

# Backup Software Compatibility For ESX Server 2.x

Last Updated: October 7, 2007

## What's New

Changes since the last edition of this guide include:

- Updated to include support for ESX Server 2.5.5.

## Introduction

Data residing within VMware virtual machines can be backed up using three different approaches:

- 1 You can run backup clients from within a virtual machine performing file-level or system level backups. As of ESX Server 2.5.2, a backup client is assumed to work correctly in a virtual machine as long as the client transfers data over an Ethernet network and does no direct hardware access. Therefore this document does not provide explicit compatibility listings for backup clients running in virtual machines on ESX 2.5.2 or later.
- 2 You can run backup clients' agents from the ESX Server service console, backing up virtual machines in their entirety as `.disk` and/or `.vmdk` files residing in the ESX Server VMFS file system.
- 3 You can back up virtual machine data by running a backup server within a virtual machine that is connected to a tape drive or other SCSI-based backup media attached to the physical system.

The directions for connecting the SCSI backup device to a virtual machine through the SCSI pass-through mechanism are detailed in the *ESX Server Administration Guide*. Before you begin, take note of the following restrictions:

- VMware supports attaching SCSI drives to the ESX Server using Adaptec SCSI adapters. Using other adapters, such as LSI MPT-Fusion SCSI, is not supported.
- If using a tape drive library (versus using a stand-alone tape drive), the library must be multi-target, and not multi-LUN.
- Set the tape drive's virtual target ID in the virtual machine's configuration to be the same as the physical target ID.

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**NOTE** ESX Server versions 1.x and 2.x do not support connecting fibre attached tape drives to the ESX Server or virtual machines. Attached tape storage using the Adaptec AHA-29xxx adapter series is the only supported configuration.

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These approaches are discussed in the ESX Server *Backup Planning* tech note. VMware has tested specific backup packages for use in each of these situations.

If you are having a technical issue with 3rd party HW/SW and it is not found on this list, please refer to our 3rd Party HW/SW support policy at <http://www.vmware.com/support/policies/ThirdParty.html>.

This chapter includes:

- [Backup Vendor Qualifications](#)
- [Currently Qualified Software](#)

## Backup Vendor Qualifications

VMware ESX Server has been qualified by the following backup software vendors for use with their products:

- VERITAS NetBackup 5.x
  - Backup agent running within a virtual machine and the service console with ESX Server 2.x
- IBM Tivoli Storage Manager
  - Backup agent running within a virtual machine with ESX Server 2.x
- Legato Networker
  - Backup agent running with a virtual machine and the service console with ESX with ESX Server 2.0.1

Please refer to [Table 1 on page 2](#) for information on the compatibility of specific versions.

## Currently Qualified Software

This is not an exhaustive list of all backup software packages and versions that are compatible with ESX Server, but it represents those servers that VMware or its partners have tested with the stated release of ESX Server.

**Table 1. ESX Server 2.5.x**

Software Package	ESX Server 2.5		ESX Server 2.5.1		ESX Server 2.5.2 <sup>6</sup>		ESX Server 2.5.3 <sup>6</sup>		ESX Server 2.5.4 <sup>6</sup>		ESX Server 2.5.5 <sup>6</sup>		
	Backup Client running within		Backup Client running within		Backup Client running within		Backup Client running within		Backup Client running within		Backup Client running within		
	VM	Service Console	VM	Service Console	VM	Service Console	VM	Service Console	VM	Service Console	VM	Service Console	
VERITAS Backup Exec v 1.0.0	X	X	X	X	X	X	X	X	X	X	X	X	X
VERITAS Backup Exec v 8.6	X	X	X	X	X	X	X	X	X	X	X	X	X
VERITAS Backup Exec v 9.0	X	X	X	X	X	X	X	X	X	X	X	X	X
VERITAS Backup Exec v 9.1	X	X	X	X	X	X	X	X	X	X	X	X	X
VERITAS Backup Exec v 10				X	X	X	X	X	X	X	X	X	X
VERITAS Backup Exec v 10d										X	X	X	X
VERITAS NetBackup v 4.5	X	X	X	X	X	X	X	X	X	X	X	X	X
VERITAS NetBackup v 5.0	X	X	X	X	X	X	X	X	X	X	X	X	X
VERITAS NetBackup v 5.0 MP4	X	X	X	X	X	X	X	X	X	X	X	X	X
VERITAS NetBackup v 5.1	X	X	X	X	X	X	X	X	X	X	X	X	X
VERITAS NetBackup v 5.1 MP2	X	X	X	X	X	X	X	X	X	X	X	X	X
VERITAS NetBackup v 6										X	X	X	X

<sup>1</sup> For Tivoli Storage Manager server version 5.1.7, please use client version 5.1.6.

<sup>2</sup> For Tivoli Storage Manager server version 5.2.1 and 5.3.3, please use client version 5.2.0.

<sup>3</sup> Before BrightStor ARCserve can perform backups on the service console, you must first execute the following command:  

```
grep vmfs /proc/mounts >> /etc/mtab
```

<sup>4</sup> This refers to the Networker Storage Node, not the Networker Server.

<sup>5</sup> Contact HP for information on supported backup devices.

<sup>6</sup> Starting in ESX Server 2.5.2, we support all network backup clients in a virtual machine.

**Table 1. ESX Server 2.5.x (Continued)**

Software Package	ESX Server 2.5		ESX Server 2.5.1			ESX Server 2.5.2 <sup>6</sup>		ESX Server 2.5.3 <sup>6</sup>		ESX Server 2.5.4 <sup>6</sup>		ESX Server 2.5.5 <sup>6</sup>		
	Backup Client running within		Backup Client running within			Backup Client running within		Backup Client running within		Backup Client running within		Backup Client running within		
	VM	Service Console	VM	Service Console	Service Console	VM	Service Console	VM	Service Console	VM	Service Console	VM	Service Console	
Tivoli Storage Manager v 5.1.5	X	X		X	X		X		X		X		X	
Tivoli Storage Manager v 5.1.6	X	X		X	X		X		X		X		X	
Tivoli Storage Manager v 5.1.7 <sup>1</sup>	X	X	X	X	X	X	X	X	X	X	X	X	X	
Tivoli Storage Manager v 5.2.1 <sup>2</sup>	X	X	X	X	X	X	X	X	X	X	X	X	X	
Tivoli Storage Manager v 5.2.3	X	X	X	X	X	X	X	X	X	X	X	X	X	
Tivoli Storage Manager v 5.3	X		X	X		X		X		X				
Tivoli Storage Manager v 5.3.3 <sup>2</sup>													X	
Legato Networker v 6.1.2	X			X										
Legato Networker v 7.0	X	X	X <sup>4</sup>	X	X	X <sup>4</sup>	X	X <sup>4</sup>	X	X <sup>4</sup>	X	X <sup>4</sup>	X	X <sup>4</sup>
Legato Networker v 7.1.x	X	X	X <sup>4</sup>	X	X	X <sup>4</sup>	X	X <sup>4</sup>	X	X <sup>4</sup>	X	X <sup>4</sup>	X	X <sup>4</sup>
Legato Networker v 7.2	X	X	X <sup>4</sup>	X	X	X <sup>4</sup>	X	X <sup>4</sup>	X	X <sup>4</sup>	X	X <sup>4</sup>	X	X <sup>4</sup>
Legato Networker v 7.2.1										X	X	X	X	
Legato Networker Server v 7.2	X	X	X <sup>4</sup>	X	X	X <sup>4</sup>	X	X <sup>4</sup>	X	X <sup>4</sup>	X	X <sup>4</sup>	X	X <sup>4</sup>
Legato Networker Storage Node v 7.2	X	X	X <sup>4</sup>	X	X	X <sup>4</sup>	X	X <sup>4</sup>	X	X <sup>4</sup>	X	X <sup>4</sup>	X	X <sup>4</sup>
Legato Networker v7.3.2 JumboUpdate1													X	X
CA BrightStor ARCserve v 9	X	X <sup>3</sup>	X	X	X <sup>3</sup>	X	X <sup>3</sup>	X	X <sup>3</sup>	X	X <sup>3</sup>	X	X <sup>3</sup>	X
CA BrightStor ARCserve v 11	X	X <sup>3</sup>	X	X	X <sup>3</sup>	X	X <sup>3</sup>	X	X <sup>3</sup>	X	X <sup>3</sup>	X	X <sup>3</sup>	X
CA BrightStor ARCserve v 11.1	X	X <sup>3</sup>	X	X	X <sup>3</sup>	X	X <sup>3</sup>	X	X <sup>3</sup>	X	X <sup>3</sup>	X	X <sup>3</sup>	X
CA BrightStor ARCserve v 11.5										X	X	X	X	
CA BrightStor ARCserve v 11.5 SP1													X	X
HP Data Protector 5.5	X	X		X	X	X <sup>5</sup>	X	X <sup>5</sup>	X	X <sup>5</sup>				
Commvault Galaxy 5.0	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Commvault Galaxy 5.9									X	X	X	X	X	X
Commvault Galaxy 6.1 SP4													X	X

<sup>1</sup> For Tivoli Storage Manager server version 5.1.7, please use client version 5.1.6.

<sup>2</sup> For Tivoli Storage Manager server version 5.2.1 and 5.3.3, please use client version 5.2.0.

<sup>3</sup> Before BrightStor ARCserve can perform backups on the service console, you must first execute the following command:  

```
grep vmfs /proc/mounts >> /etc/mtab
```

<sup>4</sup> This refers to the Networker Storage Node, not the Networker Server.

<sup>5</sup> Contact HP for information on supported backup devices.

<sup>6</sup> Starting in ESX Server 2.5.2, we support all network backup clients in a virtual machine.

**Table 2.** ESX Server 2.0.x and 2.1.x

Software Package	ESX Server 2.0.0			ESX Server 2.0.1			ESX Server 2.1.x		
	Backup Client running within		Backup Server running within VM	Backup Client running within		Backup Server running within VM	Backup Client running within		Backup Server running within VM
	VM	Service Console		VM	Service Console		VM	Service Console	
VERITAS Backup Exec v 8.6	X	X	X	X	X	X	X	X	X
VERITAS Backup Exec v 9.0	X	X		X	X	X	X	X	X
VERITAS Backup Exec v 9.1							X	X	X
VERITAS NetBackup v 4.5		X	X	X	X	X	X	X	X
VERITAS NetBackup v 5.0							X	X	X
VERITAS NetBackup v 5.1									
Tivoli Storage Manager v 5.1.5	X			X	X		X	X	
Tivoli Storage Manager v 5.1.6	X			X	X		X	X	
Tivoli Storage Manager v 5.1.7 <sup>1</sup>	X	X		X	X	X	X	X	X
Tivoli Storage Manager v 5.2.1 <sup>2</sup>				X	X	X	X	X	X
Tivoli Storage Manager v 5.2.3									
Legato Networker v 6.1.2				X			X		
Legato Networker v 7.0		X		X	X	X <sup>4</sup>	X	X	X <sup>4</sup>
Legato Networker v 7.1.x				X	X	X <sup>4</sup>	X	X	X <sup>4</sup>
CA BrightStor ARCserve v 9	X	X		X	X	X	X	X	X
CA BrightStor ARCserve v 11							X	X	X
HP Data Protector 5.1	X	X					X	X	
HP Data Protector 5.5							X	X	
Commvault Galaxy									

<sup>1</sup> For Tivoli Storage Manager server version 5.1.7, please use client version 5.1.6.

<sup>2</sup> For Tivoli Storage Manager server version 5.2.1, please use client version 5.2.0.

<sup>3</sup> To make BrightStor ARCserve perform backups on the Service Console, you need to execute the following command first:

```
grep vmEs /proc/mounts >> /etc/mtab
```

<sup>4</sup> This refers to the Networker Storage Node, not the Networker Server.

**Table 3. ESX Server 1.5.2**

Software Package	ESX Server 1.5.2		
VERITAS Backup Exec v 8.6	X	X	X
VERITAS Backup Exec v 9.0			X
VERITAS NetBackup v 4.5	X	X <sup>1</sup>	X
Tivoli Storage Manager v 5.1.5	X	Not recommended <sup>2</sup>	X
Tivoli Storage Manager v 5.1.6			X
Tivoli Storage Manager v 5.1.7 <sup>3</sup>			X
Legato Networker v 6.1.2	X		X <sup>4</sup>
Legato Networker v 7.0			X <sup>4</sup>
CA BrightStor ARCserve v 9	X	Not tested	X

<sup>1</sup> Needs client patch from Veritas to work on the service console.

<sup>2</sup> Tivoli Storage Manager can be used from within the service console using command line only. Add the following parameter:

`MAKEPARSEFILE NO`

to the `dsm.opt` file found on the service console in the following location:

`/opt/tivoli/tsm/client/ba/bin/dsm.opt`

<sup>3</sup> For Tivoli Storage Manager server version 5.1.7, please use client version 5.1.6.

<sup>4</sup> This refers to the Networker Storage Node, not the Networker Server.

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