

Custom Reports Using Data Collectors

Get ready for a newer version of NetBackup (8.0)

Installation and Upgrade Checklist Report for NetBackup Enterprise Server 7.7.3, Windows Server 2012, x86-64

Important Notes

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All NetBackup Servers, Clients, OpsCenter Server, NetBackup Appliance and Access

VTS17-003: Multiple Vulnerabilities in Veritas NetBackup, NetBackup Appliances and Access - VTS17-003.

All NetBackup OpsCenter Servers

Impact of security vulnerability CVE-2017-5638 on OpsCenter Server - 000125967.

All Platforms

If using custom file paths for progress log, rename file, etc. with the command line utilities, bprestore, bpbackup, etc., consult 000100775 for more information.

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NEW! = New content since the last release of SORT

Compatibility between NetBackup versions for Master Server, Media Server and Client

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Compatibility between NetBackup versions

For compatibility between major versions, the latest available release of NetBackup is compatible with media servers and clients that run a release of NetBackup that is up to one major version behind. However, this compatibility ceases to be supported in any configuration once the previous major version has reached its End of Support Life.

For information on Veritas End of Life Policy, refer to https://www.veritas.com/support/en_US/article.000116439

NetBackup does not support any scenario where a media server or client runs a software release update version that is higher than that of their Master server.

For more information, refer to the NetBackup Release Notes and the NetBackup Upgrade Guide: https://www.veritas.com/support/en_US/article.000094423 .

NetBackup Master Server	NetBackup Media Server	NetBackup Client
7.7	7.0	7.0
7.7	7.0.1	7.0, 7.0.1
7.7	7.1, 7.1.0.x	7.0, 7.0.1, 7.1, 7.1.0.x

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7.7	7.5, 7.5.0.x	7.0, 7.0.1, 7.1, 7.1.0.x, 7.5, 7.5.0.x
7.7	7.6, 7.6.0.x	7.0, 7.0.1, 7.1, 7.1.0.x, 7.5, 7.5.0.x, 7.6, 7.6.0.x
7.7	7.6.1, 7.6.1.x	7.0, 7.0.1, 7.1, 7.1.0.x, 7.5, 7.5.0.x, 7.6, 7.6.0.x, 7.6.1, 7.6.1.x
7.7	7.7	7.0, 7.0.1, 7.1, 7.1.0.x, 7.5, 7.5.0.x, 7.6, 7.6.0.x, 7.6.1, 7.6.1.x, 7.7
7.7.1	7.0	7.0
7.7.1	7.0.1	7.0, 7.0.1
7.7.1	7.1, 7.1.0.x	7.0, 7.0.1, 7.1, 7.1.0.x
7.7.1	7.5, 7.5.0.x	7.0, 7.0.1, 7.1, 7.1.0.x, 7.5, 7.5.0.x
7.7.1	7.6, 7.6.0.x	7.0, 7.0.1, 7.1, 7.1.0.x, 7.5, 7.5.0.x, 7.6, 7.6.0.x
7.7.1	7.6.1, 7.6.1.x	7.0, 7.0.1, 7.1, 7.1.0.x, 7.5, 7.5.0.x, 7.6, 7.6.0.x, 7.6.1, 7.6.1.x
7.7.1	7.7	7.0, 7.0.1, 7.1, 7.1.0.x, 7.5, 7.5.0.x, 7.6, 7.6.0.x, 7.6.1, 7.6.1.x, 7.7
7.7.1	7.7.1	7.0, 7.0.1, 7.1, 7.1.0.x, 7.5, 7.5.0.x, 7.6, 7.6.0.x, 7.6.1, 7.6.1.x, 7.7, 7.7.1
7.7.2	7.0	7.0
7.7.2	7.0.1	7.0, 7.0.1
7.7.2	7.1, 7.1.0.x	7.0, 7.0.1, 7.1, 7.1.0.x
7.7.2	7.5, 7.5.0.x	7.0, 7.0.1, 7.1, 7.1.0.x, 7.5, 7.5.0.x
7.7.2	7.6, 7.6.0.x	7.0, 7.0.1, 7.1, 7.1.0.x, 7.5, 7.5.0.x, 7.6, 7.6.0.x
7.7.2	7.6.1, 7.6.1.x	7.0, 7.0.1, 7.1, 7.1.0.x, 7.5, 7.5.0.x, 7.6, 7.6.0.x, 7.6.1, 7.6.1.x
7.7.2	7.7	7.0, 7.0.1, 7.1, 7.1.0.x, 7.5, 7.5.0.x, 7.6, 7.6.0.x, 7.6.1, 7.6.1.x, 7.7
7.7.2	7.7.1	7.0, 7.0.1, 7.1, 7.1.0.x, 7.5, 7.5.0.x, 7.6, 7.6.0.x, 7.6.1, 7.6.1.x, 7.7, 7.7.1

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7.7.2	7.7.2	7.0, 7.0.1, 7.1, 7.1.0.x, 7.5, 7.5.0.x, 7.6, 7.6.0.x, 7.6.1, 7.6.1.x, 7.7, 7.7.1, 7.7.2
7.7.3	7.0	7.0
7.7.3	7.0.1	7.0, 7.0.1
7.7.3	7.1, 7.1.0.x	7.0, 7.0.1, 7.1, 7.1.0.x
7.7.3	7.5, 7.5.0.x	7.0, 7.0.1, 7.1, 7.1.0.x, 7.5, 7.5.0.x
7.7.3	7.6, 7.6.0.x	7.0, 7.0.1, 7.1, 7.1.0.x, 7.5, 7.5.0.x, 7.6, 7.6.0.x
7.7.3	7.6.1, 7.6.1.x	7.0, 7.0.1, 7.1, 7.1.0.x, 7.5, 7.5.0.x, 7.6, 7.6.0.x, 7.6.1, 7.6.1.x
7.7.3	7.7	7.0, 7.0.1, 7.1, 7.1.0.x, 7.5, 7.5.0.x, 7.6, 7.6.0.x, 7.6.1, 7.6.1.x, 7.7
7.7.3	7.7.1	7.0, 7.0.1, 7.1, 7.1.0.x, 7.5, 7.5.0.x, 7.6, 7.6.0.x, 7.6.1, 7.6.1.x, 7.7, 7.7.1
7.7.3	7.7.2	7.0, 7.0.1, 7.1, 7.1.0.x, 7.5, 7.5.0.x, 7.6, 7.6.0.x, 7.6.1, 7.6.1.x, 7.7, 7.7.1, 7.7.2
7.7.3	7.7.3	7.0, 7.0.1, 7.1, 7.1.0.x, 7.5, 7.5.0.x, 7.6, 7.6.0.x, 7.6.1, 7.6.1.x, 7.7, 7.7.1, 7.7.2, 7.7.3

Other general rules for major, minor, and release update compatibility:

- OpsCenter/OpsCenter Analytics must always be running the same or higher major, minor, release update or maintenance patch as the master servers in the environment.
- All components (master, media, client, console, and agent) on an individual system must be at the same version.
- Backup images created under an older version of NetBackup will always be recoverable with a newer version of NetBackup
- A new feature may not be functional until the master, media and client are updated.
- Administration Consoles cannot be at an earlier version than the NetBackup server version they connect to via the "change server" functionality in the console

NetBackup Software Compatibility Documentation:

[NetBackup Enterprise Server and Server 7.7 - 7.7.x OS Software Compatibility List \(last updated on April 18, 2017\)](#)

[7.7 - 7.7.x OS Software Compatibility List Updates](#)

Late Breaking News - Available Hot Fixes for Master Server, Media Server and Client

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Available hot fixes - for details and download information, consult the TECH note link in the table.

Hot fixes will no longer be publicly available sometime after the fix is contained in a formal maintenance release. When this occurs, the TECH note will provide the maintenance release version containing the fix.

Hot Fix	Description	Install Location
000109528	In NetBackup 7.7.x, System State restores fail when attempted from synthetic full backups.	Master Server, Media Server, Client
000115737	A hotfix is available for OpsCenter 7.7.3 which resolves multiple issues: NetBackup OpsCenter report either shows client names as a numeric value, blank or merged with other values. After Upgrading to OpsCenter 7.7.2 or 7.7.3, the VM (Virtual Machine) Data Collector Fails.	NetBackup OpsCenter Server
000114349	Unable to Save Report in OpsCenter.	NetBackup OpsCenter Server
000115641	OpsCenter sends false alerts and may show false H/W status (HDD, FAN, Temperature etc.) of NetBackup Appliance on 2.7.x.	NetBackup OpsCenter Server
000109333	Unable to edit backup window on calendar-based schedule in Java GUI.	Master Server, Java Administration Console
000111380	NetBackup 7.7.2 NDMP accelerated backups can fail with status 13	Master Server, Media Server
000125967	Impact of CVE-2017-5638 on OpsCenter Server	NetBackup OpsCenter Server

000125842	Although a SQL instance is skipped, the backup completes successfully with status code 0 reported.	Client
000115974	Status 156 when performing Shadow Copy Component backups on cluster passive node	Client
000126394	VTS17-003: An EEB is now available for Issue #6 CVE-2017-6401 affecting NetBackup and NetBackup Appliances.	Master Server, Media Server, Client

For known issues on other platforms and issues for which there is not a hot fix, consult the Late Breaking News documentation:

[7.7.3 Late Breaking News](#)

[Guidelines for the availability of EEB/hotfixes](#)

[Notification of new NetBackup Technical Alerts](#)

Patches for NetBackup for Master Server,Media Server and Client

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Required Patches

There is no information found for this section.

Recommended Patches

There is no information found for this section.

NetBackup Documentation References:

[NetBackup 7.7.3 Release Notes](#)

Patches for Operating System for Master Server,Media Server and Client

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Required Patches

There is no information found for this section.

NetBackup Documentation References:

[NetBackup 7.7.3 Release Notes](#)

NetBackup Appliances

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Veritas NetBackup Appliances

NetBackup Appliances are Veritas-branded devices offering backup and deduplication solutions for enterprise environments in an appliance form factor. For more information, see the NetBackup Appliances page at <https://www.veritas.com/product/backup-and-recovery/netbackup-appliances/>

NetBackup 5200 Series (Master/Media Server) and 5300 Series (Media Server) Appliances

The following tables list NetBackup 5200 Series and 5300 Series release versions, the Appliance models supported with each version, the associated NetBackup Appliance software version, and the NetBackup Release version on which it is based. The latest 5200 Series and 5300 Series documentation can be found at <http://www.veritas.com/docs/00002217>. Late breaking news related to NetBackup Appliances can be found at <http://www.veritas.com/docs/000010279>.

NetBackup 5300 Series - Supported Versions

NetBackup 5300 Series Appliance Release	Supported NetBackup Appliance Models	NetBackup 5300 Series Appliance Software Version	Based on NetBackup Release
2.7.3	5330	7.7.3	7.7.3
2.7.2	5330	7.7.2	7.7.2
2.7.1	5330	7.7.1	7.7.1
(No 2.7 release. NetBackup 5300 Series Appliances running 2.6.1 or later can be	N/A	N/A	N/A

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used as back-level media servers in a NetBackup 7.7 GA configuration.)			
2.6.1.2	5330	7.6.1.2	7.6.1.2
2.6.1.1	5330	7.6.1.1	7.6.1.1
2.6.1	5330	7.6.1	7.6.1

NetBackup 5200 Series - Supported Versions

NetBackup 5200 Series Appliance Release	Supported NetBackup Appliance Models	NetBackup 5200 Series Appliance Software Version	Based on NetBackup Release
2.7.3	5240, 5230, 5220	7.7.3	7.7.3
2.7.2	5230, 5220	7.7.2	7.7.2
2.7.1	5230, 5220	7.7.1	7.7.1
(No 2.7 release. NetBackup 5200 Series Appliances running 2.x or later can be used as back-level media servers in a NetBackup 7.7 GA configuration.)	N/A	N/A	N/A
2.6.1.2	5230, 5220, 5200	7.6.1.2	7.6.1.2
2.6.1.1	5230, 5220, 5200	7.6.1.1	7.6.1.1
2.6.1	5230, 5220, 5200	7.6.1	7.6.1
2.6.0.4	5230, 5220, 5200	7.6.0.4	7.6.0.4
2.6.0.3	5230, 5220, 5200	7.6.0.3	7.6.0.3
2.6.0.2	5230, 5220, 5200	7.6.0.2	7.6.0.2
2.6	5230, 5220, 5200	7.6	7.6
2.5.3	5230, 5220, 5200	7.5.0.6	7.5.0.6
2.5.2	5230, 5220, 5200	7.5.0.5	7.5.0.5
2.5.1	5220, 5200	7.5.0.4	7.5.0.4
2.5	5220, 5200	7.5.0.2	7.5.0.1
2.0.3	5220, 5200	7.1.0.8	7.1.0.4
2.0.2	5220, 5200	7.1.0.7	7.1.0.3

2.0.1	5220, 5200	7.1.0.6	7.1.0.2
2.0	5200	7.1.0.5	7.1.0.1
1.2	5200	7.0.1.8	7.0.1 with additional fixes
1.1.0.2	5200	7.0.1.5	7.0.1 with additional fixes
1.1.0.1	5200	7.0.1.5	7.0.1 with additional fixes

The following table lists NetBackup 5200 Series and 5300 Series-supported functionality and indicates the minimum NetBackup Appliance Release version required for support of that functionality. NetBackup 5200 Series and 5300 Series Appliances can be used with all supported core NetBackup clients (see <http://www.veritas.com/docs/000025229>), application and database agents (see <http://www.veritas.com/docs/000025230>), and **Snapshot client** configurations.

NetBackup 5200 Series and 5300 Series - Supported Functionality

Functionality	Minimum Appliance Release	Notes
NetBackup Master/Media Server	2.0	The Master Server role is only supported on 5200 Series Appliances. Key Management Service (KMS) and NetBackup Access Control (NBAC) are not supported when the Appliance is configured as a Master Server.
NetBackup Media Server	1.1.0.1	The Master Server in the NetBackup domain must be running a version of NetBackup equal to or newer than the NetBackup version on which the appliance is based. Support begins with NetBackup 7.0.1.
Accelerator (for files and folders)	2.5	
Accelerator with NDMP	2.7.1	Supported with NetApp FAS and V series filers. For more information on this feature, see the NetBackup for NDMP Administrator's Guide at http://www.veritas.com/docs/000003214 .

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Accelerator with VMware-type policies	2.6	
Auto Image Replication to MSDP/5200 Series or 5300 Series over Ethernet	2.0	
Auto Image Replication to MSDP/5200 Series or 5300 Series over Fibre Channel (FC)	2.7.3	
Auto Image Replication to PDDO/5000 Series	2.0.1	
Client Deduplication / Client Direct over Ethernet	1.1.0.1	Veritas allows NetBackup Clients (NetBackup 7.0 and later) to write data directly to NetBackup Storage Server Appliances. The client hosts the deduplication plug-in that deduplicates the backup data. The plug-in sends only unique segments to the Storage Server, reducing network traffic and distributing CPU load. For the list of supported clients, see the Deduplication Supported Operating Systems section of the NetBackup Version 7.7 - 7.7.x Operating System Compatibility List at http://www.veritas.com/docs/000025229 .
Copilot for Oracle	2.7.1	Supported with 5230, 5240, and 5330 only. For more information on this feature, see the NetBackup Copilot for Oracle Configuration Guide at http://www.veritas.com/docs/000002217
Fibre Transport Media Server	2.0	Supported with 5220, 5230, 5240, and 5330 only.
Granular Recovery Technology (GRT)	1.2	
Granular Recovery Technology (GRT) with VMware-type policies	2.6	Support for VMware-type backup policies with Application Protection options enabled for Exchange or SharePoint.

Instant Recovery for VMware	2.6.1	Support for restoring virtual machines with Instant Recovery is described in the NetBackup for VMware Administrator's Guide at http://www.veritas.com/docs/000003214 and in Article http://www.veritas.com/docs/000074081 . For details on supported platforms for instant recovery restore hosts, see Support for NetBackup 7.x and 8.x in virtual environments at http://www.veritas.com/docs/000006177 .
Key Management Service (KMS)	1.1.0.1 (Media Server) 2.6 (Master Server)	With version 2.6 and later, KMS is supported with Appliances configured as either a Master or a Media Server. With a NetBackupCLI administrator account in the NetBackup Appliance Shell Menu, an Appliance Master Server can administrate KMS with tape devices connected to itself or another NetBackup Appliance. Regenerating the data encryption key is the only supported method of recovering KMS on an Appliance Master Server. With versions earlier than 2.6, KMS is only supported when the Appliance is configured as a Media Server, and a non-Appliance Master Server is required to administrate KMS with devices connected to a NetBackup Appliance.
Media Server Encryption Option (MSEO)		There are no plans to support this feature.
NetBackup Access Control (NBAC)	1.1.0.1	Supported when the Appliance is configured as a Media Server only. Not supported when the Appliance is configured as a Master Server.
NDMP	1.1.0.1	

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NetBackup Cluster		There are no plans to support this feature.
NetBackup OpenStorage Cloud and Third-Party Plug-in Support	2.0.2	Supported plug-ins are listed in the "Support with NetBackup Appliance" tables shown in the OST Cloud and OST Storage Servers Vendor Compatibility sections.
OpsCenter	1.1.0.1	
OpsCenter Managed Server	2.0	
Optimized Duplication (Opt_Dup) over Ethernet	1.2	Supported from 5200/5300 Series to 5000 Series (MSDP to PDDO) and from 5200/5300 Series to 5200/5300 Series (MSDP to MSDP).
Optimized Duplication (Opt_Dup) over Fibre Channel (FC)	2.0 2.7.3	Supported from 5200/5300 Series to 5000 Series (MSDP to PDDO). Requires 5020 or 5030 Appliance running version 1.3.0.1 or later. Supported from 5200/5300 Series to 5200/5300 Series (MSDP to MSDP) with versions 2.7.3 or later.
Optimized Synthetics (Opt_Synth)	1.2	NetBackup Appliance version 2.0 or later/ NetBackup 7.1 or later is recommended for Optimized Synthetics support.
Tape Drive Support	1.1.0.1	Supported tape drives are listed in the "Support with NetBackup Appliance" tables shown in the Tape Drives Vendor Compatibility section. Shared Storage Option (SSO) is supported.
Tape Library Support	1.1.0.1 (TLD) 2.5 (ACS)	Supported tape libraries are listed with the note "This library is supported with NetBackup 5200 Series and 5300 Series Appliances" in the Tape Libraries Vendor Compatibility section. Use the NetBackup Device Configuration Wizard within the NetBackup Administration Console to

		configure robots and tape drives on the NetBackup Appliance.
Virtual Tape Library (VTL) Support	1.1.0.1 (TLD) 2.5 (ACS)	Supported VTLs are listed in the "Support with NetBackup Appliance" tables shown in the Virtual Tape Libraries Vendor Compatibility section. Use the NetBackup Device Configuration Wizard within the NetBackup Administration Console to configure VTLs and emulated tape drives on the NetBackup Appliance.

NetBackup 5000 Series Appliances (Deduplication)

The following table lists NetBackup 5000 Series release versions, the Appliance models supported with each version, and the equivalent Deduplication Appliance software versions. The latest 5000 Series documentation can be found at <http://www.veritas.com/docs/000002833>. Late breaking news related to NetBackup Appliances can be found at <http://www.veritas.com/docs/000010279>.

NetBackup 5000 Series - Supported Versions

NetBackup 5000 Series Appliance Release	Supported NetBackup Appliance Models	NetBackup 5000 Series Appliance Software Version
1.4.5	5030, 5020, 5000	6.6.5
1.4.4	5030, 5020, 5000	6.6.5
1.4.3.1	5020, 5000	6.6.4
1.4.2	5020, 5000	6.6.3a
1.4.1.1	5020, 5000	6.6.3a
1.4.1	5020, 5000	6.6.3
1.4	5020, 5000	6.6.2
1.3.0.2	5020, 5000	6.6.1.2
1.3.0.1	5020, 5000	6.6.1.2
1.2.0	5000	6.6.0.2
6.6 (Initial Release)	5000	6.6.0.2

The following table lists NetBackup 5000 Series supported functionality and indicates the Appliance software version at which that functionality was first supported.

NetBackup 5000 Series - Supported Functionality

Functionality	Minimum Appliance Release	Notes
Accelerator (for files and folders)	6.6 (Initial Release)	NetBackup 7.5 or later is required for Accelerator support.
Auto Image Replication	1.4	NetBackup 5030 Appliance or NetBackup 5020 Appliance version 1.4 or later is required for Auto Image Replication support.
Call Home	1.3.0.1	Enhancements to Call Home, Alerting, and Registration functionality are included in Appliance version 1.4.4 and later.
Client Deduplication / Client Direct over Ethernet	1.2.0	Veritas allows NetBackup Clients (NetBackup 7.0 and later) to write data directly to NetBackup Storage Server Appliances. The client hosts the deduplication plug-in that deduplicates the backup data. The plug-in sends only unique segments to the Storage Server, reducing network traffic and distributing CPU load. For the list of supported clients, see the Deduplication Supported Operating Systems section of the NetBackup Version 7.7 - 7.7.x Operating System Compatibility List at http://www.veritas.com/docs/000025229 .
Fibre Channel support for PDDO	1.3.0.1	NetBackup 5030 Appliance or NetBackup 5020 Appliance version 1.3.0.1 or later is required for Fibre Channel support for PDDO.

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Granular Recovery Technology (GRT)	6.6 (Initial Release)	NetBackup 7.1 or later is required for Granular Recovery Technology support.
Intelligent Platform Management Interface (IPMI) support	1.4.2	NetBackup 5030 Appliance or NetBackup 5020 Appliance version 1.4.2 or later is required for IPMI support.
NetBackup OST Storage Server	6.6 (Initial Release)	Supported OpenStorage functionality and Media Server platforms are listed in the OST Storage Servers section of OST Secondary Storage Solutions.
Optimized Duplication (Opt_Dup)	6.6 (Initial Release)	
Optimized Duplication (Opt_Dup) from PDDO to MSDP	1.4.5	Supported from 5000 Series to 5200/5300 Series. Requires NetBackup 7.6.1 or later and NetBackup 5200/5300 Series Appliance 2.6.1 or later.
Optimized Synthetics (Opt_Synth)	6.6 (Initial Release)	NetBackup 7.1 or later is recommended for Optimized Synthetics support.
PureDisk Remote Office Appliance	6.6 (Initial Release)	Supported clients: Apple Mac OS, Hewlett Packard Enterprise HP-UX, IBM AIX, Microsoft Windows, SUSE Linux Enterprise Server, Red Hat Enterprise Linux, Oracle Solaris. Supported application agents: Microsoft Exchange, Microsoft SQL, Oracle. For specific versions see http://www.veritas.com/docs/000040140 (for 5000) and http://www.veritas.com/docs/000008731 (for 5020 and 5030).
Virtual Local Area Network (VLAN)	1.4.1.1	

NetBackup Hardware Compatibility Documentation:

[NetBackup Enterprise Server and Server 7.7 - 7.7.x Hardware Compatibility List \(last updated on April 7, 2017\)](#)

[NetBackup Hardware Compatibility Documentation: Introduction](#)

NetBackup Self Service

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Veritas NetBackup Self Service offers large enterprises and service providers a single store front for all backup and recovery service offerings. Customers and business users can perform self-service backup and restore operations using intuitive, custom-designed interface themes. A single instance supports the registration of multiple tenants or business units to allow secure separation between clients. Codeless, visually-designed forms and process workflows cater to most self-service needs. Service Level Agreement (SLA) measurement, notification, chargeback, and reporting make it easy to manage the service.

NetBackup 7.7 Self Service Documentation:

- All NetBackup 7.7 Self Service PDFs in a single .zip file: <http://www.veritas.com/docs/000004646>

Self Service Versions	NetBackup Versions
NetBackup 7.7 Self Service	NetBackup 7.6.1 NetBackup 7.6.1.1 NetBackup 7.6.1.2 NetBackup 7.7 NetBackup 7.7.1 NetBackup 7.7.2 ^[1]
NetBackup 7.7.3 Self Service	NetBackup 7.6.1 NetBackup 7.6.1.1 NetBackup 7.6.1.2 NetBackup 7.7 NetBackup 7.7.1 NetBackup 7.7.2 NetBackup 7.7.3 ^[1]

Footnotes

1. Refer : <https://www.veritas.com/docs/000107934>.

NetBackup Software Compatibility Documentation:
NetBackup Enterprise Server and Server 7.7 - 7.7.x OS Software Compatibility List (last updated on April 18, 2017)
7.7 - 7.7.x OS Software Compatibility List Updates

Virtual Systems Compatibility for Master Server, Media Server and Client

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Virtual Systems Compatibility

This Statement of Support for NetBackup in a Virtual Environment document describes the extent of support for NetBackup within a virtual environment. Ideally, every NetBackup configuration supported in a traditional physical environment would also be supported in any virtual environment without qualification. While that is our mission, it is not always possible.

Therefore, the purpose of this document is to:

- Clarify differences between NetBackup support in physical vs. virtual environments
- Describe general guidelines for support in virtual environments
- Describe impact upon specific NetBackup components: clients, servers, options, etc.
- Provide references to related information

VMware Compatibility

Virtual Systems Compatibility - Reference Article: TECH127089 Statement of Support for NetBackup in a Virtual Environment:
<http://www.veritas.com/docs/000006177>

- NetBackup supports all vendor patches (U3a, U3b, etc.) unless otherwise noted.

NetBackup Versions	VDDK Versions	vSphere Versions	vCloud Director Versions	Backup/Restore Host Versions
7.7.3	6.0	vSphere 6.5 vSphere 6.0, 6.0 U1, 6.0 U2 , 6.0 U3 vSphere 5.5, 5.5 U1, 5.5 U2, 5.5 U3 vSphere 5.1, 5.1 U1, 5.1 U2, 5.1 U3	5.5, 5.5.1, 5.5.2, 5.5.3, 5.5.4, 5.5.5, 5.5.6 5.1, 5.1.1, 5.1.2, 5.1.3 Service Provider Versions: 8.0, 8.0.1, 8.10, 8.20 5.6.5, 5.6.4, 5.6.3	All 64 bit only: Windows Server 2012 R2, 2012, 2008 R2 Red Hat Enterprise Linux (RHEL) 7.0, 6.6 SUSE Linux Enterprise Server (SLES) 12, 11.3

		For supported vCenter and ESXi versions and additional information, see the VMware VDDK 6.0 release notes URL below.		
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- For vCloud Director 8.0, 8.0.1, 8.0.2 to determine the host name: Refer to https://www.veritas.com/support/en_US/article.000108257
- For vCloud Director 8.0, 8.0.1, 8.0.2 NetBackup restores to vCloud: Refer to <http://www.veritas.com/docs/000108831>
- For vSphere 6.5 support, refer to <http://www.veritas.com/docs/000116592>

Note the following:

- VMware version information can also be obtained from the VMware Product Interoperability Matrix, and is subject to change by VMware. For the latest information, see the following: http://www.vmware.com/resources/compatibility/sim/interop_matrix.php
- NetBackup supports installation of the backup host in a virtual machine (VMware "hotadd"). The guest operating systems that NetBackup supports for hotadd are the same as the above.
- For the Linux VMware backup host or restore host, locales other than UTF-8 are not supported.
- NetBackup 7.7 and later supports VMware Virtual Volumes (VVols)
- NetBackup 7.6.1.1 and later supports vSphere 5.5 Update 3b and later.
- NetBackup supports all triple-dot versions of VMware vCloud Director, unless otherwise noted.
- Install "VMware ESXi 6.0, Patch Release ESXi600-201511001 (2137545)" for consistent backups. This ESX patch is mandatory, according to VMware, to fix the data loss situation reported in VMware KB article 2136854. For more information about the cause and the resolution of this issue, see: http://kb.vmware.com/selfservice/microsites/search.do?language=en_US&cmd=displayKC&externalId=2136854

VMware VDDK Release Notes:

- VDDK 6.0 Release Notes: <https://www.vmware.com/support/developer/vddk/vddk-600-releasenotes.html>

Hyper-V Servers Compatibility

Hyper-V Servers Compatibility - Reference Article: TECH127089 Statement of Support for NetBackup in a Virtual Environment: <http://www.veritas.com/docs/000006177>

Note:

- NetBackup Client must be installed on the Hyper-V server
- Master and Media Server platform support as supported by the appropriate NBU release

NetBackup Versions	Hyper-V Server Versions	System Center Virtual Machine Manager Versions	Comments
7.7.3	Hyper-V Server 2012 R2 Hyper-V Server 2012 R2 U1 Hyper-V Server 2012 R2 U2 Hyper-V Server 2012 R2 U3 Hyper-V Server 2012 Hyper-V Server 2008 R2 Hyper-V Server 2008SP2	NetBackup Add-In and Hyper-V Intelligent Policy for <ul style="list-style-type: none"> • SCVMM 2012 R2 • SCVMM 2012 R2 Rollup 1 through 8 	<ul style="list-style-type: none"> • Hyper-V Intelligent Policy supported only for Hyper-V Server 2012 R2 (and associated updates) • Hyper-V Intelligent Policy integration with SCVMM • VHD and VHDX support • Added support for SAN client for Hyper-V cluster. Valid only for Hyper-V intelligent policy

NetBackup support for Hyper-V Limitations:

- 1.VMs must reside on the NTFS file system (ReFS or NTFS Deduplication is not supported).
- 2.Block-level incremental backup is not supported.
- 3.VMs residing on SMB 3.0 are not supported
- 4.VMs residing on 4K Native (4Kn) drives are not supported.
5. File-level recovery from a Hyper-V backup is not supported in any of the following cases:
 - The files inside a VM reside in a Resilient File System (ReFS) volume.
 - The files inside a VM reside in an NTFS deduplicated volume.
- 6.Backup of Hyper-V Guest using shared VHDX are not supported.

NetBackup Software Compatibility Documentation:

[NetBackup Enterprise Server and Server 7.7 - 7.7.x OS Software Compatibility List \(last updated on April 18, 2017\)](#)

[7.7 - 7.7.x OS Software Compatibility List Updates](#)

Cluster Compatibility List

This Software Compatibility List (SCL) document contains information for Veritas NetBackup 7.7 through 7.7.x. It covers NetBackup Server (which includes Enterprise Server and Server), Client, Bare Metal Restore (BMR), Clustered Master Server Compatibility and Storage Stacks, Deduplication, File System Compatibility, Media Server Encryption Option (MSEO), NetBackup OpsCenter, NetBackup Access Control (NBAC), SAN Media Server/SAN Client/FT Media Server, Virtual System Compatibility and NetBackup Self Service Support. It is divided into bookmarks on the left that can be expanded.

For information about certain NetBackup features, functionality, 3rd-party product integration, Veritas product integration, applications, databases, and OS platforms that Veritas intends to replace with newer and improved functionality, or in some cases, discontinue without replacement, please see the widget titled "NetBackup Future Platform and Feature Plans" at <https://sort.veritas.com/netbackup>

Reference Article TECH59978 https://www.veritas.com/support/en_US/article.TECH59978 for links to all other NetBackup compatibility lists.

Clustered Master Server Compatibility

See NetBackup High Availability Administrator's Guide <http://www.veritas.com/docs/000003214> for details. Cluster compatibility is only listed for NetBackup Components that are cluster aware. NetBackup clients and agents are supported in cluster environments but are not cluster aware.

For Linux distributions shown in the tables below, NetBackup is supported on all "editions" and on all vendor GA updates (n.1, n.2, etc.) or service packs (SP1, SP2, etc.) unless otherwise footnoted in this document or in the NetBackup OS Compatibility List. <http://www.veritas.com/docs/000040842>

For information about certain NetBackup features, functionality, 3rd-party product integration, Veritas product integration, applications, databases, and OS platforms that Veritas intends to replace with newer and improved functionality, or in some cases, discontinue without replacement, please see the widget titled "NetBackup Future Platform and Feature Plans" at <https://sort.veritas.com/netbackup>

Cluster Type	Version	OS	CPU Architecture	Minimum NetBackup Level
VCS (SFWHA)	6.0.2	Windows Server 2012	x86-64	7.6.0.3 ^{[1][2]}
VCS (SFWHA)	6.1	Windows Server 2012	x86-64	7.6.0.3 ^{[1][2]}

WSFC ^[3]	2012	Windows Server 2012	x86-64	7.6.0.4 ^[4]
VCS (SFWHA)	6.1	Windows Server 2012 R2	x86-64	7.6.0.3 ^{[1][2]}
VCS (SFWHA)	7.0	Windows Server 2012 R2	x86-64	7.6.1.2 ^{[1][2]}
WSFC ^[3]	2012 R2	Windows Server 2012 R2	x86-64	7.6.0.3

Footnotes

1. FlashBackup is not currently supported when using Storage Foundation 6 or greater volume manager.
2. VSS based snapshot at a volume-level is supported, but snapshots at a LUN level will not work due to a Microsoft issue.
3. Windows Server Failover Cluster (WSFC), formerly MSCS.
4. Not supported with NetBackup 7.6.1.

Clustered Master Server Storage Stacks

The table below captures the NetBackup clustering solution supported volume manager on shared disk. For example, when configuring NetBackup on a Linux OS VCS cluster, the only supported volume manager for the shared disk used by NetBackup is VxVM.

Note that the table below does not include OS versions. Please see the preceding table for specific OS version support.

NetBackup support of the FlashBackup policy with Storage Foundation 6 volume manager is scheduled for a future NetBackup release.

NetBackup support of Storage Foundation 6 features of Deduplication and Compression is scheduled for a future NetBackup release.

Cluster Technology	OS	Storage Stack
MSCS/WSFC	Windows ^[1]	VxVM, LDM
VCS	Windows ^{[1][2]}	VxVM

Footnotes

1. Supported on all OS versions as noted in the preceding table.
2. With VCS 6.0 (VCSW/SFWHA 6.0) VSS based snapshot at a volume-level is supported, but snapshots at a LUN level will not work due to a Microsoft issue.

NetBackup Cluster Compatibility Documentation:

[NetBackup Enterprise Server and Server 7.7 - 7.7.x OS Software Compatibility List \(last updated on April 18, 2017\)](#)

[7.7 - 7.7.x OS Software Compatibility List Updates](#)

Bare Metal Restore (BMR) Support for Master Server

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General Information

* Bare Metal Restore Server (BMR server) is a feature of the Master Server.

BMR Boot Server

* BMR Boot Server is supported on the same Operating Systems as the BMR client. In case of Windows, BMR Boot Server bitness is not relevant. I.E., a Windows x86 boot server can boot x86 and x64 servers and visa-versa.

BMR Boot Server Requirements

Please Reference the Requirements for Bare Metal Restore (BMR) Boot Servers document for comprehensive information, <http://www.veritas.com/docs/000041982>.

NetBackup Software Compatibility Documentation:

[NetBackup Enterprise Server and Server 7.7 - 7.7.x OS Software Compatibility List \(last updated on April 18, 2017\)](#)

[7.7 - 7.7.x OS Software Compatibility List Updates](#)

Deduplication Supported Operating Systems for Media Server

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If you are looking for information regarding PureDisk support, and not media server deduplication, reference article <http://www.veritas.com/docs/000008731>

For further details on recommended hardware reference NetBackup Deduplication: Additional Usage Information: <http://www.veritas.com/docs/000041111> .

Where support is shown for "Windows Server 2008" or "Windows Server 2008 R2" it is implied that Standard Edition, Enterprise Edition, Datacenter Edition, and Web Edition are supported.

Where support is shown for "Windows Server 2012", or "Windows Server 2012 R2" it is implied that Foundation Edition, Essentials Edition, Standard Edition, and Datacenter Edition are supported.

Media Server Deduplication (MSDP) is supported in an Infrastructure as a Service (IaaS) environment on any cloud platform that meets minimum requirements. For additional details on minimum and recommended configurations see NetBackup Media Server Deduplication (MSDP) in the Cloud https://www.veritas.com/support/en_US/article.000004584.

OS	CPU Architecture	Media Server Dedupe	Minimum NetBackup Level
Windows Server 2012 R2 ^[1]	x86-64	Yes	7.6.0.3
Windows Server 2012 ^[1]	x86-64	Yes	7.6.0.1

Footnotes

1. See the File System Compatibility table for support details regarding the Windows 2012 NTFS data deduplication feature, and the ReFS file system.

NetBackup Software Compatibility Documentation:

[NetBackup Enterprise Server and Server 7.7 - 7.7.x OS Software Compatibility List \(last updated on April 18, 2017\)](#)

[7.7 - 7.7.x OS Software Compatibility List Updates](#)

Disk Storage Units for Media Server

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Disk Storage Units

NetBackup permits the creation of an unlimited number of disk storage units. The types of storage units are described in the table below.

Disk Storage Unit Types

Type of disk storage unit	Description
---------------------------	-------------

BasicDisk

A BasicDisk type storage unit consists of a directory on a locally-attached disk or a network-attached disk that is exposed as a file system to a NetBackup media server. NetBackup stores backup data in the specified directory.

BasicDisk configuration considerations:

1. Do not include the same volume or file system in multiple BasicDisk storage units.
2. BasicDisk storage units cannot be used in a storage lifecycle policy.

AdvancedDisk

An AdvancedDisk type storage unit is used for a dedicated disk that is directly attached to a NetBackup media server. AdvancedDisk is available only when the Data Protection Optimization Option is licensed. NetBackup assumes exclusive ownership of the disk resources that comprise an AdvancedDisk disk pool. If the resources are shared with other users, NetBackup cannot manage disk pool capacity or storage lifecycle policies correctly. For AdvancedDisk, the NetBackup media servers function as both data movers and storage servers. For more information on configuring AdvancedDisk, see the <http://www.veritas.com/docs/000003214>">"NetBackup AdvancedDisk Storage Solutions Guide."

AdvancedDisk support assumptions:

1. Veritas NetBackup has an open support policy for AdvancedDisk storage units. The storage must be seen as local disk by the NetBackup Media Server, regardless of connection method (SCSI, Fibre Channel, iSCSI, etc), to be supported as an AdvancedDisk storage unit.

Please note: Due to the open support policy, and the range of 3rd party storage solutions, it is the responsibility of the customer to ensure that the chosen storage solution meets the specific performance needs in the specific production environment.

Veritas NetBackup features that are performance-dependent, such as Granular Restore Technology (GRT) are not supported with AdvancedDisk storage units.

Hybrid storage solutions, with a mix of both local (LAN or FC) and WAN (remote or cloud) based storage tiers, have become available. Thorough testing of these storage solutions, when used as AdvancedDisk storage units, needs to be completed by the customer, to the customer's satisfaction, particularly in the area of restore operations, to ensure that timeouts do not occur. Some specific hybrid storage solutions may be tested as NetBackup AdvancedDisk storage units, in Veritas labs, with joint effort and in cooperation with Veritas storage partners.

Resulting white papers and reference materials will appear here:

- Microsoft Azure StorSimple: <https://docs.microsoft.com/en-us/azure/storsimple/storsimple-configure-backuptarget-netbackup>">"Configure StorSimple with Veritas NetBackup"

2. Veritas InfoScale Foundation and Storage Foundation are supported with NetBackup AdvancedDisk. For information on disk arrays that are supported with the InfoScale Foundation or Storage Foundation version you're running, please see <https://sort.veritas.com>">"Veritas Services and Operations Readiness Tools (SORT)."

3. AdvancedDisk functionality is subject to all functional limitations as imposed either by the operating system or by the underlying file system.

AdvancedDisk configuration considerations:

1. For UNIX NetBackup Media Servers, AdvancedDisk requires that all LSUs (Logical Storage Units) are active mount points within the UNIX host. Using the NFS automount feature is not recommended with AdvancedDisk.

2. Access to NFS storage requires NetBackup daemons to run as root. The NFS server exporting the file system must be configured to allow root access to the file system.

3. To ensure support, the disk array must be combined with interconnect hardware that is supported by the disk array manufacturer and the operating system vendor. Refer to the respective vendor's support lists for this information.

	<p>4. When installing and configuring HBA drivers it is recommended that the array vendor-qualified HBA drivers be used as opposed to the general HBA drivers that are released for each operating system. These array vendor-qualified HBA drivers are typically found in a separate section of the HBA vendor or array vendor's website, often separated by array model.</p> <p>5. Performance may vary depending on the array hardware used.</p>
OpenStorage	<p>An OpenStorage type storage unit is used for disk storage, usually provided by a third party vendor. The actual name of the disk type depends on the vendor. OpenStorage is available only when the OpenStorage Disk Option is licensed. The storage is integrated into NetBackup through an API. The storage vendor partners with Veritas to integrate the storage into NetBackup. The storage host is the storage server. The NetBackup media servers function as the data movers. The storage vendor's plugin must be installed on each media server that functions as a data mover. The logon credentials to the storage server must be configured on each media server. For more information on configuring OpenStorage, see the http://www.veritas.com/docs/000003214">"NetBackup OpenStorage Solutions Guide for Disk."</p>
PureDisk	<p>A PureDisk disk type storage unit is used for deduplicated data for the following storage destinations:</p> <p>Media Server Deduplication Pool (MSDP): NetBackup deduplicates the data and hosts the storage. MSDP is available only when the NetBackup Data Protection Optimization Option is licensed. For more information on configuring MSDP, see the http://www.veritas.com/docs/000003214">"NetBackup Deduplication Guide."</p> <p>PureDisk storage pool: A NetBackup 5000 Series Appliance hosts the storage. For more information on configuring a PureDisk storage pool, see</p>

the <http://www.veritas.com/docs/000010419>">"NetBackup Deduplication Appliance Software Getting Started Guide."

NetBackup Hardware Compatibility Documentation:

[NetBackup Enterprise Server and Server 7.7 - 7.7.x Hardware Compatibility List \(last updated on April 7, 2017\)](#)

[NetBackup Hardware Compatibility Documentation: Introduction](#)

OST Secondary Storage Solutions - General Information for Media Server

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OST Secondary Storage Solutions

The Veritas OpenStorage (OST) Technology API allows intelligent storage devices and intelligent cloud storage solutions to interface to NetBackup Media Servers. The storage vendor or Veritas provides a software plug-in, which is installed on each NetBackup Media Server that is connected to the storage device / cloud provider. OST functionality is available on all supported NetBackup Media Server platforms. If you do not see OST support for your desired Storage Server appliance / Cloud Storage Provider / Media Server OS platform, please contact that storage vendor to request OST support for that platform. Please see the Veritas NetBackup Administrator's Guide for more information on how to use OST.

OpenStorage - Considerations

Subject	Notes
Support assumptions	<p>For details on supported operating systems, please refer to the NetBackup Enterprise Server and Server 7.7 - 7.7.x OS Software Compatibility List at http://www.veritas.com/docs/000025229.</p> <ol style="list-style-type: none">1. Where support is shown for NetBackup 5200 Series or 5300 Series Appliances it means that the OST solution is supported on appliances running versions 2.5.x.x, 2.6.x.x, or 2.7.x, unless noted otherwise.2. Where support is shown for "Windows Server 2008 Enterprise Edition" it also means that the other editions of Windows Server 2008 and Windows Server 2008 R2 are supported. Only the x64

	<p>(64-bit) editions of the OS are supported as a NetBackup Media Server. Server Core Installation Option is not supported as a NetBackup Media Server.</p> <p>3. Where support is shown for "Windows Server 2012 Datacenter" it also means that the other editions of Windows Server 2012, Windows Storage Server 2012, Windows Server 2012 R2, and Windows Storage Server 2012 R2 are supported.</p> <p>4. CentOS, Novell Open Enterprise Server (Linux), and Oracle Linux are not supported with OpenStorage, unless noted otherwise.</p>
Configuration considerations	<p>1. The Veritas NetBackup OpenStorage Optimized Duplication feature takes advantage of the replication capabilities built into many storage servers and cloud solutions by allowing images replicated by the storage servers or cloud solutions to be registered as duplicated copies in the NetBackup catalog. This feature requires at least one NetBackup Media Server with connectivity to both the source storage server or cloud solution and the destination storage server or cloud solution. Optimized Duplication cannot be performed across NetBackup domains.</p>
Operating system support added	<p>1. AIX 7.2 is supported as a media server with NetBackup 7.7.2 and later.</p>
Operating system support dropped	<p>1. SUSE Linux Enterprise Server 10 is not supported as a media server with NetBackup 7.7.1 and later.</p>

OpenStorage - Supported Functionality

The following table lists NetBackup OpenStorage functionality and indicates the NetBackup 7.7.x version at which that functionality was first supported. For detailed descriptions of OpenStorage functionality, see the Veritas NetBackup OpenStorage Solutions Guide for Disk at <http://www.veritas.com/docs/000003214>.

To see which OST functionality is supported with your OpenStorage solution, refer to the "Supported OpenStorage Functionality" column in the Vendor Compatibility tables below.

OpenStorage Functionality	Abbreviation	Start of Support	Notes
---------------------------	--------------	------------------	-------

Accelerator (for files and folders)	Accelerator	7.7 GA	<p>If your storage server shows support for Accelerator in the tables below, Veritas recommends updating your device mappings file to the current version to ensure this functionality is enabled.</p> <p>If you are running Accelerator-enabled backups of Windows clients whose file systems contain hard linked files, running NetBackup 7.5.0.7 or later on the client is strongly recommended.</p> <p>For more information, see http://www.veritas.com/docs/000025532</p>
Accelerator with NDMP	Accel_NDMP	7.7.1	<p>Supported with NetApp FAS and V series filers.</p> <p>For more information on this feature, see the NetBackup for NDMP Administrator's Guide at http://www.veritas.com/docs/000003214.</p>
Accelerator with VMware-type policies	Accel_VMware	7.7 GA	<p>If your storage server shows support for Accelerator with VMware in the tables below, Veritas recommends updating your device mappings file to the current version to ensure this functionality is enabled.</p>
Auto Image Replication	A.I.R.	7.7 GA	<p>For more information on configuring Auto Image Replication, see About</p>

Veritas Services and Operations Readiness Tools (SORT)

			the storage lifecycle policies required for Auto Image Replication at http://www.veritas.com/docs/000120198
Targeted Auto Image Replication	Targeted_A.I.R.	7.7 GA	If your storage server shows support for Targeted A.I.R. in the tables below, Veritas recommends updating your device mappings file to the current version to ensure this functionality is enabled.
Direct Copy to dedicated tape drives	Direct_Copy	7.7 GA	
Direct Copy to shared tape drives	Direct_Copy_Shared	7.7 GA	
Granular Recovery Technology	Granular_Recovery	7.7 GA	Support for the Veritas NetBackup OpenStorage Granular Recovery Technology feature is described in the following Articles: http://www.veritas.com/docs/000009237 and http://www.veritas.com/docs/000085639 .
Granular Recovery Technology with VMware-type policies	GRT_VMware	7.7 GA	Support for VMware-type backup policies with Application Protection options enabled for Exchange or SharePoint. Support for the Veritas NetBackup OpenStorage Granular Recovery Technology feature is described in the following Articles:

Veritas Services and Operations Readiness Tools (SORT)

			http://www.veritas.com/docs/000009237 and http://www.veritas.com/docs/000085639 .
Instant Recovery for VMware	IR_VMware	7.7 GA	<p>Support for restoring virtual machines with Instant Recovery is described in the NetBackup for VMware Administrator's Guide at http://www.veritas.com/docs/000003214 and in Article http://www.veritas.com/docs/000074081. For details on platforms that are supported as instant recovery restore hosts, see Article http://www.veritas.com/docs/000006177.</p>
NetBackup Encryption Key Management Service	KMS	7.7 GA	<p>In the OST Cloud vendor tables, KMS indicates that the cloud provider supports using NetBackup KMS to encrypt backups to cloud targets. In the OST Storage Servers vendor tables, KMS indicates that the plug-in supports NetBackup KMS with Direct Copy to Tape functionality.</p>
Optimized Duplication	Opt_Dup	7.7 GA	<p>Optimized Duplication transfers data in 256 KB chunks.</p>
Optimized Duplication (Whole Image Copy)	WI_Opt_Dup	7.7 GA	<p>Whole image Optimized Duplication uses the storage unit's Maximum fragment size to transfer an entire NetBackup</p>

			image fragment in a single operation.
Optimized Synthetics	Opt_Synth	7.7 GA	Storage Lifecycle Policies are not supported in policies that use the multiple copy synthetic backups method. For details, see Article http://www.veritas.com/docs/000022616 .

Cloud - Supported Technology Methods

NetBackup supports Cloud-based storage providers using a variety of technology methods, described below.

1. S3 Storage - This method uses the NetBackup S3 Cloud Connector, a plug-in included with NetBackup. For more information on configuring S3 solutions, see <http://www.veritas.com/docs/000115794>">"Amazon S3 storage type API configuration options for NetBackup".
2. OST - This method uses a third-party OpenStorage Technology plug-in.
3. AdvancedDisk Targets - This method uses third-party hardware or software to make the cloud appear as an [AdvancedDisk storage unit](#) to NetBackup.
4. VTL - This method uses third-party software to present the Cloud as if it were a VTL (Virtual Tape Library) to NetBackup.

Cloud Provider	Technology method
Amazon AWS Storage Gateway	Amazon AWS VTL
Amazon GovCloud Simple Storage Service	NetBackup S3 Cloud connector
Amazon GovCloud Simple Storage Service - Infrequent Access	NetBackup S3 Cloud connector
Amazon Simple Storage Service (S3) Standard	NetBackup S3 Cloud connector
Amazon Simple Storage Service (S3) Standard - Infrequent Access	NetBackup S3 Cloud connector
AT&T Cloud Storage	NetBackup S3 Cloud connector
AT&T Synaptic Storage as a Service	NetBackup-provided plug-in

Chunghwa Telecom Hicloud S3	NetBackup S3 Cloud connector
Cloudian HyperStore Object Storage	NetBackup S3 Cloud connector
Datish Systems OpenDedup	Datish Systems-provided OST plug-in
EMC ATMOS Object Storage	NetBackup S3 Cloud connector
EMC Elastic Cloud Storage	NetBackup S3 Cloud connector
Google Cloud Storage Coldline	NetBackup S3 Cloud connector
Google Cloud Storage Nearline	NetBackup S3 Cloud connector
HGST Active Archive and ActiveScale Cloud Storage Systems	NetBackup S3 Cloud connector
Hitachi Cloud Services	NetBackup S3 Cloud connector
Hitachi Content Platform	NetBackup S3 Cloud connector
IBM Cloud Object Storage	NetBackup S3 Cloud connector
Microsoft Azure StorSimple	NetBackup AdvancedDisk target
NetApp AltaVault	NetApp-provided OST plug-in
Oracle Cloud Service	NetBackup S3 Cloud connector
Quantum Lattus Object Storage	NetBackup S3 Cloud connector
Quantum Q-Cloud Protect	Quantum-provided OST plug-in
Quantum Q-Cloud Protect for AWS	Quantum-provided OST plug-in
Rackspace Cloud Files	NetBackup-provided plug-in
Scality RING Storage	NetBackup S3 Cloud connector
StorReduce Deduplicate Cloud Storage	NetBackup S3 Cloud connector
SwiftStack Object Storage	NetBackup S3 Cloud connector
Telefonica Cloud Storage	NetBackup S3 Cloud connector

NetBackup Hardware Compatibility Documentation:

[NetBackup Enterprise Server and Server 7.7 - 7.7.x Hardware Compatibility List \(last updated on April 7, 2017\)](#)

[NetBackup Hardware Compatibility Documentation: Introduction](#)

OST Cloud

OST Cloud Storage plug-ins enable Veritas NetBackup to access Cloud Storage Solutions. Either the storage vendor or Veritas provides a software plug-in, which is installed on each NetBackup Media Server that is connected to the cloud solution.

OST Cloud support information is listed below, organized by vendor. Under each vendor there are separate tables showing compatibility with NetBackup Appliances, with Linux/Windows operating systems, and with UNIX operating systems. The tables provide information on supported versions of plug-ins and functionality, and other important notes about the hardware and its compatibility. If you do not see OST Cloud support for your desired Cloud Storage Solution provider / Media Server OS platform, please contact that Cloud Storage vendor to request OST Cloud support for that platform. Please see the Veritas NetBackup Administrator's Guide for more information on how to use OST.

OST Cloud - Considerations

Subject	Notes
Support assumptions	For details on supported operating systems, please refer to the http://www.veritas.com/docs/000025229 "NetBackup 7.7 - 7.7.x Operating System Software Compatibility List" . 1. In the vendor compatibility tables below, the column "NetBackup Version Containing Plug-in" indicates the NetBackup 7.7.x version at which that cloud storage solution was first supported. 2. Cloud support on Windows platforms requires Windows 2008 R2 or later.
Operating system support added	1. AIX 7.2 is supported as a media server with NetBackup 7.7.2 and later.
Operating system support dropped	1. SUSE Linux Enterprise Server 10 is not supported as a media server with NetBackup 7.7.1 and later.

OST Cloud - Configuration Files

NetBackup support for new cloud providers is accomplished through the use of cloud configuration files. The latest version of this file is included in NetBackup release updates and is also available for download independently on the Veritas support site. This file is updated whenever new cloud provider support is needed independent of NetBackup release updates. This file is cumulative, so

the most recent version contains all support added in earlier versions. The column "NetBackup version" indicates the NetBackup Master Server version that the Cloud Configuration package requires for installation.

For more information on configuring Cloud solutions see <http://www.veritas.com/docs/000115793>">"About the cloud storage vendors for Veritas NetBackup".

Note: There are now separate Cloud Configuration packages for NetBackup 7.7.1 and later (package versions 2.1.x) and NetBackup 8.0 and later (package versions 2.2.x). For new NetBackup 7.7.1 or later installations or reinstallations, use the current 2.1.x package listed below. If you are already running a NetBackup 7.7.1 or later configuration with Cloud Configuration packages 2.2.1 through 2.2.4, you do not need to update to 2.1.5.

Cloud Configuration Package version	NetBackup version	URL	Providers added
2.1.6	7.7.1 or later	http://www.veritas.com/docs/000097618	<ul style="list-style-type: none"> - Amazon - Canada Central region - Amazon - London region - Amazon - Ohio region - IBM Cloud Object Storage - Local and WAN performance improvement
2.1.5	7.7.1 or later	Use the most recent version above.	<ul style="list-style-type: none"> - Amazon GovCloud (S3) - Infrequent Access - Amazon - Mumbai region - Amazon Virtual Private Cloud (VPC) and Amazon custom cloud instance - AT&T Cloud Storage (S3) - China Mobile CMCC Cloud Storage (S3) - Chunghwa Telecom Hicloud (S3) - default Cloud Instance - EMC Elastic Cloud Storage (S3) - Google Cloud Storage (S3) - Coldline Storage Class

			<ul style="list-style-type: none"> - IBM Cloud Object Storage - Local and WAN (S3) - Oracle Cloud Service (S3) - Quantum Lattus Object Storage (S3) - Scality RING Storage for LAN (S3) - Scality RING Storage for WAN (S3)
2.1.4	7.7.1 or later	Use the most recent version above.	<ul style="list-style-type: none"> - Chunghwa Telecom Hicloud S3 - StorReduce Deduplicate Cloud Storage - Telefonica Cloud Storage
2.1.3	7.7.1 or later	Use the most recent version above.	<ul style="list-style-type: none"> - HGST Active Archive and ActiveScale Cloud Storage Systems performance enhancement - EMC ATMOS
2.1.2	7.7.1 or later	Use the most recent version above.	<ul style="list-style-type: none"> - Amazon Simple Storage Service (S3) Seoul and Beijing regions - HGST Active Archive and ActiveScale Cloud Storage Systems - Hitachi Content Platform (HCP) S3-specific support - SwiftStack Object Storage
2.0.2	7.7.1	Use the most recent version above.	<ul style="list-style-type: none"> - Amazon Simple Storage Service (S3) Standard - Infrequent Access (IA)

OST Cloud - Links to Vendor Sites

More information on NetBackup OpenStorage Cloud solutions is available at the following OST Cloud vendors' websites.

Vendor	URL
Amazon	AWS S3 - http://aws.amazon.com/s3 AWS GovCloud - http://aws.amazon.com/govcloud-us/ AWS Virtual Private Cloud (VPC) - https://aws.amazon.com/vpc/
AT&T	Cloud Storage (S3) - http://www.att.com/cloud Synaptic Storage as a Service - https://www.synaptic.att.com
Chunghwa Telecom	http://hicloud.hinet.net/
Cloudian	http://www.cloudian.com/
Datish Systems (OpenDedup)	http://www.openededup.org
EMC	Atmos - http://www.emc.com/storage/atmos/atmos.htm Elastic Cloud Storage - http://www.emc.com/storage/ecs/index.htm
Google	Coldline - https://cloud.google.com/storage/archival Nearline - https://cloud.google.com/storage-nearline/
HGST	http://www.hgst.com/products/systems
Hitachi	http://www.hds.com/solutions/cloud/hitachi-cloud-services.html
IBM	https://www.ibm.com/cloud-computing/products/storage/object-storage/cloud/
NetApp	http://www.netapp.com/us/products/protection-software/altavault/
Oracle	https://cloud.oracle.com/home
Quantum	Lattus - http://www.quantum.com/products/bigdatamanagement/lattus/index.aspx Q-Cloud - http://www.quantum.com/ServiceandSupport/SoftwareandDocumentationDownloads/OSTClientPlugIn/Index.aspx
Rackspace	http://www.rackspace.com
Scality	http://www.scality.com/
StorReduce	http://storreduce.com/
SwiftStack	https://www.swiftstack.com
Telefonica	https://www.telefonica.com/en/

Contents (for details click on the checkbox)

Amazon	AT&T	China Mobile
Chunghwa Telecom	Cloudian	EMC
Google	HGST	Hitachi
IBM	NetApp	Oracle
Quantum	Rackspace	Scality
StorReduce	SwiftStack	Telefonica

NetBackup Hardware Compatibility Documentation:

[NetBackup Enterprise Server and Server 7.7 - 7.7.x Hardware Compatibility List \(last updated on April 7, 2017\)](#)

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OST Secondary Storage Solutions - Storage Servers for Media Server

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OST Storage Servers

OpenStorage Servers are intelligent storage devices that interface to NetBackup Media Servers via the Veritas OpenStorage (OST) API. The vendor supplying the Storage Server appliance provides a software plug-in, which is installed on each NetBackup Media Server that is attached to the OpenStorage Server.

OST Storage Servers support information is listed below, organized by vendor. Under each vendor there are separate tables showing compatibility with NetBackup Appliances, with Linux/Windows operating systems, and with UNIX operating systems. The tables provide information on supported versions of plug-ins and functionality, and other important notes about the hardware and its compatibility. OST functionality is available on all supported NetBackup Media Server platforms. If you do not see OST support for your desired Storage Server appliance / Media Server OS platform, please contact that Storage Server appliance vendor to request OST support for that platform. Please see the Veritas NetBackup Administrator's Guide for more information on how to use OST.

OST Storage Servers - Considerations

Subject	Notes
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Support assumptions

For details on supported operating systems, please refer to the NetBackup Enterprise Server and Server 7.7 - 7.7.x OS Software Compatibility List at <http://www.veritas.com/docs/000025229>.

1. All OpenStorage Servers are compatible with the NetBackup Data Protection Optimization Option features (Storage Lifecycle Policies, Intelligent Disk Capacity Management and Media Server Load Balancing) and the SAN Client (currently supported only with Solaris SPARC and Linux x64 media servers).

Vendor support considerations

1. Veritas and OpenStorage server vendors have mutually agreed to support NetBackup customers with OST solutions. Veritas and most OST server vendors are members of TSANet.

2. Veritas qualifies OpenStorage plug-ins for use with NetBackup. The qualified plug-ins are maintained by the party that writes and distributes the plug-ins. Features Veritas Partners implement behind the OST API, that operate independently and are transparent to NetBackup and the OpenStorage API (for example, replication between storage servers, deduplication on the storage server, deduplication-aware plug-ins, data transport mechanisms between the media server and the storage server), are not specifically qualified by Veritas. Partner-specific features designed to interoperate in the NetBackup environment as part of the total solution are the maintenance responsibility of the partner. Check the partner's compatibility list to ensure support of the feature with NetBackup and to ensure that your infrastructure (that is, hardware and network) meets the partner's recommended sizing considerations for the feature.

3. Check the device manufacturer's compatibility list to verify the minimum version of Storage Server software required for your Storage Server family member, that the Storage Server software version you are running is compatible with the plug-in version, and that the storage server software version supports the OpenStorage functionality you are running.

	4. Minor versions of the plug-ins listed in the tables below are also supported. (Example: Version "2.0" means versions 2.0.1, 2.0.2, etc. are also supported. Version "3" means versions 3.1, 3.2, etc. are also supported.)
Configuration considerations	1. The Data Interface column in the tables below describes the supported data path between the media server running the vendor's OST plug-in and the OST storage server.
Operational considerations	1. Storage Servers that do not automatically increase the size of Logical Storage Units (LSU) may take advantage of the LSU spanning feature. For information about spanning volumes on OpenStorage disk pools, see the Veritas NetBackup OpenStorage Solutions Guide for Disk.
Operating system support added	1. AIX 7.2 is supported as a media server with NetBackup 7.7.2 and later.
Operating system support dropped	1. SUSE Linux Enterprise Server 10 is not supported as a media server with NetBackup 7.7.1 and later.

OST Storage Servers - Links to Vendor Sites

More information on NetBackup OpenStorage solutions is available at the following OST Storage Server vendors' websites.

Vendor	URL
Cleversafe	http://www.cleversafe.com/
Data Domain	http://www.datadomain.com/products/
Dell	http://www.dell.com/
ExaGrid	http://www.exagrid.com/exagrid-products/supported-data-backup-applications/symantec-netbackup/
FalconStor	http://www.falconstor.com/en/pages/?pn=VTL
Fujitsu	http://www.fujitsu.com/global/
Hitachi	http://www.hds.com/
Hewlett Packard Enterprise	https://www.hpe.com/us/en/storage/storeonce.html
Huawei	http://www.huawei.com/

H3C	http://www.h3c.com/en/OurBusiness/Products/Storage/
IBM	http://www.ibm.com/
NEC	http://www.necam.com/HYDRAsstor/
NetApp	http://www.netapp.com/us/products/protection-software/altavault/
Oracle	http://www.oracle.com/technetwork/server-storage/sun-unified-storage/downloads/zfssa-plugins-1489830.html
Quantum	http://www.quantum.com/ServiceandSupport/SoftwareandDocumentationDownloads/OSTClientPlugIn/Index.aspx
Quest	https://www.quest.com/products/dr-series-disk-backup-appliances/
Sepaton	http://www.sepaton.com/
Veritas	https://www.veritas.com/product/backup-and-recovery/netbackup-appliances/

OST Storage Servers - Vendor Compatibility

Contents (for details click on the checkbox)

Cleversafe	Data Domain	Dell
ExaGrid	FalconStor	Fujitsu
H3C	Hewlett Packard Enterprise	Hitachi
NEC	NetApp	Quantum
Quest - formerly Dell	SEPATON	

NetBackup Hardware Compatibility Documentation:

[NetBackup Enterprise Server and Server 7.7 - 7.7.x Hardware Compatibility List \(last updated on April 7, 2017\)](#)

[NetBackup Hardware Compatibility Documentation: Introduction](#)

Virtual tape device support information is listed below, organized by vendor. Under each vendor there are separate tables showing compatibility with NetBackup Appliances, with Linux/Windows operating systems, and with UNIX operating systems. The tables provide information on supported versions of software, inquiry string (vendor ID + product ID), and other important notes about the hardware and its compatibility.

Virtual Tape Libraries/Drives - Considerations

Subject	Notes
Support assumptions	<p>For details on supported operating systems, please refer to the NetBackup Enterprise Server and Server 7.7 - 7.7.x OS Software Compatibility List at http://www.veritas.com/docs/000025229.</p> <ol style="list-style-type: none">1. Virtual tape device software versions are no longer listed in this section. Veritas recommends using the most recent version of software available when you configure the VTL with NetBackup. When a minimum VTL software version is required, it will be listed in a footnote. If a VTL software version is causing a problem, Veritas will work with the hardware vendor to resolve the problem. Veritas and most hardware vendors listed are members of TSA.net.2. Where support is shown for "Windows Server 2008 Enterprise Edition" it also means that the other editions of Windows Server 2008 and Windows Server 2008 R2 are supported. Only the x64 (64-bit) editions of the OS are supported as a NetBackup Media Server. Server Core Installation Option is not supported as a NetBackup Media Server.3. Where support is shown for "Windows Server 2012 Datacenter" it also means that the other editions of Windows Server 2012, Windows Storage Server 2012, Windows Server 2012 R2, and Windows Storage Server 2012 R2 are supported.4. Where support is shown for "Red Hat Enterprise Linux 5 on x86-64" it also means that CentOS 5 and Oracle Linux 5 are supported.

	<p>5. Where support is shown for "Red Hat Enterprise Linux 6 on x86-64" it also means that CentOS 6 and Oracle Linux 6 are supported.</p> <p>6. Where support is shown for "Red Hat Enterprise Linux 7 on x86-64" it also means that CentOS 7 and Oracle Linux 7 are supported.</p> <p>7. Where support is shown for "SUSE Linux Enterprise Server" it also means that Novell Open Enterprise Server (Linux) is supported.</p>
Vendor support considerations	<ol style="list-style-type: none">1. Check the device manufacturer's compatibility list to verify OS platform support for the version of software running on your VTL.2. Check the device manufacturer's compatibility list to verify the minimum version of VTL software required for your VTL family member.3. The list of attributes for each drive emulation is based on the most recent version of Virtual tape device software tested. Check with the device manufacturer to determine when support for a specific attribute was added.
Configuration considerations	<ol style="list-style-type: none">1. The virtual library must be configured with the unique VTL inquiry string as listed. Using the inquiry string to emulate a real library model is not supported even if the real device is supported with NetBackup. (If an AIX media server is being used for robotic control, an alternate emulated string listed below may be used.)2. Only the virtual tape drive emulations listed with each virtual library are supported. Other virtual tape drive emulations are not supported even if the real device being emulated is supported with NetBackup. Conversely, a virtual tape drive emulation listed as supported in this section does not mean the physical model is also supported.3. Veritas recommends the use of SCSI Persistent Reserve (SPR) whenever all the hardware in your device path supports it. Refer to the NetBackup Administrator's Guide for more information on SPR and the types of configurations where SPR

	<p>may be more effective than the default SPC-2 SCSI reserve and release method.</p> <p>4. NetBackup NDMP Direct Copy with VTL enables NDMP tape duplication to physical tape libraries. For more information on this feature, see "NDMP Direct Copy with VTL" in the Veritas NetBackup for NDMP Administrator's Guide at http://www.veritas.com/docs/000003214.</p>
OS library and tape driver considerations	<ol style="list-style-type: none">1. Refer to the Tape Drives section of this document for information on supported tape drivers.2. On IBM AIX, use of the IBM Atape driver is required with IBM tape libraries. The Atape driver's multi-path feature must be disabled.3. NetBackup has been supporting non-IBM tape libraries (robotics) with an IBM AIX robotic control host using the "ovpass" driver for many years. Changes and new functionality in AIX 6.1 and 7.1 have resulted in some issues with ovpass and an inability to support new functionality such as dynamic tracking and controlling SAS robots. Therefore, Veritas is no longer supporting the ovpass driver. Existing customers may continue to use ovpass as they are today, but if issues are encountered Veritas will not be able to resolve them. Some VTLs have been tested with an emulated physical library inquiry string that is listed along with the device's unique VTL inquiry string. Veritas recommends configuring your VTL using this alternate library inquiry string, or using another OS platform as the robotic control host.
Operational considerations	<ol style="list-style-type: none">1. Filling up the available disk space on a virtual device may cause unpredictable behavior of the device. Working with the device vendor may be required to recover from errors that result from a full disk.2. NetBackup NDMP Direct Copy with VTL or an embedded NetBackup media server (e.g., EMC DL4000) may be used to copy backup images (not media) from the VTL directly to physical tape or a 2nd VTL. Copying virtual media to physical

	<p>media or a 2nd virtual media is not supported by Veritas; any support for this must come from the VTL vendor providing the capability. If the VTL copies virtual media to physical media (or a 2nd VTL), NetBackup is not aware of the physical media or 2nd virtual media and may not be able to recover that data directly from it.</p> <p>3. When NetBackup expires a virtual volume, the virtual device is not aware that the data is no longer needed. Because of this, the virtual device may appear to be much closer to capacity than it really is. When NetBackup subsequently begins writing to that virtual volume at the beginning of the volume, the virtual library will then be aware that the rest of the data is no longer needed and can free up the disk space.</p>
Operating system support added	<p>1. AIX 7.2 is supported as a media server with NetBackup 7.7.2 and later.</p>
Operating system support dropped	<p>1. SUSE Linux Enterprise Server 10 is not supported as a media server with NetBackup 7.7.1 and later.</p>

Virtual Tape Libraries/Drives - Tape Drive Emulation Attributes

The following table lists attributes supported with Virtual Tape Libraries and indicates the NetBackup 7.7.x version at which that attribute was first supported.

Attribute	Abbreviation	NetBackup Release Supported
NDMP Direct Copy with VTL, physical tape drives used with this feature must be dedicated to the VTL.	DirCpy_Ded	7.7 GA
NDMP Direct Copy with VTL, physical tape drives used with this feature can be shared using NetBackup Shared Storage Option (SSO).	DirCpy_Shr	7.7 GA
SCSI Reservation	SResv	7.7 GA
SCSI Persistent Reservation	SPR	7.7 GA

Write Once, Read Many	WORM	7.7 GA
NetBackup Encryption Key Management Service	KMS	7.7 GA
Append-only mode	App	7.7 GA

Virtual Tape Libraries/Drives - NetBackup Robot Types

Most Virtual Tape Libraries use the NetBackup robot type TLD. The following table lists operating system platform support for TLD robots. For supported OS versions, refer to the NetBackup Enterprise Server and Server 7.7 - 7.7.x OS Software Compatibility List at <http://www.veritas.com/docs/000025229>.

A few Virtual Tape Libraries use NetBackup robot type ACS. For information on ACS robotics support, see [ACS - Oracle Automated Cartridge System](#) in the Tape Libraries section.

For more information about configuring robot types, see the NetBackup Device Configuration Guide at <http://www.veritas.com/docs/000003214>.

TLD - Tape Library DLT

Operating System	NetBackup Release Supported
NDMP	7.7 GA

Virtual Tape Libraries/Drives - Vendor Compatibility

Contents (for details click on the checkbox)

Amazon	Data Domain	Dell
EMC	FalconStor	Fujitsu
H3C	Hewlett Packard Enterprise	Huawei
IBM	Oracle	Quantum
Quest - formerly Dell	SEPATON	Spectra Logic
Sun		

NetBackup Hardware Compatibility Documentation:

[NetBackup Enterprise Server and Server 7.7 - 7.7.x Hardware Compatibility List \(last updated on April 7, 2017\)](#)

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NDMP Devices Compatibility List for Media Server

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NDMP Devices

NDMP device support information is listed below, organized by vendor. The tables provide information on the versions of software tested, supported connection methods and functionality, and other important notes about the hardware and its compatibility.

For information about Operating Systems supported with NDMP, see the NDMP column in the NetBackup Server section for each OS platform in the NetBackup Enterprise Server and Server 7.7 - 7.7.x OS Software Compatibility List at <http://www.veritas.com/docs/000025229>.

For NetBackup for NDMP vendor-specific configuration information, refer to Article <http://www.veritas.com/docs/000027113>.

Minor ("double-dot") versions of the software listed in the tables below are also supported. (Example: "v5.0" means versions v5.0.1, v5.0.2, etc. are also supported.)

IPv6 is supported with NetBackup 7.7 and later.

64-bit inode numbers are supported with NetBackup 7.7 and later.

Wildcard characters can be used in regular expressions or the directive ALL_FILESYSTEMS to specify path names in NDMP policy backup selections. For more information on the use of wildcard characters, see the Veritas NetBackup for NDMP Administrator's Guide.

NDMP Devices - Connection Methods

The following table describes the supported NDMP connection methods.

Connection Method	Description
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Direct-attach	Data travels from disk to a tape device on the same NDMP host, or from disk to tape device on a SAN. Backup data is NOT sent over local network. NOTE: The tape drives must be in NDMP-type storage units.
Remote	Data travels from the NDMP host, across the local network to a NetBackup media server, to a storage unit connected to the NetBackup media server.
3-way	Data travels from disk on an NDMP host to a tape device on another NDMP host. Backup data is sent over the local network. NOTE: The tape drives must be in NDMP-type storage units.

NDMP Devices - Vendor Compatibility

Contents (for details click on the checkbox)

Data Domain	Dell	EMC
Hewlett Packard Enterprise	Hitachi	Huawei
IBM	Imation	Isilon
Mirapoint	NEC	NetApp
Nexenta	Oracle	Stratus Technologies

NetBackup Hardware Compatibility Documentation:

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Tape Libraries Compatibility List for Media Server

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Tape Libraries

Tape library support information is listed below. This information is organized by vendor and provides information on the inquiry string (vendor ID + product ID), the method(s) of controlling the robot, and any other important notes about the hardware and its compatibility.

Tape Libraries - Considerations

Subject	Notes
Support assumptions	<p>For details on supported operating systems, please refer to the NetBackup Enterprise Server and Server 7.7 - 7.7.x OS Software Compatibility List at http://www.veritas.com/docs/000025229.</p> <ol style="list-style-type: none">1. The tables in this section show robotic support only, not tape drive support. Refer to the Tape Drives section of this document to ensure that the specific drive used in the library is supported on the desired OS platform(s). The library vendor must also support the library and drive combination.2. Firmware versions are not listed in this section. Veritas recommends using the most recent version of firmware available when you configure the library with NetBackup. When a minimum firmware version is required, it will be listed in the Notes column. If a firmware version is causing a problem, Veritas will work with the hardware vendor to resolve the problem. Veritas and most hardware vendors listed are members of TSANet.3. API robot types (ACS and TLH) are supported on NetBackup Enterprise Server, and not supported on NetBackup Server.4. For API robot types, the "Inquiry String" column is intentionally left blank.5. Where support is shown for "Red Hat Enterprise Linux" it also means that CentOS and Oracle Linux are supported.6. Where support is shown for "SUSE Linux Enterprise Server" it also means that Novell Open Enterprise Server (Linux) is supported.
Configuration considerations	<ol style="list-style-type: none">1. Library partitioning is supported unless noted otherwise.2. On IBM AIX, use of the IBM Atape driver is required with IBM tape libraries. The Atape driver's multi-path feature must be disabled.

	3. NetBackup has been supporting non-IBM tape libraries (robotics) with an IBM AIX robotic control host using the "ovpass" driver for many years. Changes and new functionality in AIX 6.1 and 7.1 have resulted in some issues with ovpass and an inability to support new functionality such as dynamic tracking and controlling SAS robots. Therefore, Veritas is no longer supporting the ovpass driver. Existing customers may continue to use ovpass as they are today, but if issues are encountered Veritas will not be able to resolve them. Veritas recommends using another OS platform as the robotic control host.
Operating system support added	1. AIX 7.2 is supported as a media server with NetBackup 7.7.2 and later.
Operating system support dropped	1. SUSE Linux Enterprise Server 10 is not supported as a media server with NetBackup 7.7.1 and later.

Tape Libraries - NetBackup Robot Types

These tables list operating system platform support for each NetBackup robotic daemon type. For supported OS versions, refer to the NetBackup Enterprise Server and Server 7.7 - 7.7.x OS Software Compatibility List at <http://www.veritas.com/docs/000025229>.

For more information on configuring each robot type, see the NetBackup Device Configuration Guide.

Contents (for details click on the checkbox)

ACS - Oracle Automated Cartridge System TLD - Tape Library DLT

TLH - IBM Automated Tape Library (ATL)

Tape Libraries - Legend

The following table describes terms and symbols used in the Tape Libraries - Vendor Compatibility tables.

Tape Libraries - Legend

Value	Meaning
Multi LUN	The device is a Multi-LUN based library.
SCSI ID	The device is a SCSI ID based library.
^	Character used to denote a space in the INQUIRY STRING.

Tape Libraries - Vendor Compatibility

Contents (for details click on the checkbox)

ADIC	Dell	Fujitsu
H3C	Hewlett Packard Enterprise	Hitachi
IBM	NEC	Oracle
Overland Storage	Qualstar	Quantum
Spectra Logic	Sun	Tandberg

NetBackup Hardware Compatibility Documentation:

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[NetBackup Hardware Compatibility Documentation: Device Mappings Files](#)

Tape Drives Compatibility List for Media Server

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Tape Drives

Tape drive support information is listed below, organized by vendor. Under each vendor there are separate tables showing compatibility with NetBackup Appliances, with Linux/Windows operating systems and with UNIX operating systems. These tables provide information on the operating system versions supported by the drive, inquiry string (vendor ID + product ID), and other important notes about the hardware and its compatibility.

Tape Drives - Considerations

Subject	Notes
Support assumptions	For details on supported operating systems, please refer to the NetBackup Enterprise Server and Server 7.7 - 7.7.x OS Software Compatibility List at http://www.veritas.com/docs/000025229 .

1. To ensure support, a device (both drive and library where applicable) must be supported by Veritas, the device manufacturer, and the operating system vendor.
2. Firmware versions are not listed in this section. Veritas recommends using the most recent version of firmware available when you configure the drive with NetBackup. When a minimum firmware version is required, it will be listed in the footnotes. If a firmware version is causing a problem, Veritas will work with the hardware vendor to resolve the problem. Veritas and most hardware vendors listed are members of TSANet.
3. Where support is shown for "Windows Server 2008 Enterprise Edition" it also means that the other editions of Windows Server 2008 and Windows Server 2008 R2 are supported. Only the x64 (64-bit) editions of the OS are supported as a NetBackup Media Server. Server Core Installation Option is not supported as a NetBackup Media Server.
4. Where support is shown for "Windows Server 2012 Datacenter" it also means that the other editions of Windows Server 2012, Windows Storage Server 2012, Windows Server 2012 R2, and Windows Storage Server 2012 R2 are supported.
5. Where support is shown for "Red Hat Enterprise Linux 5 on x86-64" it also means that CentOS 5 and Oracle Linux 5 are supported.
6. Where support is shown for "Red Hat Enterprise Linux 6 on x86-64" it also means that CentOS 6 and Oracle Linux 6 are supported.
7. Where support is shown for "Red Hat Enterprise Linux 7 on x86-64" it also means that CentOS 7 and Oracle Linux 7 are supported.
8. Where support is shown for "SUSE Linux Enterprise Server" it also means that Novell Open Enterprise Server (Linux) is supported.
9. The "ULTRIUM-TD" and the "ULT3580-TD" inquiry strings are interchangeable (both are supported), unless noted otherwise.

	<p>The "ULTRIUM-HH" and the "ULT3580-HH" inquiry strings are interchangeable (both are supported), unless noted otherwise.</p> <p>10. Backup Exec Tape Reader is not supported in NetBackup 7.7 and later releases.</p>
Vendor support considerations	<p>1. The list of attributes for each tape drive is based on the most recent drive testing. Check with the device manufacturer to determine the firmware version at which support for a specific attribute was added.</p>
Configuration considerations	<p>1. Veritas recommends the use of SCSI Persistent Reserve (SPR) whenever all the hardware in your device path supports it. Refer to the NetBackup Administrator's Guide for more information on SPR and the types of configurations where SPR may be more effective than the default SPC-2 SCSI reserve and release method.</p> <p>2. Only tape drives listed in the tables below are supported. Other tape drive models are not supported even if the Virtual Tape Library section shows an emulated version of the drive is supported with NetBackup.</p> <p>3. For Solaris 10, Veritas recommends running Update 6 (137137-09 for SPARC, 137138-09 for x64) or later.</p>
OS tape driver considerations	<p>1. Except where noted, Veritas recommends the use of the operating system's native tape drivers.</p>
Operational considerations	<p>1. Tape Alert functionality is supported by all drives, unless noted otherwise.</p>
Operating system support added	<p>1. AIX 7.2 is supported as a media server with NetBackup 7.7.2 and later.</p>
Operating system support dropped	<p>1. SUSE Linux Enterprise Server 10 is not supported as a media server with NetBackup 7.7.1 and later.</p>

Tape Drives - Attributes

The following table lists attributes supported with Tape Drives and indicates the NetBackup 7.7.x version at which that attribute was first supported.

Attribute	Abbreviation	NetBackup Release Supported
SCSI Reservation	SResv	7.7 GA
SCSI Persistent Reservation	SPR	7.7 GA
Write Once, Read Many	WORM	7.7 GA
NetBackup Encryption Key Management Service	KMS	7.7 GA
Append-only mode	Append	7.7 GA

Tape Drives - Vendor Compatibility

Contents (for details click on the checkbox)

Dell	Hewlett Packard Enterprise	IBM
Oracle	Quantum	Sun

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[NetBackup Hardware Compatibility Documentation: Device Mappings Files](#)

Fibre Transport Media Server HBAs Compatibility List for Media Server

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This feature is not supported on this platform.

NetBackup Hardware Compatibility Documentation:

[NetBackup Enterprise Server and Server 7.7 - 7.7.x Hardware Compatibility List \(last updated on April 7, 2017\)](#)

[NetBackup Hardware Compatibility Documentation: Introduction](#)

Encryption and Security Solutions for Media Server

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Encryption and Security Solutions

Encryption and security solution support information is listed below, organized by solution type.

The following listings do not include specific operating system compatibility. For a list of supported NetBackup Media Server platforms, refer to the NetBackup Enterprise Server and Server 7.7 - 7.7.x OS Software Compatibility List at <http://www.veritas.com/docs/000025229>.

NetBackup Key Management Service (KMS)

The NetBackup Key Management Service (KMS) feature is intended to support any tape drive with built-in hardware encryption capability that conforms to the SCSI T10 encryption standard. Each drive model listed in the following table has been tested in Veritas labs to verify that it works with NetBackup correctly, so Veritas recommends using only listed drives with the KMS feature. Refer to the [Tape Drives](#) section in this document for the list of platforms and interfaces on which each of the following drives is supported.

Note: KMS is supported on any tape library supported by NetBackup, provided the library vendor supports that library with any of the encryption-capable drives listed in the table below.

NetBackup KMS - Supported Devices

Manufacturer	Model	Notes
Dell	PowerVault LTO4-120	
Dell	PowerVault LTO5-140	
Hewlett Packard Enterprise	Ultrium 1760 LTO4	
Hewlett Packard Enterprise	Ultrium 1840 LTO4	
Hewlett Packard Enterprise	Ultrium 3000 LTO5	
Hewlett Packard Enterprise	Ultrium 3280 LTO5	
Hewlett Packard Enterprise	Ultrium 6250 LTO6	
Hewlett Packard Enterprise	Ultrium 6650 LTO6	
Hewlett Packard Enterprise	Ultrium 15000 LTO7	
Hewlett Packard Enterprise	Ultrium 15750 LTO7	
IBM	System Storage TS1040 Ultrium 4	Requires firmware version 7BG2 or later.

Veritas Services and Operations Readiness Tools (SORT)

IBM	System Storage TS1050 Ultrium 5	
IBM	System Storage TS1060 Ultrium 6	
IBM	System Storage TS1070 Ultrium 7	
IBM	System Storage TS1120 (3592 Model E05)	Requires firmware version 1C15 or later.
IBM	System Storage TS1130 (3592 Model E06)	Requires firmware version 2480 or later.
IBM	System Storage TS1140 (3592 Model E07)	
IBM	System Storage TS1150 (3592 Model E08)	
IBM	System Storage TS2240 Ultrium 4 Half Height	
IBM	System Storage TS2250 Ultrium 5 Half Height	
IBM	System Storage TS2260 Ultrium 6 Half Height	
IBM	System Storage TS2270 Ultrium 7 Half Height	
IBM	System Storage TS2340 Ultrium 4	Requires firmware version 7BG2 or later.
IBM	System Storage TS2350 Ultrium 5	
IBM	System Storage TS2360 Ultrium 6	
IBM	System Storage TS2370 Ultrium 7	
IBM	Ultrium 4 (OEM)	Requires firmware version 7BG2 or later.
IBM	Ultrium 4 Half Height (OEM)	
IBM	Ultrium 5 (OEM)	
IBM	Ultrium 5 Half Height (OEM)	
IBM	Ultrium 6 (OEM)	
IBM	Ultrium 6 Half Height (OEM)	
IBM	Ultrium 7 (OEM)	
IBM	Ultrium 7 Half Height (OEM)	

Oracle StorageTek	T10000B	Requires firmware version 1.41.211 or later.
Oracle StorageTek	T10000C	Requires firmware version 1.53.311 or later. The drive needs manual setup including obtaining the data path key management (DPKM) encryption license from Oracle.
Oracle StorageTek	T10000D	
Quantum	LTO-4 HH	Requires firmware version 2190 or later.
Quantum	LTO-5 FH	
Quantum	LTO-5 HH	
Quantum	LTO-6 HH	
Quantum	LTO-7 HH	
Tandberg	HH LTO 5	

NetBackup Hardware Compatibility Documentation:

[NetBackup Enterprise Server and Server 7.7 - 7.7.x Hardware Compatibility List \(last updated on April 7, 2017\)](#)

[NetBackup Hardware Compatibility Documentation: Introduction](#)

NetBackup Media Server Encryption Option (MSEO)

Operating system requirements are the same for both MSEO key management server and media server installations.

The Media Server Encryption Option and its documentation is available for download at <https://symantec.flexnetoperations.com/>.

Where support is shown for "Windows Server 2008" it is implied that Standard Edition, Enterprise Edition, Datacenter Edition, and Web Edition are supported.

Where support is shown for "Windows Server 2008 R2" it is implied that Standard Edition, Enterprise Edition, Datacenter Edition, and Web Edition are supported.

Where support is shown for "Windows Server 2012" it is implied that Standard Edition, Datacenter Edition, Essentials Edition, and Foundation Edition are supported.

Media Server OS	CPU Architecture	Minimum NetBackup Level	Minimum MSEO Level
Windows 2012 R2 and all subsequent updates	x86-64	7.6.0.4	7.6.1
Windows 2012 and all subsequent updates	x86-64	7.6	7.6

NetBackup Software Compatibility Documentation:

[NetBackup Enterprise Server and Server 7.7 - 7.7.x OS Software Compatibility List \(last updated on April 18, 2017\)](#)

[7.7 - 7.7.x OS Software Compatibility List Updates](#)

NetBackup Media Server Encryption Option (MSEO)

The NetBackup Media Server Encryption Option (MSEO) feature supports the tape drive models listed in the following table. For a list of NetBackup Media Server platforms that support MSEO, refer to the NetBackup Enterprise Server and Server 7.7 - 7.7.x OS Software Compatibility List at <http://www.veritas.com/docs/000025229>. Refer to the [Tape Drives](#) section in this document for the list of platforms on which each of the following drives is supported.

NetBackup MSEO - Supported Devices

Manufacturer	Models	Interface	Notes
Dell	PowerVault LTO5-140 FH	Fibre Channel	
Dell	PV110T LTO2, PV110T SDLT320	SCSI	
Hewlett Packard Enterprise	Ultrium 460 LTO2, Ultrium 960 LTO3, Ultrium 1760 LTO4, Ultrium 1840 LTO4, Ultrium 3000 LTO5, Ultrium 3280 LTO5, Ultrium 6250 LTO6, Ultrium 6650 LTO6	Fibre Channel	
Hewlett Packard Enterprise	SDLT600, Ultrium 448 LTO2, Ultrium 460 LTO2, Ultrium 920 LTO3, Ultrium 960 LTO3,	SCSI	

Veritas Services and Operations Readiness Tools (SORT)

	<p>Ultrium 1760 LTO4, Ultrium 1840 LTO4</p>		
<p>IBM</p>	<p>System Storage TS1030 Ultrium 3, System Storage TS1040 Ultrium 4, System Storage TS1050 Ultrium 5, System Storage TS1060 Ultrium 6, System Storage TS1120 (3592 Model E05), System Storage TS2340 Ultrium 4, System Storage TS2350 Ultrium 5, System Storage TS2360 Ultrium 6, TotalStorage 3580 Ultrium 2, TotalStorage 3580 Ultrium 3, TotalStorage 3590E Series, TotalStorage 3590H Series, TotalStorage 3592 Model J1A, Ultrium 2 (OEM), Ultrium 3 (OEM), Ultrium 4 (OEM), Ultrium 5 (OEM), Ultrium 6 (OEM)</p>	<p>Fibre Channel</p>	
<p>IBM</p>	<p>System Storage TS2230 Ultrium 3 Half Height, System Storage TS2340 Ultrium 4, TotalStorage 3580 Ultrium 2, TotalStorage 3580 Ultrium 3, TotalStorage 3590E Series, TotalStorage 3590H Series, Ultrium 2 (OEM), Ultrium 3 (OEM), Ultrium 4 (OEM)</p>	<p>SCSI</p>	
<p>Oracle</p>	<p>T10000D</p>	<p>Fibre Channel</p>	<p>Refer to the "Managing Tape Blocks" section of the NetBackup MSEO</p>

			Administrator's Guide for maximum blocksize considerations with these drives.
Quantum	LTO-3 HH, SDLT 600	Fibre Channel	
Quantum	LTO-2, LTO-2 HH, LTO-3, LTO-3 HH, SDLT 320, SDLT 600	SCSI	
Sun	StorEdge LTO3	Fibre Channel	
Sun	LTO3 HH, StorEdge LTO2, StorEdge LTO3, StorEdge SDLT 320	SCSI	
Tandberg	SDLT 320	SCSI	

NetBackup Hardware Compatibility Documentation:

[NetBackup Enterprise Server and Server 7.7 - 7.7.x Hardware Compatibility List \(last updated on April 7, 2017\)](#)

[NetBackup Hardware Compatibility Documentation: Introduction](#)

Third Party Encryption Solutions for Media Server

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Third-Party Encryption Solutions

Support information for vendor-supplied encryption solutions is listed below, organized by vendor. Under each vendor there is a table showing tested solutions, firmware versions tested with that solution, and other important notes about the solution and its compatibility.

The firmware listed in these tables is the firmware that has been tested. Firmware versions newer than those listed are also supported.

Support for specific storage devices such as tape drives, libraries, and virtual devices is not listed in this section. NetBackup will support any hardware that is supported both by the encryption provider and Veritas. Please refer to the other sections of this document for Veritas' support of these storage devices.

Please Note:

The firmware listed on this page is the firmware that has been tested. All firmware versions newer than what is listed are also supported.

Third-Party Encryption Solutions - Vendor Compatibility

Contents (for details click on the checkbox)

Brocade	Cisco Systems	Decru
Fujitsu	Hewlett Packard Enterprise	IBM
NEC	Quantum	SafeNet
Sun StorageTek	Thales (NeoScale)	

NetBackup Hardware Compatibility Documentation:

[NetBackup Enterprise Server and Server 7.7 - 7.7.x Hardware Compatibility List \(last updated on April 7, 2017\)](#)

[NetBackup Hardware Compatibility Documentation: Introduction](#)

SAN Media Server/SAN Client/FT Media Server for Media Server and Client

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- Unless otherwise noted the minimum NetBackup level for SAN Client support is NetBackup 6.5 GA.

SAN style backups via SAN Media Server

SAN media servers are NetBackup media servers that back up their own data. SAN media servers cannot back up data that resides on other clients. SAN media servers are useful for certain situations. For example, a SAN media server is useful if the data volume consumes so much network bandwidth that it affects your network negatively.

- Enables LAN-free data protection with high performance access to shared resources.
- Can share tape resources with NetBackup Master and Media Servers.

- Can only back itself up, not other clients.
- Software is installed stand-alone on each cluster node and linked to the virtual host via an application cluster.
- When you define a backup policy for a SAN media server, add only the SAN media server as the client.
- The NetBackup Shared Storage Option is able to use NetBackup SAN media servers.
- There is no platform restriction regarding SAN Media Servers - any Media Server can be a SAN Media Server. The only difference is in the license authentication mechanism. Application and DB Agents are supported with the SAN Media Server.

SAN style backups via SAN Client

A NetBackup SAN client is a NetBackup client on which the Fibre Transport service is activated. The SAN client is similar to the SAN media server that is used for the Shared Storage Option; it backs up its own data. However, the SAN client is based on the smaller NetBackup client installation package, so it has fewer administration requirements and uses fewer system resources.

- It connects to a NetBackup media server over Fibre Channel.
- The NetBackup SAN Client Fibre Transport Service manages the connectivity and the data transfers for the FT pipe on the SAN clients. The SAN client FT service also discovers FT target mode devices on the NetBackup media servers and notifies the FT Service Manager about them.
- Requires SAN connectivity with a Media Server running Fibre Transport Services (reference additional information below in regards to the FT Media Server).

SAN client does not support the following types of backup:

- SharePoint
- Enterprise Vault
- Exchange DAG or CCR backups through a passive node of an Exchange cluster
- All other application and database agents are supported with the SAN Client.

Note: SAN client does support the use of FlashBackup but all restores from FlashBackup backups will use the LAN connection, not the SAN connection.

SAN client and NetBackup Deduplication

- SAN Client is a NetBackup optional feature that provides high speed backups and restores of NetBackup clients. Fibre Transport is the name of the NetBackup high-speed data transport method that is part of the SAN Client feature. The backup and restore traffic occurs over a SAN.
- SAN clients can be used with the deduplication option; however, the deduplication must occur on the media server, not the client. Configure the media server to be both a deduplication storage server (or load balancing server) and an FT media server. The SAN client backups are then sent over the SAN to the deduplication server/FT media server host. At that media server, the backup stream is deduplicated.

- Do not enable client deduplication on SAN Clients. The data processing for deduplication is incompatible with the high-speed transport method of Fibre Transport. Client-side deduplication relies on two-way communication over the LAN with the media server. A SAN client streams the data to the FT media server at a high rate over the SAN.

FT Media Server

A NetBackup FT media server is a NetBackup media server on which the Fibre Transport services are activated. NetBackup FT media servers accept connections from SAN clients and send data to the storage units. The host bus adapters (HBAs) that accept connections from the SAN clients use a special NetBackup target mode driver to process FT traffic. The media server FT service controls data flow, processes SCSI commands, and manages data buffers for the server side of the FT pipe. It also manages the target mode driver for the host bus adaptors.

Reference the HCL document Fibre Transport Media Server HBAs section for supported Operating Systems and HBAs. <http://www.veritas.com/docs/000025228>

NetBackup Software Compatibility Documentation:

[NetBackup Enterprise Server and Server 7.7 - 7.7.x OS Software Compatibility List \(last updated on April 18, 2017\)](#)
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Infrastructure Used for Testing for Media Server

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Infrastructure Used for Testing

The NetBackup Shared Storage Option (SSO) hardware support model for Storage Area Network (SAN) components is an open model. In other words, all Fibre Channel over Ethernet (FCoE) converged network adapters (CNA), Fibre Channel (FC) host bus adapters (HBA), switches, bridges, and routers are supported in a SAN environment. This means that if a FCoE or FC component is causing a problem, Veritas will work with the component vendor in an attempt to resolve the problem, but resolution is not guaranteed. Veritas and most hardware vendors listed are members of TSANet.

Infrastructure - Considerations

Subject	Notes
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Vendor support considerations	1. To ensure compatibility, the device manufacturers and the operating system vendor must support the combination of SAN components.
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CNAs

This list of SAN components represents equipment that has been used during NetBackup qualification testing of devices listed in previous sections of this document. It is not intended to be a list of supported components.

CNAs - Considerations

Subject	Notes
Support assumptions	<p>For details on supported operating systems, please refer to the NetBackup Enterprise Server and Server 7.7 - 7.7.x OS Software Compatibility List at http://www.veritas.com/docs/000025229.</p> <ol style="list-style-type: none">1. Where support is shown for "Windows Server 2008 Enterprise Edition" it also means that the other editions of Windows Server 2008 and Windows Server 2008 R2 are supported. Only the x64 (64-bit) editions of the OS are supported as a NetBackup Media Server. Server Core Installation Option is not supported as a NetBackup Media Server.2. Where support is shown for "Windows Server 2012 Datacenter" it also means that the other editions of Windows Server 2012, Windows Storage Server 2012, Windows Server 2012 R2, and Windows Storage Server 2012 R2 are supported.3. Where support is shown for "Red Hat Enterprise Linux 5 on x86-64" it also means that CentOS 5 and Oracle Linux 5 are supported.4. Where support is shown for "Red Hat Enterprise Linux 6 on x86-64" it also means that CentOS 6 and Oracle Linux 6 are supported.5. Where support is shown for "Red Hat Enterprise Linux 7 on x86-64" it also means that CentOS 7 and Oracle Linux 7 are supported.

	6. Where support is shown for "SUSE Linux Enterprise Server" it also means that Novell Open Enterprise Server (Linux) is supported.
Vendor support considerations	1. Consult the hardware vendor's web site for current firmware and driver updates (where applicable).
Configuration considerations	1. All like CNAs within a SAN should use the same firmware, BIOS and driver revision as recommended by CNA vendors.
Operating system support added	1. AIX 7.2 is supported as a media server with NetBackup 7.7.2 and later.
Operating system support dropped	1. SUSE Linux Enterprise Server 10 is not supported as a media server with NetBackup 7.7.1 and later.

Contents (for details click on the checkbox)

Hewlett Packard Enterprise

HBAs

This list of SAN components represents equipment that has been used during NetBackup qualification testing of devices listed in previous sections of this document. It is not intended to be a list of supported components.

HBAs - Considerations

Subject	Notes
Support assumptions	<p>For details on supported operating systems, please refer to the NetBackup Enterprise Server and Server 7.7 - 7.7.x OS Software Compatibility List at http://www.veritas.com/docs/000025229.</p> <p>1. Where support is shown for "Windows Server 2008 Enterprise Edition" it also means that the other editions of Windows Server 2008 and Windows Server 2008 R2 are supported. Only the x64 (64-bit) editions of the OS are supported as a NetBackup Media Server. Server Core Installation Option is not supported as a NetBackup Media Server.</p> <p>2. Where support is shown for "Windows Server 2012 Datacenter" it also means that the other editions of Windows</p>

	<p>Server 2012, Windows Storage Server 2012, Windows Server 2012 R2, and Windows Storage Server 2012 R2 are supported.</p> <p>3. Where support is shown for "Red Hat Enterprise Linux 5 on x86-64" it also means that CentOS 5 and Oracle Linux 5 are supported.</p> <p>4. Where support is shown for "Red Hat Enterprise Linux 6 on x86-64" it also means that CentOS 6 and Oracle Linux 6 are supported.</p> <p>5. Where support is shown for "Red Hat Enterprise Linux 7 on x86-64" it also means that CentOS 7 and Oracle Linux 7 are supported.</p> <p>6. Where support is shown for "SUSE Linux Enterprise Server" it also means that Novell Open Enterprise Server (Linux) is supported.</p>
Vendor support considerations	<p>1. All like HBAs within a SAN should use the same firmware, BIOS and driver revision as recommended by HBA vendors.</p> <p>2. Consult the hardware vendor's web site for current firmware and driver updates (where applicable).</p>
Operating system support added	<p>1. AIX 7.2 is supported as a media server with NetBackup 7.7.2 and later.</p>
Operating system support dropped	<p>1. SUSE Linux Enterprise Server 10 is not supported as a media server with NetBackup 7.7.1 and later.</p>

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Brocade
QLogic

Emulex

Hewlett Packard Enterprise

Bridges/Routers

This list of SAN components represents equipment that has been used during NetBackup qualification testing of devices listed in previous sections of this document. It is not intended to be a list of supported components.

Infrastructure - Considerations

Subject	Notes
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Vendor support considerations	<ol style="list-style-type: none">1. To ensure compatibility, the device manufacturers and the operating system vendor must support the combination of SAN components.2. Consult the hardware vendor's web site for current firmware.
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Contents (for details click on the checkbox)

Bridges/Routers

Switches

This list of SAN components represents equipment that has been used during NetBackup qualification testing of devices listed in previous sections of this document. It is not intended to be a list of supported components.

Infrastructure - Considerations

Subject	Notes
Vendor support considerations	<ol style="list-style-type: none">1. To ensure compatibility, the device manufacturers and the operating system vendor must support the combination of SAN components.2. Consult the hardware vendor's web site for current firmware.

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Switches

NetBackup Hardware Compatibility Documentation:

[NetBackup Enterprise Server and Server 7.7 - 7.7.x Hardware Compatibility List \(last updated on April 7, 2017\)](#)

[NetBackup Hardware Compatibility Documentation: Introduction](#)

Software Compatibility List (SCL) for Client

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NetBackup Client is supported on Microsoft Windows Server 2012 Editions: Foundation, Essentials, Standard, and Datacenter, and with "core" option enabled or disabled. NetBackup supported functionality is listed in the tables below. 64-bit OS on Intel 64 and AMD64 architectures is supported.

NetBackup Master and Media Server are supported on Microsoft Windows Server 2012 Editions: Foundation, Essentials, Standard, and Datacenter, and with "core" option enabled or disabled. NetBackup supported functionality is listed in the tables below. 64-bit OS on Intel 64 and AMD64 architectures is supported.

Reference the MSFT web site for information on Editions.

NetBackup Client and Media Server are supported on Microsoft Storage Server 2012 and 2012 R2.

Windows Service Packs (SP) are supported by default, unless noted otherwise below.

OS	CPU Architecture	OS Bits	NetBackup Client	NetBackup Bits	BMR Client/Boot Server	NBAC	SAN Client	Minimum NetBackup Level
Windows Server 2012 ^[1]	x86-64	64	Y	64	Y ^[2]	Y	Y	7.5.0.6
Windows Server 2012 R2 ^[1]	x86-64	64	Y	64	Y ^[3]	Y	Y	7.5.0.6

Footnotes

1. Refer to File System Compatibility table for support details regarding the Windows 2012 NTFS data deduplication feature, and the ReFS file system.
2. BMR Client/Boot Server support began in NetBackup 7.6.0.2.
3. BMR Client/Boot Server support began in NetBackup 7.6.0.3.

NetBackup Software Compatibility Documentation:

[NetBackup Enterprise Server and Server 7.7 - 7.7.x OS Software Compatibility List \(last updated on April 18, 2017\)](#)

[7.7 - 7.7.x OS Software Compatibility List Updates](#)

[Operating Systems Compatibility List General Information](#)

NetBackup Binary Size

Approximate binary size of the NetBackup client software for an initial install.

OS - All Versions	CPU Architecture	32-bit client	64-bit client	Notes
Windows	x86-64		1056MB	Covers all compatible Windows x64 platforms

Temporary Disk Space Requirement for Upgrades

During an upgrade of NetBackup, 500 MBs of temporary disk space is required on the drive where Windows is installed.

NetBackup Documentation References:

[NetBackup 7.7.3 Release Notes](#)

Bare Metal Restore File System/Volume Manager Support for Client

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Listed in the table below are the available File Systems and Logical Volume Managers compatible with Bare Metal Restore 7.7 through 7.7.x. Support is conditional according to the published notes corresponding to the individual OS platforms.

The table below contains scenarios that have been thoroughly tested with NetBackup. Due to the number of combinations, it is not possible to test all combinations for compatibility. If a particular scenario is not listed, it may work fine, but has not been explicitly tested by Veritas.

Minimum NetBackup Level

The information in this column is the minimum level of NetBackup that must be installed on the BMR Client to support the associated OS platform.

Where support is shown for "Windows Server 2008" or "Windows Server 2008 R2" it is implied that Standard Edition, Enterprise Edition, Datacenter Edition, and Web Edition are supported.

Where support is shown for "Windows Server 2012" or "Windows Server 2012 R2" it is implied that Foundation Edition, Essentials Edition, Standard Edition, and Datacenter Edition are supported.

OS	File Systems	Volume Managers	Striping, Mirroring, RAID	Minimum NetBackup Level	Notes
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Windows Server 2012 x64 (64-bit)	FAT32, NTFS, ReFS	Windows LDM	All	7.6.0.2	
Windows Server 2012 R2 x64 (64-bit)	FAT32, NTFS, ReFS	Windows LDM	All	7.6.0.3	

Acronyms

- LDM - Logical Disk Manager
- LVM - Logical Volume Manager
- SFW - Storage Foundation for Windows
- SRT - Shared Resource Tool
- SVM - Solaris Volume Manager
- VxFS - Veritas File System
- VxVM - Veritas Volume Manager

NetBackup Software Compatibility Documentation:

- [NetBackup Enterprise Server and Server 7.7 - 7.7.x OS Software Compatibility List \(last updated on April 18, 2017\)](#)
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Client Selections for Backup Policies for Client

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The information in the Client Selection column of the table below is the client type that should be selected when installing NetBackup as a client on the Operating System/Version and Architecture listed in this table.

Where support is shown for "Windows Server 2008" or "Windows Server 2008 R2" it is implied that Standard Edition, Enterprise Edition, Datacenter Edition, and Web Edition are supported.

Where support is shown for "Windows Server 2012", "Windows Server 2012 R2" or "Windows Server 2016" it is implied that Standard Edition, Datacenter Edition, Essentials Edition, and Foundation Edition are supported.

OS	CPU Architecture	NetBackup 7.7 Client Selection
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Windows Server 2012 and R2	x86-64	Windows-x64,Windows
Windows Storage Server 2012 and R2	x86-64	Windows-x64,Windows

NetBackup Software Compatibility Documentation:

[NetBackup Enterprise Server and Server 7.7 - 7.7.x OS Software Compatibility List \(last updated on April 18, 2017\)](#)

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Deduplication Supported Operating Systems for Client

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If you are looking for information regarding PureDisk support, and not media server deduplication, reference article <http://www.veritas.com/docs/000008731>

For further details on recommended hardware reference NetBackup Deduplication: Additional Usage Information: <http://www.veritas.com/docs/000041111> .

Where support is shown for "Windows Server 2008" or "Windows Server 2008 R2" it is implied that Standard Edition, Enterprise Edition, Datacenter Edition, and Web Edition are supported.

Where support is shown for "Windows Server 2012", or "Windows Server 2012 R2" it is implied that Foundation Edition, Essentials Edition, Standard Edition, and Datacenter Edition are supported.

Media Server Deduplication (MSDP) is supported in an Infrastructure as a Service (IaaS) environment on any cloud platform that meets minimum requirements. For additional details on minimum and recommended configurations see NetBackup Media Server Deduplication (MSDP) in the Cloud https://www.veritas.com/support/en_US/article.000004584.

OS	CPU Architecture	Client Deduplication	Minimum NetBackup Level
Windows Server 2012 R2 ^[1]	x86-64	Yes	7.6.0.3
Windows Server 2012 ^[1]	x86-64	Yes	7.6.0.1

Footnotes

1. See the File System Compatibility table for support details regarding the Windows 2012 NTFS data deduplication feature, and the ReFS file system.

NetBackup Software Compatibility Documentation:

[NetBackup Enterprise Server and Server 7.7 - 7.7.x OS Software Compatibility List \(last updated on April 18, 2017\)](#)

[7.7 - 7.7.x OS Software Compatibility List Updates](#)

Database and Application Agent Compatibility for Client

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About this document: This Software Compatibility List (SCL) document contains information for Veritas NetBackup 7.7 through 7.7.x. It covers Database and Application Agents that are supported on specific Operating Systems and CPU Architectures. It is divided into bookmarks on the left that can be expanded.

Other NetBackup Compatibility Lists: Reference Article <http://www.veritas.com/docs/000033647> for links to all other NetBackup compatibility lists.

Database and application patch support: Major versions of database software have been qualified in Veritas Labs and are listed in the tables below. NetBackup supports minor versions, service packs, and patches of database software unless otherwise noted, with the exception of Microsoft Exchange, Microsoft SharePoint and Microsoft SQL Server.

Linux support: For Linux distributions shown in the tables below, NetBackup is supported on all "editions" and on all vendor GA updates (n.1, n.2, etc.) or service packs (SP1, SP2, etc.) unless otherwise footnoted in this document or in the NetBackup OS Compatibility List, <http://www.veritas.com/docs/000040842> .

Database Appliances: 3rd party database hardware appliances are supported if the appliance OS/architecture and database software are listed in the Veritas NetBackup OS compatibility list <http://www.veritas.com/docs/000040842> and in the Database and Application Agent compatibility list (this document). For example, some Oracle Exadata and Exalogic models are supported based upon this support statement. Please consult the vendor documentation to identify the embedded software versions.

End of life information: More information is available about certain NetBackup features, functionality, 3rd-party product integration, Veritas product integration, applications, databases, and OS platforms that Veritas intends to replace with newer and improved functionality, or in some cases, discontinue without replacement.

please see the SORT widget titled "NetBackup Future Platform and Feature Plans" at <https://sort.veritas.com/netbackup> .

Database Agents

The sections below contain information that is related to specific database agents and OS platforms.

SAP

The NetBackup SAP Agent protects SAP Oracle environments by integrating with SAP BR*Tools. SAP BR*Tools may have a separate version from the SAP Kernel. Reference Technical Solution 51094 for details <http://www.veritas.com/docs/000033132>. SAP environments based on Microsoft SQL or DB2 databases are supported via the NetBackup Microsoft SQL and DB2 agents respectively.

SAP supports Oracle and MAX-DB base environments.

Windows Server 2008

When using a 32-bit OS on a x64 CPU the DB Agent is supported if the x86 CPU is listed in this compatibility list.

MySQL

MySQL Agent is available from Zmanda <http://www.zmanda.com>. For quotes or any other technical or business questions related to this agent, please contact Zmanda at: symantec@zmanda.com.

PostgreSQL

PostgreSQL Agent is available from Zmanda <http://www.zmanda.com>. For quotes or any other technical or business questions related to this agent, please contact Zmanda at: symantec@zmanda.com.

Contents (for details click on the checkbox)

Enterprise Vault	IBM DB2	IBM Lotus Domino
Microsoft Exchange	Microsoft SharePoint	Microsoft SQL Server
Oracle Database	SAP ASE	SAP MaxDB
SAP Oracle	XBSA Extensible Client	

NetBackup Database and Application Agent Documentation:

[NetBackup 7.7 - 7.7.x Database and Application Agent Compatibility List \(last updated on April 10, 2017\)](#)

[7.7 - 7.7.x Database and Application Agent Software Compatibility List Updates](#)

Snapshot Client - General Information for Client

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Snapshot Client

This section contains Snapshot Client compatibility information for Veritas NetBackup 7.7.x. It covers NetBackup Server (which includes Enterprise Server and Server), Client, and Snapshot Client.

Veritas supports standard unaltered kernel/Operating System levels. Should an issue arise on a revised kernel, Operating System, or virtual system environment, Veritas support may request the recreation of the problem with the standard operating environment distribution.

Veritas Storage Foundation Compatibility

Storage Foundation file system and volume manager are supported as the Snapshot Client stack based on Operating System requirements of the Storage Foundation product. For specific OS compatibility information regarding Storage Foundation, please see the Veritas Operations Readiness Tools (SORT) at <https://sort.veritas.com/>.

FlashBackup policy limitation: The NetBackup FlashBackup policy is not supported on Veritas File System (VxFS) layout versions 8 and beyond, versions 7 and earlier are supported.

Third-Party Products

When a problem may be related to product(s) from a third-party vendor with whom Veritas has a cooperative or collaborative relationship on such product(s), then Veritas will work with that vendor in an attempt to resolve the problem, but resolution is not guaranteed. When Veritas does not have such a support relationship in place with the third-party vendor, or when the vendor ceases to support such product(s), then our ability to support Veritas Licensed Software operating with such vendor's product(s) may be limited, affected, or prevented (and such third party product(s) may cease to be part of Veritas-supported configuration(s)). Veritas support may be limited by the hardware or software vendor due to their support lifecycle. Should a vendor announce End of Support for a product, Veritas support may be limited.

Oracle Agent Support

Oracle ASM Environment is not supported.

Snapshot Client - Considerations

Subject	Notes
Support assumptions	For details on supported operating systems, please refer to the NetBackup Enterprise Server and Server 7.7 - 7.7.x OS Software Compatibility List at http://www.veritas.com/docs/000025229 . 1. Where support is shown for "Windows Server" it also means that the other editions of Windows Server and Windows Storage Server are supported, unless noted otherwise. Windows Server 2008 Core Installation is not supported as a NetBackup Media Server. Windows 2012 Core and 2012 R2 Core are supported as a NetBackup Media Server.

NetBackup Hardware Compatibility Documentation:

[NetBackup Enterprise Server and Server 7.7 - 7.7.x Hardware Compatibility List \(last updated on April 7, 2017\)](#)

[NetBackup Hardware Compatibility Documentation: Introduction](#)

Snapshot Client - Array-based Snapshot Methods for Client

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This feature is not supported on this platform.

NetBackup Hardware Compatibility Documentation:

[NetBackup Enterprise Server and Server 7.7 - 7.7.x Hardware Compatibility List \(last updated on April 7, 2017\)](#)

[NetBackup Hardware Compatibility Documentation: Introduction](#)

Snapshot Client - Software-based Snapshot Methods for Client

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This feature is not supported on this platform.

NetBackup Hardware Compatibility Documentation:

[NetBackup Enterprise Server and Server 7.7 - 7.7.x Hardware Compatibility List \(last updated on April 7, 2017\)](#)

[NetBackup Hardware Compatibility Documentation: Introduction](#)

Snapshot Client - VSS Snapshot Providers Support for Microsoft Windows Considerations for Client

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Subject	Notes
Support assumptions	<ul style="list-style-type: none">- Array vendor tables have been removed from this section as Veritas NetBackup has an open support policy for Microsoft Volume Shadow Copy Service (VSS) snapshots.- Support is implied if an array vendor supplies and actively supports a VSS provider, or when using a Veritas Storage Foundation VxVM provider, or when using the Microsoft Default System provider.- Support includes Local, Alternate Client, FlashBackup-Windows Local, and FlashBackup-Windows Alternate Client snapshot methods.- Support extends to NetBackup application agents, Windows virtual machines using VMware RDM disks or Hyper-V Pass-Thru disks, and NetBackup for Hyper-V backups of VM snapshots.- Snapshot roll back (Snapshot Client Instant Recovery) is not supported, use the copy back method instead.- Consult with your array vendor on VSS provider availability.

NetBackup Hardware Compatibility Documentation:

[NetBackup Enterprise Server and Server 7.7 - 7.7.x Hardware Compatibility List \(last updated on April 7, 2017\)](#)

NetBackup Hardware Compatibility Documentation: Introduction

Encryption and Security Solutions for Client

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NetBackup Client Encryption

NetBackup Client Encryption is compatible with all disk storage units (DSU), tape drives, tape libraries, and virtual tape libraries supported by NetBackup.

Note: Any DSU type supported by NetBackup can be used with client encryption, although encryption prevents deduplication by Media Server Dedupe, OpenStorage devices, or VTLs.

NetBackup Client Encryption is supported on all NetBackup client platforms except NetWare and OpenVMS, and is not supported with BMR or SAN client.

Symantec Security Information Manager

NetBackup Client is supported with Symantec Security Information Manager (SSIM) v4.8 and later.

For more information on SSIM, see https://support.symantec.com/en_US/dpl.52517.html

NetBackup Hardware Compatibility Documentation:

[NetBackup Enterprise Server and Server 7.7 - 7.7.x Hardware Compatibility List \(last updated on April 7, 2017\)](#)

[NetBackup Hardware Compatibility Documentation: Introduction](#)

Active Directory Support for Client

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Active Directory is supported via the standard Windows file system agent when specifying System State:\ or Shadow Copy Components:\. Since it is a part of the standard system components, backup and recovery of Active Directory is supported on all Windows server platforms which NetBackup supports as a client.

Active Directory Granular Restore is a special restore option enabled by a policy selection. This option is also supported on all platforms in which Active Directory is supported by NetBackup.

Where support is shown for "Windows Server 2008 or Windows Server 2008 R2" it is implied that Standard Edition, Enterprise Edition, Datacenter Edition, and Web Edition are supported.

Where support is shown for "Windows Server 2012 or Windows Server 2012 R2" it is implied that Standard Edition, Datacenter Edition, Essentials Edition, and Foundation Edition are supported.

Where support is shown for "Windows Server 2016" it is implied that Standard Edition, Datacenter Edition, Essentials Edition, and Foundation Edition are supported.

In IPV6-enabled NetBackup 7.7 and later environments, Granular Recovery Technology (GRT) is not supported for Active Directory.

Agent	OS	CPU Architecture	OS Bit
Active Directory Granular Restore	Windows Server 2012 R2	x86-64	64
Active Directory Granular Restore	Windows Server 2012	x86-64	64

NetBackup Software Compatibility Documentation:

[NetBackup Enterprise Server and Server 7.7 - 7.7.x OS Software Compatibility List \(last updated on April 18, 2017\)](#)

[7.7 - 7.7.x OS Software Compatibility List Updates](#)

NetBackup supports backing up file data on all POSIX compliant file systems. The table below represents the platform configurations that have been tested for compatibility with ACLs and other extended attributes. Unless otherwise noted in the table below, ACLs and other extended attributes are not supported.

NetBackup has improved its integration with the Veritas File System (VxFS) product to ensure interoperability on all compatible VxFS versions. If you run a VxFS version that is older than VxFS 4.0 then you need to install new VxFS libraries on the client to back up the systems that run VxFS. You can search and download the appropriate VxFS libraries to your system from Patch Central on the Veritas Support Web site. See, <https://sort.veritas.com/patch/finder>.

Note :

- For Linux Operating Systems, the backup and restore of extended attributes set by the chattr command on XFS, ZFS, BTRFS etc. is not supported
- Cross platform restore of extended attributes is not supported.

File System	ACL	Other Extended Attributes or Named Data Streams	Notes / Exceptions
NTFS	Yes	Yes	Regarding the Microsoft Windows Server data deduplication feature: - NTFS deduplication volume may be backed up to any type of storage unit. - Optimized Backup occurs for NTFS deduplication volumes when possible. Per Microsoft design, any restore from Optimized Backup is non-optimized. This means, after restore, files are in non-optimized form until the next optimization is run by the OS schedule. Be sure adequate space is available for restore. - By design, TIR is not supported on NTFS deduplication volumes.

			<ul style="list-style-type: none"> - FlashBackup is not supported with NTFS deduplication volumes.
ReFS	Yes	Yes	<p>The ReFS file system is supported with the following caveats:</p> <ul style="list-style-type: none"> - The ReFS file system is not supported in a virtual environment. - Installing the NetBackup package on an ReFS volume is not supported. - Accelerator is fully supported with the ReFS file system. - Accelerator is supported with the ReFS file system in NetBackup 7.5.0.6, but not with "Change Journal" enabled. - Restoring files backed up from an NTFS file system, to an ReFS file system, is not supported. As a workaround, it is possible to restore to an NTFS file system, remove attributes not supported by ReFS, then copy files to the ReFS file system. - FlashBackup is not supported with the ReFS file system. - MSDP is not supported with the ReFS file system.

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NetBackup OpsCenter Web Browser Requirements

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Web Browser	Versions	Notes
Microsoft Internet Explorer	<ul style="list-style-type: none"> - 7.x, 8.x, 9.0, 10.0, 11.0 - 32-bit and 64-bit 	<ul style="list-style-type: none"> - IE 7.0 and later versions may display a security certificate warning page when you access OpsCenter. Reference "Disabling security certificate warnings permanently from browsers" instructions in the NetBackup OpsCenter Administrator's Guide. - It may not be possible to view reports, jobs, or audit data when exporting from IE 9.0. Alternatively, IE 9.0 may show a "Internet Explorer Cannot Download" error when exporting reports, jobs, or auditing data from OpsCenter. - Reference "Exporting OpsCenter reports or data with IE 9.0" instructions in the NetBackup OpsCenter Administrator's Guide. - Extra steps are required to access the OpsCenter console using Internet Explorer version 7 or 8 on a 32-bit Windows computer. For more information, see "About web browser considerations" in the NetBackup OpsCenter Administrator's Guide. - NetBackup 7.7.2 and later support OpsCenter with IE 11

		- The NetBackup OpsCenter Administrator's Guide and other Guides are available by selecting the appropriate NetBackup version link at http://www.veritas.com/docs/000003214
Mozilla Firefox	<ul style="list-style-type: none"> - 3.0, 3.5.x, 3.6.x, 9.0.1 and above for OpsCenter 7.0 to 7.5. - 15.0 and later versions for OpsCenter 7.6 and later. - 32-bit and 64-bit 	- Mozilla Firefox may display an Untrusted Connection page when you access OpsCenter. Reference "Disabling the Untrusted Connection page in Mozilla Firefox" instructions in the Veritas OpsCenter Administrator's Guide.

NetBackup Software Compatibility Documentation:
[NetBackup Enterprise Server and Server 7.7 - 7.7.x OS Software Compatibility List \(last updated on April 18, 2017\)](#)
[7.7 - 7.7.x OS Software Compatibility List Updates](#)

NetBackup OpsCenter Backup Product Support

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There are two OpsCenter products: Veritas NetBackup OpsCenter and Veritas NetBackup OpsCenter Analytics. OpsCenter does not require any license and is included with the NetBackup Enterprise Server and Server products. OpsCenter provides single deployment configuration and user interface for monitoring, alerting, and reporting functionality. It provides monitoring, management and administration capabilities for NetBackup as well as operational reporting for other products as designated in the following table.

OpsCenter Analytics is the licensed version of OpsCenter. In addition to the features available in the unlicensed OpsCenter version, Analytics offers report customization, chargeback reporting and support for third-party data protection products as designated in the following table. The primary objectives of this product are to help organizations assess their compliance with business standards, e.g., service level agreements, and assist in effective business planning, e.g., future backup requirements via backup trend analysis.

Listed in the table below are the backup and archiving products and versions supported by OpsCenter and OpsCenter Analytics.

Backup Product	Version	Support Level	Analytics License Required
Veritas NetBackup	7.7 and higher versions	All supported NetBackup platforms by Remote Agent. Native OpsCenter agent for Windows 2008 (SP2 and R2) and Solaris 10 and 11.	No
Veritas NetBackup Appliance	See NetBackup Hardware Compatibility List for Appliance support information. http://www.veritas.com/docs/000025228	Data collection happens automatically by NBSL	No
Veritas NetBackup PureDisk	6.2, 6.2.2, 6.5, 6.5.1, 6.5.1.2, 6.6, 6.6.0.1, 6.6.0.2, 6.6.0.3, 6.6.1, 6.6.1.2, 6.6.3a, 6.6.5	PureDisk supported platform (PDOS) by the OpsCenter integrated Agent. You do not need a separate Agent to collect data from PureDisk. You can use the inbuilt Agent of the OpsCenter Server for data collection. To create or configure the data collector, select the Agent that is installed as Integrated Agent.	No

NetBackup Software Compatibility Documentation:
[NetBackup Enterprise Server and Server 7.7 - 7.7.x OS Software Compatibility List \(last updated on April 18, 2017\)](#)
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NetBackup OpsCenter Operating System Requirements

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OpsCenter Analytics has the same Operating System requirements as OpsCenter.

Check the Operating Systems server table for the exact version of NetBackup in which OpsCenter server support started. Veritas Cluster Server (VCS) support for OpsCenter 7.1 Server, OpsCenter 7.5 Server, OpsCenter 7.6 Server and OpsCenter 7.7.1 in cluster mode:

VCS versions 4.3, 5.0 MP3 and 5.1 on Solaris

VCS versions 4.2 RP2, 5.1 and 5.1 SP1 on Windows

Veritas Cluster Server (VCS) support for OpsCenter 7.7.2 Server in cluster mode:

VCS version 6.1 on Windows 2008 R2 SP1 and Windows 2012 R2.

OpsCenter Agent and OpsCenter View Builder installations are not supported in a cluster environment.

32-bit View Builder binaries are used on 64-bit platforms.

OS	CPU Architecture	OpsCenter Server	OpsCenter Agent	OpsCenter View Builder
Windows 2012 R2	x86-64	Yes	Yes	Yes
Windows 2012	x86-64	Yes	Yes	Yes

NetBackup OpsCenter Binary Size

Approximate binary sizes for NetBackup OpsCenter Agent, Server, and ViewBuilder software.

OS - All Versions	CPU Architecture	Agent	Server	ViewBuilder
Windows Server	x86-64	223MB	689MB	199MB

NetBackup OpsCenter Physical Memory Requirement

OS/Version	CPU Architecture	Minimum Memory Requirement
Windows Server 2012	x86-64	8 GB

Software compatibility and release notes documentation is contained in:

[NetBackup Enterprise Server and Server 7.7 - 7.7.x OS Software Compatibility List \(last updated on April 18, 2017\)](#)

[7.7 - 7.7.x OS Software Compatibility List Updates](#)

[NetBackup 7.7.3 Release Notes](#)

The NetBackup Java Administration Console is an interface to configure and manage NetBackup installed on the same machine. The interface can run on any NetBackup Java-capable system.

The Backup Archive and Restore (BAR) console is an interface to the NetBackup client. The Backup, Archive, and Restore utility performs backups and archives for the system on which it is installed and restores for this system and other clients.

For information on how to install the consoles mentioned above reference the NetBackup Installation Guides. And for information on usage reference the NetBackup Administrator's Guides.

The table below is a list of the platforms that support the NetBackup-Java Administration Console and the Backup Archive and Restore Interface.

Note, if a supported NetBackup client is not listed in the table below the client is supported for backup and restore, but it does not support any of the available graphical interfaces.

Where support is shown for "Windows Server 2008" or "Windows Server 2008 R2", it is implied that Standard Edition, Enterprise Edition, Datacenter Edition, and Web Edition are supported.

Where support is shown for "Windows Server 2012" it is implied that Standard Edition, Datacenter Edition, Essentials Edition, and Foundation Edition are supported.

Where support is shown for "Windows Server 2016" it is implied that Standard Edition, Datacenter Edition, Essentials Edition, and Foundation Edition are supported.

OS	CPU Architecture	NetBackup-Java Administration Console	Backup, Archive, and Restore Interface
Windows Server 2012 R2	x64	Y	Y
Windows Server 2012	x64	Y	Y

NetBackup Software Compatibility Documentation:

[NetBackup Enterprise Server and Server 7.7 - 7.7.x OS Software Compatibility List \(last updated on April 18, 2017\)](#)

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Veritas is committed to providing the best possible data protection experience for NetBackup customers on the widest variety of platforms, operating systems, databases, applications, and hardware. Veritas is continuously reviewing NetBackup's support of these items to ensure the proper balance of supporting their General Availability release, the very latest versions of new software, hardware and introducing new features and functionality and maintaining support for existing and older versions of these products and NetBackup functionality. While Veritas is continually adding support for new features, platforms, operating systems, and applications, it may be also necessary to improve, replace, or remove support in NetBackup for lesser used, older features, functionality, software, OS, databases, applications, integration with other products, and hardware that are no longer supported or nearing their end of support life from the manufacturer from NetBackup Compatibility Lists.

To better help its customers to plan for these upcoming changes to the support status of these items in NetBackup, Veritas will provide advanced notification as soon as possible as listed below. Veritas intends to list the older product functionality, features, hardware, OS, and 3rd party software products that will no longer be supported in the next release of NetBackup. If possible, these items are listed at least six months before that release.

The information below lists certain features, functionality, 3rd-party and Veritas products, applications, databases, and OS/Platforms for which Veritas intends to replace with newer and improved functionality, or in some cases, discontinue without replacement. The last release of NetBackup to proliferate support of the item is provided. Technotes in the Notes column contain additional details about available replacement options. Where a major, minor or release update version is specified, the feature or platform is supported through the last Maintenance Update (patch) of that release. Where 'All' is specified, it is supported for all versions or variations of the family of the relevant or supported platforms.

Check this site frequently for updated information for NetBackup. If an item listed below will cause significant business impacts, contact your Veritas Sales Account Team. Please note that the official NetBackup Support Lifecycle for your existing NetBackup product version won't be affected or altered in any way. For the official Veritas Support Lifecycle Policy of all NetBackup versions, see https://www.veritas.com/content/support/en_US/terms/support-fundamentals.html.

Information in the following table contains plans starting with NetBackup 7.5. For information concerning no longer supported platforms, consult the following section of the report.

Information in the following table was last updated on **2017-04-26**.

Date Added/Modified	Feature/Functionality/OS/Platform	NetBackup Area	OS/Platform	OS/Platform Version	CPU Architecture	Last Supported Release	Notes
2017-04-24	Exchange 2007	NetBackup for Exchange	Windows	All	All	8.0	
2017-04-19	DB2 versions 9.1, 9.5, 9.7 & 10.1	NetBackup for DB2	All	All	All	8.0	

Veritas Services and Operations Readiness Tools (SORT)

2017-04-19	NetBackup High Availability (HA) Media Server	Media Server	All	All	All	8.0	HA Media Server was End of Life for new installs with NetBackup 7.7 and only upgrades from 6.5 were supported. This will now continue the EOL for HA Media Server with regards to upgraded HA Media Server moving forward with the Jasper release. NetBackup Media Server App_Clusters will not be impacted. NetBackup HA Appliances are not impacted.
2017-04-19	SharePoint 2007	NetBackup for SharePoint	Windows	All	All	8.0	
2017-03-14	Replication Director for EMC VNX	Replication Director	All	All	All	8.0	
2016-10-18	SQL Server 2005	NetBackup for SharePoint	Windows	All	All	7.7.3	

Veritas Services and Operations Readiness Tools (SORT)

2016-10-18	SQL Server 2005	NetBackup for Enterprise Vault	Windows	All	All	7.7.3	
2016-04-28	SQL Server 2005	NetBackup for SQL Server	Windows	All	All	7.7.3	
2016-04-13	Backup Exec Tape Reader	Master Server, Media Server	All	All	All	7.6.1	Statement of direction for Backup Exec Tape Reader - http://www.veritas.com/docs/000005737
2016-01-11	BMR - XenServer support	Client	All	All	All	7.7.3	
2014-12-12	OS/2 Policy Type	Master Server, Client	All master server and OS/2 clients	All	All	7.6.1	
2014-12-12	NetWare Policy Type	Master Server, Client	All master server and NetWare clients	All	All	7.6.1	
2014-12-12	NetBackup Search	NetBackup Search	All	All	All	7.6.1	
2014-12-12	Windows 2003	All	Windows	All	All	7.6.1	Based on Microsoft EOL of Windows 2003
2014-12-12	AFS Policy Type	Master Server, Client	All master server and UNIX/Linux clients	All	All	7.6.1	

Veritas Services and Operations Readiness Tools (SORT)

2014-12-12	Exchange Server 2003 - restores	NetBackup for Exchange	Windows	All	x86-64	7.6.1	
2014-12-12	Oracle 8i, 9i and 10g support	NetBackup for Oracle	All	All	All	7.6.1	
2014-12-12	Sybase 12	NetBackup for Sybase	All	All	All	7.6.1	
2014-12-12	Sybase 12.5	NetBackup for Sybase	All	All	All	7.6.1	
2014-12-12	Menu interfaces (bpadm and vmadm)	Master Server, Media Server	All master and media server	All	All	7.6.1	
2014-12-12	All SQL 2005 releases other than SP4	NetBackup for SQL Server	Windows	All	All	7.6.1	
2014-12-12	Exchange 2003	NetBackup for Exchange	Windows	All	x86-64	7.6.1	
2014-12-12	NetBackup Windows MFC Administration Console	Master Server, Media Server	Windows	All	All	7.6.1	The NetBackup Windows MFC Administration Console will no longer be available after the NetBackup v7.6.1 release. The replacement technology will be an improved Java Administration

							Console user interface. The Windows Backup and Recovery (client) User Interface will continue to ship.
2014-12-12	Support for Nirvanix as a cloud storage platform.	Media Server	All	All	All	7.6.1	
2014-12-12	Backup Exec Reporting	OpsCenter	All	All	All	7.6.1	Backup Exec reporting will be handled by the Backup Exec Enterprise Server Option that includes the Central Admin Server Option.

NetBackup Software Compatibility Documentation:
[NetBackup Enterprise Server and Server 7.7 - 7.7.x OS Software Compatibility List \(last updated on April 18, 2017\)](#)
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Operating Systems No Longer Supported by NetBackup

Support has been dropped for the following OS Versions/Architectures in the 7.7.x versions of NetBackup.

OS/Version	CPU Architecture	OS Bits	NetBackup	Last NetBackup Release Supported
SUSE Enterprise Linux Server 10	x86-64	64	Client, Master and Media Server	7.7
Novell Open Enterprise Server (Linux)	x86-64	64	Client, Master and Media Server	7.7.1
Apple Mac OS X	x86-64	64	Client	7.7.1
FreeBSD	x86-64	64	Client	7.7.1
Oracle Linux	x86-64	64	Master	7.7.1

NetBackup Software Compatibility Documentation:

[NetBackup Enterprise Server and Server 7.7 - 7.7.x OS Software Compatibility List \(last updated on April 18, 2017\)](#)

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Documentation

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Product Documentation

[All NetBackup Self Service documentation in a single .zip file - Release 7.7.3](#)

[NetBackup 7.7.2 Administrator's Guide for UNIX, Windows, and Linux, Volume I](#)

[NetBackup 7.7.2 Administrator's Guide, Volume II](#)

[NetBackup 7.7.2 Getting Started Guide](#)

[NetBackup 7.7.3 Cloud Administrator's Guide](#)

[NetBackup 7.7.3 Commands Reference Guide](#)

[NetBackup 7.7.3 Installation Guide for UNIX and Windows](#)

[NetBackup 7.7.3 PDFs in a single .zip file](#)

[NetBackup 7.7.3 SAP Administrator's Guide](#)

[Veritas Services and Operations Readiness Tools \(SORT\)](#)

[NetBackup 7.7.3 Sharepoint Administrator's Guide](#)

[NetBackup 7.7.3 Status Codes Reference Guide](#)

[NetBackup 7.7.x Documentation](#)

[NetBackup Backup, Archive, and Restore Getting Started Guide - Release 7.7](#)

[NetBackup Device Configuration Guide - Release 7.7](#)

[NetBackup OpsCenter 7.7.3 Administrator's Guide](#)

[NetBackup OpsCenter Reporting Guide - Release 7.7](#)

[NetBackup Release Notes, Administration, Installation, Troubleshooting, Getting Started, and Solutions Guide](#)

[NetBackup Third-party Legal Notices](#)

[NetBackup Troubleshooting Guide - Release 7.7](#)

Installation/Upgrade Documentation

[How to perform a consistency check of the NetBackup EMM and BMR databases](#)

[Links to the latest NBCC / NBCCR downloads](#)

[NetBackup 7.7.3 Upgrade Guide](#)

[NetBackup 7.x Upgrade Portal](#)

[NetBackup LiveUpdate Guide - Release 7.7](#)

[NetBackup Replication Director Tools for NetApp Storage Systems](#)

[Veritas NetBackup Emergency Engineering Binary Guide](#)

[What's new in NetBackup and NetBackup Appliance releases](#)

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Late Breaking News

[7.7.3 Late Breaking News](#)

[Guidelines for the availability of EEB/hotfixes](#)

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Compatibility Lists

[NetBackup 7.7 - 7.7.x Database and Application Agent Compatibility List](#)

[NetBackup Enterprise Server and Server 7.7 - 7.7.x Hardware Compatibility List](#)

[NetBackup Master Compatibility List](#)

NetBackup Enterprise Server and Server 7.7 - 7.7.x OS Software Compatibility List
Support for NetBackup 7.x and 8.x in virtual environments
NetBackup is not supported on hosts with Backup Exec installed

Performance and Tuning Guidelines

[ERROR CODE: error 26 bpbrm jobs failing with status 26](#)
[How to estimate the number of master servers needed](#)
[How to estimate the number of media servers needed](#)
[Information on resource allocation within NetBackup](#)
[NetBackup 7.7.2 Network Ports Reference Guide](#)
[NetBackup Backup Planning and Performance Tuning Guide Release 7.5 and Release 7.6](#)
[NetBackup OpsCenter Performance and Tuning Guide - Release 7.7](#)
[NetBackup pre-install check detects insufficient space to perform upgrade](#)

Product End of Life Information

[End of Life Policy for Business Software Products](#)
[End of Support for Prior NetBackup Versions](#)
[SORT End of Support Life matrix](#)

Other Related Documentation

[NetBackup 7.7.1 Deduplication Guide](#)
[NetBackup 7.7.1 Security and Encryption Guide](#)
[NetBackup Add-in for Microsoft SCVMM Console Guide - Release 7.7](#)
[NetBackup AdvancedDisk Storage Solutions Guide - Release 7.7](#)
[NetBackup Bare Metal Restore Administrator's Guide - Release 7.7.2](#)
[NetBackup Clustered Master Server Administrator's Guide - Release 7.7.2](#)
[NetBackup for DB2 Administrator's Guide - Release 7.7](#)
[NetBackup for Enterprise Vault Agent Administrator's Guide - Release 7.7](#)
[NetBackup for Hyper-V Administrator's Guide - Release 7.7.1](#)
[NetBackup for Informix Administrator's Guide - Release 7.7](#)
[NetBackup for Lotus Notes Administrator's Guide - Release 7.7](#)
[NetBackup for Microsoft Exchange Server Administrator's Guide - Release 7.7.2](#)

Veritas Services and Operations Readiness Tools (SORT)

NetBackup for Microsoft SQL Server Administrator's Guide - Release 7.7.2

NetBackup for NDMP Administrator's Guide - Release 7.7.1

NetBackup for Oracle Administrator's Guide - Release 7.7.2

NetBackup for Sybase Administrator's Guide - Release 7.7

NetBackup for VMware Administrator's Guide - Release 7.7.3

NetBackup OpenStorage Solutions Guide for Disk - Release 7.7

NetBackup OpsCenter Release Notes, Administration Guides, Reporting Guides, and Performance and Tuning Guide

NetBackup Replication Director Solutions Guide - Release 7.7

NetBackup SAN Client and Fibre Transport Guide - Release 7.7

NetBackup Snapshot Client Administrator's Guide - Release 7.7

NetBackup Vault Administrator's Guide - Release 7.7

NetBackup Vault Operator's Guide - Release 7.7

NetBackup VMware Web Client Guide - Release 7.7.2