



# Storage / SAN Compatibility Guide For ESX Server 3.5 and ESX Server 3i

Last Updated: December 3, 2008

## What's New

Changes since the last edition of this guide include:

- Added support for HDS AMS 2100, 2300, 2500. See "[Hitachi Data Systems \(HDS\)](#)," on page 58.
- Added support for LeftHand Networks Dell 2950 and SAN/iQ 8, HP ProLiant DL320s and SAN/iQ 8, HP ProLiant DL380 and SAN/iQ 8, IBM x3650 and SAN/iQ 8, NSM 160 and SAN/iQ 8, NSM 2060 and SAN/iQ 8, NSM 2120 and SAN/iQ 8, NSM 2120 G2 SAN/iQ 8, NSM 260 and SAN/iQ 8, NSM 4150 and SAN/iQ 8, VSA and SAN/iQ 8. See "[LeftHand Networks](#)," on page 61.

## Introduction

VMware ESX Server software has been tested and deployed in a variety of storage area network (SAN) environments. This guide describes the storage devices currently tested by VMware and its storage partners.

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**NOTE** The use of an external enclosure, or JBOD connected to a supported SAS/SCSI controller in a supported server is supported, as long as there is no disk sharing among multiple servers or SAS/SCSI cards.

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**NOTE** ESX Server 3.5, ESX Server 3i Embedded and ESX Server 3i Installable are equivalent products from a storage compatibility perspective.

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**NOTE** You will note that this guide is sparsely populated at present. The reason for this is that storage arrays require re-certification for ESX Server 3.5 and ESX Server 3i, and while many re-certifications are in process or planned, relatively few have been fully completed to date. In contrast, servers and I/O devices do not require re-certification. The Systems Compatibility and I/O Compatibility Guides for ESX Server 3.5 and ESX Server 3i are already well populated because in almost all cases certification from the latest ESX Server 3.x version of the guides was simply carried over to the ESX Server 3.5 and ESX Server 3i version. For details on when the re-certification of a specific storage array for ESX Server 3.5 and ESX Server 3i will be complete, please contact the storage vendor.

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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 document discusses the following topics:

- [“Maximum Storage Specifications Supported”](#) on page 2
- [“Third-Party Software”](#) on page 3
- [“Fibre Channel SANs”](#) on page 3
- [“Storage Arrays supported with FCoE CNAs”](#) on page 35
- [“Network Attached Storage”](#) on page 35
- [“iSCSI”](#) on page 42
- [“SAS Arrays”](#) on page 70
- [“OEM SAN Array Model Reference”](#) on page 73

## Maximum Storage Specifications Supported

The following system and virtual machine maximums are supported for ESX Server hosts:

**Table 1.** Supported system and virtual machine maximums

<b>ESX Server 3.x</b>	
Maximum LUNs per system	256 (128 during install)
Maximum HBAs per system	16 ports (4 quad-port cards, 8 dual-port cards, etc.)
Maximum virtual HBAs per virtual machine	4
Maximum targets per virtual HBA	15
Maximum virtual disks per Windows virtual machine	60
Maximum virtual disks per Linux virtual machine	60
Maximum number of VMFS file systems per server	256
Maximum disk space per VMFS	2TB * # of extents
Maximum file size per VMFS-3 file	Default max file size for VMFS-3 is 256GB (block size of 1MB). This can be configured to a block size of 8MB which will allow a 2TB file.

**Table 1.** Supported system and virtual machine maximums (Continued)

	ESX Server 3.x
Maximum number of files per VMFS-3	Supports enough files to hold the maximum number of VMs per VMFS volume supported by ESX 3.0 (typically greater than 30,000 files)
Maximum number of paths per LUN	32
Maximum number of total paths	1024
Maximum number of targets per HBA	15
Minimum VMFS-3 volume size	1.1 GB

## Third-Party Software

Third party backup, replication, and snapshot software is certified and supported by the providers of the software. The ESX Server 2.5 guide at [http://www.vmware.com/pdf/esx25\\_san\\_cfg.pdf](http://www.vmware.com/pdf/esx25_san_cfg.pdf) shows the list of software that was supported with ESX Server 2.5. Please contact your SAN vendors regarding their plans to support ESX Server 3.x. As vendors certify software, we will create a list of certified software for ESX Server 3.x.

### Windows Clustering (MSCS) with ESX

Windows Clustering refers Cluster Services in Windows 2003 and 2000 in a shared disk configuration between two virtual machines or a virtual machine and a physical system. Such clustering is certified only with a subset of arrays listed in this guide. It is supported with ESX Server 3.5 with both 32-bit and 64-bit VMs running Windows 2003. Only 4Gb HBAs are supported with MSCS and ESX Server 3.5. Before installing VMware ESX Server 3.5 software with your storage array, please examine the lists on the following pages to find out whether your array and configuration are supported.

Please refer to your storage vendor for more information and configuration details.

## Fibre Channel SANs

For Fibre Channel SANs, VMware tests the following configurations:

- **Basic Connectivity** — The ability of ESX Server 3.x hosts to recognize and interoperate with the storage array. This configuration does not allow for multipathing or any type of failover.
- **Multipathing** — The ability of ESX Server 3.x hosts to handle multiple paths to the same storage device.
- **HBA Failover** — In this configuration, the ESX Server 3.x host is equipped with multiple HBAs connecting to one or more SAN switches. The server is robust to HBA and switch failure only.
- **Storage Port Failover** — In this configuration, the ESX Server 3.x host is attached to multiple storage ports and is robust to storage port failures.

- **Windows Clustering (MSCS) Support** — Windows Clustering support applies to Windows 2000 SP4, Windows 2003 RTM, SP 1, R2 and SP 2. For ESX Server version requirements for these operating systems in cluster environment, please refer to <http://kb.vmware.com/kb/2021>. Clustering is supported only with a limited set of HBAs; please refer to the I/O Compatibility Guide ([http://www.vmware.com/pdf/vi3\\_io\\_guide.pdf](http://www.vmware.com/pdf/vi3_io_guide.pdf)) for the list of HBAs not supported with Windows Clustering.
- **Boot from SAN** — In this configuration, the ESX Server 3.x host boots from a LUN stored on the SAN rather than a local disk.
- **Direct Connect** — In this configuration, the ESX Server 3.x host is directly connected to the array (that is, no switch between HBA and the array). Clustering is not supported in this configuration.

In the following tables, an X in a table cell indicates the storage array or an equivalent configuration has been tested. All storage products listed in this compatibility guide are supported. For further details about array firmware, storage product configurations and best practices, please contact the storage vendor.

There are several items on the ESX Server 2.5.x SAN Compatibility Guide ([http://www.vmware.com/pdf/esx\\_SAN\\_guide.pdf](http://www.vmware.com/pdf/esx_SAN_guide.pdf)) that are not on this 3.x list. Please contact your storage vendors for plans regarding these items.

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**NOTE** Only footnoted storage arrays are supported with Brocade 415 and 425 HBAs.

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**NOTE** Unless otherwise footnoted, all fibre channel arrays are supported with both 2Gbit and 4Gbit connectivity.

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VMware works closely with each of its OEMs to drive towards mutual support of ESX Server at the time of announcement. Due to different product release cycles, levels of testing, and OEM agreements, not all OEM devices will be supported at the general availability date of a new version of ESX Server. We recommend contacting the OEM vendor for the best information on when their device is planned to be certified with Virtual Infrastructure 3.

VMware supports Storage Virtualization Devices (SVD) with ESX Server 3.0.2 or later. See [“Storage Virtualization Device \(SVD\)”](#) on page 29 for more information.

This section contains information on storage arrays from the following vendors:

- [“3PAR”](#) on page 6
- [“AC&NC”](#) on page 6
- [“Bull”](#) on page 7
- [“Compellent”](#) on page 7
- [“DataCore,”](#) on page 8
- [“Dell,”](#) on page 9
- [“Dot Hill Systems,”](#) on page 10
- [“EMC”](#) on page 10
- [“FalconStor Software”](#) on page 12
- [“Fujitsu”](#) on page 13

- [“Fujitsu Siemens”](#) on page 14
- [“Hewlett Packard”](#) on page 16
- [“Hitachi”](#) on page 17
- [“Hitachi Data Systems \(HDS\)”](#) on page 19
- [“IBM”](#) on page 20
- [“LSILogic”](#) on page 21
- [“NEC,”](#) on page 22
- [“NetApp,”](#) on page 23
- [“Nexsan Technologies,”](#) on page 23
- [“Nihon Unisys,”](#) on page 24
- [“Overland Storage,”](#) on page 25
- [“Pillar Data Systems,”](#) on page 25
- [“Promise Technology,”](#) on page 26
- [“Sun,”](#) on page 26
- [“Transtec”](#) on page 28
- [“Xiotech,”](#) on page 28
- [“Xyratex Ltd,”](#) on page 29

Table 2. 3PAR

	ESX Server 3.5						ESX Server 3i Embedded						ESX Server 3i Installable					
	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN
E200	X	X <sup>1</sup>	X	X		X	X	X <sup>1</sup>	X	X		X	X	X <sup>1</sup>	X	X		X
S400	X	X <sup>1</sup>	X	X		X	X	X <sup>1</sup>	X	X		X	X	X <sup>1</sup>	X	X		X
S800	X	X <sup>1</sup>	X	X		X	X	X <sup>1</sup>	X	X		X	X	X <sup>1</sup>	X	X		X
T-Class	X	X <sup>1</sup>	X	X		X	X	X <sup>1</sup>	X	X		X	X	X <sup>1</sup>	X	X		X
See <a href="#">NOTE</a> on page 1 for JBOD support information.																		
<sup>1</sup> Requires Update 1 or higher of the ESX Server version listed in the corresponding column.																		

Table 3. AC&amp;NC

	ESX Server 3.5						ESX Server 3i Embedded						ESX Server 3i Installable					
	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN
JetStor SAS 516F <sup>1,2</sup>	X		X			X	X		X			X	X		X			X
See <a href="#">NOTE</a> on page 1 for JBOD support information.																		
<sup>1</sup> Supported with Qlogic HBAs only.																		
<sup>2</sup> Requires Update 2 with patch 07 or higher update release of the ESX Server version listed in the corresponding column.																		

**Table 4.** Bull

		ESX Server 3.5					ESX Server 3i Embedded				ESX Server 3i Installable								
		Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN
StoreWay	FDA1500	X	X	X		X	X	X	X			X	X	X	X	X			
	FDA2500	X	X	X		X	X	X	X			X	X	X	X	X			
	FDA2900	X	X	X			X	X	X			X	X	X	X	X			
See <a href="#">NOTE</a> on page 1 for JBOD support information.																			

**Table 5.** Compellent

		ESX Server 3.5					ESX Server 3i Embedded				ESX Server 3i Installable								
		Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN
Storage Center		X	X	X		X	X	X	X			X	X	X	X	X			
See <a href="#">NOTE</a> on page 1 for JBOD support information.																			

**Table 6.** DataCore

	ESX Server 3.5				ESX Server 3i Embedded				ESX Server 3i Installable			
Basic connectivity	X				X	X			X			
Direct connect support	X				X				X			
Multipathing with HBA failover	X				X				X			
Multipathing with storage port failover												
Windows Clustering support												
Boot from SAN												
Basic connectivity												
Direct connect support												
Multipathing with HBA failover												
Multipathing with storage port failover												
Windows Clustering support												
Boot from SAN												
Basic connectivity												
Direct connect support												
Multipathing with HBA failover												
Multipathing with storage port failover												
Windows Clustering support												
Boot from SAN												
SSY-UNL-P-385 <sup>1</sup>	X	X	X	X	X	X	X	X	X	X	X	X
See <b>NOTE</b> on page 1 for JBOD support information.												
<sup>1</sup> Please refer to Datacore's website for Active/Passive configuration with ESX Server: <a href="ftp://support.datacore.com/psp/tech_bulletins/TechBulletinsAll/TB5_ESX_config.pdf">ftp://support.datacore.com/psp/tech_bulletins/TechBulletinsAll/TB5_ESX_config.pdf</a>												

Table 7. Dell

		ESX Server 3.5				ESX Server 3i Embedded				ESX Server 3i Installable									
		Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN
AX	AX150	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	AX4-5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Dell CLARiiON	CX300	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	CX500	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	CX700	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	CX3-10c	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	CX3-20	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	CX3-20c	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	CX3-20f	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	CX3-40	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	CX3-40c	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	CX3-40f	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	CX3-80	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	CX4-120	X	X	X	X	X <sup>1,2</sup>	X	X	X	X	X	X	X <sup>1,2</sup>	X	X	X	X	X	X <sup>1,2</sup>
	CX4-240	X	X	X	X	X <sup>1,2</sup>	X	X	X	X	X	X	X <sup>1,2</sup>	X	X	X	X	X	X <sup>1,2</sup>
	CX4-480	X	X	X	X	X <sup>1,2</sup>	X	X	X	X	X	X	X <sup>1,2</sup>	X	X	X	X	X	X <sup>1,2</sup>
CX4-960	X	X	X	X	X <sup>1,2</sup>	X	X	X	X	X	X	X <sup>1,2</sup>	X	X	X	X	X	X <sup>1,2</sup>	

See **NOTE** on page 1 for JBOD support information.

<sup>1</sup> Support for Windows 2000 SP4 Advanced Server, Windows 2003 Enterprise Edition, Windows 2003 SP1 Enterprise Edition, Windows 2003 SP2 Enterprise Edition, and Windows 2003 R2 Enterprise Edition.

<sup>2</sup> Requires Update 1 or higher of the ESX Server version listed in the corresponding column.

**Table 8.** Dot Hill Systems

	ESX Server 3.5					ESX Server 3i Embedded					ESX Server 3i Installable							
	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN
5730	X	X	X		X	X		X	X			X	X	X				
R/Evolution 2730	X	X	X		X	X		X	X			X	X	X				
R/Evolution 2730T	X	X	X		X	X		X	X			X	X	X				
See <a href="#">NOTE</a> on page 1 for JBOD support information.																		

**Table 9.** EMC

		ESX Server 3.5					ESX Server 3i Embedded					ESX Server 3i Installable						
		Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support
AX	AX150	X	X	X	X	X <sup>4,6</sup>	X	X	X	X	X	X <sup>4,6</sup>	X	X	X	X	X	X <sup>4,6</sup>
	AX4-5	X	X	X	X	X <sup>4,6</sup>	X	X	X	X	X	X <sup>4,6</sup>	X	X	X	X	X	X <sup>4,6</sup>
Celerra	NS20FC <sup>1,3</sup>	X	X	X	X	X <sup>4,6</sup>	X	X	X	X	X	X <sup>4,6</sup>	X	X	X	X	X	X <sup>4,6</sup>
	NS40FC <sup>1,3</sup>	X	X	X	X	X <sup>4,6</sup>	X	X	X	X	X	X <sup>4,6</sup>	X	X	X	X	X	X <sup>4,6</sup>

Table 9. EMC (Continued)

		ESX Server 3.5				ESX Server 3i Embedded				ESX Server 3i Installable									
		Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN
EMC CLARiiON	CX300	X	X	X	X <sup>4,6</sup>	X	X	X	X	X	X	X <sup>4,6</sup>	X	X	X	X	X	X <sup>4,6</sup>	
	CX500	X	X	X	X <sup>4,6</sup>	X	X	X	X	X	X	X <sup>4,6</sup>	X	X	X	X	X	X <sup>4,6</sup>	
	CX700	X	X	X	X <sup>4,6</sup>	X	X	X	X	X	X	X <sup>4,6</sup>	X	X	X	X	X	X <sup>4,6</sup>	
	CX3-10c <sup>2</sup>	X	X	X	X	X <sup>4,6</sup>	X	X	X	X	X	X <sup>4,6</sup>	X	X	X	X	X	X <sup>4,6</sup>	
	CX3-20 <sup>2</sup>	X	X	X	X	X <sup>4,6</sup>	X	X	X	X	X	X <sup>4,6</sup>	X	X	X	X	X	X <sup>4,6</sup>	
	CX3-20c <sup>2</sup>	X	X	X	X	X <sup>4,6</sup>	X	X	X	X	X	X <sup>4,6</sup>	X	X	X	X	X	X <sup>4,6</sup>	
	CX3-20f <sup>2</sup>	X	X	X	X	X <sup>4,6</sup>	X	X	X	X	X	X <sup>4,6</sup>	X	X	X	X	X	X <sup>4,6</sup>	
	CX3-40 <sup>2</sup>	X	X	X	X	X <sup>4,6</sup>	X	X	X	X	X	X <sup>4,6</sup>	X	X	X	X	X	X <sup>4,6</sup>	
	CX3-40c <sup>2</sup>	X	X	X	X	X <sup>4,6</sup>	X	X	X	X	X	X <sup>4,6</sup>	X	X	X	X	X	X <sup>4,6</sup>	
	CX3-40f <sup>2</sup>	X	X	X	X	X <sup>4,6</sup>	X	X	X	X	X	X <sup>4,6</sup>	X	X	X	X	X	X <sup>4,6</sup>	
	CX3-80 <sup>2</sup>	X	X	X	X	X <sup>4,6</sup>	X	X	X	X	X	X <sup>4,6</sup>	X	X	X	X	X	X <sup>4,6</sup>	
	CX4-120 <sup>2</sup>	X	X	X	X	X <sup>4,6</sup>	X	X	X	X	X	X <sup>4,6</sup>	X	X	X	X	X	X <sup>4,6</sup>	
	CX4-240 <sup>2</sup>	X	X	X	X	X <sup>4,6</sup>	X	X	X	X	X	X <sup>4,6</sup>	X	X	X	X	X	X <sup>4,6</sup>	
	CX4-480 <sup>2</sup>	X	X	X	X	X <sup>4,6</sup>	X	X	X	X	X	X <sup>4,6</sup>	X	X	X	X	X	X <sup>4,6</sup>	
CX4-960 <sup>2</sup>	X	X	X	X	X <sup>4,6</sup>	X	X	X	X	X	X <sup>4,6</sup>	X	X	X	X	X	X <sup>4,6</sup>		
EMC Symmetrix	DMX/DMX2	X	X	X	X <sup>4,6</sup>	X	X	X	X	X	X <sup>4,6</sup>	X	X	X	X	X	X <sup>4,6</sup>		
	DMX-3 <sup>2</sup>	X	X	X	X <sup>4,6</sup>	X	X	X	X	X	X <sup>4,6</sup>	X	X	X	X	X	X <sup>4,6</sup>		
	DMX-4	X	X	X	X <sup>4,6</sup>	X	X	X	X	X	X <sup>4,6</sup>	X	X	X	X	X	X <sup>4,6</sup>		
NX4 <sup>3,5</sup>	X	X	X		X														
See <a href="#">NOTE</a> on page 1 for JBOD support information.																			
<sup>1</sup> Supported only for the open Fibre Channel ports on the arrays that are captive to NS20FC and NS40FC.																			
<sup>2</sup> Supported with Brocade 4G and 8G HBAs.																			
<sup>3</sup> LUNs are not shared between Fibre Channel and iSCSI hosts.																			

**Table 9.** EMC (Continued)

	ESX Server 3.5	ESX Server 3i Embedded	ESX Server 3i Installable
Basic connectivity	Direct connect support	Direct connect support	Direct connect support
Multipathing with HBA failover	Multipathing with storage port failover	Multipathing with HBA failover	Multipathing with HBA failover
Windows Clustering support	Windows Clustering support	Windows Clustering support	Windows Clustering support
Boot from SAN	Boot from SAN	Boot from SAN	Boot from SAN
Basic connectivity	Basic connectivity	Basic connectivity	Basic connectivity
Direct connect support	Direct connect support	Direct connect support	Direct connect support
Multipathing with HBA failover	Multipathing with storage port failover	Multipathing with HBA failover	Multipathing with HBA failover
Windows Clustering support	Windows Clustering support	Windows Clustering support	Windows Clustering support
Boot from SAN	Boot from SAN	Boot from SAN	Boot from SAN
Basic connectivity	Basic connectivity	Basic connectivity	Basic connectivity
Direct connect support	Direct connect support	Direct connect support	Direct connect support
Multipathing with HBA failover	Multipathing with storage port failover	Multipathing with HBA failover	Multipathing with HBA failover
Windows Clustering support	Windows Clustering support	Windows Clustering support	Windows Clustering support
Boot from SAN	Boot from SAN	Boot from SAN	Boot from SAN
<sup>4</sup> Support for Windows 2000 SP4 Advanced Server, Windows 2003 Enterprise Edition, Windows 2003 SP1 Enterprise Edition, Windows 2003 SP2 Enterprise Edition, and Windows 2003 R2 Enterprise Edition.			
<sup>5</sup> Support is only for the open FC ports on the arrays that are captive to NX4.			
<sup>6</sup> Requires Update 1 or higher of the ESX Server version listed in the corresponding column.			

**Table 10.** FalconStor Software

	ESX Server 3.5	ESX Server 3i Embedded	ESX Server 3i Installable
Basic connectivity	Direct connect support	Direct connect support	Direct connect support
Multipathing with HBA failover	Multipathing with storage port failover	Multipathing with HBA failover	Multipathing with HBA failover
Windows Clustering support	Windows Clustering support	Windows Clustering support	Windows Clustering support
Boot from SAN	Boot from SAN	Boot from SAN	Boot from SAN
Basic connectivity	Basic connectivity	Basic connectivity	Basic connectivity
Direct connect support	Direct connect support	Direct connect support	Direct connect support
Multipathing with HBA failover	Multipathing with storage port failover	Multipathing with HBA failover	Multipathing with HBA failover
Windows Clustering support	Windows Clustering support	Windows Clustering support	Windows Clustering support
Boot from SAN	Boot from SAN	Boot from SAN	Boot from SAN
Basic connectivity	Basic connectivity	Basic connectivity	Basic connectivity
Direct connect support	Direct connect support	Direct connect support	Direct connect support
Multipathing with HBA failover	Multipathing with storage port failover	Multipathing with HBA failover	Multipathing with HBA failover
Windows Clustering support	Windows Clustering support	Windows Clustering support	Windows Clustering support
Boot from SAN	Boot from SAN	Boot from SAN	Boot from SAN
NSS-S12	X X X X	X X X X X	X X X X
NSS-S24	X X X X	X X X X X	X X X X
See <a href="#">NOTE</a> on page 1 for JBOD support information.			

Table 11. Fujitsu

		ESX Server 3.5					ESX Server 3i Embedded					ESX Server 3i Installable							
		Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN
ETERNUS 2000	Model 50	X	X	X		X	X	X	X				X	X	X				
	Model 100	X	X	X		X	X	X	X				X	X	X				
	Model 200	X	X	X		X	X	X	X				X	X	X				
ETERNUS 3000		X	X	X		X	X	X	X				X	X	X				
ETERNUS 4000	Model 80	X	X	X		X	X	X	X				X	X	X				
	Model 100	X	X	X		X	X	X	X				X	X	X				
	Model 300	X	X	X		X	X	X	X				X	X	X				
	Model 500	X	X	X		X	X	X	X				X	X	X				
ETERNUS 6000	Model 400	X	X	X		X	X	X	X				X	X	X				
	Model 500	X	X	X		X	X	X	X				X	X	X				
	Model 600	X	X	X		X	X	X	X				X	X	X				
	Model 700	X	X	X		X	X	X	X				X	X	X				
	Model 800	X	X	X		X	X	X	X				X	X	X				
	Model 900	X	X	X		X	X	X	X				X	X	X				
	Model 1000	X	X	X		X	X	X	X				X	X	X				
	Model 1100	X	X	X		X	X	X	X				X	X	X				
ETERNUS 8000	Model 700	X	X	X		X	X	X	X				X	X	X				
	Model 900	X	X	X		X	X	X	X				X	X	X				
	Model 1100	X	X	X		X	X	X	X				X	X	X				
	Model 2100	X	X	X		X	X	X	X				X	X	X				

See [NOTE](#) on page 1 for JBOD support information.

Table 12. Fujitsu Siemens

		ESX Server 3.5				ESX Server 3i Embedded				ESX Server 3i Installable									
		Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN
FibreCAT	CX300	X	X	X	X	X <sup>4,5</sup>	X	X	X	X	X	X <sup>4,5</sup>	X	X	X	X	X	X <sup>4,5</sup>	X
	CX500	X	X	X	X	X <sup>4,5</sup>	X	X	X	X	X	X <sup>4,5</sup>	X	X	X	X	X	X <sup>4,5</sup>	X
	CX700	X	X	X	X	X <sup>4,5</sup>	X	X	X	X	X	X <sup>4,5</sup>	X	X	X	X	X	X <sup>4,5</sup>	X
	CX3-10c	X	X	X	X	X <sup>4,5</sup>	X	X	X	X	X	X <sup>4,5</sup>	X	X	X	X	X	X <sup>4,5</sup>	X
	CX3-20	X	X	X	X	X <sup>4,5</sup>	X	X	X	X	X	X <sup>4,5</sup>	X	X	X	X	X	X <sup>4,5</sup>	X
	CX3-20c	X	X	X	X	X <sup>4,5</sup>	X	X	X	X	X	X <sup>4,5</sup>	X	X	X	X	X	X <sup>4,5</sup>	X
	CX3-20f	X	X	X	X	X <sup>4,5</sup>	X	X	X	X	X	X <sup>4,5</sup>	X	X	X	X	X	X <sup>4,5</sup>	X
	CX3-40	X	X	X	X	X <sup>4,5</sup>	X	X	X	X	X	X <sup>4,5</sup>	X	X	X	X	X	X <sup>4,5</sup>	X
	CX3-40c	X	X	X	X	X <sup>4,5</sup>	X	X	X	X	X	X <sup>4,5</sup>	X	X	X	X	X	X <sup>4,5</sup>	X
	CX3-40f	X	X	X	X	X <sup>4,5</sup>	X	X	X	X	X	X <sup>4,5</sup>	X	X	X	X	X	X <sup>4,5</sup>	X
	CX3-80	X	X	X	X	X <sup>4,5</sup>	X	X	X	X	X	X <sup>4,5</sup>	X	X	X	X	X	X <sup>4,5</sup>	X
	CX4-120	X	X	X	X	X <sup>4,5</sup>	X	X	X	X	X	X <sup>4,5</sup>	X	X	X	X	X	X <sup>4,5</sup>	X
	CX4-240	X	X	X	X	X <sup>4,5</sup>	X	X	X	X	X	X <sup>4,5</sup>	X	X	X	X	X	X <sup>4,5</sup>	X
	CX4-480	X	X	X	X	X <sup>4,5</sup>	X	X	X	X	X	X <sup>4,5</sup>	X	X	X	X	X	X <sup>4,5</sup>	X
	CX4-960	X	X	X	X	X <sup>4,5</sup>	X	X	X	X	X	X <sup>4,5</sup>	X	X	X	X	X	X <sup>4,5</sup>	X
	SX60 <sup>1,2</sup>	X	X	X	X	X <sup>3,5</sup>	X	X	X	X	X	X <sup>3,5</sup>	X	X	X	X	X	X <sup>3,5</sup>	X
	SX80 <sup>1,2</sup>	X	X	X	X	X <sup>3,5</sup>	X	X	X	X	X	X <sup>3,5</sup>	X	X	X	X	X	X <sup>3,5</sup>	X
	SX88 <sup>1,2</sup>	X	X	X	X	X <sup>3,5</sup>	X	X	X	X	X	X <sup>3,5</sup>	X	X	X	X	X	X <sup>3,5</sup>	X
SX100 <sup>1,2</sup>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

See **NOTE** on page 1 for JBOD support information.

<sup>1</sup> No FW-Update possible under host I/O.

<sup>2</sup> Contact Fujitsu Siemens for SAN Boot guidelines.

**Table 12.** Fujitsu Siemens (Continued)

	ESX Server 3.5	ESX Server 3i Embedded	ESX Server 3i Installable
	<b>Basic connectivity</b> <b>Direct connect support</b> <b>Multipathing with HBA failover</b> <b>Multipathing with storage port failover</b> <b>Windows Clustering support</b> <b>Boot from SAN</b>	<b>Basic connectivity</b> <b>Direct connect support</b> <b>Multipathing with HBA failover</b> <b>Multipathing with storage port failover</b> <b>Windows Clustering support</b> <b>Boot from SAN</b>	<b>Basic connectivity</b> <b>Direct connect support</b> <b>Multipathing with HBA failover</b> <b>Multipathing with storage port failover</b> <b>Windows Clustering support</b> <b>Boot from SAN</b>
<sup>3</sup>	Support for Windows 2003 Enterprise Edition, Windows 2003 SP1 Enterprise Edition, Windows 2003 SP2 Enterprise Edition, Windows 2003 R2 Enterprise Edition.		
<sup>4</sup>	Support for Windows 2000 SP4 Advanced Server, Windows 2003 Enterprise Edition, Windows 2003 SP1 Enterprise Edition, Windows 2003 SP2 Enterprise Edition and Windows 2003 R2 Enterprise Edition.		
<sup>5</sup>	Requires Update 1 or higher of the ESX Server version listed in the corresponding column.		

Table 13. Hewlett Packard

		ESX Server 3.5				ESX Server 3i Embedded				ESX Server 3i Installable				
		Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN	
HP Enterprise Virtual Array (EVA)	4000	X	X	X	X <sup>3,4,7</sup>	X	X	X	X	X <sup>3,4,7</sup>	X	X	X	X <sup>3,4,7</sup>
	4100	X	X	X	X <sup>3,4,7</sup>	X	X	X	X	X <sup>3,4,7</sup>	X	X	X	X <sup>3,4,7</sup>
	4400 <sup>2</sup>	X	X	X	X <sup>3,4,7</sup>	X	X	X	X	X <sup>3,4,7</sup>	X	X	X	X <sup>3,4,7</sup>
	4400 with Embedded Switch <sup>2</sup>	X	X	X	X <sup>3,4,7</sup>	X	X	X	X	X <sup>3,4,7</sup>	X	X	X	X <sup>3,4,7</sup>
	6000	X	X	X	X <sup>3,4,7</sup>	X	X	X	X	X <sup>3,4,7</sup>	X	X	X	X <sup>3,4,7</sup>
	6100	X	X	X	X <sup>3,4,7</sup>	X	X	X	X	X <sup>3,4,7</sup>	X	X	X	X <sup>3,4,7</sup>
	8000	X	X	X	X <sup>3,4,7</sup>	X	X	X	X	X <sup>3,4,7</sup>	X	X	X	X <sup>3,4,7</sup>
	8100	X	X	X	X <sup>3,4,7</sup>	X	X	X	X	X <sup>3,4,7</sup>	X	X	X	X <sup>3,4,7</sup>
HP Modular Systems Array (MSA)	1000	X	X	X		X	X	X	X		X	X	X	
	1500	X	X	X		X	X	X	X		X	X	X	
	2012fc	X	X	X		X	X	X	X		X	X	X	
	2212fc	X	X	X		X	X	X	X		X	X	X	
XP10000 <sup>1</sup>	X	X	X	X <sup>3,5,7</sup>	X	X	X	X	X <sup>3,5,7</sup>	X	X	X	X <sup>3,5,7</sup>	
XP12000 <sup>1</sup>	X	X	X	X <sup>3,5,7</sup>	X	X	X	X	X <sup>3,5,7</sup>	X	X	X	X <sup>3,5,7</sup>	
XP20000	X	X	X	X <sup>3,6,7</sup>	X	X	X	X	X <sup>3,6,7</sup>	X	X	X	X <sup>3,6,7</sup>	
XP24000	X	X	X	X <sup>3,6,7</sup>	X	X	X	X	X <sup>3,6,7</sup>	X	X	X	X <sup>3,6,7</sup>	
See <a href="#">NOTE</a> on page 1 for JBOD support information.														
Please contact your local HP account or service representative for definitive information about supported HP storage product configurations including Guest OS types, array firmware and best practices when used with VMware products.														
<sup>1</sup> Please refer to <a href="http://kb.vmware.com/kb/1005009">http://kb.vmware.com/kb/1005009</a> .														
<sup>2</sup> ESX 3.5 Update 1 is required with Emulex HBAs.														

**Table 13.** Hewlett Packard (Continued)

	ESX Server 3.5			ESX Server 3i Embedded			ESX Server 3i Installable											
	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN
<sup>3</sup>	Requires Update 1 or higher of the ESX Server version listed in the corresponding column.																	
<sup>4</sup>	Support for Windows 2000 SP4 Advanced Server, Windows 2003 Enterprise Edition, Windows 2003 SP1 Enterprise Edition, Windows 2003 SP2 Enterprise Edition, and Windows 2003 R2 Enterprise Edition.																	
<sup>5</sup>	Support for Windows 2000 SP4 Advanced Server, and Windows 2003 SP2 Enterprise Edition.																	
<sup>6</sup>	Support for Windows 2003 SP2 Enterprise Edition.																	
<sup>7</sup>	Support for N+1 and CAB configuration only.																	

**Table 14.** Hitachi

	ESX Server 3.5			ESX Server 3i Embedded			ESX Server 3i Installable												
	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN	
AMS 2100	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
AMS 2300	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
AMS 2500	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
BR 50	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
BR 150	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

**Table 14.** Hitachi (Continued)

	ESX Server 3.5				ESX Server 3i Embedded				ESX Server 3i Installable										
	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN	
SANRISE 9500V Series	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
SANRISE 9970V	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
SANRISE 9980V	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
SANRISE AMS 200	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
SANRISE AMS 500	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
SANRISE AMS 1000	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
SANRISE NSC 55 <sup>1</sup>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
SANRISE USP 100 <sup>1</sup>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
SANRISE USP 600 <sup>1</sup>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
SANRISE USP 1100 <sup>1</sup>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
SANRISE WMS 100	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
SMS100	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
USP V	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
USP VM	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
See <b>NOTE</b> on page 1 for JBOD support information.																			
<sup>1</sup> Please refer to <a href="http://kb.vmware.com/kb/1005009">http://kb.vmware.com/kb/1005009</a> .																			
<sup>2</sup> Supported with Emulex HBAs only.																			

**Table 15.** Hitachi Data Systems (HDS)

	ESX Server 3.5					ESX Server 3i Embedded					ESX Server 3i Installable								
	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN	
AMS 2100	X	X	X		X	X	X	X	X		X	X	X		X	X	X	X	
AMS 2300	X	X	X		X	X	X	X	X		X	X	X		X	X	X	X	
AMS 2500	X	X	X		X	X	X	X	X		X	X	X		X	X	X	X	
Lightning 9970V	X	X	X		X	X	X	X	X		X	X	X		X	X	X	X	
Lightning 9980V	X	X	X		X	X	X	X	X		X	X	X		X	X	X	X	
SMS100	X	X	X		X	X	X	X	X		X	X	X		X	X	X	X	
TagmaStore AMS 200	X	X	X		X	X	X	X	X		X	X	X		X	X	X	X	
TagmaStore AMS 500	X	X	X		X	X	X	X	X		X	X	X		X	X	X	X	
TagmaStore AMS 1000	X	X	X		X	X	X	X	X		X	X	X		X	X	X	X	
TagmaStore NSC 55 <sup>1</sup>	X	X	X		X	X	X	X	X		X	X	X		X	X	X	X	
TagmaStore USP 100 <sup>1</sup>	X	X	X		X	X	X	X	X		X	X	X		X	X	X	X	
TagmaStore USP 600 <sup>1</sup>	X	X	X		X	X	X	X	X		X	X	X		X	X	X	X	
TagmaStore USP 1100 <sup>1</sup>	X	X	X		X	X	X	X	X		X	X	X		X	X	X	X	
TagmaStore WMS 100	X	X	X		X	X	X	X	X		X	X	X		X	X	X	X	
Thunder 9500V Series	X	X	X		X	X	X	X	X		X	X	X		X	X	X	X	
USP V	X	X	X		X	X	X	X	X		X	X	X		X	X	X	X	
USP VM	X	X	X		X	X	X	X	X		X	X	X		X	X	X	X	
See <b>NOTE</b> on page 1 for JBOD support information.																			
<sup>1</sup> Please refer to <a href="http://kb.vmware.com/kb/1005009">http://kb.vmware.com/kb/1005009</a> .																			
<sup>2</sup> Supported with Emulex HBAs only.																			

Table 16. IBM

	ESX Server 3.5				ESX Server 3i Embedded				ESX Server 3i Installable										
	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN	
DS3400	X	X	X		X	X	X	X					X	X	X				
DS4200	X	X	X		X	X	X	X					X	X	X				
DS4300/FAStT600 <sup>1,2</sup>	X	X	X		X	X	X	X					X	X	X				
DS4500/FAStT900 <sup>1,2</sup>	X	X	X		X	X	X	X					X	X	X				
DS4700	X	X	X		X	X	X	X					X	X	X				
DS4800	X	X	X		X	X	X	X					X	X	X				
DS5100 <sup>3</sup>	X	X	X			X	X	X					X	X	X				
DS5300 <sup>3</sup>	X	X	X			X	X	X					X	X	X				
DS6000	X	X	X	X <sup>2</sup>	X	X	X	X	X <sup>2</sup>				X	X	X	X	X <sup>2</sup>		
DS8000	X	X	X	X <sup>2</sup>	X	X	X	X	X <sup>2</sup>				X	X	X	X	X <sup>2</sup>		
ESS 750/800	X	X	X		X	X	X	X					X	X	X				
F10/F20	X	X	X		X	X	X	X					X	X	X				
N3000 Series	X	X	X	X	X	X	X	X	X				X	X	X	X			
N3700	X	X	X			X	X	X					X	X	X				
N5000 Series	X	X	X	X	X	X	X	X	X				X	X	X	X			
N6000 Series	X	X	X	X	X	X	X	X	X				X	X	X	X			
N7000 Series	X	X	X	X	X	X	X	X	X				X	X	X	X			
XIV <sup>2</sup>	X	X	X		X	X	X	X					X	X	X				
XIV Nexta <sup>2</sup>	X	X	X		X	X	X	X					X	X	X				
See <a href="#">NOTE</a> on page 1 for JBOD support information.																			
<sup>1</sup> Support for QLogic HBAs only.																			

**Table 16. IBM (Continued)**

	ESX Server 3.5	ESX Server 3i Embedded	ESX Server 3i Installable
Basic connectivity			
Direct connect support			
Multipathing with HBA failover			
Multipathing with storage port failover			
Windows Clustering support			
Boot from SAN			
Basic connectivity			
Direct connect support			
Multipathing with HBA failover			
Multipathing with storage port failover			
Windows Clustering support			
Boot from SAN			
Basic connectivity			
Direct connect support			
Multipathing with HBA failover			
Multipathing with storage port failover			
Windows Clustering support			
Boot from SAN			
<sup>2</sup> Requires Update 1 or higher of the ESX Server version listed in the corresponding column.			
<sup>3</sup> ESX Server 3.5 Update 2 (110268) and ESX Server Patch ESX350-200808401-BG are required.			

**Table 17. LSILogic**

	ESX Server 3.5	ESX Server 3i Embedded	ESX Server 3i Installable
Basic connectivity			
Direct connect support			
Multipathing with HBA failover			
Multipathing with storage port failover			
Windows Clustering support			
Boot from SAN			
Basic connectivity			
Direct connect support			
Multipathing with HBA failover			
Multipathing with storage port failover			
Windows Clustering support			
Boot from SAN			
Basic connectivity			
Direct connect support			
Multipathing with HBA failover			
Multipathing with storage port failover			
Windows Clustering support			
Boot from SAN			
1932 Storage System	X	X	X
See <a href="#">NOTE</a> on page 1 for JBOD support information.			

Table 18. NEC

	ESX Server 3.5					ESX Server 3i Embedded					ESX Server 3i Installable							
	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN
iStorage D1-10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
iStorage D3-10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
iStorage D8	X		X	X	X	X		X	X	X		X		X	X	X		X
iStorage E1-10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
iStorage S500	X		X	X	X	X		X	X	X		X		X	X	X		X
iStorage S550	X		X	X	X	X		X	X	X		X		X	X	X		X
iStorage S1500	X		X	X	X	X		X	X	X		X		X	X	X		X
iStorage S2500	X		X	X	X	X		X	X	X		X		X	X	X		X
iStorage S2800	X		X	X	X	X		X	X	X		X		X	X	X		X
iStorage S2900	X		X	X	X	X		X	X	X		X		X	X	X		X
iStorage S4900	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

See [NOTE](#) on page 1 for JBOD support information.

Table 19. NetApp

	ESX Server 3.5					ESX Server 3i Embedded					ESX Server 3i Installable							
	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN
FAS200 Series	X		X	X		X	X		X	X			X		X	X		
FAS900 Series	X	X	X	X		X	X	X	X	X			X	X	X	X		
FAS2000 Series <sup>1</sup>	X	X	X	X		X	X	X	X	X			X	X	X	X		
FAS3000 Series	X	X	X	X		X	X	X	X	X			X	X	X	X		
FAS3100 Series	X	X	X	X		X	X	X	X	X			X	X	X	X		
FAS6000 Series <sup>1</sup>	X	X	X	X		X	X	X	X	X			X	X	X	X		
See <a href="#">NOTE</a> on page 1 for JBOD support information.																		
<sup>1</sup> Data ONTAP 7.3 requires ESX Server 3.5 Update 2 or higher of the ESX Server version listed in the corresponding column.																		

Table 20. Nexsan Technologies

	ESX Server 3.5					ESX Server 3i Embedded					ESX Server 3i Installable							
	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN
SATABEAST	X		X	X		X	X		X	X			X		X	X		
See <a href="#">NOTE</a> on page 1 for JBOD support information.																		

**Table 21.** Nihon Unisys

	ESX Server 3.5				ESX Server 3i Embedded				ESX Server 3i Installable										
	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN	
SANARENA 1830	X	X	X		X	X	X	X					X	X	X				
SANARENA 1870	X	X	X		X	X	X	X					X	X	X				
SANARENA 1890	X	X	X		X	X	X	X					X	X	X				
SANARENA 1895	X	X	X		X	X	X	X					X	X	X				
SANARENA 18AS	X	X	X		X	X	X	X					X	X	X				
SANARENA 5200 <sup>1</sup>	X	X	X		X	X	X	X					X	X	X				
SANARENA 5800 <sup>1</sup>	X	X	X		X	X	X	X					X	X	X				
See <b>NOTE</b> on page 1 for JBOD support information.																			
<sup>1</sup> Please refer to <a href="http://kb.vmware.com/kb/1005009">http://kb.vmware.com/kb/1005009</a> .																			

**Table 22.** Overland Storage

	ESX Server 3.5					ESX Server 3i Embedded					ESX Server 3i Installable							
	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN
ULTAMUS RAID 1200	X	X	X		X	X	X	X	X	X		X	X	X				
ULTAMUS RAID 4800	X	X	X		X	X	X	X	X	X		X	X	X				

See [NOTE](#) on page 1 for JBOD support information.

**Table 23.** Pillar Data Systems

	ESX Server 3.5					ESX Server 3i Embedded					ESX Server 3i Installable							
	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN
Axiom Storage System 300	X	X	X		X	X	X	X	X	X		X	X	X				
Axiom Storage System 500	X	X	X		X	X	X	X	X	X		X	X	X				
Axiom Storage System 600	X	X	X		X	X	X	X	X	X		X	X	X				

See [NOTE](#) on page 1 for JBOD support information.

**Table 24.** Promise Technology

	ESX Server 3.5					ESX Server 3i Embedded					ESX Server 3i Installable							
	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN
E310f	X	X	X		X	X	X	X	X		X	X	X	X	X			
E610f <sup>1</sup>	X	X	X		X	X	X	X			X	X	X	X	X			

See [NOTE](#) on page 1 for JBOD support information.

<sup>1</sup> No FW-Update possible under host I/O.

**Table 25.** Sun

	ESX Server 3.5					ESX Server 3i Embedded					ESX Server 3i Installable							
	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN
StorageTek 2540 <sup>1</sup>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
StorageTek 6140 <sup>1</sup>	X	X	X	X	X <sup>3</sup>	X	X	X	X	X	X <sup>3</sup>	X	X	X	X	X	X <sup>3</sup>	X
StorageTek 6540 <sup>1</sup>	X	X	X	X	X <sup>3</sup>	X	X	X	X	X	X <sup>3</sup>	X	X	X	X	X	X <sup>3</sup>	X
StorageTek 9985 <sup>2</sup>	X	X	X		X	X	X	X				X	X	X				
StorageTek 9985v	X	X	X		X	X	X	X				X	X	X				
StorageTek 9970	X	X	X		X	X	X	X				X	X	X				

Table 25. Sun (Continued)

	ESX Server 3.5				ESX Server 3i Embedded				ESX Server 3i Installable			
	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN
StorageTek 9980	X	X	X		X	X	X	X		X	X	X
StorageTek 9990 <sup>2</sup>	X	X	X		X	X	X	X		X	X	X
StorageTek 9990v	X	X	X		X	X	X	X		X	X	X
StorageTek Flexline 240 <sup>1</sup>	X	X	X		X	X	X	X		X	X	X
StorageTek Flexline 280 <sup>1</sup>	X	X	X		X	X	X	X		X	X	X
StorageTek Flexline 380 <sup>1</sup>	X	X	X		X	X	X	X		X	X	X
See <b>NOTE</b> on page 1 for JBOD support information.												
<sup>1</sup> For more information, refer to <a href="http://kb.vmware.com/kb/1005441">http://kb.vmware.com/kb/1005441</a> .												
<sup>2</sup> Please refer to <a href="http://kb.vmware.com/kb/1005009">http://kb.vmware.com/kb/1005009</a> .												
<sup>3</sup> MSCS supported with 4Gb Fibre Channel HBAs.												

**Table 26.** Transtec

	ESX Server 3.5				ESX Server 3i Embedded				ESX Server 3i Installable			
	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN
PROVIGO 550F	X	X	X	X	X	X	X	X	X	X	X	X

**Table 27.** Xiotech

	ESX Server 3.5				ESX Server 3i Embedded				ESX Server 3i Installable			
	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN	Basic connectivity	Direct connect support	Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support	Boot from SAN
Emprise 5000	X	X	X	X	X	X	X	X	X	X	X	X
Emprise 7000 <sup>2</sup>	X	X	X	X	X	X	X	X	X	X	X	X
Magnitude 3D 3000 <sup>1</sup>	X	X	X	X	X	X	X	X	X	X	X	X
Magnitude 3D 4000 <sup>1</sup>	X	X	X	X	X	X	X	X	X	X	X	X
See <b>NOTE</b> on page 1 for JBOD support information.												
<sup>1</sup> Supported with Qlogic HBAs only.												
<sup>2</sup> Configuration limited to ISE drive bays only.												

Table 28. Xyratex Ltd

	ESX Server 3.5				ESX Server 3i Embedded				ESX Server 3i Installable			
	Basic connectivity	Direct connect support Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support Boot from SAN	Basic connectivity	Direct connect support Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support Boot from SAN	Basic connectivity	Direct connect support Multipathing with HBA failover	Multipathing with storage port failover	Windows Clustering support Boot from SAN
F5402E	X	X	X	X	X	X	X	X	X	X	X	X
F5404E <sup>1</sup>	X	X	X	X	X	X	X	X	X	X	X	X
F5412E	X	X	X	X	X	X	X	X	X	X	X	X
F6412E	X	X	X	X	X	X	X	X	X	X	X	X
See <b>NOTE</b> on page 1 for JBOD support information.												
<sup>1</sup> Requires Update 1 or higher of the ESX Server version listed in the corresponding column.												

## Storage Virtualization Device (SVD)

VMware supports Storage Virtualization Devices (SVD) with ESX Server 3.0.2 or later.

- Backend storage arrays must be listed on both the *ESX Server 3.x Storage/SAN Compatibility Guide* ([http://www.vmware.com/pdf/vi3\\_san\\_guide.pdf](http://www.vmware.com/pdf/vi3_san_guide.pdf)) and the SVD Vendor supported list.
- Do not share the same LUN of the backend storage array between SVD and any other host.

This section contains information on storage arrays from the following vendors:

- “EMC,” on page 30
- “FalconStor Software,” on page 31
- “Hewlett Packard,” on page 31
- “Hitachi,” on page 32
- “Hitachi Data Systems (HDS),” on page 33
- “IBM,” on page 33

- “NetApp,” on page 34
- “Nihon Unisys,” on page 34
- “Sun,” on page 35

**Table 29. EMC**

	ESX Server 3.5				ESX Server 3i Embedded				ESX Server 3i Installable			
	Basic connectivity	Multipathing with HBA failover	Multipathing with storage port failover	Boot from SAN	Basic connectivity	Multipathing with HBA failover	Multipathing with storage port failover	Boot from SAN	Basic connectivity	Multipathing with HBA failover	Multipathing with storage port failover	Boot from SAN
Invista 2.1 -Brocade <sup>1, 3, 4, 5</sup>	X	X	X	X	X	X	X	X	X	X	X	
Invista 2.1 -Cisco <sup>2, 3, 4, 6</sup>	X	X	X	X	X	X	X	X	X	X	X	
<sup>1</sup> This Storage Virtualization Device is supported with Qlogic and Emulex HBAs only.												
<sup>2</sup> This Storage Virtualization Device is supported with Qlogic HBAs only.												
<sup>3</sup> In an environment where RDM is used in back-end storage, special caution must be taken after RDM migration. Please see KB 1002564 for further details: <a href="http://kb.vmware.com/kb/1002564">http://kb.vmware.com/kb/1002564</a> .												
<sup>4</sup> Contact EMC for Non Disruptive Upgrade (NDU) procedure for Invista firmware upgrade.												
<sup>5</sup> Contact EMC for supported Brocade switches, Invista patch level, and Data Path Controllers.												
<sup>6</sup> Contact EMC for supported Ciscoswitches, Invista patch level, and Data Path Controllers												

**Table 30. FalconStor Software**

	ESX Server 3.5				ESX Server 3i Embedded				ESX Server 3i Installable			
	Basic connectivity	Multipathing with HBA failover	Multipathing with storage port failover	Boot from SAN	Basic connectivity	Multipathing with HBA failover	Multipathing with storage port failover	Boot from SAN	Basic connectivity	Multipathing with HBA failover	Multipathing with storage port failover	Boot from SAN
CDPx Gateway <sup>1,2,3,4,7</sup>	X	X	X	X	X	X	X	X	X	X	X	X
IPStor Enterprise <sup>1,2,3,4,5,6</sup>	X	X	X	X	X	X	X	X	X	X	X	X
NSS Gateway <sup>1,2,3,4,5,6</sup>	X	X	X	X	X	X	X	X	X	X	X	X
<sup>1</sup> This Storage Virtualization Device is supported with Qlogic HBAs only.												
<sup>2</sup> In an environment where RDM is used in back-end storage, special caution must be taken after RDM migration. Please see KB 1002564 for further details: <a href="http://kb.vmware.com/kb/1002564">http://kb.vmware.com/kb/1002564</a> .												
<sup>3</sup> NSS Gateway Software Appliance Kit revision must be at 6.0 or higher. IPStor Enterprise should be 6.x. Contact FalconStor Software for upgrades from previous versions to 6.x version.												
<sup>4</sup> NSS Gateway must be installed on FalconStor approved hardware appliances and HBAs.												
<sup>5</sup> Do not select the option to preserve physical device's inquiry string.												
<sup>6</sup> Guest operating system timeout should be set to 180 sec in clustered FalconStor appliance environment.												
<sup>7</sup> Requires Update 1 or higher of the ESX Server version listed in the corresponding column.												

**Table 31. Hewlett Packard**

	ESX Server 3.5				ESX Server 3i Embedded				ESX Server 3i Installable			
	Basic connectivity	Multipathing with HBA failover	Multipathing with storage port failover	Boot from SAN	Basic connectivity	Multipathing with HBA failover	Multipathing with storage port failover	Boot from SAN	Basic connectivity	Multipathing with HBA failover	Multipathing with storage port failover	Boot from SAN
XP10000 <sup>1,2,3</sup>	X	X	X	X	X	X	X	X	X	X	X	X
XP12000 <sup>1,2,3</sup>	X	X	X	X	X	X	X	X	X	X	X	X

**Table 31. Hewlett Packard**

	ESX Server 3.5				ESX Server 3i Embedded				ESX Server 3i Installable			
	Basic connectivity	Multipathing with HBA failover	Multipathing with storage port failover	Boot from SAN	Basic connectivity	Multipathing with HBA failover	Multipathing with storage port failover	Boot from SAN	Basic connectivity	Multipathing with HBA failover	Multipathing with storage port failover	Boot from SAN
XP20000 <sup>1,2</sup>	X	X	X	X	X	X	X	X	X	X	X	
XP24000 <sup>1,2</sup>	X	X	X	X	X	X	X	X	X	X	X	

<sup>1</sup> In an environment where RDM is used in back-end storage, special caution must be taken after RDM migration. Please see KB 1002564 for further details: <http://kb.vmware.com/kb/1002564>.

<sup>2</sup> Requires patch ESX-1002974. Please see KB 1002974 for further details: <http://kb.vmware.com/kb/1002974>.

<sup>3</sup> Please refer to <http://kb.vmware.com/kb/1005009>.

**Table 32. Hitachi**

	ESX Server 3.5				ESX Server 3i Embedded				ESX Server 3i Installable			
	Basic connectivity	Multipathing with HBA failover	Multipathing with storage port failover	Boot from SAN	Basic connectivity	Multipathing with HBA failover	Multipathing with storage port failover	Boot from SAN	Basic connectivity	Multipathing with HBA failover	Multipathing with storage port failover	Boot from SAN
SANRISE NSC 55 <sup>1,2</sup>	X	X	X	X	X	X	X	X	X	X	X	
SANRISE USP 100 <sup>1,2</sup>	X	X	X	X	X	X	X	X	X	X	X	
SANRISE USP 600 <sup>1,2</sup>	X	X	X	X	X	X	X	X	X	X	X	
SANRISE USP 1100 <sup>1,2</sup>	X	X	X	X	X	X	X	X	X	X	X	
USP V <sup>1</sup>	X	X	X	X	X	X	X	X	X	X	X	
USP VM <sup>1</sup>	X	X	X	X	X	X	X	X	X	X	X	

<sup>1</sup> In an environment where RDM is used in back-end storage, special caution must be taken after RDM migration. Please see KB 1002564 for further details: <http://kb.vmware.com/kb/1002564>.

<sup>2</sup> Please refer to <http://kb.vmware.com/kb/1005009>.

**Table 33.** Hitachi Data Systems (HDS)

	ESX Server 3.5				ESX Server 3i Embedded				ESX Server 3i Installable			
	Basic connectivity	Multipathing with HBA failover	Multipathing with storage port failover	Boot from SAN	Basic connectivity	Multipathing with HBA failover	Multipathing with storage port failover	Boot from SAN	Basic connectivity	Multipathing with HBA failover	Multipathing with storage port failover	Boot from SAN
TagmaStore NSC 55 <sup>1, 2, 3</sup>	X	X	X	X	X	X	X	X	X	X	X	X
TagmaStore USP 100 <sup>1, 2, 3</sup>	X	X	X	X	X	X	X	X	X	X	X	X
TagmaStore USP 600 <sup>1, 2, 3</sup>	X	X	X	X	X	X	X	X	X	X	X	X
TagmaStore USP 1100 <sup>1, 2, 3</sup>	X	X	X	X	X	X	X	X	X	X	X	X
USP V <sup>1, 2</sup>	X	X	X	X	X	X	X	X	X	X	X	X
USP VM <sup>1, 2</sup>	X	X	X	X	X	X	X	X	X	X	X	X

<sup>1</sup> In an environment where RDM is used in back-end storage, special caution must be taken after RDM migration. Please see KB 1002564 for further details: <http://kb.vmware.com/kb/1002564>.

<sup>2</sup> Requires patch ESX-1002974. Please see KB 1002974 for further details: <http://kb.vmware.com/kb/1002974>.

<sup>3</sup> Please refer to <http://kb.vmware.com/kb/1005009>.

**Table 34.** IBM

	ESX Server 3.5				ESX Server 3i Embedded				ESX Server 3i Installable			
	Basic connectivity	Multipathing with HBA failover	Multipathing with storage port failover	Boot from SAN	Basic connectivity	Multipathing with HBA failover	Multipathing with storage port failover	Boot from SAN	Basic connectivity	Multipathing with HBA failover	Multipathing with storage port failover	Boot from SAN
SVC <sup>1</sup>	X	X	X	X	X	X	X	X	X	X	X	X

<sup>1</sup> In an environment where RDM is used in back-end storage, special caution must be taken after RDM migration. Please see KB 1002564 for further details: <http://kb.vmware.com/kb/1002564>.

**Table 35.** NetApp

	ESX Server 3.5				ESX Server 3i Embedded				ESX Server 3i Installable			
	Basic connectivity	Multipathing with HBA failover	Multipathing with storage port failover	Boot from SAN	Basic connectivity	Multipathing with HBA failover	Multipathing with storage port failover	Boot from SAN	Basic connectivity	Multipathing with HBA failover	Multipathing with storage port failover	Boot from SAN
V3000 Series Data ONTAP 7.2.4 <sup>1, 2, 3</sup>	X	X	X	X	X	X	X	X	X	X	X	X
V6000 Series Data ONTAP 7.2.4 <sup>1, 3</sup>	X	X	X	X	X	X	X	X	X	X	X	X

<sup>1</sup> In an environment where RDM is used in back-end storage, special caution must be taken after RDM migration. Please see KB 1002564 for further details: <http://kb.vmware.com/kb/1002564>.

<sup>2</sup> This Storage Virtualization Device is supported with Qlogic HBAs only.

<sup>3</sup> Please refer to <http://kb.vmware.com/kb/1005009>.

**Table 36.** Nihon Unisys

	ESX Server 3.5				ESX Server 3i Embedded				ESX Server 3i Installable			
	Basic connectivity	Multipathing with HBA failover	Multipathing with storage port failover	Boot from SAN	Basic connectivity	Multipathing with HBA failover	Multipathing with storage port failover	Boot from SAN	Basic connectivity	Multipathing with HBA failover	Multipathing with storage port failover	Boot from SAN
SANARENA 5200 <sup>1, 2, 3</sup>	X	X	X	X	X	X	X	X	X	X	X	X
SANARENA 5800 <sup>1, 2, 3</sup>	X	X	X	X	X	X	X	X	X	X	X	X

<sup>1</sup> In an environment where RDM is used in back-end storage, special caution must be taken after RDM migration. Please see KB 1002564 for further details: <http://kb.vmware.com/kb/1002564>.

<sup>2</sup> Requires patch ESX-1002974. Please see KB 1002974 for further details: <http://kb.vmware.com/kb/1002974>.

<sup>3</sup> Please refer to <http://kb.vmware.com/kb/1005009>.

Table 37. Sun

	ESX Server 3.5				ESX Server 3i Embedded				ESX Server 3i Installable			
	Basic connectivity	Multipathing with HBA failover	Multipathing with storage port failover	Boot from SAN	Basic connectivity	Multipathing with HBA failover	Multipathing with storage port failover	Boot from SAN	Basic connectivity	Multipathing with HBA failover	Multipathing with storage port failover	Boot from SAN
StorageTek 9985 <sup>1, 2, 3</sup>	X	X	X	X	X	X	X	X	X	X	X	X
StorageTek 9985V <sup>1, 2</sup>	X	X	X	X	X	X	X	X	X	X	X	X
StorageTek 9990 <sup>1, 2, 3</sup>	X	X	X	X	X	X	X	X	X	X	X	X
StorageTek 9990V <sup>1, 2</sup>	X	X	X	X	X	X	X	X	X	X	X	X

<sup>1</sup> In an environment where RDM is used in back-end storage, special caution must be taken after RDM migration. Please see KB 1002564 for further details: <http://kb.vmware.com/kb/1002564>.

<sup>2</sup> Requires patch ESX-1002974. Please see KB 1002974 for further details: <http://kb.vmware.com/kb/1002974>.

<sup>3</sup> Please refer to <http://kb.vmware.com/kb/1005009>.

## Storage Arrays supported with FCoE CNAs

Fibre Channel Over Ethernet Converged Network Adapters (FCoE CNAs) can be concurrently connected to Fibre Channel Fabrics and Ethernet networks, through Fibre Channel Over Ethernet capable switches. Certified Fibre Channel arrays will be listed soon. Only the Fibre Channel arrays that will be listed in this section are certified to work and supported with FCoE CNAs. CNAs are not yet supported to connect with iSCSI and NFS storage arrays.

## Network Attached Storage

This section contains information on the support for network attached storage with ESX Server software.

**NOTE** Windows Clustering (MSCS) is not supported with NAS.

The following sections are included:

- [“Supported Linux Distributions”](#) on page 36
- [“Supported Storage Devices”](#) on page 36

## Supported Linux Distributions

The following Linux distributions support network attached storage when used with ESX Server 3.x software:

- Red Hat Enterprise Linux 3 NFS Server (Update 5).
- Fedora Core 4 NFS Server (2.6.12-1.1456\_FC4.9550smp).
- Fedora Core 6 NFS Server (2.6.18-1.2798.fc6 #1 SMP) for ESX Server 3.5 only.

## Supported Storage Devices

This section lists all of the supported devices for network attached storage with ESX Server 3.x software from the following vendors:

- [“American Megatrends Inc.”](#) on page 37
- [“BlueArc Corp”](#) on page 37
- [“EMC”](#) on page 37
- [“Fujitsu”](#) on page 38
- [“Fujitsu Siemens”](#) on page 38
- [“Hitachi Data Systems \(HDS\)”](#) on page 38
- [“IBM”](#) on page 39
- [“IBRIX”](#) on page 39
- [“Isilon Systems”](#) on page 39
- [“NEC”](#) on page 40
- [“NetApp”](#) on page 40
- [“ONStor Inc”](#) on page 41
- [“Overland Storage”](#) on page 41
- [“Pillar Data Systems”](#) on page 41
- [“Sun”](#) on page 41

**Table 38.** American Megatrends Inc.

	<b>ESX Server 3.5</b>	<b>ESX Server 3i Embedded</b>	<b>ESX Server 3i Installable</b>
3200i	X	X	X

**Table 39.** BlueArc Corp

	<b>ESX Server 3.5</b>	<b>ESX Server 3i Embedded</b>	<b>ESX Server 3i Installable</b>
Titan 1100	X	X	X
Titan 2100	X	X	X
Titan 2200	X	X	X
Titan 2500	X	X	X

**Table 40.** EMC

	<b>ESX Server 3.5</b>	<b>ESX Server 3i Embedded</b>	<b>ESX Server 3i Installable</b>
Celerra NS 20/40/80 series, NS 350, NS 500/700 series, CNS, and NSX DART version 5.5	X	X	X
Celerra NS 20/40/80 series, NX4, NS 350, NS 500/700 series, CNS, and NSX DART 5.6	X	X	X

**Table 41.** Fujitsu

			ESX Server 3.5	ESX Server 3i Embedded	ESX Server 3i Installable
ETERNUS NR1000F	F2020	Data ONTAP 7.2.2	X	X	X
	F2050	Data ONTAP 7.2.2	X	X	X
	F3020	Data ONTAP 7.2	X	X	X
		Data ONTAP 7.2.4	X	X	X
	F3040	Data ONTAP 7.2	X	X	X
		Data ONTAP 7.2.4	X	X	X
	F3070	Data ONTAP 7.2	X	X	X
		Data ONTAP 7.2.4	X	X	X
	F6030	Data ONTAP 7.2.4	X	X	X
	F6040	Data ONTAP 7.2.4	X	X	X
	F6070	Data ONTAP 7.2.4	X	X	X
	F6080	Data ONTAP 7.2.4	X	X	X

**Table 42.** Fujitsu Siemens

	ESX Server 3.5	ESX Server 3i Embedded	ESX Server 3i Installable
CentricStor FS2000	X	X	X
CentricStor FS4000	X	X	X
CentricStor FS8000	X	X	X

**Table 43.** Hitachi Data Systems (HDS)

	ESX Server 3.5	ESX Server 3i Embedded	ESX Server 3i Installable
HNAS Server 2100	X	X	X
HNAS Server 2200	X	X	X

**Table 44. IBM**

	<b>ESX Server 3.5</b>	<b>ESX Server 3i Embedded</b>	<b>ESX Server 3i Installable</b>
N3000 Series	X	X	X
N3700	X	X	X
N5000 Series	X	X	X
	X	X	X
N6000 Series	X	X	X
N7000 Series	X	X	X

**Table 45. IBRIX**

	<b>ESX Server 3.5</b>	<b>ESX Server 3i Embedded</b>	<b>ESX Server 3i Installable</b>
Fusion 5200	X	X	X

**Table 46. Isilon Systems**

	<b>ESX Server 3.5</b>	<b>ESX Server 3i Embedded</b>	<b>ESX Server 3i Installable</b>
IQ1920x	X	X	X
IQ3000x	X	X	X
IQ6000x	X	X	X
IQ9000x	X	X	X
IQ12000x	X	X	X

**Table 47. NEC**

		ESX Server 3.5	ESX Server 3i Embedded	ESX Server 3i Installable
iStorage	NV3400	X	X	X
	NV3400S	X	X	X
	NV5400	X	X	X
	NV5400S	X	X	X
	NV7400	X	X	X
	NV7400G	X	X	X
	NV7400S	X	X	X

**Table 48. NetApp**

		ESX Server 3.5	ESX Server 3i Embedded	ESX Server 3i Installable
FAS200 Series	Data ONTAP 7.2.4	X	X	X
FAS900 Series	Data ONTAP 7.2.4	X	X	X
FAS2000 Series	Data ONTAP 7.2.2	X	X	X
	Data ONTAP 7.3 <sup>1</sup>	X	X	X
FAS3000 Series	Data ONTAP 7.2	X	X	X
	Data ONTAP 7.2.4	X	X	X
	Data ONTAP 7.3 <sup>1, 2</sup>	X	X	X
FAS3100 Series	Data ONTAP 7.2.6	X	X	X
	Data ONTAP 7.3 <sup>1</sup>	X	X	X
FAS6000 Series	Data ONTAP 7.2.4	X	X	X
	Data ONTAP 7.2.5.1 <sup>1, 2</sup>	X	X	X
	Data ONTAP 7.3 <sup>1, 2</sup>	X	X	X
StoreVault S300		X	X	X
StoreVault S550	Data ONTAP 7.2.1S4	X	X	X

<sup>1</sup> Requires Update 2 or higher of the ESX Server version listed in the corresponding column.

<sup>2</sup> 1GbE and 10GbE Storage interfaces are supported.

**Table 49.** ONStor Inc

	ESX Server 3.5	ESX Server 3i Embedded	ESX Server 3i Installable
Bobcat 2240	X	X	X
Bobcat 2260	X	X	X
Bobcat 2280	X	X	X

**Table 50.** Overland Storage

	ESX Server 3.5	ESX Server 3i Embedded	ESX Server 3i Installable
Snap Server 520	X	X	X
Snap Server 650 <sup>1</sup>	X	X	X

<sup>1</sup> Requires Update 1 or higher of the ESX Server version listed in the corresponding column.

**Table 51.** Pillar Data Systems

	ESX Server 3.5	ESX Server 3i Embedded	ESX Server 3i Installable
Axiom Storage System 600	X	X	X

**Table 52.** Sun

	ESX Server 3.5	ESX Server 3i Embedded	ESX Server 3i Installable
Sun Storage 7110 <sup>2</sup>	X	X	X
Sun Storage 7210 <sup>2</sup>	X	X	X
Sun Storage 7410 <sup>2</sup>	X	X	X
StorageTek 5220 NAS	X	X	X
StorageTek 5320 NAS Appliance	X	X	X
Sun StorageTek 5320 NAS Cluster	X	X	X
Sun Fire X4500 <sup>1</sup>	X	X	X

<sup>1</sup> Sun Fire X4500 running Solaris 10 8/07 and the ZFS filesystem.

<sup>2</sup> Requires Update 2 or higher of the ESX Server version listed in the corresponding column.

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**NOTE** Celerra models noted are family names and cover all model numbers and model types (integrated and gateway) within the family.

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## iSCSI

VMware supports the iSCSI Storage listed in this section.

The following maximums are in place when using iSCSI arrays with ESX Server hosts:

**Table 53.** Storage parameter maximums with iSCSI Arrays

Parameter	Initiator type used	Limit
Number of HBAs	software	1
	hardware	1 dual port or 2 single port
Maximum number of targets	both software and hardware initiator	64
Number of LUNs	both software and hardware initiator	254
Number of paths to storage	software	4
	hardware	8

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**NOTE** These maximums may not apply in the case of Virtual SAN Appliance (VSA). Please refer to the specific LeftHand Networks supported arrays for the maximums and minimum supported configurations with VSA. See “[LeftHand Networks](#),” on page 61.

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VMware supports connections to iSCSI arrays using either the software initiator in the kernel or a hardware initiator (iSCSI HBA). Please refer to the *I/O Compatibility Guide* at [http://www.vmware.com/pdf/vi3\\_io\\_guide.pdf](http://www.vmware.com/pdf/vi3_io_guide.pdf) for a list of hardware initiators that can be used with ESX.

The following configurations are supported for iSCSI storage with the software initiator over a supported NIC:

- **iSCSI Base Connectivity** – The ability of an ESX Server host to recognize the target and interoperate with it.
- **SP failover** – In this configuration the ESX Server host is attached to multiple ports and is robust to storage port failover
- **NIC failover for software initiator** – If the Ethernet adapters are teamed and one fails, the other one takes over. Both adapters must be connected to the same physical switch and be on the same subnet (both NICs and iSCSI storage ports).

The following configurations are supported for iSCSI storage with hardware initiators:

- **iSCSI Base Connectivity** – The ability of an ESX Server host to recognize the target over an iSCSI HBA and interoperate with it.
- **SP failover** – In this configuration, ESX Server host is attached to multiple ports over an iSCSI HBA and is robust to storage port failover.
- **Boot from iSCSI** – In this configuration, ESX Server hosts boot from the target iSCSI array rather than from a local disk.
- **iSCSI hardware initiator failover** – The ESX server host is equipped with multiple hardware initiators and is robust to hardware initiator failover.

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**NOTE** Windows Clustering is not supported with iSCSI.

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**NOTE** Software initiated iSCSI is supported fully in ESX 3.0 and later releases. Hardware initiated iSCSI is supported in experimental mode only in ESX 3.0. It is supported fully in ESX 3.0.1 with iSCSI arrays that have been qualified/certified for use with the hardware initiators.

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iSCSI Storage devices from the following manufactures have been tested for the stated release of ESX Server 3.x:

- [“3PAR”](#) on page 45
- [“Adaptec”](#) on page 45
- [“American Megatrends Inc.”](#) on page 46
- [“BlueArc Corp”](#) on page 46
- [“Celeros”](#) on page 47
- [“Compellent”](#) on page 47
- [“Cybernetics”](#) on page 48
- [“DataCore”](#) on page 48
- [“Dell”](#) on page 49
- [“Dot Hill Systems”](#) on page 50
- [“EMC”](#) on page 51
- [“FalconStor Software”](#) on page 52
- [“Fujitsu”](#) on page 52
- [“Fujitsu Siemens”](#) on page 54
- [“H3C Technologies Co., Limited”](#) on page 55
- [“Hewlett Packard,”](#) on page 55
- [“Hifn,”](#) on page 57

- [“Hitachi, Ltd.,”](#) on page 57
- [“Hitachi Data Systems \(HDS\)”](#) on page 58
- [“IBM”](#) on page 58
- [“Infortrend Technology Inc.”](#) on page 59
- [“iQstor Networks Inc”](#) on page 60
- [“iStor Networks”](#) on page 61
- [“LeftHand Networks”](#) on page 61
- [“NEC”](#) on page 63
- [“NetApp”](#) on page 64
- [“Open-E”](#) on page 65
- [“Overland Storage”](#) on page 66
- [“Pillar Data Systems”](#) on page 66
- [“Promise Technology”](#) on page 67
- [“RELDATA Inc”](#) on page 67
- [“Sanrad”](#) on page 68
- [“StoneFly”](#) on page 68
- [“StorMagic”](#) on page 69
- [“Sun”](#) on page 69
- [“Wasabi Systems Inc”](#) on page 70
- [“Xiotech”](#) on page 70

Table 54. 3PAR

	ESX Server 3.5			ESX Server 3i Embedded			ESX Server 3i Installable					
	iSCSI software initiator			iSCSI hardware initiator			iSCSI software initiator			iSCSI hardware initiator		
	iSCSI Base Connectivity	SP failover	NIC failover for software initiator	iSCSI Base Connectivity	SP failover	NIC failover for software initiator	iSCSI Base Connectivity	SP failover	NIC failover for software initiator	iSCSI Base Connectivity	SP failover	NIC failover for software initiator
InServ E200	X	X	X				X	X	X			
InServ S400	X	X	X				X	X	X			
InServ S800	X	X	X				X	X	X			
T-Class	X	X	X				X	X	X			

Table 55. Adaptec

	ESX Server 3.5			ESX Server 3i Embedded			ESX Server 3i Installable					
	iSCSI software initiator			iSCSI hardware initiator			iSCSI software initiator			iSCSI hardware initiator		
	iSCSI Base Connectivity	SP failover	NIC failover for software initiator	iSCSI Base Connectivity	SP failover	NIC failover for software initiator	iSCSI Base Connectivity	SP failover	NIC failover for software initiator	iSCSI Base Connectivity	SP failover	NIC failover for software initiator
Snap Server 730i	X	X	X				X	X	X			

**Table 56.** American Megatrends Inc.

	ESX Server 3.5			ESX Server 3i Embedded				ESX Server 3i Installable					
	iSCSI software initiator			iSCSI hardware initiator		iSCSI software initiator		iSCSI hardware initiator	iSCSI software initiator		iSCSI hardware initiator		
	iSCSI Base Connectivity	SP failover	NIC failover for software initiator	iSCSI Base	SP failover Boot from iSCSI iSCSI hardware	iSCSI Base Connectivity	SP failover NIC failover for software initiator	iSCSI Base	SP failover Boot from iSCSI iSCSI hardware	iSCSI Base Connectivity	SP failover NIC failover for software initiator	iSCSI Base	SP failover Boot from iSCSI iSCSI hardware
3200i	X	X	X	X		X	X	X	X	X	X	X	X

**Table 57.** BlueArc Corp

	ESX Server 3.5			ESX Server 3i Embedded				ESX Server 3i Installable					
	iSCSI software initiator			iSCSI hardware initiator		iSCSI software initiator		iSCSI hardware initiator	iSCSI software initiator		iSCSI hardware initiator		
	iSCSI Base Connectivity	SP failover	NIC failover for software initiator	iSCSI Base	SP failover Boot from iSCSI iSCSI hardware	iSCSI Base Connectivity	SP failover NIC failover for software initiator	iSCSI Base	SP failover Boot from iSCSI iSCSI hardware	iSCSI Base Connectivity	SP failover NIC failover for software initiator	iSCSI Base	SP failover Boot from iSCSI iSCSI hardware
Titan 1100	X			X	X	X		X		X		X	
Titan 2100	X			X	X	X		X		X		X	
Titan 2200	X			X	X	X		X		X		X	

Table 58. Celeros

	ESX Server 3.5				ESX Server 3i Embedded				ESX Server 3i Installable			
	iSCSI software initiator		iSCSI hardware initiator		iSCSI software initiator		iSCSI hardware initiator		iSCSI software initiator		iSCSI hardware initiator	
	iSCSI Base Connectivity	SP failover NIC failover for software initiator	iSCSI Base SP failover Boot from iSCSI iSCSI hardware		iSCSI Base Connectivity	SP failover NIC failover for software initiator	iSCSI Base SP failover Boot from iSCSI iSCSI hardware		iSCSI Base Connectivity	SP failover NIC failover for software initiator	iSCSI Base SP failover Boot from iSCSI iSCSI hardware	
XD11	X	X			X	X			X	X		
XD11S	X	X			X	X			X	X		
XD23	X	X			X	X			X	X		
XD23S	X	X			X	X			X	X		
XD34	X	X			X	X			X	X		
XD34S	X	X			X	X			X	X		
XD46S	X	X			X	X			X	X		
XD512	X	X			X	X			X	X		
XD56	X	X			X	X			X	X		
XD810	X	X			X	X			X	X		

Table 59. Compellent

	ESX Server 3.5				ESX Server 3i Embedded				ESX Server 3i Installable			
	iSCSI software initiator		iSCSI hardware initiator		iSCSI software initiator		iSCSI hardware initiator		iSCSI software initiator		iSCSI hardware initiator	
	iSCSI Base Connectivity	SP failover NIC failover for software initiator	iSCSI Base SP failover Boot from iSCSI iSCSI hardware		iSCSI Base Connectivity	SP failover NIC failover for software initiator	iSCSI Base SP failover Boot from iSCSI iSCSI hardware		iSCSI Base Connectivity	SP failover NIC failover for software initiator	iSCSI Base SP failover Boot from iSCSI iSCSI hardware	
Storage Center	X	X	X	X	X	X	X	X	X	X	X	X

**Table 60.** Cybernetics

	ESX Server 3.5			ESX Server 3i Embedded			ESX Server 3i Installable								
	iSCSI software initiator			iSCSI hardware initiator			iSCSI software initiator			iSCSI hardware initiator					
	iSCSI Base Connectivity	SP failover	NIC failover for software initiator	iSCSI Base	SP failover	Boot from iSCSI iSCSI hardware	iSCSI Base Connectivity	SP failover	NIC failover for software initiator	iSCSI Base	SP failover	Boot from iSCSI iSCSI hardware			
miSAN D6 <sup>1</sup>	X		X				X		X				X		X
miSAN D8	X		X				X		X				X		X
miSAN D12 <sup>1</sup>	X		X				X		X				X		X

<sup>1</sup> Requires Update 1 or higher of the ESX Server version listed in the corresponding column.

**Table 61.** DataCore

	ESX Server 3.5			ESX Server 3i Embedded			ESX Server 3i Installable								
	iSCSI software initiator			iSCSI hardware initiator			iSCSI software initiator			iSCSI hardware initiator					
	iSCSI Base Connectivity	SP failover	NIC failover for software initiator	iSCSI Base	SP failover	Boot from iSCSI iSCSI hardware	iSCSI Base Connectivity	SP failover	NIC failover for software initiator	iSCSI Base	SP failover	Boot from iSCSI iSCSI hardware			
SMY-VS5-2970 <sup>1</sup>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
SSY-UNL-P-385 <sup>1</sup>	X	X	X				X	X	X				X	X	X

<sup>1</sup> Please refer to Datacore's website for Active/Passive configuration with ESX Server:  
[ftp://support.datacore.com/psp/tech\\_bulletins/TechBulletinsAll/TB5\\_ESX\\_config.pdf](ftp://support.datacore.com/psp/tech_bulletins/TechBulletinsAll/TB5_ESX_config.pdf)

Table 62. Dell

		ESX Server 3.5				ESX Server 3i Embedded				ESX Server 3i Installable					
		iSCSI software initiator		iSCSI hardware initiator		iSCSI software initiator		iSCSI hardware initiator		iSCSI software initiator		iSCSI hardware initiator			
		iSCSI Base Connectivity	SP failover	NIC failover for software initiator	iSCSI Base	SP failover	Boot from iSCSI	iSCSI hardware	iSCSI Base Connectivity	SP failover	NIC failover for software initiator	iSCSI Base	SP failover	Boot from iSCSI	iSCSI hardware
	AX150i <sup>2</sup>	X	X	X					X	X	X				
	AX4-5i <sup>2</sup>	X	X	X					X	X	X				
	CX3-10c <sup>2</sup>	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	CX3-20c <sup>2</sup>	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	CX3-40c <sup>2</sup>	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	MD3000i <sup>2</sup>	X	X	X					X	X	X				
	NX1950 <sup>2</sup>	X	X	X					X	X	X				
	PS5000E <sup>1</sup>	X	X	X	X	X <sup>4</sup>	X	X	X	X	X	X <sup>4</sup>	X	X	X
	PS5000X <sup>3</sup>	X	X	X	X	X <sup>4</sup>	X	X	X	X	X	X <sup>4</sup>	X	X	X
	PS5000XV <sup>3</sup>	X	X	X	X	X <sup>4</sup>	X	X	X	X	X	X <sup>4</sup>	X	X	X
	PS5500E	X	X	X	X	X	X	X	X	X	X	X	X	X	X
EqualLogic PS Series	PS50E <sup>5</sup>	X	X	X	X	X <sup>6</sup>	X	X	X	X	X	X <sup>6</sup>	X	X	X
	PS70E <sup>5</sup>	X	X	X	X	X <sup>6</sup>	X	X	X	X	X	X <sup>6</sup>	X	X	X
	PS100E <sup>5</sup>	X	X	X	X	X <sup>6</sup>	X	X	X	X	X	X <sup>6</sup>	X	X	X
	PS200E <sup>5</sup>	X	X	X	X	X <sup>6</sup>	X	X	X	X	X	X <sup>6</sup>	X	X	X
	PS300E <sup>5</sup>	X	X	X	X	X <sup>6</sup>	X	X	X	X	X	X <sup>6</sup>	X	X	X
	PS400E <sup>5</sup>	X	X	X	X	X <sup>6</sup>	X	X	X	X	X	X <sup>6</sup>	X	X	X
	PS3600X <sup>7</sup>	X	X	X	X	X <sup>6</sup>	X	X	X	X	X	X <sup>6</sup>	X	X	X
	PS3700X <sup>7</sup>	X	X	X	X	X <sup>6</sup>	X	X	X	X	X	X <sup>6</sup>	X	X	X
	PS3800XV <sup>7</sup>	X	X	X	X	X <sup>6</sup>	X	X	X	X	X	X <sup>6</sup>	X	X	X
PS3900XV <sup>7</sup>	X	X	X	X	X <sup>6</sup>	X	X	X	X	X	X <sup>6</sup>	X	X	X	

<sup>1</sup> Supported with firmware versions V3.2 to V3.3. Contact Dell for supported firmware versions.

<sup>2</sup> Contact Dell for additional information including supported array firmware versions.

**Table 62.** Dell (Continued)

	ESX Server 3.5			ESX Server 3i Embedded			ESX Server 3i Installable					
	iSCSI software initiator			iSCSI hardware initiator			iSCSI software initiator			iSCSI hardware initiator		
	iSCSI Base Connectivity	SP failover	NIC failover for software initiator	iSCSI Base	SP failover	Boot from iSCSI iSCSI hardware	iSCSI Base Connectivity	SP failover	NIC failover for software initiator	iSCSI Base	SP failover	Boot from iSCSI iSCSI hardware
<sup>3</sup>	Supported with firmware V3.3. Contact Dell for supported firmware versions.											
<sup>4</sup>	Contact Dell for timeout value settings for proper SP failover operation.											
<sup>5</sup>	Supported with firmware versions V3.1 to V3.3. Contact EqualLogic for supported firmware versions.											
<sup>6</sup>	Contact EqualLogic for timeout value settings for proper SP failover operation.											
<sup>7</sup>	Supported with firmware V3.3. Contact EqualLogic for supported firmware versions.											

**Table 63.** Dot Hill Systems

	ESX Server 3.5			ESX Server 3i Embedded			ESX Server 3i Installable					
	iSCSI software initiator			iSCSI hardware initiator			iSCSI software initiator			iSCSI hardware initiator		
	iSCSI Base Connectivity	SP failover	NIC failover for software initiator	iSCSI Base	SP failover	Boot from iSCSI iSCSI hardware	iSCSI Base Connectivity	SP failover	NIC failover for software initiator	iSCSI Base	SP failover	Boot from iSCSI iSCSI hardware
R/Evolution 2330	X	X	X	X	X	X	X	X	X	X	X	X

**Table 64. EMC**

	ESX Server 3.5				ESX Server 3i Embedded				ESX Server 3i Installable								
	iSCSI software initiator		iSCSI hardware initiator		iSCSI software initiator		iSCSI hardware initiator		iSCSI software initiator		iSCSI hardware initiator						
	iSCSI Base	SP failover	NIC failover for		iSCSI Base	SP failover	Boot from iSCSI	iSCSI hardware	iSCSI Base	SP failover	NIC failover for		iSCSI Base	SP failover	Boot from iSCSI	iSCSI hardware	
AX150i <sup>1</sup>	X	X	X						X	X	X		X	X	X		
AX4-5i <sup>1</sup>	X	X	X						X	X	X		X	X	X		
Celerra NS 20/40/80 series, NS 350, NS 500/700 series, CNS, and NSX DART 5.5	X	X	X						X	X	X		X	X	X		
Celerra NS 20/40/80 series, NX4, NS 350, NS 500/700 series, CNS, and NSX DART 5.6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CLARiiON	CX3-10c <sup>1</sup>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	CX3-20c <sup>1</sup>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	CX3-40c <sup>1</sup>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	CX4-120	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	CX4-240	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	CX4-480	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	CX4-960	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
DMX-3 <sup>1</sup>	X	X	X						X	X	X		X	X	X		
DMX-4 <sup>1</sup>	X	X	X	X <sup>2</sup>	X <sup>2</sup>	X <sup>2</sup>	X <sup>2</sup>	X	X	X	X <sup>2</sup>	X <sup>2</sup>	X <sup>2</sup>	X	X	X	X <sup>2</sup>

<sup>1</sup> Contact EMC for additional information including supported array firmware versions.

<sup>2</sup> ESX Server 3.5 Update 2 (110268) patch is required.

**Table 65. FalconStor Software**

		ESX Server 3.5						ESX Server 3i Embedded						ESX Server 3i Installable										
		iSCSI software initiator			iSCSI hardware initiator			iSCSI software initiator			iSCSI hardware initiator			iSCSI software initiator			iSCSI hardware initiator							
		iSCSI Base Connectivity SP failover	NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI	iSCSI hardware initiator failover	iSCSI Base Connectivity SP failover	NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI	iSCSI hardware initiator failover	iSCSI Base Connectivity SP failover	NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI	iSCSI hardware initiator failover	iSCSI Base Connectivity SP failover	NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI	iSCSI hardware initiator failover			
NSS HC620				X	X	X						X	X	X								X	X	X
NSS HC630				X	X	X						X	X	X								X	X	X
NSS HC670				X	X	X						X	X	X								X	X	X
NSS-S12		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
NSS-S24		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

**Table 66. Fujitsu**

		ESX Server 3.5						ESX Server 3i Embedded						ESX Server 3i Installable									
		iSCSI software initiator			iSCSI hardware initiator			iSCSI software initiator			iSCSI hardware initiator			iSCSI software initiator			iSCSI hardware initiator						
		iSCSI Base Connectivity SP failover	NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI	iSCSI hardware initiator failover	iSCSI Base Connectivity SP failover	NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI	iSCSI hardware initiator failover	iSCSI Base Connectivity SP failover	NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI	iSCSI hardware initiator failover	iSCSI Base Connectivity SP failover	NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI	iSCSI hardware initiator failover		
ETERNUS 2000	Model 50	X	X	X				X	X	X				X	X	X							
	Model 100	X	X	X				X	X	X				X	X	X							
	Model 200	X	X	X				X	X	X				X	X	X							
ETERNUS 4000	Model 300	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Model 500	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

**Table 66.** Fujitsu (Continued)

		ESX Server 3.5						ESX Server 3i Embedded						ESX Server 3i Installable								
		iSCSI software initiator			iSCSI hardware initiator			iSCSI software initiator			iSCSI hardware initiator			iSCSI software initiator			iSCSI hardware initiator					
		iSCSI Base Connectivity	SP failover	NIC failover for software initiator	iSCSI Base Connectivity	SP failover	Boot from iSCSI	iSCSI hardware initiator	iSCSI Base Connectivity	SP failover	NIC failover for software initiator	iSCSI Base Connectivity	SP failover	Boot from iSCSI	iSCSI hardware initiator	iSCSI Base Connectivity	SP failover	NIC failover for software initiator	iSCSI Base Connectivity	SP failover	Boot from iSCSI	iSCSI hardware initiator
ETERNUS 8000	Model 700	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Model 900	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Model 1100	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Model 2100	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

**Table 67.** Fujitsu Siemens

		ESX Server 3.5						ESX Server 3i Embedded						ESX Server 3i Installable							
		iSCSI software initiator			iSCSI hardware initiator			iSCSI software initiator			iSCSI hardware initiator			iSCSI software initiator			iSCSI hardware initiator				
		iSCSI Base Connectivity SP failover	NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI	iSCSI hardware initiator failover	iSCSI Base Connectivity SP failover	NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI	iSCSI hardware initiator failover	iSCSI Base Connectivity SP failover	NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI	iSCSI hardware initiator failover	iSCSI Base Connectivity SP failover	NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI	iSCSI hardware initiator failover
FibreCAT	CX3-10c <sup>3</sup>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	CX3-20c <sup>3</sup>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	CX3-40c <sup>3</sup>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	CX4-120	X	X	X				X	X	X				X	X	X					
	CX4-240	X	X	X				X	X	X				X	X	X					
	CX4-480	X	X	X				X	X	X				X	X	X					
	CX4-960	X	X	X				X	X	X				X	X	X					
	SX 80iSCSI <sup>3</sup>	X	X	X				X	X	X				X	X	X					
<sup>1</sup> SP/datamover or cluster failover is not supported during boot from iSCSI.																					
<sup>2</sup> iSCSI hardware initiator support is experimental only.																					
<sup>3</sup> Contact Fujitsu Siemens for additional information including supported array firmware versions.																					

**Table 68.** H3C Technologies Co., Limited

		ESX Server 3.5			ESX Server 3i Embedded			ESX Server 3i Installable		
		iSCSI software initiator	iSCSI hardware initiator		iSCSI software initiator	iSCSI hardware initiator		iSCSI software initiator	iSCSI hardware initiator	
		iSCSI Base Connectivity SP failover NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI iSCSI hardware initiator failover	iSCSI Base Connectivity SP failover NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI iSCSI hardware initiator failover	iSCSI Base Connectivity SP failover NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI iSCSI hardware initiator failover
Neocean IX3040 NI1Z1SC2140			X	X	X			X	X	X
Neocean IX3080 NI1Z1SC2280			X	X	X			X	X	X
Neocean IX3620 NI1Z1SC22X2			X	X	X			X	X	X

**Table 69.** Hewlett Packard

		ESX Server 3.5			ESX Server 3i Embedded			ESX Server 3i Installable		
		iSCSI software initiator	iSCSI hardware initiator		iSCSI software initiator	iSCSI hardware initiator		iSCSI software initiator	iSCSI hardware initiator	
		iSCSI Base Connectivity SP failover NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI iSCSI hardware initiator failover	iSCSI Base Connectivity SP failover NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI iSCSI hardware initiator failover	iSCSI Base Connectivity SP failover NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI iSCSI hardware initiator failover
AiO	400 <sup>1</sup>	X	X		X	X		X	X	
	600 <sup>1</sup>	X	X		X	X		X	X	
	1200 <sup>1</sup>	X	X		X	X		X	X	
	1200r <sup>1</sup>	X	X		X	X		X	X	
	SB600c <sup>1</sup>	X	X		X	X		X	X	

**Table 69.** Hewlett Packard (Continued)

		ESX Server 3.5				ESX Server 3i Embedded				ESX Server 3i Installable			
		iSCSI software initiator		iSCSI hardware initiator		iSCSI software initiator		iSCSI hardware initiator		iSCSI software initiator		iSCSI hardware initiator	
		iSCSI Base Connectivity SP failover	NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI iSCSI hardware initiator failover	iSCSI Base Connectivity SP failover	NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI iSCSI hardware initiator failover	iSCSI Base Connectivity SP failover	NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI iSCSI hardware initiator failover
HP Enterprise Virtual Array (EVA)	EVA4000	X	X	X	X	X	X	X	X	X	X	X	X
	EVA4100	X	X	X	X	X	X	X	X	X	X	X	X
	EVA4400	X	X	X	X	X	X	X	X	X	X	X	X
	EVA4400 with Embedded Switch	X	X	X	X	X	X	X	X	X	X	X	X
	EVA6000	X	X	X	X	X	X	X	X	X	X	X	X
	EVA6100	X	X	X	X	X	X	X	X	X	X	X	X
	EVA8000	X	X	X	X	X	X	X	X	X	X	X	X
	EVA8100	X	X	X	X	X	X	X	X	X	X	X	X
HP Modular Systems Array (MSA)	MSA1510 <sup>1, 2, 3</sup>	X	X			X	X			X	X		
	MSA2012i	X	X	X		X	X	X		X	X	X	
HP ProLiant	DL380 G5 Storage Server <sup>1</sup>	X	X			X	X			X	X		
	SB460c Storage Server <sup>1</sup>	X	X			X	X			X	X		
<sup>1</sup> Single Controller only.													
<sup>2</sup> Support for Windows guest operating system only.													
<sup>3</sup> Requires Update 1 or higher of the ESX Server version listed in the corresponding column.													

**Table 70.** Hifn

	ESX Server 3.5						ESX Server 3i Embedded						ESX Server 3i Installable								
	iSCSI software initiator			iSCSI hardware initiator			iSCSI software initiator			iSCSI hardware initiator			iSCSI software initiator			iSCSI hardware initiator					
	iSCSI Base Connectivity SP failover	NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI	iSCSI hardware initiator failover	iSCSI Base Connectivity SP failover	NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI	iSCSI hardware initiator failover	iSCSI Base Connectivity SP failover	NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI	iSCSI hardware initiator failover	iSCSI Base Connectivity SP failover	NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI	iSCSI hardware initiator failover	
Swarm 3000	X	X	X				X	X	X				X	X	X						

**Table 71.** Hitachi, Ltd.

	ESX Server 3.5						ESX Server 3i Embedded						ESX Server 3i Installable							
	iSCSI software initiator			iSCSI hardware initiator			iSCSI software initiator			iSCSI hardware initiator			iSCSI software initiator			iSCSI hardware initiator				
	iSCSI Base Connectivity SP failover	NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI	iSCSI hardware initiator failover	iSCSI Base Connectivity SP failover	NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI	iSCSI hardware initiator failover	iSCSI Base Connectivity SP failover	NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI	iSCSI hardware initiator failover	iSCSI Base Connectivity SP failover	NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI	iSCSI hardware initiator failover
SANRISE AMS 200	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
SANRISE AMS 500	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
SANRISE AMS 1000	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
SANRISE WMS 100	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
SMS100 <sup>1</sup>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

<sup>1</sup> Dual Controller models only.

**Table 72.** Hitachi Data Systems (HDS)

	ESX Server 3.5						ESX Server 3i Embedded						ESX Server 3i Installable							
	iSCSI software initiator			iSCSI hardware initiator			iSCSI software initiator			iSCSI hardware initiator			iSCSI software initiator			iSCSI hardware initiator				
	iSCSI Base Connectivity SP failover	NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI	iSCSI hardware initiator failover	iSCSI Base Connectivity SP failover	NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI	iSCSI hardware initiator failover	iSCSI Base Connectivity SP failover	NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI	iSCSI hardware initiator failover	iSCSI Base Connectivity SP failover	NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI	iSCSI hardware initiator failover
AMS 2100	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
AMS 2300	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
AMS 2500	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
HNAS Server 2200	X						X								X					
SMS100 <sup>1</sup>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Tagmastore AMS 200	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X	X
Tagmastore AMS 500	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X	X
Tagmastore AMS 1000	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X	X
Tagmastore WMS 100	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X	X

<sup>1</sup> Dual Controller models only.**Table 73.** IBM

	ESX Server 3.5						ESX Server 3i Embedded						ESX Server 3i Installable							
	iSCSI software initiator			iSCSI hardware initiator			iSCSI software initiator			iSCSI hardware initiator			iSCSI software initiator			iSCSI hardware initiator				
	iSCSI Base Connectivity SP failover	NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI	iSCSI hardware initiator failover	iSCSI Base Connectivity SP failover	NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI	iSCSI hardware initiator failover	iSCSI Base Connectivity SP failover	NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI	iSCSI hardware initiator failover	iSCSI Base Connectivity SP failover	NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI	iSCSI hardware initiator failover
DS3300	X	X	X				X	X	X				X	X	X					
N3000 Series	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Table 73. IBM (Continued)

	ESX Server 3.5							ESX Server 3i Embedded							ESX Server 3i Installable								
	iSCSI software initiator			iSCSI hardware initiator				iSCSI software initiator			iSCSI hardware initiator				iSCSI software initiator			iSCSI hardware initiator					
	iSCSI Base Connectivity SP failover	NIC failover for software initiator		iSCSI Base Connectivity SP failover	Boot from iSCSI	iSCSI hardware initiator failover		iSCSI Base Connectivity SP failover	NIC failover for software initiator		iSCSI Base Connectivity SP failover	Boot from iSCSI	iSCSI hardware initiator failover		iSCSI Base Connectivity SP failover	NIC failover for software initiator		iSCSI Base Connectivity SP failover	Boot from iSCSI	iSCSI hardware initiator failover			
N5000 Series	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
N6000 Series	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
N7000 Series	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IBM i 6.1 on Power Systems <sup>1,2</sup>				X	X	X	X				X	X	X							X	X	X	
<sup>1</sup> Certification testing was performed on an IBM Power 570 running IBM i 6.1 in a partition with 1.65 processors and 5 GB of memory.																							
<sup>2</sup> Requires Update 3 or higher of the ESX Server version listed in the corresponding column.																							

Table 74. Infortrend Technology Inc.

	ESX Server 3.5							ESX Server 3i Embedded							ESX Server 3i Installable							
	iSCSI software initiator			iSCSI hardware initiator				iSCSI software initiator			iSCSI hardware initiator				iSCSI software initiator			iSCSI hardware initiator				
	iSCSI Base Connectivity SP failover	NIC failover for software initiator		iSCSI Base Connectivity SP failover	Boot from iSCSI	iSCSI hardware initiator failover		iSCSI Base Connectivity SP failover	NIC failover for software initiator		iSCSI Base Connectivity SP failover	Boot from iSCSI	iSCSI hardware initiator failover		iSCSI Base Connectivity SP failover	NIC failover for software initiator		iSCSI Base Connectivity SP failover	Boot from iSCSI	iSCSI hardware initiator failover		
A16E-G2130 <sup>1</sup>	X							X												X		
S12E-G1133 <sup>1</sup>	X							X												X		
S12E-R1132 <sup>1</sup>	X							X												X		
<sup>1</sup> Please refer to Infortrend's website for Active/Passive configuration with ESX Server: <a href="http://www.infortrend.com/doc/VMware.pdf">http://www.infortrend.com/doc/VMware.pdf</a>																						

**Table 74.** Infortrend Technology Inc. (Continued)

	ESX Server 3.5		ESX Server 3i Embedded		ESX Server 3i Installable	
	iSCSI software initiator	iSCSI hardware initiator	iSCSI software initiator	iSCSI hardware initiator	iSCSI software initiator	iSCSI hardware initiator
	iSCSI Base Connectivity SP failover NIC failover for software initiator	iSCSI Base Connectivity SP failover Boot from iSCSI initiator hardware initiator failover	iSCSI Base Connectivity SP failover NIC failover for software initiator	iSCSI Base Connectivity SP failover Boot from iSCSI initiator hardware initiator failover	iSCSI Base Connectivity SP failover NIC failover for software initiator	iSCSI Base Connectivity SP failover Boot from iSCSI initiator hardware initiator failover
S16E-G1130 <sup>1</sup>	X		X		X	
S16E-R1130 <sup>1</sup>	X		X		X	
<sup>1</sup> Please refer to Infortrend's website for Active/Passive configuration with ESX Server: <a href="http://www.infortrend.com/doc/VMware.pdf">http://www.infortrend.com/doc/VMware.pdf</a>						

**Table 75.** iQstor Networks Inc

	ESX Server 3.5		ESX Server 3i Embedded		ESX Server 3i Installable	
	iSCSI software initiator	iSCSI hardware initiator	iSCSI software initiator	iSCSI hardware initiator	iSCSI software initiator	iSCSI hardware initiator
	iSCSI Base Connectivity SP failover NIC failover for software initiator	iSCSI Base Connectivity SP failover Boot from iSCSI initiator hardware initiator failover	iSCSI Base Connectivity SP failover NIC failover for software initiator	iSCSI Base Connectivity SP failover Boot from iSCSI initiator hardware initiator failover	iSCSI Base Connectivity SP failover NIC failover for software initiator	iSCSI Base Connectivity SP failover Boot from iSCSI initiator hardware initiator failover
iQ2850 <sup>1</sup>	X		X		X	
<sup>1</sup> Please refer to iQstor's website for Active/Passive configuration with ESX Server: <a href="http://www.iqstor.com/partners/vmware/VMware_Configuration.pdf">http://www.iqstor.com/partners/vmware/VMware_Configuration.pdf</a>						

**Table 76.** iStor Networks

	ESX Server 3.5				ESX Server 3i Embedded				ESX Server 3i Installable			
	iSCSI software initiator		iSCSI hardware initiator		iSCSI software initiator		iSCSI hardware initiator		iSCSI software initiator		iSCSI hardware initiator	
	iSCSI Base Connectivity SP failover	NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI initiator failover	iSCSI Base Connectivity SP failover	NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI initiator failover	iSCSI Base Connectivity SP failover	NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI initiator failover
iS512	X	X			X	X			X	X		

**Table 77.** LeftHand Networks

	ESX Server 3.5				ESX Server 3i Embedded				ESX Server 3i Installable			
	iSCSI software initiator		iSCSI hardware initiator		iSCSI software initiator		iSCSI hardware initiator		iSCSI software initiator		iSCSI hardware initiator	
	iSCSI Base Connectivity SP failover	NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI initiator failover	iSCSI Base Connectivity SP failover	NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI initiator failover	iSCSI Base Connectivity SP failover	NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI initiator failover
Dell 2950 and SAN/iQ 7	X	X	X	X	X	X	X	X	X	X	X	X
Dell 2950 and SAN/iQ 8 <sup>2</sup>	X	X	X					X	X	X		
HP ProLiant DL320s and SAN/iQ 7	X	X	X	X	X	X	X	X	X	X	X	X
HP ProLiant DL320s and SAN/iQ 8 <sup>2</sup>	X	X	X					X	X	X		
HP ProLiant DL380 and SAN/iQ 8 <sup>2</sup>	X	X	X					X	X	X		
IBM x3650 and SAN/iQ 8 <sup>2</sup>	X	X	X					X	X	X		
NSM 160 and SAN/iQ 7	X	X	X					X	X	X		
NSM 160 and SAN/iQ 8 <sup>2</sup>	X	X	X					X	X	X		
NSM 260 and SAN/iQ 8 <sup>2</sup>	X	X	X					X	X	X		
NSM 2060 and SAN/iQ 7	X	X	X	X	X	X	X	X	X	X	X	X

**Table 77.** LeftHand Networks (Continued)

	ESX Server 3.5						ESX Server 3i Embedded						ESX Server 3i Installable					
	iSCSI software initiator			iSCSI hardware initiator			iSCSI software initiator			iSCSI hardware initiator			iSCSI software initiator			iSCSI hardware initiator		
	iSCSI Base Connectivity SP failover	NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI hardware initiator failover	iSCSI Base Connectivity SP failover	NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI hardware initiator failover	iSCSI Base Connectivity SP failover	NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI hardware initiator failover	iSCSI Base Connectivity SP failover	NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI hardware initiator failover		
NSM 2060 and SAN/iQ 8 <sup>2</sup>	X	X	X				X	X	X				X	X	X			
NSM 2120 and SAN/iQ 7	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
NSM 2120 and SAN/iQ 8 <sup>2</sup>	X	X	X				X	X	X				X	X	X			
NSM 2120 G2 SAN/iQ 8 <sup>2</sup>	X	X	X				X	X	X				X	X	X			
NSM 4150 and SAN/iQ 7	X	X	X				X	X	X				X	X	X			
NSM 4150 and SAN/iQ 8 <sup>2</sup>	X	X	X				X	X	X				X	X	X			
VSA SAN/iQ 7 <sup>1</sup>	X	X	X				X	X	X				X	X	X			
VSA and SAN/iQ 8 <sup>2,3</sup>	X	X	X				X	X	X				X	X	X			

<sup>1</sup> VMware support for the LeftHand Networks iSCSI Virtual SAN Appliance (VSA) is contingent on the following requirements:

- VMware supports connections to the VSA using only the software initiator in the kernel.
- The following configurations are supported when running the VSA with supported NICs and server configuration that do not exceed the matching defined maximums and minimum requirements supported with the VSA as specified in this document:  
Shared Server Configuration – A configuration where the VSA and other virtual machines share the same VMware ESX Server host.  
Dedicated Server Configuration – A configuration where the VSA is the only virtual machine running on the ESX Server hosts in the VSA cluster.
- Only VSA running SAN/iQ 7.0 has been tested and it is supported with ESX Server 3.5, ESX Server 3i Embedded and ESX Server 3i Installable.
- Minimum server requirements for deploying the VSA in a shared server configuration are a Quad Core or two Dual Core CPU with 2Ghz/Core, four 1Gb NICs, and 2GB of RAM.
- Minimum server requirements for deploying the VSA in a dedicated server configuration are a Dual Core CPU with 2Ghz/Core, two 1Gb NICs, and 2GB of RAM.
- The maximum number of supported targets exported by the VSA, in an ESX Server environment, is 32.
- To properly function the VSA requires 2 Ghz of reserved CPU resources and 1024M reserved memory.
- The VSA only supports a virtual disk with 5 GB to 2 TB of space located on internal SCSI or SAS disk storage, or direct attached SCSI or SAS storage that is not accessible from more than one physical server.
- All virtual disks for the VSA must be configured as independent persistent.
- The VMFS datastore for the VSA must not be shared with any other virtual machines.
- For high availability, a minimum of two VSA nodes in a cluster and a failover manager or virtual manager are required.
- Please refer to the LeftHand Networks User Manual and Quick Start Guide for VSA for configuration guidelines and deployment best practices.

**Table 77.** LeftHand Networks (Continued)

	ESX Server 3.5			ESX Server 3i Embedded			ESX Server 3i Installable		
	iSCSI software initiator	iSCSI hardware initiator		iSCSI software initiator	iSCSI hardware initiator		iSCSI software initiator	iSCSI hardware initiator	
	iSCSI Base Connectivity SP failover NIC failover for software initiator	iSCSI Base Connectivity SP failover Boot from iSCSI initiator failover		iSCSI Base Connectivity SP failover NIC failover for software initiator	iSCSI Base Connectivity SP failover Boot from iSCSI initiator failover		iSCSI Base Connectivity SP failover NIC failover for software initiator	iSCSI Base Connectivity SP failover Boot from iSCSI initiator failover	
<sup>2</sup>	Requires Update 2 or higher of the ESX Server version listed in the corresponding column.								
<sup>3</sup>	For more information refer to <a href="http://kb.vmware.com/kb/1007817">http://kb.vmware.com/kb/1007817</a> .								

**Table 78.** NEC

	ESX Server 3.5			ESX Server 3i Embedded			ESX Server 3i Installable		
	iSCSI software initiator	iSCSI hardware initiator		iSCSI software initiator	iSCSI hardware initiator		iSCSI software initiator	iSCSI hardware initiator	
	iSCSI Base Connectivity SP failover NIC failover for software initiator	iSCSI Base Connectivity SP failover Boot from iSCSI initiator failover		iSCSI Base Connectivity SP failover NIC failover for software initiator	iSCSI Base Connectivity SP failover Boot from iSCSI initiator failover		iSCSI Base Connectivity SP failover NIC failover for software initiator	iSCSI Base Connectivity SP failover Boot from iSCSI initiator failover	
iStorage E1-10	X	X	X	X	X	X	X	X	X

Table 79. NetApp

	ESX Server 3.5						ESX Server 3i Embedded						ESX Server 3i Installable							
	iSCSI software initiator			iSCSI hardware initiator			iSCSI software initiator			iSCSI hardware initiator			iSCSI software initiator			iSCSI hardware initiator				
	iSCSI Base Connectivity SP failover	NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI	iSCSI hardware initiator failover	iSCSI Base Connectivity SP failover	NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI	iSCSI hardware initiator failover	iSCSI Base Connectivity SP failover	NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI	iSCSI hardware initiator failover	iSCSI Base Connectivity SP failover	NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI	iSCSI hardware initiator failover
FAS200 Series Data ONTAP 7.2.4	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
FAS900 Series Data ONTAP 7.2.4	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
FAS2000 Series Data ONTAP 7.2.4	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
FAS3000 Series Data ONTAP 7.2RC4	X	X	X	X	X <sup>1</sup>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
FAS3000 Series Data ONTAP 7.2.4				X	X	X	X			X	X		X			X	X		X	
FAS3000 Series Data ONTAP 7.3 <sup>3,4</sup>	X	X	X				X	X	X				X	X	X					
FAS3100 Series Data ONTAP 7.3	X	X	X				X	X	X				X	X	X					
FAS6000 Series Data ONTAP 7.2.4	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
FAS6000 Series Data ONTAP 7.3 <sup>3,4</sup>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
StoreVault S300 Data ONTAP 7.2.1	X		X				X	X					X	X						
StoreVault S550 Data ONTAP 7.2.1S4	X		X				X	X					X	X						

<sup>1</sup> SP/datamover or cluster failover is not supported during boot from iSCSI.

<sup>2</sup> iSCSI hardware initiator support is experimental only

**Table 79.** NetApp (Continued)

ESX Server 3.5		ESX Server 3i Embedded		ESX Server 3i Installable	
iSCSI software initiator	iSCSI hardware initiator	iSCSI software initiator	iSCSI hardware initiator	iSCSI software initiator	iSCSI hardware initiator
iSCSI Base Connectivity SP failover NIC failover for software initiator	iSCSI Base Connectivity SP failover Boot from iSCSI iSCSI hardware initiator failover	iSCSI Base Connectivity SP failover NIC failover for software initiator	iSCSI Base Connectivity SP failover Boot from iSCSI iSCSI hardware initiator failover	iSCSI Base Connectivity SP failover NIC failover for software initiator	iSCSI Base Connectivity SP failover Boot from iSCSI iSCSI hardware initiator failover
<sup>3</sup> 1GbE and 10GbE Storage interfaces are supported.					
<sup>4</sup> Requires Update 2 or higher of the ESX Server version listed in the corresponding column.					

**Table 80.** Open-E

	ESX Server 3.5		ESX Server 3i Embedded		ESX Server 3i Installable	
	iSCSI software initiator	iSCSI hardware initiator	iSCSI software initiator	iSCSI hardware initiator	iSCSI software initiator	iSCSI hardware initiator
	iSCSI Base Connectivity SP failover NIC failover for software initiator	iSCSI Base Connectivity SP failover Boot from iSCSI iSCSI hardware initiator failover	iSCSI Base Connectivity SP failover NIC failover for software initiator	iSCSI Base Connectivity SP failover Boot from iSCSI iSCSI hardware initiator failover	iSCSI Base Connectivity SP failover NIC failover for software initiator	iSCSI Base Connectivity SP failover Boot from iSCSI iSCSI hardware initiator failover
DSS with Intel S5000PAL / SR 2500 Platform Model	X	X	X	X	X	X
DSS with Intel Modular Server MFSYS25	X	X	X	X	X	X

**Table 81.** Overland Storage

	ESX Server 3.5			ESX Server 3i Embedded			ESX Server 3i Installable					
	iSCSI software initiator		iSCSI hardware initiator	iSCSI software initiator		iSCSI hardware initiator	iSCSI software initiator		iSCSI hardware initiator			
	iSCSI Base Connectivity SP failover	NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI	iSCSI hardware initiator failover	iSCSI Base Connectivity SP failover	NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI	iSCSI hardware initiator failover		
Snap Server 520	X		X <sup>1,2</sup>		X		X <sup>1,2</sup>		X		X <sup>1,2</sup>	

<sup>1</sup> Please refer to Overland Storage's website for Hardware iSCSI configuration with ESX Server:  
<http://support.overlandstorage.com/jive/entry.jspa?externalID=7141&categoryID=755>

<sup>2</sup> Requires Update 1 or higher of the ESX Server version listed in the corresponding column.

**Table 82.** Pillar Data Systems

	ESX Server 3.5			ESX Server 3i Embedded			ESX Server 3i Installable						
	iSCSI software initiator		iSCSI hardware initiator	iSCSI software initiator		iSCSI hardware initiator	iSCSI software initiator		iSCSI hardware initiator				
	iSCSI Base Connectivity SP failover	NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI	iSCSI hardware initiator failover	iSCSI Base Connectivity SP failover	NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI	iSCSI hardware initiator failover			
Axiom Storage System 300	X	X	X			X	X	X			X	X	X
Axiom Storage System 500	X	X	X			X	X	X			X	X	X
Axiom Storage System 600	X	X	X			X	X	X			X	X	X

**Table 83.** Promise Technology

	ESX Server 3.5			ESX Server 3i Embedded			ESX Server 3i Installable					
	iSCSI software initiator			iSCSI hardware initiator			iSCSI software initiator			iSCSI hardware initiator		
	iSCSI Base Connectivity SP failover	NIC failover for software initiator		iSCSI Base Connectivity SP failover	Boot from iSCSI	iSCSI hardware initiator failover	iSCSI Base Connectivity SP failover	NIC failover for software initiator		iSCSI Base Connectivity SP failover	Boot from iSCSI	iSCSI hardware initiator failover
M310i	X	X	X				X	X	X			
M610i	X	X	X				X	X	X			

**Table 84.** RELDATA Inc

	ESX Server 3.5			ESX Server 3i Embedded			ESX Server 3i Installable					
	iSCSI software initiator			iSCSI hardware initiator			iSCSI software initiator			iSCSI hardware initiator		
	iSCSI Base Connectivity SP failover	NIC failover for software initiator		iSCSI Base Connectivity SP failover	Boot from iSCSI	iSCSI hardware initiator failover	iSCSI Base Connectivity SP failover	NIC failover for software initiator		iSCSI Base Connectivity SP failover	Boot from iSCSI	iSCSI hardware initiator failover
9240	X	X	X				X	X	X			

**Table 85.** Sanrad

	ESX Server 3.5			ESX Server 3i Embedded			ESX Server 3i Installable							
	iSCSI software initiator			iSCSI hardware initiator			iSCSI software initiator			iSCSI hardware initiator				
	iSCSI Base Connectivity SP failover	NIC failover for software initiator		iSCSI Base Connectivity SP failover	Boot from iSCSI	iSCSI hardware initiator failover	iSCSI Base Connectivity SP failover	Boot from iSCSI	iSCSI hardware initiator failover	iSCSI Base Connectivity SP failover	NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI	iSCSI hardware initiator failover
V-STOR	X			X			X			X				

**Table 86.** StoneFly

	ESX Server 3.5			ESX Server 3i Embedded			ESX Server 3i Installable							
	iSCSI software initiator			iSCSI hardware initiator			iSCSI software initiator			iSCSI hardware initiator				
	iSCSI Base Connectivity SP failover	NIC failover for software initiator		iSCSI Base Connectivity SP failover	Boot from iSCSI	iSCSI hardware initiator failover	iSCSI Base Connectivity SP failover	Boot from iSCSI	iSCSI hardware initiator failover	iSCSI Base Connectivity SP failover	NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI	iSCSI hardware initiator failover
HSC-1601	X	X	X	X	X	X	X	X	X	X				
ISC-401	X	X	X	X	X	X	X	X	X	X				
ISC-801	X	X	X	X	X	X	X	X	X	X				
ISC-1601	X	X	X	X	X	X	X	X	X	X				
ISC-2401	X	X	X	X	X	X	X	X	X	X				
StoneFly OptiSAN	X	X	X	X	X	X	X	X	X	X				

**Table 87.** StorMagic

	ESX Server 3.5			ESX Server 3i Embedded			ESX Server 3i Installable							
	iSCSI software initiator			iSCSI hardware initiator			iSCSI software initiator			iSCSI hardware initiator				
	iSCSI Base Connectivity SP failover	NIC failover for software initiator		iSCSI Base Connectivity SP failover	Boot from iSCSI initiator failover		iSCSI Base Connectivity SP failover	Boot from iSCSI initiator failover		iSCSI Base Connectivity SP failover	NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI initiator failover	iSCSI hardware initiator
SMTB	X	X				X	X			X	X			

**Table 88.** Sun

	ESX Server 3.5			ESX Server 3i Embedded			ESX Server 3i Installable							
	iSCSI software initiator			iSCSI hardware initiator			iSCSI software initiator			iSCSI hardware initiator				
	iSCSI Base Connectivity SP failover	NIC failover for software initiator		iSCSI Base Connectivity SP failover	Boot from iSCSI initiator failover		iSCSI Base Connectivity SP failover	Boot from iSCSI initiator failover		iSCSI Base Connectivity SP failover	NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI initiator failover	iSCSI hardware initiator
StorageTek 2510	X	X	X			X	X	X		X	X	X		

**Table 89.** Wasabi Systems Inc

	ESX Server 3.5				ESX Server 3i Embedded				ESX Server 3i Installable			
	iSCSI software initiator		iSCSI hardware initiator		iSCSI software initiator		iSCSI hardware initiator		iSCSI software initiator		iSCSI hardware initiator	
	iSCSI Base Connectivity SP failover	NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI iSCSI hardware initiator failover	iSCSI Base Connectivity SP failover	NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI iSCSI hardware initiator failover	iSCSI Base Connectivity SP failover	NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI iSCSI hardware initiator failover
VMX 2000sx	X	X			X	X			X	X		

**Table 90.** Xiotech

	ESX Server 3.5				ESX Server 3i Embedded				ESX Server 3i Installable			
	iSCSI software initiator		iSCSI hardware initiator		iSCSI software initiator		iSCSI hardware initiator		iSCSI software initiator		iSCSI hardware initiator	
	iSCSI Base Connectivity SP failover	NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI iSCSI hardware initiator failover	iSCSI Base Connectivity SP failover	NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI iSCSI hardware initiator failover	iSCSI Base Connectivity SP failover	NIC failover for software initiator	iSCSI Base Connectivity SP failover	Boot from iSCSI iSCSI hardware initiator failover
Emprise 7000 <sup>1</sup>	X	X	X	X	X	X	X	X	X	X	X	X
Magnitude 3D 3000	X	X	X	X	X	X	X	X	X	X	X	X
Magnitude 3D 4000	X	X	X	X	X	X	X	X	X	X	X	X

<sup>1</sup> Configuration limited to ISE drive bays only.

## SAS Arrays

For SAS Arrays, VMware tests the following configurations:

- **Basic Connectivity** — The ability of ESX Server 3.5 hosts to recognize and interoperate with the storage array. This configuration does not allow for multipathing, any type of failover, or sharing of LUNs between multiple hosts.

- **Direct Connect** — In this configuration, the ESX Server 3.x host is directly connected to the array (that is, no switch between HBA and the array). Windows Clustering is not supported in this configuration.
- **LUN sharing** — The ability of multiple ESX Server 3.x hosts to share the same LUN.
- **Multipathing** — The ability of ESX Server 3.x hosts to handle multiple paths to the same storage device.
- **HBA Failover** — In this configuration, the ESX Server 3.x host is equipped with multiple HBAs connecting directly to the array. The server is robust to HBA failure only.
- **Storage Port Failover** — In this configuration, the ESX Server 3.x host is attached to multiple storage ports on the same array and is robust to storage port failures.

In the following tables, an X in a table cell indicates the storage array or an equivalent configuration has been tested. All storage products listed in this compatibility guide are supported. For further details about array firmware, storage product configurations and best practices, please contact the storage vendor.

This section contains information on storage arrays from the following vendors:

- [“Dell”](#) on page 71
- [“Hewlett Packard”](#) on page 72
- [“IBM”](#) on page 72

**Table 91.** Dell

	ESX Server 3.5					ESX Server 3i Embedded					ESX Server 3i Installable							
	Basic connectivity	Direct Connect	LUN sharing	Multipathing	HBA Failover	Storage Port Failover	Basic connectivity	Direct Connect	LUN sharing	Multipathing	HBA Failover	Storage Port Failover	Basic connectivity	Direct Connect	LUN sharing	Multipathing	HBA Failover	Storage Port Failover
MD3000 <sup>1</sup>	X					X							X					

<sup>1</sup> Requires Update 1 or higher of the ESX Server version listed in the corresponding column.

**Table 92.** Hewlett Packard

	ESX Server 3.5						ESX Server 3i Embedded						ESX Server 3i Installable					
	Basic connectivity	Direct Connect	LUN sharing	Multipathing	HBA Failover	Storage Port Failover	Basic connectivity	Direct Connect	LUN sharing	Multipathing	HBA Failover	Storage Port Failover	Basic connectivity	Direct Connect	LUN sharing	Multipathing	HBA Failover	Storage Port Failover
MSA2012sa <sup>1, 2, 3</sup>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
<sup>1</sup> Requires Update 2 or higher of the ESX Server version listed in the corresponding column.																		
<sup>2</sup> HP Shared SAS supported with MSA2012sa Storage Array Controller and HP SC08GE HBA using mptscsi_2xx drivers.																		
<sup>3</sup> Shared VMFS support across two or more ESX Server hosts requires MSA2012sa firmware version J300P03 or higher.																		

**Table 93.** IBM

	ESX Server 3.5						ESX Server 3i Embedded						ESX Server 3i Installable					
	Basic connectivity	Direct Connect	LUN sharing	Multipathing	HBA Failover	Storage Port Failover	Basic connectivity	Direct Connect	LUN sharing	Multipathing	HBA Failover	Storage Port Failover	Basic connectivity	Direct Connect	LUN sharing	Multipathing	HBA Failover	Storage Port Failover
DS3200 <sup>1, 3</sup>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
SAS RAID Controller Module <sup>2</sup>	X		X	X	X	X			X	X	X	X	X		X	X	X	X
<sup>1</sup> Requires Update 1 or higher of the ESX Server version listed in the corresponding column.																		
<sup>2</sup> Requires Update 2 or higher of the ESX Server version listed in the corresponding column.																		
<sup>3</sup> For more information on configuring IBM DS3200 for use with ESX Server, refer to: <a href="http://kb.vmware.com/kb/1004313">http://kb.vmware.com/kb/1004313</a> .																		

## OEM SAN Array Model Reference

**Table 94.** SAN Array Model Reference

OEM	Array Type	Mode	Recommended Path Policy	Model String
3PAR	InServ E200	Active-active	Fixed	3PARdata VV
3PAR	InServ S400	Active-active	Fixed	3PARdata VV
3PAR	InServ S800	Active-active	Fixed	3PARdata VV
3PAR	T-Class	Active-active	Fixed	
AC&NC	JetStor SAS 516F	Active-active	MRU – Most Recently Used	JetStor SAS 516F
Adaptec	Snap Server 730i	Active-passive	MRU – Most Recently Used	Snap Server 730i
American Megatrends Inc.	3200i	Active-active	Fixed	StorTrends iTX
BlueArc Corp	Titan 1100	Active-active	Fixed	Titan 5.0
BlueArc Corp	Titan 2100	Active-active	Fixed	Titan 5.0
BlueArc Corp	Titan 2200	Active-active	Fixed	Titan 2200
BlueArc Corp	Titan 2500	Active-active	Fixed	Titan 5.0
Bull	StoreWay FDA1500	Active-active	Fixed	iStorage 1000
Bull	StoreWay FDA2500	Active-active	Fixed	iStorage 2000
Bull	StoreWay FDA2900	Active-active	Fixed	iStorage 2000
Celeros	XD11	Active-active	Fixed	EzSanfiler
Celeros	XD11S	Active-active	Fixed	EzSanfiler
Celeros	XD23	Active-active	Fixed	EzSanfiler
Celeros	XD23S	Active-active	Fixed	EzSanfiler
Celeros	XD34	Active-active	Fixed	EzSanfiler
Celeros	XD34S	Active-active	Fixed	EzSanfiler
Celeros	XD46S	Active-active	Fixed	EzSanfiler
Celeros	XD512	Active-active	Fixed	EzSanfiler
Celeros	XD56	Active-active	Fixed	EzSanfiler
Celeros	XD810	Active-active	Fixed	EzSanfiler
Compellent	Storage Center	Active-active	Fixed	Compellent Vol
Cybernetics	miSAN D6	Active-active	Fixed	iSAN_Vault
Cybernetics	miSAN D8	Active-active	Fixed	iSAN_Vault
Cybernetics	miSAN D12	Active-active	Fixed	iSAN_Vault
DataCore	SMY-VS5-2970	Active-passive	MRU – Most Recently Used	SANmelody

**Table 94.** SAN Array Model Reference (Continued)

OEM	Array Type	Mode	Recommended Path Policy	Model String
DataCore	SSY-UNL-P-385	Active-passive	MRU – Most Recently Used	SANsymphony
Dell	PS5500E	Active-active	Fixed	
Dell	EqualLogic PS Series	Active-active	Fixed	EQLOGIC
Dot Hill Systems	5730	Active-active	Fixed	Dot Hill 5730
Dot Hill Systems	R/Evolution 2330	Active-active	Fixed	R/Evo 2330-2R
Dot Hill Systems	R/Evolution 2730	Active-active	MRU – Most Recently Used	R/Evo 2730-2R
Dot Hill Systems	R/Evolution 2730T	Active-active	MRU – Most Recently Used	R/Evo 2730T-2R
EMC	AX series	Active-passive	MRU – Most Recently Used	DGC
EMC	CX series	Active-passive	MRU – Most Recently Used	DGC
EMC (Dell)	CX3 series	Active-passive	MRU – Most Recently Used	DGC
EMC	CX4 series	Active-passive	MRU – Most Recently Used	DGC
EMC	Celerra NS20FC	Active-passive	MRU – Most Recently Used	DGC
EMC	Celerra NS40FC	Active-passive	MRU – Most Recently Used	DGC
EMC	Celerra NS 20/40/80 series, NX4, NS 350, NS 500/700 series, CNS, and NSX DART 5.6	Active-passive	MRU – Most Recently Used	Celerra
EMC	Invista-Brocade	Active-active	MRU – Most Recently Used	Invista
EMC	Invista-Cisco	Active-active	Fixed	Invista
EMC	NX4	Active-passive	MRU – Most Recently Used	DGC
EMC	Symmetrix series	Active-active	Fixed	Symmetrix
FalconStor Software	IPStor Enterprise	Active-active	Fixed	
FalconStor Software	NSS Gateway	Active-active	Fixed	
FalconStor Software	NSS HC620	Active-active	Fixed	
FalconStor Software	NSS HC630	Active-active	Fixed	
FalconStor Software	NSS HC670	Active-active	Fixed	
FalconStor Software	NSS-S12	Active-active	Fixed	IPStor Disk
FalconStor Software	NSS-S24	Active-active	Fixed	
Fujitsu	ETERNUS 2000	Active-active	Fixed	E2000
Fujitsu	ETERNUS 3000	Active-active	Fixed	E3000
Fujitsu	ETERNUS 4000 Model 80 and Model 100	Active-active	Fixed	E400A
Fujitsu	ETERNUS 4000 Model 300 and Model 500	Active-active	Fixed	E4000
Fujitsu	ETERNUS 6000	Active-active	Fixed	E6000

**Table 94.** SAN Array Model Reference (Continued)

<b>OEM</b>	<b>Array Type</b>	<b>Mode</b>	<b>Recommended Path Policy</b>	<b>Model String</b>
Fujitsu	ETERNUS 8000	Active-active	Fixed	E8000
Fujitsu Siemens	CentricStor FS4000	Active-passive	MRU – Most Recently Used	CSFS
Fujitsu Siemens	FibreCAT CX-series	Active-passive	MRU – Most Recently Used	DGC
Fujitsu Siemens	FibreCAT CX3-series	Active-passive	MRU – Most Recently Used	DGC
Fujitsu Siemens	FibreCAT CX4-series	Active-passive	MRU – Most Recently Used	DGC
Fujitsu Siemens	FibreCAT SX60	Active-active	Fixed	FibreCAT_SX1
Fujitsu Siemens	FibreCAT SX80	Active-active	Fixed	FibreCAT_SX1
Fujitsu Siemens	FibreCAT SX88	Active-active	Fixed	FibreCAT_SX1
Fujitsu Siemens	FibreCAT SX100	Active-active	Fixed	FibreCAT_SX1
H3C Technologies Co., Limited	Neocean IX3040 NI1Z1SC2140	Active-active	MRU – Most Recently Used	IX3040
H3C Technologies Co., Limited	Neocean IX3080 NI1Z1SC2280	Active-active	MRU – Most Recently Used	IX3080
H3C Technologies Co., Limited	Neocean IX3620 NI1Z1SC22X2	Active-active	MRU – Most Recently Used	IX3620
Hewlett Packard	EVA-4000	Active-active	Fixed	HSV200
Hewlett Packard	EVA-4100	Active-active	Fixed	HSV200
Hewlett Packard	EVA-4400	Active-active	Fixed	HSV300
Hewlett Packard	EVA-4400 with Embedded Switch	Active-active	Fixed	HSV300
Hewlett Packard	EVA-6000	Active-active	Fixed	HSV200
Hewlett Packard	EVA-6100	Active-active	Fixed	HSV200
Hewlett Packard	EVA-8000	Active-active	Fixed	HSV210
Hewlett Packard	EVA-8100	Active-active	Fixed	HSV210
Hewlett Packard	MSA-1000 FW 7.0 or higher	Active-active	Fixed	MSA_VOLUME
Hewlett Packard	MSA-1500 FW 7.0 or higher	Active-active	Fixed	MSA_VOLUME
Hewlett Packard	MSA-1500 V5	Active-passive	MRU – Most Recently Used	MSA1000 VOLUME
Hewlett Packard	MSA-2212sa	Active-active	Fixed	HP_MSA2212sa_J200
Hewlett Packard	MSA-2012fc	Active-active	Fixed	HP_MSA2012fc_J200
Hewlett Packard	MSA-2212fc	Active-active	Fixed	HP_MSA2212fc_J200
Hewlett Packard	MSA-2012i	Active-active	Fixed	HP_MSA2012i_J200
Hewlett Packard	XP10000	Active-active	Fixed	
Hewlett Packard	XP12000	Active-active	Fixed	

**Table 94.** SAN Array Model Reference (Continued)

OEM	Array Type	Mode	Recommended Path Policy	Model String
Hewlett Packard	XP20000	Active-active	Fixed	
Hewlett Packard	XP24000	Active-active	Fixed	
Hifn	Swarm 3000	Active-active	Fixed	EMUL STORAGE
Hitachi, Ltd.	AMS 2100	Active-active	Fixed	
Hitachi, Ltd.	AMS 2300	Active-active	Fixed	
Hitachi, Ltd.	AMS 2500	Active-active	Fixed	
Hitachi, Ltd.	BR 50	Active-passive	MRU/Fixed <sup>1</sup>	
Hitachi, Ltd.	BR 150	Active-passive	MRU/Fixed <sup>1</sup>	
Hitachi, Ltd.	SANRISE 9500V Series	Active-active	Fixed	
Hitachi, Ltd.	SANRISE 9970V	Active-active	Fixed	
Hitachi, Ltd.	SANRISE 9980V	Active-active	Fixed	
Hitachi, Ltd.	SANRISE AMS 200	Active-passive	MRU/Fixed <sup>1</sup>	
Hitachi, Ltd.	SANRISE AMS 500	Active-passive	MRU/Fixed <sup>1</sup>	
Hitachi, Ltd.	SANRISE AMS 1000	Active-passive	MRU/Fixed <sup>1</sup>	
Hitachi, Ltd.	SANRISE NSC 55	Active-active	Fixed	
Hitachi, Ltd.	SANRISE USP 100	Active-active	Fixed	
Hitachi, Ltd.	SANRISE USP 600	Active-active	Fixed	
Hitachi, Ltd.	SANRISE USP 1100	Active-active	Fixed	
Hitachi, Ltd.	SANRISE WMS 100	Active-passive	MRU/Fixed <sup>1</sup>	
Hitachi, Ltd.	SMS100	Active-active	MRU/Fixed <sup>1</sup>	
Hitachi, Ltd.	USP V	Active-active	Fixed	
Hitachi, Ltd.	USP VM	Active-active	Fixed	
Hitachi Data Systems	AMS 2100	Active-active	Fixed	
Hitachi Data Systems	AMS 2300	Active-active	Fixed	
Hitachi Data Systems	AMS 2500	Active-active	Fixed	
Hitachi Data Systems	HNAS Server 2100	Active-active	Fixed	
Hitachi Data Systems	HNAS Server 2200	Active-active	Fixed	
Hitachi Data Systems	Lightning 9970V	Active-active	Fixed	
Hitachi Data Systems	Lightning 9980V	Active-active	Fixed	
Hitachi Data Systems	SMS100	Active-active	MRU/Fixed <sup>1</sup>	
Hitachi Data Systems	TagmaStore AMS 200	Active-passive	MRU/Fixed <sup>1</sup>	

**Table 94.** SAN Array Model Reference (Continued)

OEM	Array Type	Mode	Recommended Path Policy	Model String
Hitachi Data Systems	TagmaStore AMS 500	Active-passive	MRU/Fixed <sup>1</sup>	
Hitachi Data Systems	TagmaStore AMS 1000	Active-passive	MRU/Fixed <sup>1</sup>	
Hitachi Data Systems	TagmaStore NSC 55	Active-active	Fixed	
Hitachi Data Systems	TagmaStore USP 100	Active-active	Fixed	
Hitachi Data Systems	TagmaStore USP 600	Active-active	Fixed	
Hitachi Data Systems	TagmaStore USP 1100	Active-active	Fixed	
Hitachi Data Systems	Tagmastore WMS 100	Active-passive	MRU/Fixed <sup>1</sup>	
Hitachi Data Systems	Thunder 9500V Series	Active-active	Fixed	
Hitachi Data Systems	USP V	Active-active	Fixed	
Hitachi Data Systems	USP VM	Active-active	Fixed	
IBM	DS3200	Active-passive	MRU – Most Recently Used	1726-2xx
IBM	DS3300	Active-passive	MRU – Most Recently Used	1726-3xx
IBM	DS3400	Active-passive	MRU – Most Recently Used	1726-4xx
IBM	DS4200	Active-passive	MRU – Most Recently Used	1815
IBM	DS4500/FAS <sup>+</sup> T900	Active-passive	MRU – Most Recently Used	1742
IBM	DS4700	Active-passive	MRU – Most Recently Used	1814
IBM	DS4800	Active-passive	MRU – Most Recently Used	1815
IBM	DS5100	Active-passive	MRU – Most Recently Used	1818
IBM	DS5300	Active-passive	MRU – Most Recently Used	1818
IBM	DS8000	Active-active	Fixed	2107900
IBM	ESS 750/800	Active-active	Fixed	
IBM	ESS F10/F20	Active-active	Fixed	
IBM	N3000 Series	Active-active	Fixed	LUN
IBM	N3700	Active-active	Fixed	LUN
IBM	N5000 Series	Active-active	Fixed	LUN
IBM	N6000 Series	Active-active	Fixed	LUN
IBM	N7000 Series	Active-active	Fixed	LUN
IBM	SVC	Active-active	MRU – Most Recently Used	2145
IBM	XIV	Active-active	Fixed	2810XIV
Infortrend Technology Inc.	A16E-G2130	Active-passive	MRU – Most Recently Used	
Infortrend Technology Inc.	S12E-G1133	Active-passive	MRU – Most Recently Used	S12E-G1133

**Table 94.** SAN Array Model Reference (Continued)

OEM	Array Type	Mode	Recommended Path Policy	Model String
Infotrend Technology Inc.	S12E-R1132	Active-passive	MRU – Most Recently Used	S12E-R1132
Infotrend Technology Inc.	S16E-G1130	Active-passive	MRU – Most Recently Used	S16E-G1130
Infotrend Technology Inc.	S16E-R1130	Active-passive	MRU – Most Recently Used	S16E-R1130
iQstor Networks Inc	iQ2850	Active-passive	MRU – Most Recently Used	iQ2850
Isilon Systems	IQ1920x	Active-active	Fixed	
iStor Networks	iS512	Active-active	Fixed	iS512
LeftHand Networks	Dell 2950 and SAN/iQ 7	Active-active	Fixed	iSCSIDisk
LeftHand Networks	HP ProLiant DL320s and SAN/iQ 7	Active-active	Fixed	iSCSIDisk
LeftHand Networks	NSM 160 and SAN/iQ 7	Active-active	Fixed	iSCSIDisk
LeftHand Networks	NSM 2060 and SAN/iQ 7	Active-active	Fixed	iSCSIDisk
LeftHand Networks	NSM 2120 and SAN/iQ 7	Active-active	Fixed	iSCSIDisk
LeftHand Networks	NSM 4150 and SAN/iQ 7	Active-active	Fixed	iSCSIDisk
LSILogic	1932 Storage System	Active-passive	MRU – Most Recently Used	INF-01-00
NEC	iStorage D1-10	Active-active	Fixed	iStorage 1000
NEC	iStorage D3-10	Active-active	Fixed	iStorage 1000
NEC	iStorage D8	Active-active	Fixed	iStorage 1000
NEC	iStorage NV3400	Active-passive	MRU – Most Recently Used	iStorage NV3400
NEC	iStorage NV3400S	Active-passive	MRU – Most Recently Used	iStorage NV3400S
NEC	iStorage NV5400	Active-passive	MRU – Most Recently Used	iStorage NV5400
NEC	iStorage NV5400S	Active-passive	MRU – Most Recently Used	iStorage NV5400S
NEC	iStorage NV7400	Active-passive	MRU – Most Recently Used	iStorage NV7400
NEC	iStorage NV7400G	Active-passive	MRU – Most Recently Used	iStorage NV7400G
NEC	iStorage NV7400S	Active-passive	MRU – Most Recently Used	iStorage NV7400S
NEC	iStorage S500	Active-active	Fixed	iStorage 1000
NEC	iStorage S550	Active-active	Fixed	iStorage 1000
NEC	iStorage S1500	Active-active	Fixed	iStorage 1000
NEC	iStorage S2500	Active-active	Fixed	iStorage 2000
NEC	iStorage S2800	Active-active	Fixed	iStorage 2000
NEC	iStorage S2900	Active-active	Fixed	iStorage 1000
NEC	iStorage S4900	Active-active	Fixed	iStorage 4000
NetApp	FAS200 Series	Active-active	Fixed	

**Table 94.** SAN Array Model Reference (Continued)

OEM	Array Type	Mode	Recommended Path Policy	Model String
NetApp	FAS900 Series	Active-active	Fixed	
NetApp	FAS2000 Series	Active-active	Fixed	
NetApp	FAS3000 Series	Active-active	Fixed	
NetApp	FAS3100 Series	Active-active	Fixed	LUN
NetApp	V6000 Series	Active-active	Fixed	
Nexsan Technologies	SATABEAST	Active-active	Fixed	SATABeast
Nihon Unisys	SANARENA 1830	Active-passive	MRU/Fixed <sup>1</sup>	
Nihon Unisys	SANARENA 1870	Active-passive	MRU/Fixed <sup>1</sup>	
Nihon Unisys	SANARENA 1890	Active-passive	MRU/Fixed <sup>1</sup>	
Nihon Unisys	SANARENA 1895	Active-passive	MRU/Fixed <sup>1</sup>	
Nihon Unisys	SANARENA 18AS	Active-passive	MRU/Fixed <sup>1</sup>	
Nihon Unisys	SANARENA 5200	Active-active	Fixed	
Nihon Unisys	SANARENA 5800	Active-active	Fixed	
Open-E	DSS with Intel S5000PAL / SR 2500 Platform Model	Active-passive	MRU – Most Recently Used	Data Storage Server
Open-E	DSS with Intel Modular Server MFSYS25	Active-passive	MRU – Most Recently Used	Data Storage Server
Overland Storage	Snap Server 520	Active-passive	MRU – Most Recently Used	Snap Server 520
Overland Storage	ULTAMUS RAID 1200	Active-active	Fixed	F5412E
Overland Storage	ULTAMUS RAID 4800	Active-active	Fixed	F5404E
Pillar Data Systems	Axiom 300	Active-active	Fixed	Axiom 300
Pillar Data Systems	Axiom 500	Active-active	Fixed	Axiom 500
Pillar Data Systems	Axiom 600	Active-active	Fixed	Axiom 600
Promise Technology	E310f	Active-active	Fixed	Vtrak E310f
Promise Technology	E610f	Active-active	Fixed	Vtrak E610I\ f
Promise Technology	M310i	Active-active	Fixed	M310i
Promise Technology	M610i	Active-active	MRU – Most Recently Used	M610i
RELDATA Inc	9240	Active-active	Fixed	IP_GATEWAY_9240
Sanrad	V-STOR	Active-active	Fixed	V-STOR Volume
StoneFly	HSC-1601	Active-active	Fixed	OPSNv2
StoneFly	ISC-401	Active-active	Fixed	OPSNv2
StoneFly	ISC-801	Active-active	Fixed	OPSNv2

**Table 94.** SAN Array Model Reference (Continued)

OEM	Array Type	Mode	Recommended Path Policy	Model String
StoneFly	ISC-1601	Active-active	Fixed	OPSNv2
StoneFly	ISC-2401	Active-active	Fixed	OPSNv2
StoneFly	OptiSAN	Active-active	Fixed	OPSNv2
StorMagic	SMTB	Active-active	MRU – Most Recently Used	SMTB4F
Sun	StorageTek 2540	Active-passive	MRU – Most Recently Used	LCSM100_F
Sun	StorageTek 6540	Active-passive	MRU – Most Recently Used	FLEXLINE 380
Sun	StorageTek 9970	Active-active	Fixed	
Sun	StorageTek 9980	Active-active	Fixed	
Sun	StorageTek 9985	Active-active	Fixed	
Sun	StorageTek 9985	Active-active	Fixed	
Sun	StorageTek 9985v	Active-active	Fixed	
Sun	StorageTek 9990	Active-active	Fixed	
Sun	StorageTek 9990v	Active-active	Fixed	
Sun	StorageTek Flexline 240	Active-passive	MRU – Most Recently Used	OPENstorage D240
Sun	StorageTek Flexline 280	Active-passive	MRU – Most Recently Used	OPENstorage D280
Sun	StorageTek Flexline 380	Active-passive	MRU – Most Recently Used	STK FLEXLINE 380
Transtec	PROVIGO 550F	Active-active	Fixed	PROVIGO 550F
Wasabi Systems Inc	VMX 2000sx	Active-active	Fixed	VMX 2000sx
Xiotech	Emprise 5000	Active-active	Fixed	
Xiotech	Emprise 7000	Active-active	Fixed	Xiotech Virtual-ISE
Xiotech	Magnitude 3D 3000	Active-active	Fixed	
Xiotech	Magnitude 3D 4000	Active-active	Fixed	Magnitude 3D
Xyratex Ltd	F5402E	Active-active	Fixed	F5402E
Xyratex Ltd	F5404E	Active-active	Fixed	F5404E
Xyratex Ltd	F5412E	Active-active	Fixed	F5412E
Xyratex Ltd	F6412E	Active-active	Fixed	F6412E

<sup>1</sup> Path policy is changed to Fixed in ESX 3.5 patch ESX350-200804401-BG. See knowledge base article <http://kb.vmware.com/kb/1004161> for more information.

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