linux platforms: Asianux, CentOS, Debian GNU/Linux, Novell Open Enterprise Server, Oracle Linux, Red Flag Linux, Red Hat, and SUSE.

Table 5 shows the approximate binary size and the OpsCenter Agent, Server, and ViewBuilder software requirements for each operating system that is compatible with OpsCenter.

Table 5 OpsCenter binary sizes for compatible platforms

OS/Version	CPU Architecture	Agent	Server	ViewBuilder
Red Hat Enterprise Linux Server 5 (Kernel 2.6.18+)	x86-64		855MB	
SUSE Linux Enterprise Server 10 (SP2) (Kernel 2.6.16+)	x86-64		855MB	
Solaris 10	SPARC	451MB	959MB	
Solaris 10	x86-64		985MB	
Windows Server 2008 R2	x86-64	268MB	777MB	172MB
Windows Server 2012	x86-64	268MB	777MB	172MB

Table 6 shows the approximate binary size and the NetBackup vCenter Plugin client software requirements for each operating system that is compatible with the NetBackup vCenter Plugin.

Table 6 NetBackup vCenter Plugin binary sizes for compatible platforms

OS/Version	CPU Architecture	32-bit client	64-bit client	32-bit server	64-bit server	Notes
SUSE Linux Enterprise Server 11 (SP1)	x86-64	N/A	N/A	N/A	2.6GB	Thin Provision OVA format only
SUSE Linux Enterprise Server 11 (SP1)	x86-64	N/A	N/A	N/A	20GB	Thick Provision OVA format only

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 7](#) describes the tasks that you should perform on your backup environment before you install NetBackup.

Table 7 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 8](#) describes the information you should have available when you install NetBackup.

Table 8 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 Guide http://www.symantec.com/docs/DOC5332 ■ NetBackup Release Notes http://www.symantec.com/docs/DOC5332
	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)

Table 8 NetBackup installation information (*continued*)

Check	Required information
	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.
- Configure Storage Devices** Use this wizard to configure the storage devices that you want NetBackup to use. The wizard uses device serialization to configure robotic libraries and drives.
- Configure Disk Storage Servers** Use this wizard to create and configure a storage server and a disk pool to use the new storage server.
- Configure Cloud Storage Server** Use this wizard to create a cloud storage server and a disk pool, to allow NetBackup to send your data to your cloud storage provider.
- Configure Disk Pool** Use this wizard to create and configure a disk pool and a storage server to use the disk pool.
- Configure Volumes** Use this wizard to configure the removable media to use for backups.

Configure the Catalog Backup

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 on the Symantec NetBackup website in Adobe Portable Document Format (PDF).

<http://www.symantec.com/docs/DOC5332>

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>

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

Table 9 describes the names of the technical manuals that relate to NetBackup.

Table 9 NetBackup documentation

Document type	Document title
Installation guides	<i>Symantec NetBackup Installation Guide for UNIX and Windows</i>
	<i>Symantec NetBackup Release Notes</i>
	<i>Symantec NetBackup 7.6 Upgrade Guide</i>
Administrator's guides (basic product)	<i>Symantec NetBackup Administrator's Guide for UNIX, Windows, and Linux, Volume I</i>
	<i>Symantec NetBackup Administrator's Guide for UNIX, Windows, and Linux, Volume II</i>
	<i>Symantec NetBackup Clustered Master Server Administrator's Guide</i>
	<i>Symantec NetBackup OpsCenter Administrator's Guide</i>

Table 9 NetBackup documentation (*continued*)

Document type	Document title
Guides for agents and options	<i>Symantec NetBackup LiveUpdate Guide</i>
	<i>Symantec NetBackup Snapshot Client Administrator's Guide</i>
	<i>Symantec NetBackup for Hyper-V Guide</i>
	<i>Symantec NetBackup for VMware Guide</i>
	<i>Symantec NetBackup for DB2 Administrator's Guide for UNIX, Windows, and Linux</i>
	<i>Symantec NetBackup for Informix Administrator's Guide</i>
	<i>Symantec NetBackup for Lotus Notes Administrator's Guide</i>
	<i>Symantec NetBackup for Microsoft Exchange Server Administrator's Guide</i>
	<i>Symantec NetBackup for Microsoft SQL Server Administrator's Guide</i>
	<i>Symantec NetBackup for NDMP Administrator's Guide</i>
	<i>Symantec NetBackup for Oracle for UNIX, Windows, and Linux Administrator's Guide</i>
	<i>Symantec NetBackup for SAP Administrator's Guide for UNIX, Windows, and Linux</i>
	<i>Symantec NetBackup for Microsoft SharePoint Server Administrator's Guide</i>
	<i>Symantec NetBackup for Sybase Administrator's Guide for UNIX, Windows, and Linux</i>
	<i>Symantec NetBackup Bare Metal Restore Administrator's Guide</i>
<i>Symantec NetBackup Vault Administrator's Guide</i>	
<i>Symantec NetBackup for Enterprise Vault Agent Administrator's Guide for Windows</i>	
<i>Symantec NetBackup Vault Operator's Guide</i>	
<i>Symantec NetBackup Cloud Administrator's Guide</i>	
<i>Symantec NetBackup Search Administrator's Guide</i>	
Getting started guides	<i>Symantec NetBackup Getting Started Guide</i>
	<i>Symantec NetBackup Backup, Archive, and Restore Getting Started Guide</i>

Table 9 NetBackup documentation (*continued*)

Document type	Document title
Storage and device guides	<i>Symantec NetBackup AdvancedDisk Storage Solutions Guide</i>
	<i>Symantec NetBackup OpenStorage Solutions Guide for Disk</i>
	<i>Symantec NetBackup Device Configuration Guide</i>
	<i>Symantec NetBackup SAN Client and Fibre Transport Guide</i>
Other guides	<i>Symantec NetBackup Replication Director Solutions Guide</i>
	<i>Symantec NetBackup Commands Reference Guide</i>
	<i>Symantec NetBackup Security and Encryption Guide</i>
	<i>Symantec NetBackup in Highly Available Environments Guide</i>
	<i>Symantec NetBackup Deduplication Guide</i>
	<i>Symantec NetBackup Troubleshooting Guide</i>
	<i>Symantec NetBackup Status Codes Reference Guide</i>
	<i>Symantec NetBackup Product Family Third-party Legal Notices</i>
	<i>Symantec NetBackup DataStore SDK Programmer's Guide for XBSA</i>
	<i>Symantec NetBackup OpsCenter Reporting Guide</i>
<i>Symantec NetBackup Plug-in for VMware vCenter Guide</i>	
<i>Symantec NetBackup Network Ports Reference Guide</i>	

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>