

IBM TotalStorage™ DS300 & DS400 Interoperability Matrix

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Important Disclaimer Information:

The following compatibility/interoperability information provided by IBM should be used as a reference guide only, because hardware and software levels and releases may vary, and numerous hardware and software combinations are possible. IBM makes no representation or guarantee regarding the compatibility of specific hardware or software products.

For specific Operating System support on your server, refer to IBM Server Proven at:

www-03.ibm.com/servers/eserver/serverproven/compat/us/

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To take full advantage of the constant improvements in the DS300 and DS400 code and firmware, you should upgrade to the latest code levels as soon as it is available. The latest code levels are available by selecting the Product Support link from the appropriate DS300 & DS400 model page located at:

<http://www-1.ibm.com/servers/storage/disk/index.html>

See the last page of this document for instructions on receiving automatic notification of changes.

DS300 and DS400 Single and Dual

Note: DS300 requires switch attachment, and direct attach configuration is not supported

DS300 1701, all models Supported Operating Systems	System x	BladeCenter	DS400 1700, all models Supported Operating Systems	System x	BladeCenter
Firmware 7.xx			Firmware 7.xx		
Windows Server 2003 w/SP1 ¹	✓	✓	Windows Server 2003 w/SP1 ¹	✓	✓
Windows 2000 Server & Adv. Server w/SP4	✓	✓	Windows 2000 Server & Adv. Server w/SP4	✓	✓
Microsoft Clustering Services on Win2003 ²	✓	✓	Microsoft Clustering Services on Win2003 ²	✓	✓
Linux Clustering Support			Linux Clustering Support		
Novell NetWare			Novell NetWare		
VMWare ESX Server			VMWare ESX Server		
Red Hat Enterprise Linux 3.0	✓	✓	Red Hat Enterprise Linux 3.0	✓	✓
Red Hat Enterprise Linux 4.0 Update 2	✓	✓	Red Hat Enterprise Linux 4.0	✓	✓
Red Hat Enterprise Linux 4.0 ³	✓	✓	SuSE Linux Enterprise Server 8	✓	✓
SuSE Linux Enterprise Server 8	✓	✓	SuSE Linux Enterprise Server 9	✓	✓
SuSE Linux Enterprise Server 9	✓	✓	ServeRAID Manager 8.25 (2912)	✓	✓
ServeRAID Manager 8.25 (2912)	✓	✓			
Supported iSCSI HBAs, Software Initiators, and Gigabit Ethernet adapters			Supported Fibre Channel HBAs		
IBM iSCSI HBA – 73P3601 ^{4,5}	✓		IBM FC2/133-24P0960	✓	
QLogic QLA4010 ⁶	✓		QLogic QLA2340 ⁶	✓	
IBM iSCSI Server TX Adapter – 30R5201	✓		IBM BladeCenter Fibre Channel HBA – 26K4841 ⁷		✓
IBM iSCSI Server SX Adapter – 30R5501	✓		IBM 2-Gbps SMB Fibre Channel HBA -13N1873	✓	
IBM BladeCenter iSCSI Adapter – 26K6487 ⁴		✓	QLogic QLA200 ⁸		
Microsoft iSCSI Software Initiator 1.06a	✓				
Microsoft iSCSI Software Initiator 2.0	✓	✓			
Linux iSCSI initiator v3.6.3 ⁹	✓	✓			
Linux iSCSI initiator v3.6.4 ⁹	✓	✓			
PRO/1000 MT Server Ethernet Adapter by Intel 31P9601 ¹⁰	✓				
Gigabit Ethernet adapters on some hosts ¹¹					
IBM BladeCenter® Gigabit Ethernet Expansion - 73P9030 ¹²		✓			
Options			Options		
1Gbyte system memory upgrade ¹³	✓	✓	1Gbyte system memory upgrade ¹³	✓	✓
IBM Director 5.1 ¹⁴	✓	✓	IBM Director 5.1 ¹⁴	✓	✓
Enhanced Flashcopy for Windows ¹⁴	✓	✓	Enhanced Flashcopy for Windows ¹⁴	✓	✓
Controller upgrades	✓	✓	Controller upgrades	✓	✓
Remote Boot	✓	✓	Remote Boot ¹⁵	✓	✓
Jumbo Frames Support	✓	✓	Jumbo Frames Support	✓	✓
			EXP400 Attachment	✓	✓

¹ Microsoft Windows Server 2003 – Enterprise, Standard and Web editions, 32bit

² Microsoft does not support logo certification on non-supported OS, (Windows 2000)

³ iSCSI adapter p/n 73P3601 required for this Operating System on System x Servers

⁴ Required for boot from SAN operation

⁵ Required for supporting Red Hat 4.0

⁶ Supported with IBM BIOS, NVRAM (1.47), and with IBM device drivers

⁷ Same MPIO driver as used by QLA2340 or IBM 2-Gbps SMB Fibre Channel HBA - 13N1873

⁸ Supported with IBM BIOS, NVRAM (1.23), and with IBM device drivers

⁹ Multi-pathing option is not supported with Linux iSCSI software initiators. Do not use with RedHat 4 or SLES 9.

RedHat 4 and SLES 9 come with embedded iSCSI initiators

¹⁰ Supported with all MS and Linux drivers listed

¹¹ DS300 certified with onboard Ethernet adapter for all hosts ServerProven with DS300; refer to [ServerProven](#)

¹² Gigabit Ethernet switch module required in bays 3 and 4 of BladeCenter chassis

¹³ Required for use with IBM Director and Flashcopy Option

¹⁴ 1Gbyte memory upgrade required

¹⁵ If booting off this specific LUN, a redundant path to that particular storage device is not available

DS300 & DS400 Single and Dual Controller & Supported SAN Fabrics

	DS300	DS400
IBM SAN Switches for System x Servers		
IBM System Storage SAN10Q		✓
IBM TotalStorage SAN16B-2		✓
IBM 3534-F08		✓
IBM 2005-H08/H16		✓
IBM 2006-L10		✓
IBM 2109-F16		✓
Cisco MDS 9506 Multilayer Director - switch		✓
IBM SAN Switches for BladeCenters		
Brocade Entry SAN Switch Modules for IBM eServer BladeCenter - 26K5601		✓
Brocade Enterprise SAN Switch Modules for IBM eServer BladeCenter - 90P0165		✓
McDATA 6-port Fibre Channel Switch Module for IBM eServer BladeCenter - 32R1790		✓
QLogic Enterprise 6-port Fibre Channel Switch Module for IBM eServer BladeCenter - 26K6477		✓
BladeCenter Optical Pass thru module - 02R9080		✓
IBM Gigabit Ethernet Switches for System x Servers		
Note: DS300 uses all commonly available gigabit Ethernet switches, however, the following represent the actual switches that were tested. The sample below does not in any way represent switches that are limited with DS300		
3Com Superstack 3824	✓	
D-Link DGS-1024T	✓	
D-Link DGS-1016TG	✓	
NetGear GS524T	✓	
NetGear GS516T	✓	
Commonly available Gigabit Ethernet switches	✓	
IBM Gigabit Ethernet Switches for BladeCenters		
Cisco Systems® Intelligent Gigabit Ethernet Switch Module for IBM eServer BladeCenter - 13N2281	✓	
Nortel Networks® Layer 2-7 Gigabit Ethernet Switch Module for IBM BladeCenter - 73P9057	✓	

DS300 & DS400 Supported HDDs

	DS300	DS400
Express Packs (HDDs)		
73.4GB 10K rpm Ultra320 SCSI Express 3-pack - 39M4566	✓	✓
146.8GB 10K rpm Ultra320 SCSI Express 3-pack - 39M4565	✓	✓
73.4GB 15K rpm Ultra320 SCSI Express 3-pack - 39M4568	✓	✓
HDDs		
73.4GB 10K rpm Ultra320 SCSI HDD - 90P1305	✓	✓
146.8GB 10K rpm Ultra320 SCSI HDD - 90P1306	✓	✓
300GB 10K rpm Ultra320 SCSI HDD - 90P1307	✓	✓
36.4GB 15K rpm Ultra320 SCSI HDD - 90P1380	✓	✓
73.4GB 15K rpm Ultra320 SCSI HDD - 90P1381	✓	✓
146.8GB 15K rpm Ultra320 SCSI HDD - 90P1382	✓	✓