



# CHAPTER 1

## Disk Storage Interoperability Matrix

This chapter lists storage systems qualified by the Original Storage Vendors (OSMs), Cisco Partners, and Cisco's Data Center Interoperability Engineering for supporting seamless deployment of Storage Area Networks using the Cisco MDS 9000 family of Fibre Channel Switches and Director class products, Cisco Nexus 7000 Series devices, and Cisco Nexus 5000 Series devices.

[Table 1-1](#) lists Cisco MDS 9000 switches, Cisco Nexus 7000 Series switches, and Cisco Nexus 5000 Series switches, and the NX-OS and SAN-OS software releases that each switch supports. The switches listed in this table support the disk storage products listed in this chapter.

**Table 1-1** Supported NX-OS and SAN-OS Releases on Cisco MDS 9000 Switches

Cisco MDS 9000 Switch	Cisco NX-OS or SAN-OS Release
Cisco MDS 9500 Series	5.2(2d), 5.2(2a), 5.2(2), 5.2(1)
	5.0(8), 5.0(7), 5.0(4d), 5.0(4c), 5.0(4b), 5.0(4), 5.0(1a)
	4.2(9), 4.2(7e), 4.2(7d), 4.2(7b), 4.2(7a), 4.2(5), 4.2(3a), 4.2(3), 4.2(1b), 4.2(1a) 4.1(3a), 4.1(1c), 4.1(1b)
	3.3(5b), 3.3(5a), 3.3(5), 3.3(4a), 3.3(4), 3.3(3), 3.3(2), 3.3(1c), 3.3(1a), 3.2(3a), 3.2(3), 3.2(2c), 3.2(1)
	3.1(4), 3.1(3a), 3.1(3), 3.1(2b), 3.1(2a), 3.1(2), 3.1(1)
	3.0(3b), 3.0(3), 3.0(2b), 3.0(2a), 3.0(2), 3.0(1)
Cisco MDS 9222i switch	5.2(2d), 5.2(2a), 5.2(2), 5.2(1)
	5.0(8), 5.0(7), 5.0(4d), 5.0(4c), 5.0(4b), 5.0(4), 5.0(1a)
	4.2(9), 4.2(7e), 4.2(7d), 4.2(7b), 4.2(7a), 4.2(5), 4.2(3a), 4.2(3), 4.2(1b), 4.2(1a), 4.1(3a), 4.1(1c), 4.1(1b)
	3.3(5b), 3.3(5a), 3.3(5), 3.3(4a), 3.3(4), 3.3(3), 3.3(2), 3.3(1c), 3.3(1a), 3.2(3a), 3.2(3), 3.2(2c), 3.2(1a)
Cisco MDS 9134 and 9124 switches	5.2(2d), 5.2(2a), 5.2(2)
	5.0(8), 5.0(7), 5.0(4d), 5.0(4c), 5.0(4b), 5.0(4), 5.0(1a)
	4.2(9), 4.2(7e), 4.2(7d), 4.2(7b), 4.2(7a), 4.2(5), 4.2(3a), 4.2(3), 4.2(1b), 4.2(1a) 4.1(3a), 4.1(1c), 4.1(1b)
	3.3(5b), 3.3(5a), 3.3(5), 3.3(4a), 3.3(4), 3.3(3), 3.3(2), 3.3(1c), 3.3(1a), 3.2(3a), 3.2(3), 3.2(2c), 3.2(1)
	3.1(4), 3.1(3a), 3.1(3), 3.1(2b), 3.1(2a), 3.1(2), 3.1(1)

**Table 1-1 Supported NX-OS and SAN-OS Releases on Cisco MDS 9000 Switches (continued)**

Cisco MDS 9000 Switch	Cisco NX-OS or SAN-OS Release
Cisco MDS 9148 switch	5.2(2d), 5.2(2a), 5.2(2), 5.2(1)
	5.0(8), 5.0(7), 5.0(4d), 5.0(4c), 5.0(4b), 5.0(4), 5.0(1a)
Cisco Nexus 7000 Series	6.0(3), 6.0(2), 6.0(1)
	5.2(4), 5.2(3a), 5.2(1)
Cisco Nexus 5000 switch	5.1(3)N2(1), 5.1(3)N1(1a), 5.1(3)N1(1)
	5.0(3)N2(2b), 5.0(3)N2(2a), 5.0(3)N2(2), 5.0(3)N2(1), 5.0(3)N1(1c), 5.0(2)N2(1a), 5.0(2)N2(1), 5.0(2)N1(1)
	4.2(1)N2(1a), 4.2(1)N2(1), 4.2(1)N1(1)
	4.1(3)N2(1a), 4.1(3)N2(1), 4.1(3)N1(1a), 4.1(3)N1(1)
	4.0(1a)N2(1a), 4.0(1a)N2(1), 4.0(1a)N1(1a), 4.0(1a)N1(1), 4.0(0)N1(2a), 4.0(0)N1(2), 4.0(0)N1(1a)
Cisco Nexus 5500 switch	5.1(3)N2(1), 5.1(3)N1(1a), 5.1(3)N1(1)
	5.0(3)N2(2b), 5.0(3)N2(2a), 5.0(3)N2(2), 5.0(3)N2(1), 5.0(3)N1(1c)

## Additional Information

Refer to the following OSM websites to obtain the latest support matrix:

- EMC—visit: EMC Interoperability support Matrices. **Refer to this matrix for comprehensive list of latest supported EMC storage arrays including Sym V-max and newer CLARiiON disk arrays.** <http://www.emc.com/interoperability>
- HP—visit: HP StorageWorks SAN design reference guide [http://h20000.www2.hp.com/bc/docs/support/SupportManual/c00403562/c00403562.pdf?jumpid=reg\\_R1002\\_USEN](http://h20000.www2.hp.com/bc/docs/support/SupportManual/c00403562/c00403562.pdf?jumpid=reg_R1002_USEN)  
and Refer to the EBS compatibility matrix <http://h18006.www1.hp.com/products/storageworks/san/documentation.html>
- IBM—visit <ftp://service.boulder.ibm.com/storage/san/cisco/mds9216.pdf>  
<http://www14.software.ibm.com/webapp/set2/sas/f/vios/documentation/datasheet.html#san>
- IBM Bladecenter compatibility matrix:  
<http://www-947.ibm.com/systems/support/supportsite.wss/supportresources?categoryind=5035083&brandind=5000020&familyind=5108750&typeind=0&modelind=0&osind=0&taskind=2&news=N&parts=N&pubs=N&matrix=N&selectedButton.x=20&selectedButton.y=14>
- IBM SAN Volume Controller—visit:  
<http://www-1.ibm.com/support/docview.wss?rs=591&uid=ssg1S1002472>  
[http://www-1.ibm.com/support/docview.wss?rs=591&uid=ssg1S1003091#\\_MDS](http://www-1.ibm.com/support/docview.wss?rs=591&uid=ssg1S1003091#_MDS)
- HDS—visit <http://www.hds.com/corporate/resources.html>
- NetApp—visit NOW service & support page (login required) for Replicator-X  
[http://now.netapp.com/NOW/knowledge/docs/olio/guides/tdps/tdps\\_interoperability\\_guide.xls](http://now.netapp.com/NOW/knowledge/docs/olio/guides/tdps/tdps_interoperability_guide.xls)

## Qualified Storage Systems

Table 1-2 lists the storage systems that are qualified with the Cisco MDS 9000 switches and NX-OS software that is listed in Table 1-1.

**Table 1-2 Qualified Storage Systems**

Vendor	Disk Storage Model	Page
EMC	EMC Symmetrix 8000 Series	5
	EMC Symmetrix VMAX, DMX-3, DMX-4	6
	CLARiiON CX200	9
	CLARiiON CX600/400/300/500/700, CX-4 series, VNX series,3	9
	CLARiiON CX600/400/300/500/700, CX-4 series, VNX series,3	9
Hitachi Data Systems	Distance Extension	10
	Virtual and Universal Storage Platform (VSP, USP, USPV) Series	11
	Lightning 9900V Series	12
	Adaptable Modular Storage AMS 2100, 2500, and 2300; 200, 500, and 1000	13
	Thunder 9500V Series	14
	HDS High Performance NAS (HNAS)	15
IBM	Distance Extension	16
	ESS 2105 model 800	17
	DS 8000 Series	18
	DS 6000 Series	19
	DS 3000, 4000, 5000 series	20
	DS4200 (FAStT 700), DS4500 (FAStT 900)	20
	DS4300 (FAStT 600 Single and Dual Controller), DS4300 Turbo	21
	DS4100 (FAStT 100)	22
	IBM FAStT 200, 500	22
	IBM DS 8000, 6000 Series Distance Extension	23
	IBM ESS 2105 Series Distance Extension	23
HP	HP XP 10000, 12000, 20000, 24000	24
	HP XP128, XP1024	25
	HP EVA GL -- 3000 (HSV100), 5000 (HSV110)	26
	HP EVA XL -- 4000, 6000, 8000	28
	HP MSA1000, MSA1500 (Active/Active)	29
	Distance Extension	30

**Table 1-2 Qualified Storage Systems (continued)**

Vendor	Disk Storage Model	Page
Oracles	StorageTek 9990V, 9985V, 9970V	31
	StorageTek 6540, 6140, 2540, 2530, 2510	31
	StorEdge 3000	31
NEC	S2300	32
	S1300	32
	S2800	32
	D1-10, D3-10	33
	S2800 Distance Extension	33
	D8-30	33
Fujitsu	ETERNUS 2000	34
	ETERNUS 3000	36
	ETERNUS 6000	36
	ETERNUS 4000	37
	ETERNUS 8000	41
	ETERNUS DX60 S2, ETERNUS DX80 S2, ETERNUS DX90 S2, ETERNUS DX400 S2 Series, ETERNUS DX8000 S2 Series, ETERNUS DX60, ETERNUS DX80, ETERNUS DX90, ETERNUS DX400 Series, ETERNUS DX8000 Series	44
ADTX	ArrayMasStor L	45
Infortrend	EonStor FI6F-R2A2	46
	EonStor 2510FS	46
3PAR	3Par InServ Storage Server	47
	3Par InServ Storage Server	48
XIOtech	Magnitude (Rel. 10.01/11.01), Magnitude 3D (Rel. 2.5/3.13), Magnitude 3D 3000 (Rel 4.1)	48
NetApp	FAS and V-series Product Families	50
Pillar Data Systems	Axiom Storage System 300, 500	52
Apple Computer	Xserve RAID	53
ATTO	ATTO Diamond V Class Array	54
	HP EVA 4x00, 6x00, 8x00	54
Compellent	Storage Center	55
Nexsan	ATAbay-2X	56
	ATAbeast	56
	SATABay	56

## EMC

Table 1-3 EMC Symmetrix 8000 Series

Operating System		Host Bus Adapter
Type	Version	
EMC NAS7	5.0.9/11, 5.1.15/18, 5.1.9	<b>EMC:</b> 201-712-900, 250-734-902, 250-735-900, 250-736-900
HP-UX	11.0, 11i (11.11)	<b>HP:</b> A5158A, A6795A
	11.0	<b>HP:</b> A6684, A6685A
Tru64 Unix	5.1	<b>HP:</b> KGPSA-DA
	5.1, 5.1A, 5.1B	<b>HP:</b> KGPSA-CA, KGPSA-DA, KGPSA-BC, FCA 2384, FCA2354
OpenVMS	7.2-2, 7.3, 7.3-1	<b>HP:</b> KGPSA-CA, KGPSA-DA, KGPSA-BC, FCA2354
AIX	5.1, 5.2, 5.3	<b>IBM:</b> 6227, 6228, 6239, 5716
Windows 2000	Advanced Server SP4, Datacenter SP4, Powered Server Appliance Kit SP4 (SAK),	<p><b>Emulex:</b> LP10000-E, LP10000DC-E, LP1050-E, LP1050DC-E, LP11000-E, LP11002-E, LP1150-E, LP9002-E (LP9002L-E), LP9002DC-E, LP9802-E, LP9802DC-E, LP10000ExDC-E, LP1050Ex-E LP982-E; LPe11000-E, LPe11000-E-G, LPe11002-E, LPe11002-E-G, LPe1150-E, LPe1150-E-G;</p> <p><b>HP:</b> A7298A (LP982), A7387A (LP1050DC), A7388A (LP1050), AD167A/FC2143 (LP1150), AD168A/FC2243 (LP11002), AD300A (QLE2462), AE311A/FC1142SR (QLE2460), AE312A/FC1242SR (QLE2462), FCA2101 (LP952), FCA2210 (QLA2340), FCA2214/281541-B21 (QLA2340), FCA2214DC/321835-B21 (QLA2342), FCA2354 (LP9002), FCA2355 (LP9002DC), FCA2384 (LP9802), FCA2404 (LP9802), FCA2404DC (LP9802DC), FCA2408 (LP982);, A7560A (LP1050Ex), A8002A/FC2142SR (LPe1150), A8003A/FC2242SR (LPe11002), LPe1105-HP 4Gb FC, LPe1205, QMH2562, QMH2462, AB429A/FC1143 (QLA2460), AE369A/FC1243 (QLA2462)</p> <p><b>IBM:</b> 24P0960 (QLA2340), 39M5894 (QLA2460), 39M5895 (QLA2462), 39R6525 (QLE2460), 39R6527 (QLE2462), 42D0405 (LP11000), 42D0407 (LP11002); 42C2069 (LPe11000), 42C2071(LPe11002), 19K1246 (QLA2310)</p> <p><b>QLogic:</b> QLA2200F-EMC, QLA2310F-E-SP, QLA2340-E-SP, QLA2342-E-SP, QLA2460-E-SP, QLA2462-E-SP, QLE2460-E-SP, QLE2462-E-SP, QLE2360-E-SP</p> <p><b>Sun:</b> SG-XPCI1FC-EM2 (LP10000), SG-XPCI1FC-EM4 (LP11000), SG-XPCI1FC-EM4-Z (LP11000), SG-XPCI1FC-QF4 (QLA2460), SG-XPCI2FC-EM2 (LP10000DC), SG-XPCI2FC-EM4 (LP11002), SG-XPCI2FC-EM4-Z (LP11002), SG-XPCI2FC-QF4 (QLA2462), SG-XPCIE1FC-EM4 (LPe11000), SG-XPCIE1FC-EM8-Z (LPe12000), SG-XPCIE1FC-QF4 (QLE2460), SG-XPCIE1FC-QF8-Z (QLE2560), SG-XPCIE2FC-EB4-Z (LPem11002), SG-XPCIE2FC-EM4 (LPe11002), SG-XPCIE2FC-EM8-Z (LPe12002), SG-XPCIE2FC-QB4-Z (QEM2462), SG-XPCIE2FC-QF4 (QLE2462), SG-XPCIE2FC-QF8-Z (QLE2562);</p> <p><b>Unisys:</b> FCH732213-P64 (LP9002L-F2), FCH752313-PCX (LP1050), FCH752323-PCX (LP10000DC)</p> <p><b>NEC:</b> N8190-120 (LP1050), N8190-105 (LP952), N8190-127 (LPe1150)31, N8190-131 (LPe11002), N8403-008 (LP952), N8403-015 (LP1050DC), N8403-018 (LPe1105), N8803-031 (QLA2310F), NQ2014A-A001 (QLA2342), NQ2015A-A001 (QLA2460), NQ2016A-A001 (QLA2462), NT2010A-A001 (QLA2340)</p> <p><b>Dell:</b> 2362M;</p>
Windows 2003	AS Enterprise Edition	<p><b>Emulex:</b> LP10000-E, LP10000DC-E, LP8000-EMC, LP9002-E, LP982-E, LP9802-E, LP9802DC-E, LP9002DC-E, LP1105, LPe12000-E, LPe11000-E</p> <p><b>HP:</b> 336070-001, FCA2354, FCA2355, FCA2404</p>
	AS Standard Edition	<p><b>IBM:</b> 19K1246 (QLA2310), 24P0960 (QLA2340)</p> <p><b>NEC:</b> N8803-031</p> <p><b>Qlogic:</b> QLA2310F-E, QLA2340-E, QLA2342-E, QLE2562, QLE2460</p>
	Data Center	<p><b>Unisys:</b> FCH20111-P64, FCH20113-P64, FCH732213-P64</p>
Windows 2008		<p><b>Emulex:</b> LP10000-E, LP10000DC-E, LP8000-EMC, LP9002-E, LP982-E, LP9802-E, LP9802DC-E, LP9002DC-E, LP1105, LPe11000-E, LPe12000-E</p> <p><b>Qlogic:</b> QLA2310F-E, QLA2340-E, QLA2342-E, QLE2562, QLE2460</p>

Table 1-3 EMC Symmetrix 8000 Series (continued)

Operating System		Host Bus Adapter
Type	Version	
Linux	RedHat 2.0 and higher	<b>HP:</b> Mezzanine <b>QLogic:</b> QLA220F, QLA2310F, QLA2340-E, QLE2562, QLE2460 <b>Emulex:</b> LP982-E, LP9002-E, LP9802-E, LP9802DC-E, LP1050DC-E, LP10000-E, LP10000DC-E, LP11000-E, LPe12000-E
Solaris	8	<b>Emulex:</b> LP10000-E, LP10000DC-E, LP8000-EMC, LP9002DC-E, LP9002S-E, LP9002C-E <b>Qlogic:</b> QLA2202FS-E, QLA2340-E, QLA2342-E, QLE2460, QLE2560 <b>JNI:</b> FC64-1063-EMC, FCE-1063-E, FCE2-1063-E, FCE2-1473-E, FCE2-6412-E, FCX2-6562-E
	9, 10	<b>Emulex:</b> LP8000-EMC, LP9002DC-E, LP9002S-E, LP9002C-E, LP12002-M8 <b>Qlogic:</b> QLA2202FS-E, QLA2340-E, QLA2342-E <b>JNI:</b> FCE-1063-E, FCE2-1063-E, FCE2-1473-E, FCE2-6412-E, FCX2-6562-E
VMWare ESX	1.5.2, 2.0.1, 3.0, 4.0	<b>QLogic:</b> QLA2340-E, QLA2342-E, QLE2460, QLE2560

Table 1-4 EMC Symmetrix VMAX, DMX-3, DMX-4

Operating System		Host Bus Adapter/Converged Network Adapter
Type	Version	
EMC NAS7	5.0.9/11, 5.1.15/18, 5.1.9	<b>EMC:</b> 201-712-900, 250-734-902, 250-735-900, 250-736-900
HP-UX	11iv1, 11iv2, 11iv3	<b>HP:</b> A6826A, A9782A, A9784A, AB378A, AB378B, AB379A(QLA2462), AB379B (QLA2462), A6795A, A9782A, AB465A, AD193A, AD194A, AD299A, AD300A(QLE2462), AD355A
Tru64 Unix	V5.1B-1,V5.1B-24, V5.1B-3,V5.1B-42 6, V5.1B-5	<b>HP:</b> FCA2354(LP9002), FCA2384(LP9802), FCA2684, FCA2684DC, KGPSA-DA(261329-B21), KGPSA-BC (380574-001), KGPSA-CA (168794-B21)
OpenVMS	V7.3-2, V8.2, V8.3, V8.2-1, V8.3-1H1	<b>HP:</b> DS-A5132-AA, DS-A5134-AA, FCA2354 (LP9002), FCA2384 (LP9802), FCA2684, FCA2684DC, KGPSA-DA (261329-B21), KGPSA-EA (302784-B21), KGPSA-BC (380574-001), KGPSA-CA (168794-B21), A6826A, AB378A, AB379A (QLA2462), AD299A, AD300A (QLE2462), AD355A
AIX	5.1, 5.2, 5.3, 6.1	<b>IBM:</b> 6227, 6228, 6239, 1905, 1910, 1977, 5716, 5758, 5759, 5773, 5774, 5735 <b>Bull:</b> DCCG202-0000, DCCG203-0000
IBM i5/OS [System i]	V5R3M0, V5R3M5, V5R4M0,V5R4M5	<b>IBM:</b> 2787, 5760

Table 1-4 EMC Symmetrix VMAX, DMX-3, DMX-4 (continued)

Operating System		
Type	Version	Host Bus Adapter/Converged Network Adapter
Windows 2000	Advanced Server SP4, Datacenter SP4, Powered Server Appliance Kit SP4 (SAK),	<p><b>Emulex:</b> LP10000-E, LP10000DC-E, LP1050-E, LP1050DC-E, LP11000-E, LP11002-E, LP1150-E, LP9002-E (LP9002L-E), LP9002DC-E, LP9802-E, LP9802DC-E, LP10000ExDC-E, LP1050Ex-E LP982-E; LPe11000-E, LPe11000-E-G, LPe11002-E, LPe11002-E-G, LPe1150-E, LPe1150-E-G;</p> <p><b>HP:</b> A7298A (LP982), A7387A (LP1050DC), A7388A (LP1050), AD167A/FC2143 (LP1150), AD168A/FC2243 (LP11002), AD300A (QLE2462), AE311A/FC1142SR (QLE2460), AE312A/FC1242SR (QLE2462), FCA2101 (LP952), FCA2210 (QLA2340), FCA2214/281541-B21 (QLA2340), FCA2214DC/321835-B21 (QLA2342), FCA2354 (LP9002), FCA2355 (LP9002DC), FCA2384 (LP9802), FCA2404 (LP9802), FCA2404DC (LP9802DC), FCA2408 (LP982);, A7560A (LP1050Ex), A8002A/FC2142SR (LPe1150), A8003A/FC2242SR (LPe11002), LPe1105-HP 4Gb FC, LPe1205, QMH2562, QMH2462, AB429A/FC1143 (QLA2460), AE369A/FC1243 (QLA2462)</p> <p><b>IBM:</b> 24P0960 (QLA2340), 39M5894 (QLA2460), 39M5895 (QLA2462), 39R6525 (QLE2460), 39R6527 (QLE2462), 42D0405 (LP11000), 42D0407 (LP11002); 42C2069 (LPe11000), 42C2071(LPe11002), 19K1246 (QLA2310)</p> <p><b>QLogic:</b> QLA2200F-EMC, QLA2310F-E-SP, QLA2340-E-SP, QLA2342-E-SP, QLA2460-E-SP, QLA2462-E-SP, QLE2460-E-SP, QLE2462-E-SP, QLE2360-E-SP</p> <p><b>Sun:</b> SG-XPCI1FC-EM2 (LP10000), SG-XPCI1FC-EM4 (LP11000), SG-XPCI1FC-EM4-Z (LP11000), SG-XPCI1FC-QF4 (QLA2460), SG-XPCI2FC-EM2 (LP10000DC), SG-XPCI2FC-EM4 (LP11002), SG-XPCI2FC-EM4-Z (LP11002), SG-XPCI2FC-QF4 (QLA2462), SG-XPCIE1FC-EM4 (LPe11000), SG-XPCIE1FC-EM8-Z (LPe12000), SG-XPCIE1FC-QF4 (QLE2460), SG-XPCIE1FC-QF8-Z (QLE2560), SG-XPCIE2FC-EB4-Z (LPem11002), SG-XPCIE2FC-EM4 (LPe11002), SG-XPCIE2FC-EM8-Z (LPe12002), SG-XPCIE2FC-QB4-Z (QEM2462), SG-XPCIE2FC-QF4 (QLE2462), SG-XPCIE2FC-QF8-Z (QLE2562);</p> <p><b>Unisys:</b> FCH732213-P64 (LP9002L-F2), FCH752313-PCX (LP1050), FCH752323-PCX (LP10000DC)</p> <p><b>NEC:</b> N8190-120 (LP1050), N8190-105 (LP952), N8190-127 (LPe1150)31, N8190-131 (LPe11002), N8403-008 (LP952), N8403-015 (LP1050DC), N8403-018 (LPe1105), N8803-031 (QLA2310F), NQ2014A-A001 (QLA2342), NQ2015A-A001 (QLA2460), NQ2016A-A001 (QLA2462), NT2010A-A001 (QLA2340)</p> <p><b>Dell:</b> 2362M;</p>

Table 1-4 EMC Symmetrix VMAX, DMX-3, DMX-4 (continued)

Operating System		
Type	Version	Host Bus Adapter/Converged Network Adapter
Windows 2003	Enterprise Edition  Standard Edition	<b>Emulex:</b> LP10000-E, LP10000DC-E, LP8000-EMC, LP9002-E, LP982-E, LP9802-E, LP9802DC-E, LP9002DC-E, OCe10102-F <b>HP:</b> 336070-001, FCA2354, FCA2355, FCA2404 <b>IBM:</b> 19K1246 (QLA2310), 24P0960 (QLA2340) <b>NEC:</b> N8803-031 <b>QLogic:</b> QLA2310F-E, QLA2340-E, QLA2342-E, QLE2562, QLE2460, QLE8152 <b>Unisys:</b> FCH20111-P64, FCH20113-P64, FCH732213-P64
Windows 2008		<b>Cisco:</b> P81E VIC <b>Emulex:</b> LP10000-E, LP10000DC-E, LP8000-EMC, LP9002-E, LP982-E, LP9802-E, LP9802DC-E, LP9002DC-E, OCe10102-F <b>QLogic:</b> QLA2310F-E, QLA2340-E, QLA2342-E, QLE2562, QLE2460, QLE8152
Linux	RedHat 2.0 and higher  SLES 11	<b>Cisco:</b> P81E VIC <b>HP:</b> Mezzanine <b>QLogic:</b> QLA2200F, QLA2310F, QLA2340-E, QLE2562, QLE8152 <b>Emulex:</b> LP982-E, LP9002-E, LP9802-E, LP9802DC-E, LP1050DC-E, LP10000-E, LP10000DC-E, OCe10102-F <b>Cisco:</b> P81E VIC <b>QLogic:</b> QLE8152 <b>Emulex:</b> OCe10102-F
Solaris	8	<b>Emulex:</b> LP8000-EMC, LP9002DC-E, LP9002S-E, LP9002C-E, LP9002-E <b>QLogic:</b> QCP2202F-E, QLA2200F-E, QLA2342-E, QLE2562 <b>JNI:</b> FCE-1063-E, FCE2-1063-E, FCE2-1473-E, FCE2-6412-E, FCX2-6562-E
Siemens Computers Solaris	10	<b>Emulex:</b> LP11000-E, LP11002-E, LPe11000-E, LPe11000-E-G, LPe11002-E, LPe11002-E-G; <b>QLogic:</b> QLA2460-E-SP, QLA2462-E-SP, QLE2460-E-SP, QLE2462-E-SP; <b>Sun:</b> SG-XPCI1FC-EM4 (LP11000), SG-XPCI1FC-QF4 (QLA2460), SG-XPCI2FC-EM4 (LP11002), SG-XPCI2FC-QF4 (QLA2462), SG-XPCIE1FC-EM4 (LPe11000), SG-XPCIE1FC-QF4 (QLE2460), SG-XPCIE2FC-EM4 (LPe11002), SG-XPCIE2FC-QF4 (QLE2462)
Asianux AX	2.0 SP3, EN64T, IA64, x86_64	<b>Emulex:</b> LP10000-E, LP10000DC-E, LP1050-E, LP1050DC-E, LP9002-E, (LP9002L-E), LP9002DC-E, LP9802-E, LP9802DC-E, LP982-E; <b>NEC:</b> N8190-120 (LP1050); <b>QLogic:</b> QLA2310F-E-SP, QLA2340-E-SP, QLA2342-E-SP
VMWare ESX	3.0, 4.0, 4.0 u2	<b>Cisco:</b> P81E VIC <b>QLogic:</b> QLA2340-E, QLA2342-E, QLE2460, QLE2560, QLE8152 <b>Emulex:</b> OCe10102-F
Fujitsu Siemens Computers OSD/XC	V1.0, V1.1, V1.2, V2.0, V2.1, V2.2, V3.0, V4.0	<b>Fujitsu Siemens Computers:</b> LP10000-M2 (SX70F-CF33), LP10000DC-M2 (SX70F-CF34), LP9802-F2 (SX70F-CF31), LP11000-M4 (SX70F-CF36)
EMC DART	5.5.19.4	<b>EMC:</b> 250-744-902A, 201-712-900, 250-734-902, 250-735-900, 250-736-900, 250-743-900A, Integrated
Egenera Blade Frame	SW: 4.0.1, 5.0, 5.1	<b>QLogic:</b> QLA2342-E-SP
Apple MAC OSX <sup>1</sup>	10.5, 10.6	<b>ATTO:</b> FC-41ES, FC-42ES, FC-44ES

1. Supported with Cisco SAN-OS 3.3.2 or later

Table 1-5 CLARiiON CX200

Operating System		Host Bus Adapter
Type	Version	
Windows 2000	Advanced Server (SP3, SP4) Data Center (SP3, SP4)	<b>Emulex:</b> LP8000-EMC, LP9002L-E, LP9002DC-E, LP9802-E, LP9802DC-E, LP982-E, LP10000-E, LP10000DC-E <b>Qlogic:</b> QLA2200F-EMC, QLA2310-E, QLA2342-E, QLA2340-E <b>Unisys:</b> FCH732213-P64, FCH2113-P4, FCH732213-P64 <b>HP:</b> FCA2404, 336070-001 <b>IBM:</b> 00N6881
Windows 2003	Enterprise Edition Standard Edition	<b>Emulex:</b> LP10000-E, LP10000DC-E, LP9002-E, LP982-E LP9802-E, LP9802DC <b>HP:</b> 336070-001, FCA2404 <b>Qlogic:</b> QLA2310F-E, QLA2340-E, QLA2342-E, QLE2460, QLE2560
Windows 2008		<b>Emulex:</b> LP8000-EMC, LP9002-E, LP982-E, LP9802-E, LP9802DC-E <b>Qlogic:</b> QLA2310-E, QLA2342-E, QLA2340-E, QLE2460, QLE2560
Linux	RedHat 2.0 and higher	<b>HP:</b> Mezzanine <b>QLogic:</b> QLA220F, QLA2310F, QLA2340-E <b>Emulex:</b> LP982-E, LP9002-E, LP9802-E, LP9002DC-E, LP9802DC-E, LP1050DC-E, LP10000-E, LP10000DC-E

Table 1-6 CLARiiON CX600/400/300/500/700, CX-4 series, VNX series<sup>1,3</sup>

Operating System		HBA/CNA
Type	Version	
EMC NAS7	5.0.9, 5.0.11, 5.1.15, 5.1.18, 5.1.9	<b>EMC:</b> 201-712-900, 250-734-902, 250-735-900, 250-736-900
HP-UX	11.0, 11i	<b>HP:</b> A5158A, A6795A, A6684, A6685A
Tru64 Unix	5.1, 5.1A, 5.1B	<b>HP:</b> KGPSA-DA, FCA2354, FC2384, KGPSA-CA, KGPSA-BC
AIX	5.1, 5.2, 5.3	<b>IBM:</b> 6227, 6228, 6239, 5716
Windows 2000	Advanced Server (SP3, SP4) Data Center (SP3, SP4)	<b>Emulex:</b> LP8000-EMC, LP9002L-E, LP9802-E, LP9802DC-E, LP982-E, LP10000-E, LP10000DC-E <b>Qlogic:</b> QLA2200F-EMC, QLA2310-E, QLA2342-E, QLA2340-E <b>Unisys:</b> FCH732213-P64, FCH2113-P4, FCH732213-P64 <b>HP:</b> FCA2404, 336070-001 <b>IBM:</b> 00N6881
Windows 2003	Enterprise Edition Standard Edition	<b>Emulex:</b> LP10000-E, LP10000DC-E, LP9002-E, LP982-E, LP9802-E, LP9802DC, OCe10102-F <b>HP:</b> 336070-001, FCA2404 <b>Qlogic:</b> QLA2310F-E, QLA2340-E, QLA2342-E, QLE2562, QLE8152
Windows 2008	SP2	<b>Cisco:</b> P81E VIC <b>Emulex:</b> OCe10102-F <b>Qlogic:</b> QLE8152
Windows NT	4.0 (SP6a)	<b>Cisco:</b> P81E VIC <b>Emulex:</b> LP8000-EMC, LP9002-E, LP982-E, LP9802-E, LP9802DC-E, OCe10102-F <b>HP:</b> 336070-001, FCA2404 <b>Qlogic:</b> QLA2310-E, QLA2342-E, QLA2340-E, QLE8152

**Table 1-6 CLARiiON CX600/400/300/500/700, CX-4 series, VNX series<sup>1,3</sup>**

Operating System		HBA/CNA
Type	Version	
Linux	RedHat AS 2.1, ES 2.1, 8.0, 7.3, 5, 5.5	<b>Cisco:</b> P81E VIC <b>HP:</b> Mezzanine <b>QLogic:</b> QLA220F, QLA2310F, QLA2340-E, QLE2562, QLE8152 <b>Emulex:</b> LP982-E, LP9002-E, LP9002DC-E, LP9802-E, LP9802DC-E, LP1050DC-E, LP10000-E, LP10000DC-E, OCe10102-F
	SLES 11	<b>Cisco:</b> P81E VIC <b>Emulex:</b> OCe10102-F <b>QLogic:</b> QLE8152
Solaris	8	<b>Emulex:</b> LP10000-E, LP10000DC-E, LP8000-EMC, LP9002S-E, LP9002-E, LP9002C, LP9002DC, LP9802-E <b>QLogic:</b> QLA2340-E, QLA2342-E, QCP2202F-E
	9, 10	<b>Emulex:</b> LP10000-E, LP10000DC-E, LP9002DC-E, LP9002C-E, LP9802-E <b>QLogic:</b> QCP2202F-E, QLE2562
VMWare ESX	4.0 u2	<b>Cisco:</b> P81E VIC <b>QLogic:</b> QLE8152 <b>Emulex:</b> OCe10102-F

1. Refer to EMC for the complete support matrix: [http://www.cisco.com/en/US/products/ps5989/products\\_device\\_support\\_tables\\_list.html](http://www.cisco.com/en/US/products/ps5989/products_device_support_tables_list.html)

**Table 1-7 Distance Extension**

Distance System	Maximum Distance <sup>1</sup>	Network	Protocol	Storage System
Cisco Metro 1500	200km	DWDM	Block I/O	EMC CLARiiON CX Series
			Block I/O SRDF/S	EMC Symmetrix 8000 Series
			Block I/O SRDF/S SRDF-A	EMC Symmetrix DMX Series, Vmax
ONS 15252 ONS 15530 ONS 15540	200km	DWDM	Block I/O Mirror Virew <sup>2</sup>	EMC CX Series
			Block I/O SRDF/S	EMC Symmetrix 8000 Series
			Block I/O SRDF/S SRDF/A	EMC Symmetrix DMX Series, Vmax
MDS IPS-8 MDS IPS-4 MDS9216i MPS-14/2 MDS 9222i MSM 18/4	See note after this table.	FCIP	Block I/O Mirror Virew	EMC CLARiiON CX Series
			Block I/O SRDF/S	EMC Symmetrix 8000 Series
			Block I/O SRDF/S SRDF/A	EMC Symmetrix DMX Series, Vmax

1. Supported distance is determined by EMC field personnel and professional services based on customer's application requirements.

2. The MDS Fibre Channel Write Acceleration (FC-WA, FCIP-WA) feature with MirrorView and SRDF is supported with SSI version 2.1(1g) and later. Refer to the following link for latest EMC Support Matrix: <http://www.emc.com/interoperability>

# Hitachi Data Systems

**Table 1-8 Virtual and Universal Storage Platform (VSP, USP, USPV) Series<sup>1</sup>**

Operating System		HBA/CNA	Multipath Support
Type	Version		
Windows 2000	Advanced Server (SP4)	<b>Emulex:</b> LP11000-M4, LP10000, LPe11000, LP10000DC, LP1050, LP1050DC, LP9802, LP9802DC, LP982, LP9002, LP9002L, LP9002DC, LP9402DC, LP952L, LP9000, LP8000, LP850 <b>Qlogic:</b> QLE2460, QLA2462, QLA2340, QLA2342, QLA2344, HP Fibre card, IBM Fibre card	HDLM
Windows 2003	Enterprise Edition (SP2/R2)	<b>Emulex:</b> LP11000-M4, LP10000, LP10000DC, LP1050, LP1050DC, LP9802, LP9802DC, LP982, LP9002, LP9002L, LP9002DC, LP9402DC, LP952L, LP9000, LP8000, LP850, LP1100, LPe110000, OCe10102-F <b>Qlogic:</b> QLAE2460, QLA2462, QLA2340, QLA2342, QLA2344, QLE8152, HP Fibre card, IBM Fibre card	HDLM
Windows 2008 <sup>2</sup>	SP2, R2	<b>Cisco:</b> P81E VIC <b>Qlogic:</b> QLA2340 QLA2460 QLE2460 QLE2562, QLE8152 <b>Emulex:</b> LP10000 LP11000 LPe11000 LPe12000, OCe10102-F	HDLM
AIX	5.1, 5.2, 5.3, 6.1, 7.1	<b>IBM:</b> 6227, 6228, 6239, 5716, 5735, 5758	HDLM
HPUX	11.0, 11i	<b>HP:</b> A5158A, A6795A	HDLM
Solaris	7, 8, 9, 10 <sup>3</sup>	<b>Emulex:</b> LP10000, LP9802, LP9002, LP9002L, LP9002DC, LP9402DC, LP952L, LP9000, LPE12000 <b>Qlogic:</b> QLA2340, QLE2562 <b>JNI:</b> FCE-1473, FCE-6410, FCE2-6410, FCE2-6412, FCE-6460N <b>SUN:</b> SG-XPCI1FC-JF2, SG-XPCI2FC-JF2, X6727A, X6799A	HDLM DMP
Linux	RHEL 2.1, 3.0, 4.5, 4.8, 5.1, 5.4, 5.5 SLES10	<b>Cisco:</b> P81E VIC <b>Emulex:</b> LPe11000, LP9000, LP952L, LP9002, LP9002L, LP9002DC, LP9402DC, LP9802, OCe10102-F <b>QLogic:</b> QLA2340, QLA2342, QLA2344, HP Fibre card, IBM Fiber card, QLE8152	HDLM DMP
	SLES11	<b>QLogic:</b> QLE8152 <b>Emulex:</b> OCe10102-F, OCe11102	
VMware <sup>4</sup>	ESX 3.01, 4.0, 4.0 u2, 4.1	<b>Cisco:</b> P81E VIC <b>QLogic:</b> QLA2340, QLE8152 <b>Emulex:</b> LP10000, LP11000, OCe10102-F	Bundled
	ESX 4.0 UP2, 4.1	<b>Hitachi:</b> HFCE0802 <b>Hitachi:</b> HFC0401/0402	
Netware	6.0 SP2, 6.5 SP4a	<b>QLogic:</b> QLA2300F, QLA2310F, QLA2340, QLA2342, QLA2344	Bundled

1. For **VSP** support matrix, refer to HDS website: <http://www.hds.com/products/interoperability/>
2. Windows 2008 is supported on Nexus-OS 4.1(1b) and higher versions.
3. The Emulex LPE12000 and Qlogic 2562 8G HBAs are supported on Solaris 10 Update 5 and higher.
4. Guest servers Windows 2000 SP4, Windows 2003 SP1/R2, Linux AS 3.0 UP7 or latest.

Table 1-9 Lightning 9900V Series

Operating System		Host Bus Adapter	Multipath Support
Type	Version		
Windows 2000	Advanced Server (SP4)	<b>Emulex:</b> LPe11000, LP11000-M4, LP10000DC, LP1050, LP1050DC, LP9802, LP9802DC, LP982, LP9002, LP9002L, LP9002DC, LP9402DC, LP952L, LP9000, LP8000, LP850 <b>QLogic:</b> QLE2460, QLA2462, QLA2340, QLA2342, QLA2344, HP Fibre card, IBM Fibre card	HDLM
Windows 2003	Enterprise Edition	<b>Emulex:</b> LPe11000, LP11000-M4, LP10000DC, LP1050, LP1050DC, LP9802, LP9802DC, LP982, LP9002, LP9002L, LP9002DC, LP9402DC, LP952L, LP9000, LP8000, LP850, LP11000 <b>QLogic:</b> QLE2460, QLA2462, QLA2340, QLA2342, QLA2344, HP Fibre card, IBM Fibre card	
Windows 2008 <sup>1</sup>	SP2	<b>QLogic:</b> QLA2340 QLA2460 QLE2460 QLE2560 Emulex: LP10000 LP11000 LPe11000 LPe12000	
AIX	5.1, 5.2, 5.3, 6.1	<b>IBM:</b> 6227, 6228, 6239, 5716	
HPUX	11.0, 11i	<b>HP:</b> A5158A, A6795A	
Solaris	7, 8, 9, 10	<b>Emulex:</b> LP10000, LP9802, LP9002, LP9002L, LP9002DC, LP9402DC, LP952L, LP9000, LPE12000 <b>QLogic:</b> QLA2340, QLE2562 <b>JNI:</b> FCE-1473, FCE-6410, FCE2-6410, FCE2-6412, FCE-6460N <b>SUN:</b> SG-XPCI1FC-JF2, SG-XPCI2FC-JF2, X6727A, X6799A	HDLM DMP
Linux	RHEL 2.1, 3.0, 4.5, 5.1, 5.4 SLES10	<b>Emulex:</b> LPe11000, LP9000, LP952L, LP9002, LP9002L, LP9002DC, LP9402DC, LP9802 <b>QLogic:</b> QLA2340, QLA2342, QLA2344, HP Fibre card, IBM Fiber card <b>Hitachi:</b> GVX-CC64G1, GVX-CC64G2, GVX-CC91OCOMB	HDLM DMP
VMware <sup>2</sup>	ESX 3.01, 4.0	<b>QLogic:</b> QLA2340 <b>Emulex:</b> LP10000, LP11000	Bundled
Netware	6.0 SP2, 6.5 SP4a	<b>QLogic:</b> QLA2300F, QLA2310F, QLA2340, QLA2342, QLA2344	Bundled

1. Windows 2008 is supported on Nexus-OS 4.1(1b) and higher versions.
2. Guest servers Windows 2000 SP4, Windows 2003 SP1/R2, Linux AS 3.0 UP7 or latest.

Table 1-10 Adaptable Modular Storage AMS 2100, 2500, and 2300<sup>1</sup>; 200, 500, and 1000

Operating System		HBA/CNA	Multipath Support
Type	Version		
Windows 2000	Advanced Server (SP4)	<b>Emulex:</b> LPe11000, LP11000-M4, LP10000DC, LP1050, LP1050DC, LP9802, LP9802DC, LP982, LP9002, LP9002L, LP9002DC, LP9402DC, LP952L, LP9000, LP8000, LP850 <b>QLogic:</b> QLE2460, QLA2462, QLA2340, QLA2342, QLA2344, HP Fibre card, IBM Fibre card	HDLM
Windows 2003	Enterprise Edition (SP2)	<b>Emulex:</b> LPe11000, LP11000-M4, LP10000DC, LP1050, LP1050DC, LP9802, LP9802DC, LP982, LP9002, LP9002L, LP9002DC, LP9402DC, LP952L, LP9000, LP8000, LP850, LP11000, OCe10102-F <b>QLogic:</b> QLE2460, QLA2462, QLA2340, QLA2342, QLA2344, QLE8152, HP Fibre card, IBM Fibre card <b>Hitachi<sup>2</sup>:</b> GVX-CC64G1, GVX-CC64G2, GVX-CC9IOCOMB	
Windows 2008 <sup>3</sup>	SP2, R2	<b>Cisco:</b> P81E VIC <b>QLogic:</b> QLA2340 QLA2460 QLE2460 QLE2560, QLE8152 <b>Emulex:</b> LP10000 LP11000 LPe11000 LPe12000, OCe10102-F	
AIX	5.1, 5.2, 5.3, 6.1, 7.1	<b>IBM:</b> 6227, 6228, 6239, 5716	
HPUX	11.0, 11i	<b>HP:</b> A5158A, A6795A	
Solaris	7, 8, 9, 10	<b>Emulex:</b> LP10000, LP9802, LP9002, LP9002L, LP9002DC, LP9402DC, LP952L, LP9000 <b>QLogic:</b> QLA2340, QLE2562 <b>JNI:</b> FCE-1473, FCE-6410, FCE2-6410, FCE2-6412, FCE-6460N <b>SUN:</b> SG-XPCI1FC-JF2, SG-XPCI2FC-JF2, X6727A, X6799A	HDLM DMP
Linux	RHEL 2.1, 3.0, 4.5, 5.1, 5.4, 5.5 SLES10	<b>Cisco:</b> P81E VIC <b>Emulex:</b> LPe11000, LP9000, LP952L, LP9002, LP9002L, LP9002DC, LP9402DC, LP9802, OCe10102-F <b>QLogic:</b> QLA2340, QLA2342, QLA2344, HP Fibre card, IBM Fiber card, QLE8152	HDLM DMP
	SLES11	<b>QLogic:</b> QLE8152 <b>Emulex:</b> OCe10102-F	
	RHEL 4.5, 5.1 (x86, x64)	<b>Hitachi<sup>2</sup>:</b> GVX-CC64G1, GVX-CC64G2, GVX-CC9IOCOMB	HDLM Device Mapping
VMware <sup>4</sup>	ESX 3.01, 4.0, 4.0 u2, 4.1	<b>Cisco:</b> P81E VIC <b>QLogic:</b> QLA2340, QLE8152 <b>Emulex:</b> LP10000, LP11000, OCe10102-F	Bundled
	ESX 4.0 UP2, 4.1	<b>Hitachi:</b> HFCE0802 <b>Hitachi:</b> HFC0401/0402	
Netware	6.0 SP2, 6.5 SP4a	<b>QLogic:</b> QLA2300F, QLA2310F, QLA2340, QLA2342, QLA2344	Bundled

1. AMS2300 is supported on 4.1(1b) and higher.
2. The Hitachi mezzanine adapters are supported on SAN-OS 3.1(3a) and higher.
3. Windows 2008 is supported on Nexus-OS 4.1(1b) and higher versions.
4. Guest servers Windows 2000 SP4, Windows 2003 SP1/R2, Linux AS 3.0 UP7 or latest.

Table 1-11 Thunder 9500V Series

Operating System		Host Bus Adapter	Multipath Support
Type	Version		
Windows 2000	Advanced Server (SP4)	<b>Emulex:</b> LPe11000, LP11000-M4, LP10000DC, LP1050, LP1050DC, LP9802, LP9802DC, LP982, LP9002, LP9002L, LP9002DC, LP9402DC, LP952L, LP9000, LP8000, LP850 <b>QLogic:</b> QLE2460, QLA2462, QLA2340, QLA2342, QLA2344, HP Fibre card, IBM Fibre card	HDLM
Windows 2003	Enterprise Edition	<b>Emulex:</b> LP11000-M4, LP10000DC, LP1050, LP1050DC, LP9802, LP9802DC, LP982, LP9002, LP9002L, LP9002DC, LP9402DC, LP952L, LP9000, LP8000, LP850, LP11000 <b>QLogic:</b> QLA2462, QLA2340, QLA2342, QLA2344, HP Fibre card, IBM Fibre card	
Windows 2008 <sup>1</sup>	SP2	<b>QLogic:</b> QLA2340 QLA2460 QLE2460 QLE2560 <b>Emulex:</b> LP10000 LP11000 LPe11000 LPe12000	
AIX	5.1, 5.2, 5.3, 6.1	<b>IBM:</b> 6227, 6228, 6239, 5716	
HPUX	11.0, 11i	<b>HP:</b> A5158A, A6795A	
Solaris	7, 8, 9, 10	<b>Emulex:</b> LP10000, LP9802, LP9002, LP9002L, LP9002DC, LP9402DC, LP952L, LP9000, LPE12000 <b>QLogic:</b> QLA2340, QLE2562 <b>JNI:</b> FCE-1473, FCE-6410, FCE2-6410, FCE2-6412, FCE-6460N <b>SUN:</b> SG-XPCI1FC-JF2, SG-XPCI2FC-JF2, X6727A, X6799A	HDLM DMP
Linux	RHEL 2.1, 3.0, 4.5, 5.1, 5.4 SLES 10	<b>Emulex:</b> LPe11000, LP9000, LP952L, LP9002, LP9002L, LP9002DC, LP9402DC, LP9802 <b>QLogic:</b> QLA2340, QLA2342, QLA2344, HP Fibre card, IBM Fiber card	HDLM DMP
Netware	6.0 SP2, 6.5 SP4a	<b>QLogic:</b> QLA2300F, QLA2310F, QLA2340, QLA2342, QLA2344	Bundled

1. Windows 2008 is supported on Nexus-OS 4.1(1b) and higher versions.

Table 1-12 HDS High Performance NAS (HNAS)

HDS Storage	OS version	Host Bus Adapter	Driver	server model
AMS 2100, 2300, 2500	BOS 5.2.1220.09 (64 bit)	BlueArc:Integrated FC (4G)	Bundled	HiPerf NAS 3100/3200
	BOS 5.2.1220.18 (64 bit)			BOS 6.5.1847.17 (64 bit)
	BOS 5.2.1220.36 (64 bit)			HNAS 3090
	BOS 5.2.1220.39 (64 bit)			NNAS 3080
	BOS 6.0.1533.13 (64 bit)			HiPerf NAS
	BOS 6.0.1533.24 (64 bit)			2000/2100/2200 <sup>1</sup>
	BOS 6.0.1533.33k (64 bit)			
	BOS 6.0 (64 bit)			
AMS500/AMS1000/W MS100/AMS200	BOS 5.1.1156.10 (64 bit)			
	BOS 5.1.1156.18 (64 bit)			
	BOS 5.2.1220.09 (64 bit)			
	BOS 5.2.1220.18 (64 bit)			
	BOS 5.2.1220.36 (64 bit)			
	BOS 5.2.1220.39 (64 bit)			
	BOS 6.0.1533.13 (64 bit)			
	BOS 6.0.1533.24 (64 bit)			
SMS 100	BOS 6.0.1533.33k (64 bit)			
	BOS 5.2.1220.09 (64 bit)			
	BOS 5.2.1220.18 (64 bit)			
	BOS 5.2.1220.36 (64 bit)			
	BOS 5.2.1220.39 (64 bit)			
	BOS 6.0.1533.13 (64 bit)			
USP and NSC Models	BOS 6.0.1533.24 (64 bit)			HiPerf NAS
	BOS 6.0.1533.33k (64 bit)			2000/2100/2200
	BOS 6.5.1847.17 (64 bit)			HiPerf NAS 3100/3200
	BOS 6.5.1847.17 (64 bit)			HNAS 3090, HNAS 3080
	BOS 6.5.1847.17 (64 bit)			
USP V and USP VM Models	BOS 5.1.1156.10 (64 bit)			HiPerf NAS 3100/3200
	BOS 5.2.1220.09 (64 bit)			
	BOS 5.2.1220.18 (64 bit)			
	BOS 5.2.1220.36 (64 bit)			
	BOS 5.2.1220.39 (64 bit)			
	BOS 6.0.1533.13 (64 bit)			
	BOS 6.0.1533.24 (64 bit)			
	BOS 6.5.1847.17 (64 bit)			
	BOS 6.0.1533.33k (64 bit)			HiPerf NAS
				2000/2100/2200
				HiPerf NAS 3100/3200
	BOS 6.5.1847.17 (64 bit)			HNAS 3090, HNAS 3080

1. Certified with MDS9140 SAN-OS 3.3(1c)

**Table 1-13 Distance Extension**

Distance System	Maximum Distance <sup>1</sup>	Network (TrueCopy)	Protocol	Storage System
MDS IPS-8 MDS IPS-4 MDS9216i MPS-14/2 MDS 9222i MSM 18/4	See note 1	FC-IP	Block I/O True Copy (Sync and Async)  FC-IP WA feature is supported	TagmaStore (USP, USPV) Lightning 9900v, 9900 Thunder 9500v (Sync. only)
Cisco ONS 15530 Cisco ONS 15454 Cisco CWDM	100 km  25 km	DWDM  CWDM	Block I/O True Copy (Sync and Async)  FC-WA feature supported	TagmaStore (USP, USPV) Lightning 9900v, Thunder 9500v (Sync. only)

- Supported distance is determined by HDS field personnel and professional services based on customer's application requirements. Fibre Channel write acceleration is supported with Cisco SAN-OS Release 3.0(2a) and higher.  
Hitachi Universal Replicator (HUR) for TagmaStore has been qualified on Cisco MDS SAN-OS Release 3.0(2a) and higher.

# IBM

**Table 1-14 ESS 2105 model 800**

Operating System		Host Bus Adapter	Multipath Support
Type	Version		
AIX	5.1, 5.2, 5.3, 6.1	<b>IBM:</b> 6227, 6228, 6239, 5716, 5759, 577D	SDD
Windows NT	4.0 (SP6a)	<b>Emulex:</b> LP9002L, LP9002DC <b>QLogic:</b> QLA2200F, QLA2340L, QLA2342L	
Windows 2000	Advanced Server (SP2 or later) Data Center	<b>Emulex:</b> LP9002L, LP9002DC, LP8000, LP9802, LP10000, LP11000, LPe12000 <b>QLogic:</b> QLA2200F, QLA2340L, QLA2342L, QLA2310F, QLA2310FL, QLA2462, QLE2562	
Windows 2003	Standard Enterprise	<b>IBM:</b> FC2104 (FC2/133-24P0960), eServer BladeCenter HS20 (8678 and 8832)	
Netware	6.0	<b>Emulex:</b> LP9002L, LP9002DC <b>QLogic:</b> QLA2200F, QLA2340L, QLA2342L, QLA2310F, QLA2310FL <b>IBM:</b> FC2104 (FC2/133-24P0960)	No
	6.5	<b>IBM:</b> eServer BladeCenter HS20 (8678 and 8832)	
Linux	RedHat 7.2, AS 2.1, AS 3.0, ES 5.3, ES 5.4	<b>Emulex:</b> LP9002L, LP9002DC, LP8000, LP9802 <b>QLogic:</b> QLA2200F, QLA2340L, QLA2342L, QLA2310F, QLA2310FL, QLA2462, QLE2562 <b>IBM:</b> FC2104 (FC2/133-24P0960)	SDD
	RedHat 7.3, 8, 9, 2.1	<b>IBM:</b> IBM eServer BladeCenter HS20 (8678)	
	RedHat AS 2.1	<b>IBM:</b> IBM eServer BladeCenter HS20 (8832)	
	SLES 7, 9, 10, 11	<b>Emulex:</b> LP9002L, LP9002DC <b>QLogic:</b> QLA2200F, QLA2340L, QLA2342L, QLA2310F, QLA2310FL <b>IBM:</b> FC2104 (FC2/133-24P0960)	No
	United Linux 1.0 (SLES 8.0)	<b>IBM:</b> IBM eServer BladeCenter HS20 (8678 and 8832) <b>IBM:</b> zSeries models z800, z890, z900, z990	
Solaris	2.6, 7, 8, 9, 10	<b>Emulex:</b> LP8000, LP9002L, LP9002DC, LP9002S, LP9002C <b>QLogic:</b> QLA2310FL, QLA2340/2342 <b>JNI:</b> FCE-6460, FCC-6562, FCX2-6562, FCC2-6562, FCE1473	SDD MPXIO
HP-UX	11.0, 11i	<b>HP:</b> A5158A, A6795A	
VMware ESX	2.0	<b>IBM:</b> eServer BladeCenter HS20 (8678 and 8832)	
OS/400 (iSeries)	V5R2, V5R3	<b>IBM:</b> 2766, 2787	

Table 1-15 DS 8000 Series

Operating System		HBA/CNA	Multipath Support
Type	Version		
AIX	5.1, 5.2, 5.3, 6.1	<b>IBM:</b> FC 0612, FC 0625, FC 0626, FC 0646, FC 2766, FC 2787, FC 1977, FC 5716, FC 6228, FC 6239, 577D, 5759	SDD
NAS Gateway 500	5198 model 001	NA	
Windows 2000	Advanced Server Data Center	<b>Emulex:</b> LP9002L, LP9002DC, LP9402DC, LP9802, LP10000, LP11000, LPe12000 LP10000, LP10000DC <b>QLogic:</b> QLA2310F, QLA2310FL, QLA2340F, QLA2342FL, QLA2462, QLA2562 <b>IBM:</b> 19K1246, 24P0960, eServer BladeCenter HS20, HS40, LS20	
Windows 2003	Standard Edition Enterprise Edition	<b>Cisco:</b> P81E VIC <b>Emulex:</b> LP9002L, LP9002DC, LP9402DC, LP9802, LP10000, LP11000, LPe12000, OCe10102-F LP10000, LP10000DC <b>QLogic:</b> QLA2310F, QLA2310FL, QLA2340F, QLA2342FL, QLA2462, QLA2562, QLE8152 <b>IBM:</b> 19K1246, 24P0960, eServer BladeCenter HS20, HS40, LS20	No
Netware	5.1, 6.0, 6.5	<b>Emulex:</b> LP9002L, LP9002DC, LP9402DC, LP9802, LP10000, LP11000, LPe12000 LP10000, LP10000DC <b>QLogic:</b> QLA2310F, QLA2310FL, QLA2340F, QLA2342FL, QLA2462, QLA2562 <b>IBM:</b> 19K1246, 24P0960, eServer BladeCenter HS20, HS40, LS20	
Linux	RedHat 2.1, 3.0 ES 5.3, ES 5.4, 5.5 SLES 8, 9, 10, 11	<b>Cisco:</b> P81E VIC <b>Emulex:</b> LP9002L, LP9002DC, LP9802, LP9402DC, LP10000, LP10000DC, OCe10102-F <b>QLogic:</b> QLA2340F, QLA2342FL, QLA2310F, QLA2310FL, QLE8152 <b>IBM:</b> FC 0612, FC 0625, FC 0626, FC 0646, FC 2766, FC 2787, FC 1977, FC 5716, FC 6228, FC 6239, 19K1246, 24P0960	
IBM Virtual Server (VIOS)	1.1	<b>IBM:</b> FC 1977, FC 5716, FC 6228, FC 6239	SDD
Solaris	8, 9, 10	<b>Emulex:</b> LP9002L, LP9002DC, LP9402DC, LP9002S, LP10000, LP11000, LPe12000 LP9802, LP10000, LP10000DC <b>QLogic:</b> QLA2310FL, QLA2310F, QLA2340F, QLA2342FL, QLA2462, QLE2562 <b>AMCC/JNI:</b> FCE-6460, FCX2-6562, FCX-6562, FCE-1473 <b>Sun:</b> 6727A, 6757A, 6767A (SG-XPCI1FC-QF2), 6768A (SG-XPCI2FC-QF2)	
HP-UX	11.i, 11v2 (11.23)	<b>HP:</b> A5158A, A6795A, A6684A, A6826A, A6685A, A9782A; AB465A	
VMware ESX	2.5.0, 2.5.1, 4.0 u2	<b>Cisco:</b> P81E VIC <b>IBM:</b> Blade Center HS20, HS40, 19K1246, 24P0960 <b>Emulex:</b> LP9402DC, LP9802, OCe10102-F <b>QLogic:</b> QLA2310F, QLA2310FL, QLA2340F, QLA2342FL, QLE8152	

Table 1-15 DS 8000 Series (continued)

Operating System		HBA/CNA	Multipath Support
Type	Version		
OS/400 i5/OS	V5R3	<b>IBM:</b> FC 0612, FC 0625, FC 0626, FC 0646, FC 2766, FC 2787	NA
IBM z/OS (FCP, FICON) z/OS.e (FICON) z/VM (FCP, FICON) z/VSE (FCP, FICON) VSE/ESA (FICON) Linux RH (FICON) SUSE (FCP, FICON)	ver. 1 R4, R5, R6 ver. 1 R4, R5, R6 ver. 4 R4, Ver 5 R1 ver. 3 R1 ver 2 R7 3.0 & higher 8, 9 & higher	<b>IBM:</b> zSeries models z900, z990, IBM 9672 G5 and G6, z800, z890, z9-109: FC 2315, FC 2318, FC 2319, FC2320, FC 3319, FC 3320 <b>IBM:</b> S/390: FC 2314, FC 2316	NA

Table 1-16 DS 6000 Series

Operating System		Host Bus Adapter	Multipath Support
Type	Version		
AIX	5.1, 5.2, 5.3	<b>IBM:</b> FC 5716, FC 6228, FC 6239	SDD
NAS Gateway 500	5198 model 001	NA	
Windows 2000	Advanced Server (SP2 or later) Data Center	<b>Emulex:</b> LP9002L, LP9002DC, LP9402DC, LP9802 LP10000, LP10000DC <b>QLogic:</b> QLA2310F, QLA2310FL, QLA2340L, QLA2342L, QLA2310F, QLA2310FL	
Windows 2003	Std, Enterprise Edition	<b>IBM:</b> 19K1246, 24P0960, eServer BladeCenter HS20 (8678 and 8832)	No
Netware	6.0		
	6.5	<b>IBM:</b> eServer BladeCenter HS20 (8678 and 8832)	
Linux	RedHat 2.1, 3.0	<b>Emulex:</b> LP9002L, LP9002DC, LP9802, LP9402DC, LP10000, LP10000DC <b>QLogic:</b> QLA2340L, QLA2342FL, QLA2310F, QLA2310FL <b>IBM:</b> FC2104 (FC2/133-24P0960)	SDD
	SLES 8		No
Solaris	8, 9	<b>Emulex:</b> LP9002L, LP9002DC, LP9402DC, LP9002S LP9802 <b>QLogic:</b> QLA2310FL, QLA2310F, QLA2340L, QLA2342L <b>JNI:</b> FCE-6460, FCX2-6562, FCX-6562, FCE-1473	SDD
HP-UX	11.i, 11v2 (11.23)	<b>HP:</b> A5158A, A6795A, A6684A, A6826A, A6685A, A9782A	
VMware ESX	2.0	<b>IBM:</b> Blade Center HS20 (8678, 8832) <b>Emulex:</b> LP9402DC, LP9802 <b>QLogic:</b> QLA2310F, QLA2310FL, QLA2340L, QLA2342L	
OS/400 (iSeries)	V5R2, V5R3	<b>IBM:</b> FC2766, FC 2787, FC 0646, FC 0612, FC 0626	NA
IBM z/OS (FICON or FICON Express Channels)	1.4.1 or later	<b>IBM:</b> zSeries models z900, z990, G5/G6 Longwave: FC2315, FC2319 Shortwave: FC2318, FC2320	

Table 1-17 DS 3000, 4000, 5000 series

Operating System		Host Bus Adapter	Multipath Support
Type	Version		
AIX	5.1, 5.2, 5.3	<b>IBM:</b> 6227, 6228, 6239, 5716, JS20 blade	RDAC
Windows 2000	Server, Adv. Server	<b>IBM:</b> FC2103, FC2104, FC2102	
Windows 2003	Standard, Enterprise, Web Edition	<b>QLogic:</b> QLA2200F, QLA2340L, QLA2342L, QLA2300F, QLA2310F <b>IBM:</b> eServer BladeCenter HS20, HS40 (8678 and 8832) <b>Emulex:</b> LP9002, LP9402, LP9802, LP10000	
Netware	6.0	<b>IBM:</b> FC2103, FC2104 <b>QLogic:</b> QLA2200F, QLA2340L, QLA2342L, QLA2300F, QLA2310F, QLA2310FL	No
	6.5	<b>IBM:</b> eServer BladeCenter HS20, HS40 (8678 and 8832)	
Linux	RedHat AS 2.1	<b>IBM:</b> FC2103, FC2104	RDAC
	United Linux 1.0 (SLES 8)	<b>QLogic:</b> QLA2200F, QLA2340L, QLA2342L, QLA2300F, QLA2310F <b>Emulex:</b> LP9002, LP9402, LP9802, LP10000	No
	RedHat 7.3, 8, 9	<b>IBM:</b> eServer Blade Center HS20, HS40	RDAC
	RedHat 3.0		
	United Linux 1.0 (SLES 8)		
Solaris	2.6, 7, 8, 9, 10	<b>JNI:</b> FCE-1473, FCE-6460 <b>QLogic:</b> QLA2200F, QLA2300F, QLA2310F	RDAC
HP-UX	11.0, 11i	<b>HP:</b> A5158A, A6795A, A3591B, A3740	RDAC
VMware ESX	2.5.2 & higher	<b>IBM:</b> eServer Blade Center HS20, HS40 (8678 and 8832) <b>QLogic:</b> QLA2200F, QLA2340L, QLA2342L, QLA2300F, QLA2310F <b>Emulex:</b> LP9002, LP9402, LP9802, LP10000	Native

Table 1-18 DS4200 (FAStT 700), DS4500 (FAStT 900<sup>1</sup>)

Operating System		Host Bus Adapter	Multipath Support
Type	Version		
AIX	5.1, 5.2, 5.3, 6.1	<b>IBM:</b> 6227, 6228, 6239, 5716, JS20	RDAC
Windows NT	4.0 (SP6a)	<b>IBM:</b> FC2103, FC2104 <b>QLogic:</b> QLA2200F, QLA2340L, QLA2342L, QLA2300F <b>Emulex:</b> LP9002, LP9402, LP9802, LP10000	
Windows 2000	Server Advanced Server	<b>IBM:</b> FC2103, FC2104 <b>QLogic:</b> QLA2200F, QLA2340L, QLA2342L, QLA2300F, QLA2310F	
Windows 2003	Standard, Enterprise, Web Edition	<b>IBM:</b> eServer BladeCenter HS20, HS40	
Netware	6.0	<b>IBM:</b> FC2103, FC2104 <b>QLogic:</b> QLA2200F, QLA2340L, QLA2342L, QLA2300F, QLA2310F <b>Emulex:</b> LP9002, LP9402, LP9802, LP10000	No
	6.5	<b>IBM:</b> eServer BladeCenter HS20, HS40	

Table 1-18 DS4200 (FAStT 700), DS4500 (FAStT 900<sup>1</sup>) (continued)

Operating System		Host Bus Adapter	Multipath Support
Type	Version		
Linux	RedHat AS 2.1 & later	IBM: FC2103, FC2104	RDAC
	United Linux 1.0 (SLES 8)		No
	RedHat 7.3, 8 & later	IBM: eServer BladeCenter HS20, HS40	RDAC
	RedHat AS 2.1		
	United Linux 1.0 (SLES 8) & later		
Solaris	2.6, 7, 8, 9, 10	JNI: FCE-1473, FCE-6460 QLogic: QLA2200F, QLA2340L, QLA2342L, QLA2300F, QLA2310F	RDAC MPXIO
HP-UX	11.0, 11i	HP: A5158A, A6795A, A6826A, A3591B	RDAC
VMware ESX	2.0, 2.5.2 & later	IBM: eServer Blade Center HS20, HS40 Emulex: LP9002, LP9402, LP9802, LP10000 QLogic: QLA2200F, QLA2340L, QLA2342L, QLA2300F	

1. Refer to the following links for latest IBM Interoperability support matrix:  
<http://www-03.ibm.com/systems/storage/disk/ds4000/pdf/interop-matrix.pdf>  
<ftp://service.boulder.ibm.com/storage/san/cisco/mds9216.pdf>

Table 1-19 DS4300 (FAStT 600 Single and Dual Controller), DS4300 Turbo

Operating System		Host Bus Adapter	Multipath Support
Type	Version		
AIX	5.1, 5.2, 5.3, 6.1	IBM: 6227, 6228, 6239, 5716	No
Windows NT	4.0 (SP6a)	IBM: FC2102, FC2103, FC2104	RDAC
Windows 2000	Server, Adv.Server (SP3 & later)	QLogic: QLA2200F, QLA2340L, QLA2342L, QLA2300F, QLA2310F, QLA2310FL	
Windows 2003	Standard, Enterprise, Web Edition	Emulex: LP9002, LP9402, LP9802	
Netware	6.0 & later	IBM: FC2103, FC2104 QLogic: QLA2200F, QLA2340L, QLA2342L, QLA2300F, QLA2310F, QLA2310FL	No
Linux	RedHat AS 2.1, 3.0 RedHat 3.0 (xSeries) & later	IBM: FC2103, FC2104 QLogic: QLA2340L, QLA2342L, QLA2300F, QLA2310F, QLA2310FL	RDAC
	United Linux 1.0 (SLES 8) & later SLES 9 (pSeries)		No
Solaris	2.6, 7, 8, 9 & later	JNI: FCE-1473, FCE-6460 QLogic: QLA2300F, QLA2340, QLA2342	RDAC MPXIO
HP-UX	11.0, 11i	HP: A5158A, A6795A	RDAC

Table 1-20 DS4100 (FAStT 100)<sup>1</sup>

Operating System		Host Bus Adapter	Multipath Support
Type	Version		
AIX	5.1, 5.2, 5.3	<b>IBM:</b> 6227, 6228, 6239, 5716	No
Windows 2000	Server Advanced Server (SP3)	<b>IBM:</b> FC2102, FC2103, FC2104 <b>QLogic:</b> QLA2200F, QLA2340L, QLA2342L, QLA2300F, QLA2310F, QLA2310FL	RDAC
Windows 2003	Standard, Enterprise, Web Edition	<b>Emulex:</b> LP9002, LP9402, LP9802	No
Linux	RedHat 3.0	<b>IBM:</b> FC2103, FC2104 <b>QLogic:</b> QLA2340L, QLA2342L, QLA2300F, QLA2310F, QLA2310FL	RDAC
	SLES 9 (pSeries) SLES 8 (xSeries)		No

1. Refer to the following URL for complete IBM SAN Volume Controller Compatibility information with Cisco MDS 9000 Family switches:  
<http://www-1.ibm.com/support/docview.wss?rs=591&uid=ssg1S1002472>

Table 1-21 IBM FAStT 200, 500

Operating System		Host Bus Adapter	RDAC Multipath Support
Type	Version	Model	
AIX	5.1, 5.2, 5.3	<b>IBM:</b> 6227, 6228, 6239, 5716, JS20	No
Windows NT	4.0 (SP6a)	<b>IBM:</b> FC2103, FC2104 <b>QLogic:</b> QLA2200F, QLA2340L, QLA2342L, QLA2300F	Yes
Windows 2000	Server Advanced Server	<b>QLogic:</b> QLA2200F, QLA2340L, QLA2342L, QLA2300F, QLA2310F <b>IBM:</b> eServer Blade Center HS20, HS40	
Windows 2003	Standard, Enterprise, Web Edition		
Linux	RedHat 7.3, 8, 9	<b>IBM:</b> eServer Blade Center HS20 (8678)	
	RedHat 3.0 (pSeries) RedHat 8.0 (xSeries)	<b>IBM:</b> eServer Blade Center HS20 (8832, 8678) <b>QLogic:</b> QLA2200F, QLA2340L, QLA2342L, QLA2300F, QLA2310F, FC2103, FC2104	No
	SLES 9 (pSeries) SLE 8.0 (xSeries)	<b>IBM:</b> eServer Blade Center HS20 (8832) <b>QLogic:</b> QLA2200F, QLA2340L, QLA2342L, QLA2300F, QLA2310F, FC2103, FC2104	
Solaris	2.6, 7, 8, 9	<b>JNI:</b> FCE-1473, FCE-6460 <b>QLogic:</b> QLA2200F, QLA2340L, QLA2300F	Yes
HP-UX	11.0, 11i	<b>HP:</b> A5158A, A6795A	Yes
VMware ESX	2.0, 2.5.2	<b>IBM:</b> eServer Blade Center HS20, HS40	

**Table 1-22 IBM DS 8000, 6000 Series Distance Extension**

Cisco Product	Protocol	Enhanced Remote Mirror			Global Mirror FICON
		Metro Mirroring	Global Copy	Global Mirroring	
IP Service Module (IPS 4, IPS 8), MDS 9216i, MDS 9222i, MPS-14/2, MSM 18/4	FC-IP	Ver. 5.0.0 & later	Ver. 5.0.0 & later	Ver. 5.0.0 & later	Ver. 5.0.0 & later
Cisco ONS Cisco CWDM	FC				

**Table 1-23 IBM DS 4000 Series Distance Extension**

Cisco Product	Protocol	Volume Copy	RVM
Cisco CWDM	FC	ver. 8.3, 8.41 & later	ver. 8.3, 8.41 & later

**Table 1-24 IBM ESS 2105 Series Distance Extension**

Cisco Product	Protocol	PPRC Sync	PPRC Long Distance	Async Cascade	
				PPRC-XD	Async PPRC
IP Service Module (IPS 8, IPS 4), MPS-14/2, MSM 18/4, MDS 9216i, MDS 9222i	FC-IP	ver. 2.3.0 & later	ver. 2.3.0 & later	ver. 2.3.0 & later	ver 2.4.0 & later
Cisco CWDM Cisco ONS	FC				

**Table 1-25 IBM SAN Volume Controller<sup>1</sup>**

SVC version	Protocol		
	FC	FC-IP	iSCSI
V2.1.0 & later	2.1(2b), 3.0(2), 3.2(1a), 3.2(2c), 3.2(3), 3.2.(3a), 3.3(1c), 3.3(2), 3.3(3), 3.3(4a), 3.3(5b), 4.1(1c), 4.1(3a), 4.2(1b), 4.2(3), 4.2(5), 4.2(7a), 4.2(7d), 4.2(7e), 5.0(1a), 5.0(4)	2.1(2b), 3.0(2), 3.2(1a), 3.2(2c), 3.2(3), 3.2.(3a), 3.3(1c), 3.3(2), 3.3(3), 3.3(4a), 3.3(5b), 4.1(1c), 4.1(3a), 4.2(1b), 4.2(3), 4.2(5), 4.2(7a), 4.2(7e), 5.0(1a), 5.0(4)	Windows 2000 (1.06 driver and higher) Windows 2003 (1.06 driver and higher) Red Hat AD 2.4, 2.6 kernels

1. Refer to the following URL for the complete IBM SAN Volume Controller Compatibility Matrix under Supported Hardware with Cisco MDS product family:  
<http://www-304.ibm.com/jct01004c/systems/support/supportsite.wss/supportresources?taskind=4&brandind=5000033&familyind=5329743>

## HP

Table 1-26 HP XP 10000, 12000, 20000, 24000<sup>1</sup>

Operating System		Host Bus Adapter	Multipath Support
Type	Version		
OpenVMS Alpha	7.3-2, 8.2, 8.3	<b>HP:</b> FCA2354, FCA2384, FCA2684, FCA2684DC <b>Emulex:</b> LP8000, LP9002, LP9802, LP10000, LP10000DC	Native
OpenVMS IA64 <sup>2</sup>	8.2-1, 8.3, 8.3-1H1	<b>HP:</b> AD299A, AD355A, A6826A, A9782A, A9784A AB465A, AB378A, AB378B, AB379A AB379B, AD300A, AD193A, AD194A, QMH2462	
HP-UX <sup>3</sup>	11iv1, 11iv2	<b>HP:</b> A5158, A6795A, AB465A, A9782A, A9784A, A6826A, AB378A, AB379A, AD193A, AD194A, AB378B, AB379A, AD300A, AD299A, AD355A, QMH2462, Mezzanine	SecurePath
	11iv3		Native
Tru64 Unix	5.1B-3, 5.1B-4	<b>Emulex:</b> LP8000, LP9002, LP9802, LP10000, LP10000DC	
AIX	4.3.3, 5.1, 5.2, 5.3	<b>IBM:</b> 5716, 6227, 6228, 6239	MPIO/ODM
Windows 2000	Advanced Server (SP3+)	<b>HP:</b> DS-KGPSA-CB, FCA2355, FCA2101, LP9802DC, LP1050DC, FCA2214, FCA2214-DC, Mezzanine, Balcony <b>QLogic:</b> QLA2462, QLA234x, QMH2462 <b>Emulex:</b> LP1050DC, LP1050EX, LP11002-M4, LP9802DC, LP8000, LPe1105	SecurePath  Microsoft MPIO/DSM
Windows 2003	Enterprise Edition	<b>HP:</b> DS-KGPSA-CB, FCA2355, FCA2101, FCA2214, FCA2214-DC, Mezzanine, Balcony <b>Qlogic:</b> QLA2462, QLA234x, CLE8152 <b>Emulex:</b> LP11002-M4, LP1050DC, LP9802DC, LP8000, OCe10102-F	
Windows 2008 <sup>4</sup>	IA32 & x64	<b>Cisco:</b> P81E VIC <b>Emulex:</b> LP1050 (FC2143), LP11002 (FC2243), LPe1150 (FC2142SR), LPe11002 (FC2242SR), LPe1105 (HP c-Class Mezz Card), LP9802DC (FCA2404DC), LP982 (FCA2408), OCe10102-F <b>Qlogic:</b> QLA2460 (FC1143), QLA2462 (FC1243), QLE2460 (FC1142), QLE2462 (FC1242), QLA2340 (FCA2214), QLA2342 (FCA2214DC), QMH2462 (HP c-Class Mezz Card), QLE8152 <b>HP:</b> FC Mezz Card (p-Class BL20p G2), FC Adapter Card (p-Class BL20p G3, BL45p G2), Mezzanine FCA (p-Class BL20p G4), HPBALCF 105 (p-Class BL25p, BL45p), FC Balcony Card (p-Class BL30p, BL35p), E-FC Adapter Card (p-Class BL20p G3), E-FC Balcony Card (p-Class BL25p, BL45p, BL45p G2, BL30p, BL35p, BL45p)	HP MPIO FF DSM 3.00.00
Windows NT	Enterprise 4.0 (SP6a)	<b>HP:</b> FCA2355, FCA2101, DS-KGPSA-CB	EOL
Solaris	8, 9, 10	<b>Emulex:</b> LP9802, LP10000DC <b>QLogic:</b> QLA2202, QLA2310, QLA234x, QLA2462 <b>JNI:</b> FCE-6410, FCX-6562, FCE-6460, FCE-1473 <b>Sun:</b> SG-XPCI1FC-QF2, SG-XPCI2FC-QF2	MPXIO Veritas DMP SecurePath
Linux (32bit or 64bit)	Red Hat EL 3 U6+ Red Hat EL 4 U1+ Red Hat 5.5 SuSE 8 SP4+ SuSE 9 SP2+	<b>Cisco:</b> P81E VIC <b>HP:</b> Mezzanine, Balcony <b>Qlogic:</b> QLA234x, QLA 2462, QLE 2462, QMH2462, QLE8152 <b>Emulex:</b> LP11002, LPe1105, OCe10102-F	Emulex Multipulse QLogic Path Failover
	SLES 11	<b>Qlogic:</b> QLE8152 <b>Emulex:</b> OCe10102-F	

Table 1-26 HP XP 10000, 12000, 20000, 24000<sup>1</sup> (continued)

Operating System		Host Bus Adapter	Multipath Support
Type	Version		
Netware	5.1 SP8 & higher	<b>HP:</b> Mezzanine <b>QLogic:</b> QLA234x	Native
VMware ESX Server, (XP 12000 not supported)	3.0, 4.0 u2	<b>Cisco:</b> P81E VIC <b>HP:</b> FCA2214, FCA2210, FCA2214DC, Mezzanine, Balcony <b>QLogic:</b> QLE8152 <b>Emulex:</b> OCe10102-F	Native

1. Boot From SAN is supported
2. Open VMS is not supported on the MSA 1500 active/passive configuration.
3. HP-UX 11iv1 is not supported on AD194A, AB378B, AB379B, Mezzanine cards. QMH2462 is supported on HP-UX 11iv2, 3 only. AD299A and AD355A is supported on HP-UX 11iv2 only.
4. Cisco MDS SAN-OS 3.2(3) is the minimum version required for Windows 2008 support.

Table 1-27 HP XP128, XP1024<sup>1</sup>

Operating System		Host Bus Adapter	Multipath Support
Type	Version		
OpenVMS Alpha	7.3-2, 8.2, 8.3	<b>HP:</b> FCA2354, FCA2384, FCA2684, FCA2684DC <b>Emulex:</b> LP8000, LP9002, LP9802, LP10000, LP10000DC	Native
OpenVMS IA64 <sup>2</sup>	8.2-1, 8.3, 8.3-1H1	<b>HP:</b> AD299A, AD355A, A6826A, A9782A, A9784A AB465A, AB378A, AB378B, AB379A AB379B, AD300A, AD193A, AD194A, QMH2462	
HP-UX <sup>3</sup>	11iv1, 11iv2	<b>HHP:</b> A5158, A6795A, AB465A, A9782A, A9784A, A6826A, AB378A, AB379A, AD193A, AD194A, AB378B, AB379A, AD300A, AD299A, AD355A, QMH2462, Mezzanine	SecurePath
	11iv3		Native
Tru64 Unix	5.1B-3, 5.1B-4	<b>Emulex:</b> LP8000, LP9002, LP9802, LP10000, LP10000DC	
AIX	4.3.3, 5.1, 5.2, 5.3	<b>IBM:</b> 5716, 6227, 6228, 6239	MPPIO/ODM
Windows 2000	Advanced Server (SP3+)	<b>HP:</b> DS-KGPSA-CB, FCA2355, FCA2101, LP9802DC, LP1050DC, FCA2214, FCA2214-DC, Mezzanine, Balcony <b>QLogic:</b> QLA2462, QLA234x, QMH2462 <b>Emulex:</b> LP1050DC, LP1050EX, LP11002-M4, LP9802DC, LP8000, LPe1105	SecurePath  Microsoft MPPIO/DSM
Windows 2003	Enterprise Edition	<b>HP:</b> DS-KGPSA-CB, FCA2355, FCA2101, FCA2214, FCA2214-DC, Mezzanine, Balcony <b>QLogic:</b> QLA2462, QLA234x, CLE8152 <b>Emulex:</b> LP11002-M4, LP1050DC, LP9802DC, LP8000, OCe10102-F	
Windows 2008	SP2	<b>Cisco:</b> P81E VIC <b>Emulex:</b> OCe10102-F <b>QLogic:</b> QLE8152	
Windows NT	Enterprise 4.0 (SP6a)	<b>HP:</b> FCA2355, FCA2101, DS-KGPSA-CB	EOL
Solaris	8, 9, 10	<b>Emulex:</b> LP9802, LP10000DC <b>QLogic:</b> QLA2202, QLA2310, QLA234x, QLA2462 <b>JNI:</b> FCE-6410, FCX-6562, FCE-6460, FCE-1473 <b>Sun:</b> SG-XPCI1FC-QF2, SG-XPCI2FC-QF2	MPXIO
			Veritas DMP
			SecurePath

Table 1-27 HP XP128, XP1024<sup>1</sup> (continued)

Operating System		Host Bus Adapter	Multipath Support
Type	Version		
Linux (32bit or 64bit)	Red Hat EL 3 U6+ Red Hat EL 4 U1+ Red Hat 5.5 SuSE 8 SP4+ SuSE 9 SP2+	<b>Cisco:</b> P81E VIC <b>HP:</b> Mezzanine, Balcony <b>QLogic:</b> QLA234x, QLA 2462, QLE 2462, QMH2462, QLE8152 <b>Emulex:</b> LP11002, LPe1105, OCe10102-F	Emulex Multipulse  QLogic Path Failover
	SLES 11	<b>QLogic:</b> QLE8152 <b>Emulex:</b> OCe10102-F	
Netware	5.1 SP8 & higher	<b>HP:</b> Mezzanine <b>QLogic:</b> QLA234x	Native
VMware ESX Server (XP 12000 not supported)	3.0, 4.0 u2	<b>Cisco:</b> P81E VIC <b>HP:</b> FCA2214, FCA2210, FCA2214DC, Mezzanine, Balcony <b>QLogic:</b> QLE8152 <b>Emulex:</b> OCe10102-F	Native

1. Boot From SAN is supported
2. OpenVMS is not supported on the MSA 1500 active/passive configuration.
3. HPUX 11iv1 is not supported on AD194A, AB378B, AB379B, Mezzanine cards. QMH2462 is supported on HPUX 11iv2, 3 only. AD299A and AD355A is supported on HPUX 11iv2 only.

Table 1-28 HP EVA GL -- 3000 (HSV100), 5000 (HSV110)<sup>1</sup>

Operating System		Host Bus Adapter	Multipath Support
Type	Version		
OpenVMS Alpha	7.3-2, 8.2, 8.3	<b>HP:</b> FCA2354, FCA2384, FCA2684, FCA2684DC <b>Emulex:</b> LP8000, LP9002, LP9802, LP10000, LP10000DC	Native
OpenVMS IA64 <sup>2</sup>	8.2-1, 8.3, 8.3-1H1	<b>HP:</b> AD299A, AD355A, A6826A, A9782A, A9784A AB465A, AB378A, AB378B, AB379A AB379B, AD300A, AD193A, AD194A, QMH2462	
HP-UX <sup>3</sup>	11iv1, 11iv2	<b>HP:</b> A5158, A6795A, AB465A, A9782A, A9784A, A6826A, AB378A, AB379A, AD193A, AD194A, AB378B, AB379A, AD300A, AD299A, AD355A, QMH2462, Mezzanine	SecurePath
	11iv3		native
Tru64 Unix	5.1B-3, 5.1B-4	<b>Emulex:</b> LP8000, LP9002, LP9802, LP10000, LP10000DC	
AIX	4.3.3, 5.1, 5.2, 5.3	<b>IBM:</b> 5716, 6227, 6228, 6239	MPIO/ODM
Windows 2000	Advanced Server (SP3+)	<b>HP:</b> DS-KGPSA-CB, FCA2355, FCA2101, LP9802DC, LP1050DC, FCA2214, FCA2214-DC, Mezzanine, Balcony <b>Emulex:</b> LP1050DC, LP1050EX, LP11002-M4, LP8000 <b>QLogic:</b> QLA2462, QLA234x	SecurePath  Microsoft MPIO/DSM
Windows 2003	Enterprise Edition	<b>HP:</b> DS-KGPSA-CB, FCA2355, FCA2101, FCA2214, FCA2214-DC, Mezzanine, Balcony <b>QLogic:</b> QLA2462, QLA234x <b>Emulex:</b> LP11002-M4, LP1050DC, LP9802DC, LP8000	

Table 1-28 HP EVA GL -- 3000 (HSV100), 5000 (HSV110)<sup>1</sup> (continued)

Operating System		Host Bus Adapter	Multipath Support
Type	Version		
Windows 2008 <sup>4</sup>	IA32 & x64	<b>Emulex:</b> LP1050 (FC2143), LP11002 (FC2243), LPe1150 (FC2142SR), LPe11002 (FC2242SR), LPe1105 (HP c-Class Mezz Card), LP9802DC (FCA2404DC), LP982 (FCA2408) <b>QLogic:</b> QLA2460 (FC1143), QLA2462 (FC1243), QLE2460 (FC1142), QLE2462 (FC1242), QLA2340 (FCA2214), QLA2342 (FCA2214DC), QMH2462 (HP c-Class Mezz Card) <b>HP:</b> FC Mezz Card (p-Class BL20p G2), FC Adapter Card (p-Class BL20p G3, BL45p G2), Mezzanine FCA (p-Class BL20p G4), HPBALCF 105 (p-Class BL25p, BL45p), FC Balcony Card (p-Class BL30p, BL35p), E-FC Adapter Card (p-Class BL20p G3), E-FC Balcony Card (p-Class BL25p, BL45p, BL45p G2, BL30p, BL35p, BL45p)	HP MPIO FF DSM 3.00.00
Windows NT	Enterprise Edition 4.0 (SP6a)	<b>HP:</b> FCA2355, FCA2101, DS-KGPSA-CB	EOL
Linux (32bit or 64bit)	RedHat AS 2.1 Red Hat EL 3 U6+ Red Hat EL 4 U1+ SuSE 7 SuSE 8 SP4+ SuSE 9 SP2+	<b>HP:</b> FCA2214, Mezzanine, Balcony <b>QLogic:</b> QLA234x	Emulex Multipulse  QLogic Path Failover
Solaris	8, 9, 10	<b>JNI:</b> FCE-1473, FCE-6410, FCX-6562, FCE-6460 <b>Emulex:</b> LP9802, LP10000DC <b>QLogic:</b> QLA2310, QLA234x <b>Sun:</b> SG-XPCI1FC-QF2, SG-XPCI2FC-QF2	MPXIO  Veritas DMP  SecurePath
Netware	5.1 SP8 6.1 SP4	<b>HP:</b> Mezzanine <b>QLogic:</b> QLA234x	Native
VMware ESX Server	3.0	<b>HP:</b> FCA2214, FCA2210, FCA2214DC, Mezzanine	Native

1. Boot From SAN is supported
2. OpenVMS is not supported on the MSA 1500 active/passive configuration.
3. HP-UX 11iv1 is not supported on AD194A, AB378B, AB379B, Mezzanine cards. HP-UX 11iv3 supports EVA 3000/5000 active/active configuration. QMH2462 is supported on HP-UX 11iv2, 3 only. AD299A and AD355A is supported on HP-UX 11iv2 only.
4. Cisco MDS SAN-OS 3.2(3) is the minimum version required for Windows 2008 support. Only active/active EVA firmware versions are supported.

Table 1-29 HP EVA XL -- 4000, 6000, 8000<sup>1</sup>

Operating System		Host Bus Adapter	Multipath Support
Type	Version		
OpenVMS Alpha	7.3-2, 8.2, 8.3 & later	<b>HP:</b> FCA2354, FCA2384, FCA2684, FCA2684DC <b>Emulex:</b> LP8000, LP9002, LP9802, LP10000, LP10000DC	Native
OpenVMS IA64 <sup>2</sup>	8.2-1, 8.3, 8.3-1H1 & later	<b>HP:</b> AD299A, AD355A, A6826A, A9782A, A9784A AB465A, AB378A, AB378B, AB379A AB379B, AD300A, AD193A, AD194A, QMH2462	
HP-UX <sup>3</sup>	11iv1, 11iv2	<b>HP:</b> A5158, A6795A, AB465A, A9782A, A9784A, A6826A, AB378A, AB379A, AD193A, AD194A, AB378B, AB379A, AD300A, AD299A, AD355A, QMH2462, Mezzanine	SecurePath
	11iv3		Native
Tru64 Unix <sup>4</sup>	5.1B-3, 5.1B-4	<b>Emulex:</b> LP8000, LP9002, LP9802, LP10000, LP10000DC	
AIX	4.3.3, 5.1, 5.2, 5.3	<b>IBM:</b> 5716, 6227, 6228, 6239	MPIO/ODM
Windows 2000	Advanced Server (SP3+)	<b>HP:</b> DS-KGPSA-CB, FCA2355, FCA2101, LP9802DC, LP1050DC, FCA2214, FCA2214-DC, Mezzanine, Balcony <b>Emulex:</b> LP1050DC, LP1050EX, LP11002-M4, LP8000 <b>QLogic:</b> QLA2462, QLA234x	SecurePath  Microsoft MPIO/DSM
Windows 2003	Enterprise Edition	<b>Emulex:</b> OCe10102-F <b>QLogic:</b> QLE8152	
Windows 2008 <sup>5</sup>	IA32 & x64	<b>Cisco:</b> P81E VIC <b>Emulex:</b> LP1050 (FC2143), LP11002 (FC2243), LPe1150 (FC2142SR), LPe11002 (FC2242SR), LPe1105 (HP c-Class Mezz Card), LP9802DC (FCA2404DC), LP982 (FCA2408), OCe10102-F <b>QLogic:</b> QLA2460 (FC1143), QLA2462 (FC1243), QLE2460 (FC1142), QLE2462 (FC1242), QLA2340 (FCA2214), QLA2342 (FCA2214DC), QMH2462 (HP c-Class Mezz Card), QLE8152 <b>HP:</b> HPBALCF 105 (p-Class BL25p, BL45p), FC Balcony Card (p-Class BL30p, BL35p), E-FC Adapter Card (p-Class BL20p G3), E-FC Balcony Card (p-Class BL25p, BL45p, BL45p G2, BL30p, BL35p, BL45p)	HP MPIO FF DSM 3.00.00
Linux (32bit or 64bit)	RedHat AS 2.1 & later SuSE 7 & later	<b>Cisco:</b> P81E VIC <b>Emulex:</b> OCe10102-F <b>HP:</b> FCA2214, Mezzanine, Balcony <b>QLogic:</b> QLA234x, QLE8152	Multipulse Path Failover
	SLES 11	<b>Emulex:</b> OCe10102-F <b>QLogic:</b> QLE8152	
Solaris	8, 9, 10	<b>JNI:</b> FCE-1473, FCE-6410, FCX-6562, FCE-6460 <b>Emulex:</b> LP9802, LP10000DC <b>QLogic:</b> QLA2310, QLA234x <b>Sun:</b> SG-XPCI1FC-QF2, SG-XPCI2FC-QF2	MPXIO Veritas DMP SecurePath
Netware	5.1 SP8, 6.1 SP4	<b>HP:</b> Mezzanine & <b>QLogic:</b> QLA234x	Native
VMware ESX Server	3.0, 4.0 u2	<b>Cisco:</b> P81E VIC <b>HP:</b> FCA2214, FCA2210, FCA2214DC, Mezzanine, Balcony <b>QLogic:</b> QLE8152 <b>Emulex:</b> OCe10102-F	Native
MAC-OS <sup>6</sup>	10.4.11 & later	<b>ATTO:</b> Celerity FC-41XS, FC-41ES, FC-42ES, Celerity FC-44ES	No

1. Boot From SAN is supported. The 4000, 6000, and 8000 EVA family includes the 4100, 6100, and 8100

2. OpenVMS is not supported on the MSA 1500 active/passive configuration.

3. HPUX 11iv1 is not supported on AD194A, AB378B, AB379B, Mezzanine cards. QMH2462 is supported on HPUX 11iv2, 3 only. AD299A and AD355A is supported on HPUX 11iv2 only.
4. True64 is not supported on EVA4400 and MSA1500 (active/passive) arrays.
5. Cisco MDS SAN-OS 3.2(3) is the minimum version required for Windows 2008 support. Only active/active EVA firmware versions are supported.
6. Certified bundled solution by HP/ATTO

**Table 1-30 HP MSA1000, MSA1500 (Active/Active)<sup>1</sup>**

Operating System		Host Bus Adapter	Multipath Support
Type	Version		
HP-UX <sup>2</sup>	11iv1, 11iv2	<b>HP:</b> A5158, A6795A, AB465A, A9782A, A9784A, A6826A, AB378A, AB379A, AD193A, AD194A, AB378B, AB379A, AD300A, AD299A, AD355A, QMH2462, Mezzanine	Single Path
	11iv3		Native
OpenVMS Alpha	7.3-2, 8.2, 8.3	<b>HP:</b> FCA2354, FCA2384, FCA2684, FCA2684DC <b>Emulex:</b> LP8000, LP9002, LP9802, LP10000, LP10000DC	Native
OpenVMS IA64 <sup>3</sup>	8.2-1, 8.3, 8.3-1H1	<b>HP:</b> AD299A, AD355A, A6826A, A9782A, A9784A AB465A, AB378A, AB378B, AB379A AB379B, AD300A, AD193A, AD194A, QMH2462	
Tru64 Unix	5.1B-3, 5.1B-4	<b>Emulex:</b> LP8000, LP9002, LP9802, LP10000, LP10000DC	
Windows 2000	Advanced Server (SP3+)	<b>HP:</b> DS-KGPSA-CB, FCA2355, FCA2101, LP9802DC, LP1050DC, FCA2214, FCA2214-DC, Mezzanine, Balcony <b>Emulex:</b> LP8000 <b>QLogic:</b> QLA234x	SecurePath (Active/Passive)
Windows 2003	Enterprise Edition	<b>HP:</b> FCA2355, FCA2101, FCA2214, FCA2214-DC, DS-KGPSA-CB, Mezzanine, Balcony <b>Emulex:</b> LP8000, LP9002, LP9802, OCe10102-F <b>QLogic:</b> QLA234x, QLE8152	Microsoft MPIO/DM (Active/Active)
Windows 2008 <sup>4</sup>	IA32 & x64	<b>Cisco: P81E VIC</b> <b>Emulex:</b> LP1050 (FC2143), LP11002 (FC2243), LPe1150 (FC2142SR), LPe11002 (FC2242SR), LPe1105 (HP c-Class Mezz Card), LP9802DC (FCA2404DC), LP982 (FCA2408), OCe10102-F <b>QLogic:</b> QLA2460 (FC1143), QLA2462 (FC1243), QLE2460 (FC1142), QLE2462 (FC1242), QLA2340 (FCA2214), QLA2342 (FCA2214DC), QMH2462 (HP c-Class Mezz Card), QLE8152 <b>HP:</b> FC Balcony Card (p-Class BL30p, BL35p), E-FC Adapter Card (p-Class BL20p G3), E-FC Balcony Card (p-Class BL25p, BL45p, BL45p G2, BL30p, BL35p, BL45p)	HP MPIO FF DSM 3.00.00
Linux (32bit or 64bit)	RedHat AS 2.1 & later SuSE 7 & later	<b>Emulex:</b> OCe10102-F <b>HP:</b> FCA2214, Mezzanine, Balcony <b>QLogic:</b> QLA234x, QLE8152	Multipulse QL Failover
	SLES 11	<b>Emulex:</b> OCe10102-F <b>QLogic:</b> QLE8152	
VMware ESX Server (MSA1000 only)	3.0, 4.0 u2	<b>Cisco: P81E VIC</b> <b>Emulex:</b> OCe10102-F <b>HP:</b> FCA2214, FCA2210, FCA2214DC, Mezzanine <b>QLogic:</b> QLA234x, QLE8152	Native

1. Boot From SAN is supported

2. HPUX 11iv1 is not supported on AD194A, AB378B, AB379B, Mezzanine cards. MSA 1000 active/active supports HPUX 11iv3 only. MSA 1000/1500 single control support HPUX 11iv1, v2 only. MSA1500 active/active configurations supports HPUX 11iv1, 2, 3 versions. QMH2462 is supported on HPUX 11iv2, 3 only. AD299A and AD355A is supported on HPUX 11iv2 only.
3. Open VMS is not supported on the MSA 1500 active/passive configuration.
4. Cisco MDS SAN-OS 3.2(3) is the minimum version required for Windows 2008 support. Only active/active EVA firmware versions are supported.

**Table 1-31 Distance Extension**

Distance System	Maximum Distance	Network	Protocol	Storage System
Cisco 1000Base-CWDM  HP StorageWorks - CWDM 2-Slot MUX - CWDM 8-port MUX - CWDM Slot A 4-port Add/Drop Multiplexer - CWDM Slot B 4-port Add/Drop Multiplexer	50km	CWDM	Block I/O	HP EVA GL (3.028)
			CA (Sync)	HP XL (5.031, 5.110, 6.0)
			Block I/O	HP XP128/1024, XP48/512, XP12000
			CA (Sync, Async)	
Cisco 15530	100km	DWDM	Block I/O	HP EVA GL (3.028)
			CA (Sync)	HP XL (5.031, 5.110, 6.0)
			Block I/O	HP XP128/1024, XP48/512, XP12000
			CA (Sync, Async)	
Cisco 15540	100km	DWDM	Block I/O	HP EVA GL (3.028)
			CA (Sync)	HP XL (5.031, 5.110, 6.0)
			Block I/O	HP XP128/1024, XP48/512, XP12000
			CA (Sync, Async)	
Cisco 15252	100km	DWDM	Block I/O	HP EVA GL (3.028)
			CA (Sync)	HP XL (5.031, 5.110, 6.0)
			Block I/O	HP XP128/1024, XP48/512, XP12000
			CA (Sync, Async)	
Cisco MDS IPS-8 Cisco MPS-14/2 Cisco MDS 9216i Cisco MDS 9222i Cisco MDS 18/2	See note <sup>1</sup> after this table.	FC-IP (IPSec/IKE)	Block I/O	HP EVA GL (3.028)
			CA (Sync)	HP XL (5.031, 5.110, 6.0)
HP MPX200, MPX 110			Block I/O	XP128/1024, XP48/512, XP12000, XP 24000
			CA (Sync, Async)	

1. Supported distance is determined by HP field personnel and professional services based on customer's application requirements.

# Oracle

**Table 1-32 StorageTek 9990V, 9985V, 9970V**

Operating System		Host Bus Adapter
Type	Version	
Solaris	8, 9 & later	<b>Sun:</b> SG-XPCI1FC-QF2, SG-XPCI2FC-QF2, SG-XPCI1FC-EM2, SG-XPCI2FC-EM2, SG-XPCIE1FC-QF8-Z, SG-XPCIE2FC-QF8-Z, SG-XPCIE1FC-EM8-Z, SG-XPCIE2FC-EM8-Z

**Table 1-33 StorageTek 6540, 6140, 2540, 2530, 2510**

Operating System		Host Bus Adapter
Type	Version	
Solaris	8, 9 & later	<b>Sun:</b> SG-XPCI1FC-QF2, SG-XPCI2FC-QF2, SG-XPCI1FC-EM2, SG-XPCI2FC-EM2, SG-XPCIE1FC-QF8-Z, SG-XPCIE2FC-QF8-Z, SG-XPCIE1FC-EM8-Z, SG-XPCIE2FC-EM8-Z

**Table 1-34 StorEdge 3000**

Operating System		Host Bus Adapter
Type	Version	
Solaris	8, 9 & later	<b>Sun:</b> SG-XPCI1FC-QF2, SG-XPCI2FC-QF2, SG-XPCI1FC-EM2, SG-XPCI2FC-EM2, SG-XPCIE1FC-QF8-Z, SG-XPCIE2FC-QF8-Z, SG-XPCIE1FC-EM8-Z, SG-XPCIE2FC-EM8-Z

# NEC

**Table 1-35 S2300**

Operating System		Host Bus Adapter	Multipath
Type	Version		
Windows 2000	Advanced Server (SP3 or higher)	Emulex: LP952L	NEC SPS
Windows 2003	Enterprise Server		
HPUX	11.0	<b>HP:</b> A6795A, A6826A	PvLinks
	11i		
Linux	RedHat AS2.1	<b>Emulex:</b> LP952L	No
Solaris	8, 9	<b>QLogic:</b> QLA2310F	Veritas DMP
AIX	5.1, 5.2	<b>IBM:</b> 6228, 6239	No

**Table 1-36 S1300**

Operating System		Host Bus Adapter	Multipath
Type	Version		
Windows 2000	Advanced Server (SP3 or higher)	Emulex: LP952L	NEC SPS
Windows 2003	Enterprise Server		
HPUX	11.0	<b>HP:</b> A6795A, A6826A	PvLinks
	11i		
Linux	RedHat AS2.1	<b>Emulex:</b> LP952L	No
Solaris	8, 9	<b>QLogic:</b> QLA2310F	Veritas DMP
AIX	5.1, 5.2	<b>IBM:</b> 6228, 6239	No

**Table 1-37 S2800**

Operating System		Host Bus Adapter	Multipath
Type	Version		
Windows 2000	Advanced Server (SP3 or higher)	Emulex: LP952L	NEC SPS
Windows 2003	Enterprise Server		
HPUX	11.0	<b>HP:</b> A6795A, A6826A	PvLinks
	11i		
Linux	RedHat AS2.1	<b>Emulex:</b> LP952L	No
Solaris	8, 9	<b>QLogic:</b> QLA2310F	Veritas DMP
AIX	5.1, 5.2	<b>IBM:</b> 6228, 6239	No

**Table 1-38 D1-10, D3-10**

Operating System		Host Bus Adapter	Multipath
Type	Version		
Windows 2003	Enterprise Server	<b>Emulex:</b> LP1150, LPe1150 <b>QLogic:</b> QLE2460, QLA2460	NEC SPS 3.4
Windows 2008 (x64 bit)	Enterprise Edition SP1	<b>Emulex:</b> LP1150-F, LPe1150-F4 <b>QLogic:</b> QLA2460, QLE2460	NEC SPS 4
Windows 2008 (x32 bit)			
Linux RedHat 5 (x64)	RedHat Enterprise kernel 2.6.18-53.e15	<b>Emulex:</b> LP1150, LPe1150, LP1150-F, LPe1150-F4 <b>QLogic:</b> QLA2460, QLE2460, QLA2460, QLE2460	

**Table 1-39 S2800 Distance Extension**

Cisco Product	Protocol	RDR Sync.	RDR Async
IP Service Module (IPS 8, IPS 4)	FC-IP	ver. 2.3.0	ver. 2.3.0
Cisco CWDM	FC		
Cisco ONS			

**Table 1-40 D8-30**

Operating System		Host Bus Adapter	Multipath
Type	Version		
Windows 2008 (x32 bit)	Enterprise Edition SP1	<b>Emulex:</b> LP1150-F, LPe1150-F4 <b>QLogic:</b> QLA2460, QLE2460	NEC SPS 4.0
Windows 2008 (x64bit)			
Linux RedHat 5 (x64)	kernel 2.6.18-53.e15		

# Fujitsu

Table 1-41 ETERNUS 2000

Operating System		Host Bus Adapter	Multipath
Type	Version		
Solaris	8, 9	<b>Emulex:</b> LP10000, LP10000DC, LP11000, LP11002, LPe11000, LPe11002 <b>QLogic:</b> QLA2340, QLA2342, QLA2460, QLA2462 <b>Fujitsu:</b> PW008FC2, PW008FC3, XSPFC211A, XSPFC212A, SE0X7F12F <b>Sun:</b> SG-XPCI1FC-QF4, SG-XPCI2FC-QF4, SG-XPCI1FC-QF, SG-XPCI1FC-QL2, SG-XPCI1FC-EM4, SG-XPCI2FC-EM4, SG-XPCI1FC-EM2, SG-XPCI2FC-EM2, SG-XPCIE1FC-EM4, SG-XPCIE1FC-QF4	MPxIO Solaris9:SFS4.4.14 Solaris8:SFS4.4.13 +Patch:119913-13 VERITAS5.0 MP1 (DMP) EMPD V2.0.3
	10	<b>Fujitsu:</b> PW008FC2, PW008FC3, XSPFC211A, XSPFC212A, XSPFC401A, XSPFC402A, SE0X7F11F, SE0X7F12F <b>Emulex:</b> LP10000, LP10000DC, LP11000, LP11002, LPe11000, LPe11002 <b>QLogic:</b> QLA2340, QLA2342, QLA2460, QLA2462 <b>Sun:</b> SG-XPCIE1FC-EM4, SG-XPCIE2FC-EM4, SG-XPCI1FC-EM4, SG-XPCI2FC-EM4, SG-XPCI1FC-QF4, SG-XPCI2FC-QF4, SG-XPCI1FC-QF2, SG-XPCI1FC-QL2	MPxIO VERITAS5.0 MP1 (DMP) EMPD V2.0.3
	x86 Solaris 10	<b>Sun:</b> SG-XPCI1FC-EM4, SG-XPCI2FC-EM4, SG-XPCIE1FC-EM4, SG-XPCIE2FC-EM4, SG-XPCI1FC-QF4, SG-XPCI2FC-QF4 <b>Emulex:</b> LP11000, LP11002, LPe11000, LPe11002 <b>QLogic:</b> QLA2460, QLA2462	MPxIO
HPUX	11iv2	<b>HP:</b> AB378A, AB379A, A6826A, A6795A	PvLinks VERITAS5.0 MP1 (DMP)
	11iv3	<b>HP:</b> AB378A, AB379A, A6826A, A6795A AB378B,AD193A,AD300A	PvLinks
AIX	5.2, 5.3	<b>IBM:</b> 1905, 1910	VERITAS5.0 MP1 (DMP) MPIO2.0.0
Windows 2003	Standard Edition, Standard Edition SP1, Standard, Edition SP2, R2 Standard Edition, R2 Standard, Edition SP2 Enterprise Edition, Enterprise Edition SP1, Enterprise Edition SP2, R2 Enterprise Edition SP1, R2 Enterprise Edition SP2, (IA-32) Standard x64 Edition, Enterprise x64 Edition	<b>Fujitsu:</b> PG-FC107, PG-FCD101, PG-FCD102 PG-FCD201, PG-FC201, PG-FC202 <b>Emulex:</b> LP10000, LP10000DC, LP1050,LP1050DC, LP1050Ex, LP10000ExDC, LP11000, LP11002, LP1150, LPe11000, LPe11002, LPe1150 <b>Qlogic:</b> QLA2460, QLA2462, QLE2460, QLE2462, QLE2464	EMPD V2.0L11

Table 1-41 ETERNUS 2000 (continued)

Operating System		Host Bus Adapter	Multipath
Type	Version		
Windows 2003	Enterprise Edition for Itanium-based Systems	<b>Fujitsu:</b> MC-08FC11, MC-08FC71, MC-08FC31, MC-08FC41, MC-08FC51, MC-08FC61,	EMPD V2.0L14
Windows 2000	Server, Advanced Server SP4	<b>Emulex:</b> LP10000, LP10000DC, LP1050, LP1050DC, LP1050Ex, LP10000ExDC, LP11000, LP11002, LP1150, LPe11000, LPe11002, LPe1150, <b>Qlogic:</b> QLA2460, QLA2462, QLE2460, QLE2462, QLE2464	
Linux	Red Hat Enterprise Linux AS, v.3 for x86 Red Hat Enterprise Linux ES, v.3 for x86	Fujitsu: PG-FC107, PG-FC201, PG-FCD101, PG-FCD102 Emulex: LP10000, LP10000DC, LP1050, LP1050DC, LP1050Ex, LP10000ExDC	GRMPD V1.0L04
	Red Hat Enterprise Linux AS, v.4 for x86 Red Hat Enterprise Linux ES, v.4 for x86	Fujitsu: PG-FC107, PG-FCD101, PG-FCD102, PG-FC201, PG-FC202, PG-FCD201, Emulex: LP10000, LP10000DC, LP1050, LP1050DC, LP1050Ex, LP10000ExDC, LP11000, LP11002, LP1150, LPe11000, LPe11002, LPe1150 Qlogic: QLA2340, QLA2342, QLA2344, QLE2360, QLE2362, QLA2460, QLA2462, QLE2460, QLE2462	EMPD V2.0L11
	Red Hat Enterprise Linux AS v.4 for EM64T Red Hat Enterprise Linux ES v.4 for EM64T	Fujitsu: PG-FC107, PG-FCD101, PG-FCD102, PG-FC201, PG-FC202, PG-FCD201 Emulex: LP10000, LP10000DC, LP1050, LP1050DC, LP1050Ex, LP10000ExDC, LP11000, LP11002, LP1150, LPe11000, LPe11002, LPe1150 Qlogic: QLA2340, QLA2342, QLA2344, QLE2360, QLE2362	EMPD V2.0L11 VERITAS5.0 MP1 (DMP)
	Red Hat Enterprise Linux AS v.4 for Itanium Red Hat Enterprise Linux ES v.4 for Itanium	Fujitsu: MC-08FC11, MC-08FC31, MC-08FC41, MC-08FC51, MC-08FC61, MC-08FC71	EMPD V2.0L11
	Red Hat Enterprise Linux 5 for x86	Fujitsu: PG-FC107, PG-FCD101, PG-FCD102, PG-FC201, PG-FC202, PG-FCD201 Emulex: LP10000, LP10000DC, LP1050, LP1050DC, LP1050Ex, LP10000ExDC, LP11000, LP11002, LP1150, LPe11000, LPe11002, LPe1150 Qlogic: QLA2340, QLA2342, QLA2344, QLE2360, QLE2362	EMPD V2.0L11 DeviceMapper
	Red Hat Enterprise Linux 5 for Intel64	Fujitsu: PG-FC107, PG-FCD101, PG-FCD102, PG-FC201, PG-FC202, PG-FCD201, Emulex: LP10000, LP10000DC, LP1050, LP1050DC, LP1050Ex, LP10000ExDC, LP11000, LP11002, LP1150, LPe11000, LPe11002, LPe1150 Qlogic: QLA2340, QLA2342, QLA2344, QLE2360, QLE2362	EMPD V2.0L11 DeviceMapper
	Red Hat Enterprise Linux 5 for Itanium	Fujitsu: MC-08FC11, MC-08FC31, MC-08FC41, MC-08FC51, MC-08FC61, MC-08FC71	EMPD V2.0L11
	SuSE Linux Enterprise Server 9 EM64T	Emulex LP11000/LP11002/LP1150/LPe11000/, LPe11002/LPe1150 Qlogic QLA2460/QLA2462/QLE2460/, QLE2462/QLE2464	VERITAS5.0 MP1 (DMP)

Table 1-41 ETERNUS 2000 (continued)

Operating System		Host Bus Adapter	Multipath
Type	Version		
Linux	SuSE Linux Enterprise Server 10 x86	Emulex LP11000/LP11002/LP1150/LPe11000/, LPe11002/LPe1150 QLogic QLA2460/QLA2462/QLE2460/, QLE2462/QLE2464	EMPD V2.0L12 DeviceMapper
	SuSE Linux Enterprise Server 10 EM64T	Emulex LP11000/LP11002/LP1150/LPe11000/, LPe11002/LPe1150 QLogic QLA2460/QLA2462/QLE2460/ QLE2462/QLE2464	EMPD V2.0L12 DeviceMapper
	SuSE Linux Enterprise Server 10Itanium	Emulex LP11000/LP11002/LP1150/LPe11000/, LPe11002/LPe1150	EMPD V2.0L12
Vmware Infrastructure	3.0.1, 3.0.2, 3.5	Fujitsu: PG-FC107, PG-FCD101, PG-FCD102, PG-FC201, PG-FC202, PG-FCD201 Emulex: LP10000, LP1050, LP1050Ex, LP11000, LP1150, LPe1150 QLogic: QLA2340, QLA2342, QLA2460, QLE2462	Vmware

Table 1-42 ETERNUS 3000

Operating System		Host Bus Adapter	Multipath
Type	Version		
Windows 2000	Advanced Server (SP4)	<b>Emulex:</b> LP9802, LP10000	GRMPD
Windows 2003	Enterprise Server	<b>QLogic:</b> QLA2342	
HPUX	11.0	<b>HP:</b> A6795A, A6826A	PvLinks
	11i		
Linux	RedHat AS2.1, 3.0	<b>QLogic:</b> QLA2342 <b>Emulex:</b> LP9002	No
Solaris	8, 9	<b>Emulex:</b> LP9802, LP10000	Veritas DMP
AIX	5.3, 5.2	<b>IBM:</b> 6228, 6239	No
		<b>Cambex:</b> P2000LC	DPF

Table 1-43 ETERNUS 6000

Operating System		Host Bus Adapter	Multipath
Type	Version		
Windows 2000	Advanced Server (SP4)	Emulex: LP9802, LP10000	GRMPD
Windows 2003	Enterprise Server	QLogic: QLA2342	
HPUX	11.0	<b>HP:</b> A6795A, A6826A	PvLinks
	11i		
Linux	RedHat AS2.1, 3.0	<b>QLogic:</b> QLA2342 <b>Emulex:</b> LP9002	No
Solaris	8, 9	<b>Emulex:</b> LP9802, LP10000	Veritas DMP
AIX	5.3, 5.2	<b>IBM:</b> 6228, 6239	No
		<b>Cambex:</b> P2000LC	DPF

Table 1-44 ETERNUS 4000

Operating System		Host Bus Adapter	Multipath
Type	Version		
Windows 2000	Advanced Server (SP4)	<p><b>Fujitsu:</b> PG-FC105, PG-FC106, PG-FC107, PG-FCD101, PG-FCD102, PG-FCD201, PG-FC201, PG-FC202</p> <p><b>Emulex:</b> LP9002L, LP9002DC, LP952L, LP9802, LP9802DC, LP982, LP10000, LP10000DC, LP1050, LP1050DC, LP1050Ex, LP10000ExDC, LP11000, LP11002, LP1150, LPe11000, LPe11002, LPe1150</p> <p><b>QLogic:</b> QLA2340, QLA2342, QLE2360, QLE2362, QLE2364, QLA2460, QLA2462, QLE2460, QLE2462, QLE2464</p>	EMPD V2.0L12
Windows 2003	Standard Edition, SP1, SP2 R2 Standard Edition, SP2 Enterprise Edition, SP1, SP2 R2 Enterprise Edition SP1, SP2 R2 Enterprise Edition SP2 (IA-32)	<p><b>Fujitsu:</b> PG-FC105, PG-FC106, PG-FC107, PG-FCD101, PG-FCD102, PG-FCD201, PG-FC201, PG-FC202</p> <p><b>Emulex:</b> LP9002L, LP9002DC, LP952L, LP9802, LP9802DC, LP982, LP10000, LP10000DC, LP1050, LP1050DC, LP1050Ex, LP10000ExDC, LP11000, LP11002, LP1150, LPe11000, LPe11002, LPe1150</p> <p><b>QLogic:</b> QLA2340, QLA2342, QLE2360, QLE2362, QLE2364, QLA2460, QLA2462, QLE2460, QLE2462, QLE2464</p>	EMPD V2.0L12
	Standard x64 Edition Enterprise x64 Edition	<p><b>Fujitsu:</b> PG-FC106, PG-FC107, PG-FCD101, PG-FCD102, PG-FCD201, PG-FC201, PG-FC202</p> <p><b>Emulex:</b> LP9002L, LP9002DC, LP952L, LP9802, LP9802DC, LP982, LP10000, LP10000DC, LP1050, LP1050DC, LP1050Ex, LP10000ExDC, LP11000, LP11002, LP1150, LPe11000, LPe11002, LPe1150</p> <p><b>QLogic:</b> QLA2340, QLA2342, QLE2360, QLE2362, QLE2364, QLA2460, QLA2462, QLE2460, QLE2462, QLE2464</p>	
	Enterprise Edition Datacenter Edition for Itanium-based Systems	<p><b>Fujitsu:</b> MC-08FC11, MC-08FC31, MC-08FC41, MC-08FC51, MC-08FC61, MC-08FC71</p> <p><b>Emulex:</b> LP10000, LP10000DC, LP1050, LP1050DC, LP1050Ex, LP10000ExDC, LP11000, LP11002, LP1150, LPe11000, LPe11002, LPe1150</p>	
Linux	Red Hat Enterprise Linux AS v.3 for x86 Red Hat Enterprise Linux ES v.3 or x86 Red Hat Enterprise Linux AS v.4 for x86 Red Hat Enterprise Linux ES v.4 for x86	<p><b>Fujitsu:</b> PG-FC106, PG-FC107, PG-FC201, PG-FC202, PG-FCD101, PG-FCD102, PG-FCD201</p> <p><b>Emulex:</b> LP9802, LP9802DC, LP982, LP10000, LP10000DC, LP1050, LP1050DC, LP1050Ex, LP10000ExDC, LP11000, LP11002, LP1150, LPe11000, LPe11002, LPe1150</p> <p><b>QLogic:</b> QLA2340, QLA2342, QLE2360, QLE2362, QLE2364, QLA2460, QLA2462, QLE2460, QLE2462, QLE2464</p>	EMPD V2.0L03

Table 1-44 ETERNUS 4000 (continued)

Operating System		Host Bus Adapter	Multipath
Type	Version		
Linux	Red Hat Enterprise Linux AS v4 for EM64T	Fujitsu: PG-FC106, PG-FC107, PG-FC201, PG-FC202, PG-FCD101, PG-FCD102, PG-FCD201	EMPD V2.0L03
	Red Hat Enterprise Linux ES v4 for EM64T	Emulex: LP9802, LP9802DC, LP982LP10000, LP10000DC, LP1050, LP1050DC, LP1050Ex, LP10000ExDC, LP11000, LP11002, LP1150, LPe11000, LPe11002, LPe1150 QLogic: QLA2340, QLA2342, QLE2360, QLE2362, QLE2364, QLA2460, QLA2462, QLE2460, QLE2462, QLE2464	
	Red Hat Enterprise Linux AS v4 for Itanium	Fujitsu: MC-08FC11, MC-08FC31, MC-08FC41, MC-08FC51, MC-08FC61, MC-08FC71	
	Red Hat Enterprise Linux ES v4 for Itanium		
	Red Hat Enterprise Linux 5 for x86	Fujitsu: PG-FC107, PG-FCD101, PG-FCD102, PG-FCD201, PG-FC201, PG-FC202	EMPD V2.0L11
	Red Hat Enterprise Linux 5, for Intel64	Emulex: LP10000, LP10000DC, LP1050, LP1050DC, LP1050Ex, LP10000ExDC, LP11000, LP11002, LP1150, LPe11000, LPe11002, LPe1150 QLogic: QLA2340, QLA2342, QLE2360, QLE2362, QLE2364, QLA2460, QLA2462, QLE2460, QLE2462, QLE2464	
	Red Hat Enterprise Linux 5 for Itanium	Fujitsu: MC-08FC11, MC-08FC31, MC-08FC41, MC-08FC51, MC-08FC61, MC-08FC71	
	SuSE Linux Enterprise Server 8 (x86)	QLogic: QLA2340, QLA2342, QLE2360, QLE2362, QLE2364, QLA2460, QLA2462, QLE2460, QLE2462, QLE2464	EMPD V2.0L10
SuSE Linux Enterprise Server 9 (x86)			
SuSE Linux Enterprise Server 8 (EM64T)			
SuSE Linux Enterprise Server 9 (EM64T)			
SuSE Linux Enterprise Server 9 (Itanium)	Fujitsu: MC-08FC11, MC-08FC41 Emulex: LP10000, LP10000DC, LP1050, LP1050DC, LP1050Ex, LP10000ExDC, LP11000, LP11002, LP1150, LPe11000, LPe11002, LPe1150 QLogic: QLA2340, QLA2342, QLE2360, QLE2362, QLE2364, QLA2460, QLA2462, QLE2460, QLE2462, QLE2464		
SuSE Linux Enterprise Server 10 (x86)	Emulex: LP11000, LP11002, LP1150, LPe11000, LPe11002, LPe1150 QLogic: QLA2460, QLA2462, QLE2460, QLE2462, QLE2464	DeviceMapper	
SuSE Linux Enterprise Server 10 (EM64T)			

Table 1-44 ETERNUS 4000 (continued)

Operating System		Host Bus Adapter	Multipath
Type	Version		
VMware Infrastructure	3.0.0, 3.0.1, 3.0.2, 3.5	Fujitsu: PG-FC106, PG-FC107, PG-FC201, PG-FC202, PG-FCD201, PG-FCD101, PG-FCD102 Emulex: LP9802, LP1050, LP1050Ex, LP10000, LP10000DC, LP1150, LP11000, LP11002, LPe11150, LPe11000, LPe11002 Qlogic: QLA2340, QLA2342, QLA2460, QLE2462	Vmware
VMware ESX Server	2.5.3, 2.5.4	Fujitsu: PG-FC106, PG-FC107, PG-FC201, PG-FCD101, PG-FCD102 Emulex: LP9802, LP1050, LP1050Ex, LP10000, LP10000DC Qlogic: QLA2340, QLA2342	
Solaris	8, 9	Fujitsu: GP7B8FC1, PW008FC2, PW008FC3, XSPFC211A, XSPFC212A Net Marks: PW008FC2-NM Emulex: LP10000, LP10000DC, LP11000, LP11002, LPe11000, LPe11002 QLogic: QLA2340, QLA2342, QLA2460, QLA2462 Sun: SG-XPCI1FC-QF2, SG-XPCI1FC-QL2, SG-XPCI2FC-QF2, SG-XPCI2FC-QF2-Z, SG-XPCI1FC-EM2, SG-XPCI2FC-EM2, SG-XPCIE1FC-EM4, SG-XPCIE2FC-EM4, SG-XPCI1FC-EM4, SG-XPCI2FC-EM4, SG-XPCI1FC-QF4, SG-XPCI2FC-QF4, SG-XPCIE1FC-QF4, SG-XPCIE2FC-QF4	
Solaris	10	<b>Fujitsu:</b> GP7B8FC1, PW008FC2, PW008FC3, XSPFC211A, XSPFC212A, SE0X7F11F, SE0X7F12F, XSPFC401A, XSPFC402A <b>Net Marks:</b> PW008FC2-NM <b>Emulex:</b> LP10000, LP10000DC, LP11000, LP11002, LPe11000, LPe11002 <b>QLogic:</b> QLA2340, QLA2342, QLA2460, QLA2462 <b>Sun:</b> SG-XPCI1FC-QF2, SG-XPCI1FC-QL2, SG-XPCI2FC-QF2, SG-XPCI2FC-QF2-Z, SG-XPCI1FC-EM2, SG-XPCI2FC-EM2, SG-XPCIE1FC-EM4, SG-XPCIE2FC-EM4, SG-XPCI1FC-EM4, SG-XPCI2FC-EM4, SG-XPCI1FC-QF4, SG-XPCI2FC-QF4, SG-XPCIE1FC-QF4, SG-XPCIE2FC-QF4	MPxIO VERITAS5.0 MP1 (DMP)  EMPD V2.0.3
	x86 Solaris 10 OS	<b>Sun:</b> SG-XPCI1FC-EM4, SG-XPCI2FC-EM4, SG-XPCIE1FC-EM4, SG-XPCIE2FC-EM4, SG-XPCI1FC-QF4, SG-XPCI2FC-QF4 <b>Emulex:</b> LP11000, LP11002, LPe11000, LPe11002 <b>QLogic:</b> QLA2460, QLA2462	MPxIO

Table 1-44 ETERNUS 4000 (continued)

Operating System		Host Bus Adapter	Multipath
Type	Version		
HPUX	11iv1	HP: A6826A, AB378A	PV-Links
	11iv2	HP: A6826A, A6795A, A9782A, A9784A, AB378A, AB378B, AB379A, AB465A, AB378B, AD193A, AD300A, AD299A, AD355A	PV-Links(2007) VERITAS4.1 MP1 (DMP)  VERITAS5.0 MP1 (DMP)
	11iv3	HP: AB378A, AB379A, A6826A, A6795A, AB378B, AD193A, AD300A	Native Multipathing  PV-Links
AIX	5.2, 5.3	IBM: 5716, 1977, 5758, 1905, 5759, 1910, 6239, 6228	MPIO2.0.0 VERITAS4.0 MP1 (DMP) VERITAS5.0 MP1 (DMP)

Table 1-45 ETERNUS 8000

Operating System		Host Bus Adapter	Multipath
Type	Version		
Windows 2000	Advanced Server (SP4)	<p><b>Fujitsu:</b> PG-FC105, PG-FC106, PG-FC107, PG-FCD101, PG-FCD102, PG-FCD201, PG-FC201, PG-FC202</p> <p><b>Emulex:</b> LP9002L, LP9002DC, LP952L, LP9802, LP9802DC, LP982, LP10000, LP10000DC, LP1050, LP1050DC, LP1050Ex, LP10000ExDC, LP11000, LP11002, LP1150, LPe11000, LPe11002, LPe1150</p> <p><b>QLogic:</b> QLA2340, QLA2342, QLE2360, QLE2362, QLE2364, QLA2460, QLA2462, QLE2460, QLE2462, QLE2464</p>	EMPD V2.0L12
Windows 2003	Standard Edition, SP1, SP2 R2 Standard Edition, SP2 Enterprise Edition, SP1, SP2 R2 Enterprise Edition SP1, SP2 R2 Enterprise Edition SP2 (IA-32)	<p><b>Fujitsu:</b> PG-FC105, PG-FC106, PG-FC107, PG-FCD101, PG-FCD102, PG-FCD201, PG-FC201, PG-FC202</p> <p><b>Emulex:</b> LP9002L, LP9002DC, LP952L, LP9802, LP9802DC, LP982, LP10000, LP10000DC, LP1050, LP1050DC, LP1050Ex, LP10000ExDC, LP11000, LP11002, LP1150, LPe11000, LPe11002, LPe1150</p> <p><b>QLogic:</b> QLA2340, QLA2342, QLE2360, QLE2362, QLE2364, QLA2460, QLA2462, QLE2460, QLE2462, QLE2464</p>	EMPD V2.0L12
	Standard x64 Edition Enterprise x64 Edition	<p><b>Fujitsu:</b> PG-FC106, PG-FC107, PG-FCD101, PG-FCD102, PG-FCD201, PG-FC201, PG-FC202</p> <p><b>Emulex:</b> LP9002L, LP9002DC, LP952L, LP9802, LP9802DC, LP982, LP10000, LP10000DC, LP1050, LP1050DC, LP1050Ex, LP10000ExDC, LP11000, LP11002, LP1150, LPe11000, LPe11002, LPe1150</p> <p><b>QLogic:</b> QLA2340, QLA2342, QLE2360, QLE2362, QLE2364, QLA2460, QLA2462, QLE2460, QLE2462, QLE2464</p>	
	Enterprise Edition Datacenter Edition for Itanium-based Systems	<p><b>Fujitsu:</b> MC-08FC11, MC-08FC31, MC-08FC41, MC-08FC51, MC-08FC61, MC-08FC71</p> <p><b>Emulex:</b> LP10000, LP10000DC, LP1050, LP1050DC, LP1050Ex, LP10000ExDC, LP11000, LP11002, LP1150, LPe11000, LPe11002, LPe1150</p>	
Linux	Red Hat Enterprise Linux AS v.3 for x86 Red Hat Enterprise Linux ES v.3 or x86 Red Hat Enterprise Linux AS v.4 for x86 Red Hat Enterprise Linux ES v.4 for x86	<p><b>Fujitsu:</b> PG-FC106, PG-FC107, PG-FC201, PG-FC202, PG-FCD101, PG-FCD102, PG-FCD201</p> <p><b>Emulex:</b> LP9802, LP9802DC, LP982, LP10000, LP10000DC, LP1050, LP1050DC, LP1050Ex, LP10000ExDC, LP11000, LP11002, LP1150, LPe11000, LPe11002, LPe1150</p> <p><b>QLogic:</b> QLA2340, QLA2342, QLE2360, QLE2362, QLE2364, QLA2460, QLA2462, QLE2460, QLE2462, QLE2464</p>	EMPD V2.0L03

Table 1-45 ETERNUS 8000 (continued)

Operating System		Host Bus Adapter	Multipath
Type	Version		
Linux	Red Hat Enterprise Linux AS v4 for EM64T	Fujitsu: PG-FC106, PG-FC107, PG-FC201, PG-FC202, PG-FCD101, PG-FCD102, PG-FCD201	EMPD V2.0L03
	Red Hat Enterprise Linux ES v4 for EM64T	Emulex: LP9802, LP9802DC, LP982LP10000, LP10000DC, LP1050, LP1050DC, LP1050Ex, LP10000ExDC, LP11000, LP11002, LP1150, LPe11000, LPe11002, LPe1150 QLogic: QLA2340, QLA2342, QLE2360, QLE2362, QLE2364, QLA2460, QLA2462, QLE2460, QLE2462, QLE2464	
	Red Hat Enterprise Linux AS v4 for Itanium	Fujitsu: MC-08FC11, MC-08FC31, MC-08FC41, MC-08FC51, MC-08FC61, MC-08FC71	
	Red Hat Enterprise Linux ES v4 for Itanium		
	Red Hat Enterprise Linux 5 for x86	Fujitsu: PG-FC107, PG-FCD101, PG-FCD102, PG-FCD201, PG-FC201, PG-FC202	EMPD V2.0L11
	Red Hat Enterprise Linux 5, for Intel64	Emulex: LP10000, LP10000DC, LP1050, LP1050DC, LP1050Ex, LP10000ExDC, LP11000, LP11002, LP1150, LPe11000, LPe11002, LPe1150 QLogic: QLA2340, QLA2342, QLE2360, QLE2362, QLE2364, QLA2460, QLA2462, QLE2460, QLE2462, QLE2464	
	Red Hat Enterprise Linux 5 for Itanium	Fujitsu: MC-08FC11, MC-08FC31, MC-08FC41, MC-08FC51, MC-08FC61, MC-08FC71	
	SuSE Linux Enterprise Server 8 (x86)	QLogic: QLA2340, QLA2342, QLE2360, QLE2362, QLE2364, QLA2460, QLA2462, QLE2460, QLE2462, QLE2464	EMPD V2.0L10
	SuSE Linux Enterprise Server 9 (x86)		
	SuSE Linux Enterprise Server 8 (EM64T)		
SuSE Linux Enterprise Server 9 (EM64T)			
SuSE Linux Enterprise Server 9 (Itanium)	Fujitsu: MC-08FC11, MC-08FC41 Emulex: LP10000, LP10000DC, LP1050, LP1050DC, LP1050Ex, LP10000ExDC, LP11000, LP11002, LP1150, LPe11000, LPe11002, LPe1150 QLogic: QLA2340, QLA2342, QLE2360, QLE2362, QLE2364, QLA2460, QLA2462, QLE2460, QLE2462, QLE2464		
SuSE Linux Enterprise Server 10 (x86)	Emulex: LP11000, LP11002, LP1150, LPe11000, LPe11002, LPe1150 QLogic: QLA2460, QLA2462, QLE2460, QLE2462, QLE2464	DeviceMapper	
SuSE Linux Enterprise Server 10 (EM64T)			

Table 1-45 ETERNUS 8000 (continued)

Operating System		Host Bus Adapter	Multipath
Type	Version		
VMware Infrastructure	3.0.0, 3.0.1, 3.0.2, 3.5	Fujitsu: PG-FC106, PG-FC107, PG-FC201, PG-FC202, PG-FCD201, PG-FCD101, PG-FCD102 Emulex: LP9802, LP1050, LP1050Ex, LP10000, LP10000DC, LP1150, LP11000, LP11002, LPe11150, LPe11000, LPe11002 Qlogic: QLA2340, QLA2342, QLA2460, QLE2462	Vmware
VMware ESX Server	2.5.3, 2.5.4	Fujitsu: PG-FC106, PG-FC107, PG-FC201, PG-FCD101, PG-FCD102 Emulex: LP9802, LP1050, LP1050Ex, LP10000, LP10000DC Qlogic: QLA2340, QLA2342	
Solaris	8, 9	Fujitsu: GP7B8FC1, PW008FC2, PW008FC3, XSPFC211A, XSPFC212A Net Marks: PW008FC2-NM Emulex: LP10000, LP10000DC, LP11000, LP11002, LPe11000, LPe11002 QLogic: QLA2340, QLA2342, QLA2460, QLA2462 Sun: SG-XPCI1FC-QF2, SG-XPCI1FC-QL2, SG-XPCI2FC-QF2, SG-XPCI2FC-QF2-Z, SG-XPCI1FC-EM2, SG-XPCI2FC-EM2, SG-XPCIE1FC-EM4, SG-XPCIE2FC-EM4, SG-XPCI1FC-EM4, SG-XPCI2FC-EM4, SG-XPCI1FC-QF4, SG-XPCI2FC-QF4, SG-XPCIE1FC-QF4, SG-XPCIE2FC-QF4	
Solaris	10	<b>Fujitsu:</b> GP7B8FC1, PW008FC2, PW008FC3, XSPFC211A, XSPFC212A, SE0X7F11F, SE0X7F12F, XSPFC401A, XSPFC402A <b>Net Marks:</b> PW008FC2-NM <b>Emulex:</b> LP10000, LP10000DC, LP11000, LP11002, LPe11000, LPe11002 <b>QLogic:</b> QLA2340, QLA2342, QLA2460, QLA2462 <b>Sun:</b> SG-XPCI1FC-QF2, SG-XPCI1FC-QL2, SG-XPCI2FC-QF2, SG-XPCI2FC-QF2-Z, SG-XPCI1FC-EM2, SG-XPCI2FC-EM2, SG-XPCIE1FC-EM4, SG-XPCIE2FC-EM4, SG-XPCI1FC-EM4, SG-XPCI2FC-EM4, SG-XPCI1FC-QF4, SG-XPCI2FC-QF4, SG-XPCIE1FC-QF4, SG-XPCIE2FC-QF4	MPxIO VERITAS 5.0 MP1 (DMP) EMPD V2.0.3
	x86 Solaris 10 OS	<b>Sun:</b> SG-XPCI1FC-EM4, SG-XPCI2FC-EM4, SG-XPCIE1FC-EM4, SG-XPCIE2FC-EM4, SG-XPCI1FC-QF4, SG-XPCI2FC-QF4 <b>Emulex:</b> LP11000, LP11002, LPe11000, LPe11002 <b>QLogic:</b> QLA2460, QLA2462	MPxIO

Table 1-45 ETERNUS 8000 (continued)

Operating System		Host Bus Adapter	Multipath
Type	Version		
HPUX	11iv1	HP: A6826A, AB378A	PV-Links
	11iv2	HP: A6826A, A6795A, A9782A, A9784A, AB378A, AB378B, AB379A, AB465A, AB378B,AD193A,AD300A,AD299A,AD355A	PV-Links(2007) VERITAS4.1 MP1 (DMP)  VERITAS5.0 MP1 (DMP)
	11iv3	HP: AB378A, AB379A, A6826A, A6795A, AB378B,AD193A,AD300A	Native Multipathing  PV-Links
AIX	5.2, 5.3	IBM: 5716, 1977, 5758, 1905, 5759, 1910, 6239, 6228	MPIO2.0.0 VERITAS4.0 MP1 (DMP) VERITAS5.0 MP1 (DMP)

Table 1-46 ETERNUS DX60 S2, ETERNUS DX80 S2, ETERNUS DX90 S2, ETERNUS DX400 S2 Series, ETERNUS DX8000 S2 Series, ETERNUS DX60, ETERNUS DX80, ETERNUS DX90, ETERNUS DX400 Series, ETERNUS DX8000 Series

Operating System		Host Bus Adapter	Multipath
Type	Version		
Windows Server 2008	Release 2	<b>Fujitsu:</b> PG-FC202, PG-FC203, PG-FC204, PG-FCD201, PG-FCD202, PG-FC205, PG-FC206 <b>Emulex:</b> LPe12000/LPe12002, LPe11000/LPe11002, LPe1150, LPe1250 <b>QLogic:</b> QLE2560/QLE2562, QLE2460/QLE 2462, QLE2340/QLE2342	EMPD  MSDSM and EMPD  MSDSM and EMPD
Red Hat Enterprise Linux Server	6.1	<b>Fujitsu:</b> PG-FC202, PG-FC203, PG-FC204, PG-FCD201, PG-FCD202, PG-FC205, PG-FC206 <b>Emulex:</b> LPe12000/LPe12002, LPe11000/LPe11002, LPe1150, LPe1250 <b>QLogic:</b> QLE2560/QLE2562, QLE2460/QLE 2462, QLE2340/QLE2342	EMPD and Device Mapper  EMPD and Device Mapper  EMPD and Device Mapper
SUSE Linux Enterprise Server	Version 11	<b>Fujitsu:</b> PG-FC202, PG-FC203, PG-FC204, PG-FCD201, PG-FCD202, PG-FC205, PG-FC206 <b>Emulex:</b> LPe12000/LPe12002, LPe11000/LPe11002, LPe1150, LPe1250 <b>QLogic:</b> QLE2560/QLE2562, QLE2460/QLE 2462, QLE2340/QLE2342	EMPD and Device Mapper  EMPD and Device Mapper  EMPD and Device Mapper
ESXi	5.0	<b>Fujitsu:</b> PG-FC202, PG-FC203, PG-FC204, PG-FCD201, PG-FCD202, PG-FC205, PG-FC206 <b>Emulex:</b> LPe12000/LPe12002, LPe11000/LPe11002, LPe1150, LPe1250 <b>QLogic:</b> QLE2560/QLE2562, QLE2460/QLE 2462, QLE2340/QLE2342	Native MPIO

# ADTX

**Table 1-47**      *ArrayMasStor L*

Operating System		Host Bus Adapter	Multipath
Type	Version		
Windows 2000	Advanced Server (SP4)	Emulex: LP9802	Path Cruiser
Windows 2003	Enterprise Server	QLogic: QLA2340	
Linux	RedHat 7.1.14-3	<b>Emulex:</b> LP9802	No
Solaris	8, 9	<b>Sun:</b> SG-XPCI1FC-QF2	Veritas DMP

# Infortrend

**Table 1-48 EonStor F16F-R2A2**

Operating System		Host Bus Adapter	Multipath
Type	Version		
Windows 2000	Advanced Server (SP4)	Emulex: LP9002, LP9802	No
Windows 2003	Enterprise Server	<b>Emulex:</b> LP1050DC	
Linux	RedHat 8.0	<b>Emulex:</b> LP9002, 9802 <b>QLogic:</b> QLA2310	

**Table 1-49 EonStor 2510FS**

Operating System		Host Bus Adapter	Multipath
Type	Version		
Windows 2000	Advanced Server (SP4)	Emulex: LP9002, LP9802	No
Windows 2003	Enterprise Server	<b>Emulex:</b> LP1050DC	
Linux	RedHat 8.0	<b>Emulex:</b> LP9002, 9802 <b>QLogic:</b> QLA2310	

# 3PAR

**Table 1-50 3Par InServ Storage Server**

Qualified Operating System		Host Bus Adapter
Type	Version	
Windows 2000	SP4 x86 x64	<b>QLogic:</b> QLA2310F(L), QLA2340(L), QLA2342(L), QLA2344, QLA2350, QLA2352,QLE2360,QLE2362, 26K4859, 26K4841, 300874-B21, 361426-B21 381881-B21, 354054-B21, QLA2440, QLA2460,QLA2462, QLE2440,QLE2460, QLE2462,QLE2464, 26R0890, 26R0884, 41Y8527,39Y9306, 403619-B21,341-3574
Windows 2003	SP1, SP2, R2 SP1, R2 SP2 x86 x64 IA64	
Windows 2008	x86 x64 IA64	
Linux RH	RHEL 3, RHEL 4, RHEL 5	<b>Emulex:</b> LP952L, LP982,LP9002(L,DC), LP9402DC, LP9802(DC), LP10000(DC,ExDC),LP1050 (DC), 394757-B21, LP(e)1150, LP(e)11000,LP(e)11002, 39Y9186, 43W6859, 403621-B21, 341-3575
Linux SUSE	SLES 9, SLES 10	<b>QLogic:</b> QLA2310F(L), QLA 2302F, QLA2340, QLA2342, QLA2344, QLA2302, QLA2460, QLA2462, QLE2360, QLE2362, QLE2460, QLE2462, QLA2300F, QLA2440, QLE2440
AIX	5.1	<b>IBM:</b> 6228, 6239
	5.2	<b>IBM:</b> 6228 6239 5716
	AIX 5.3, AIX 6.1, IBM Virtual I/O Server	<b>IBM:</b> 6228 6239 5716 5758 5759 5773 5774
OnStor	EverON 2.2.x,3.0.x, 3.1.x	Included in EverON
HP-UX	11i v1, 11iv2, 11iv3	<b>HP:</b> 6795A 6826A 9782A 9784A AB465A AB378 AB379 AD193A AD194A A6795A
Tru64	5.1b	<b>HP:</b> KGPSA-CA KGPSA-DA (FCA-2354) KGPSA-EA (FCA-2384) A5132-AA (FCA2684) A5134-AA (FCA-2684DC)
Egenera	PAN Manager 5.0, 5.1	Egenera supplied
VMware ESX	ESX 3.0, 3.0.x, 3.5, 3i	All QLogic and Emulex fibre channel HBAs supported by VMware (excluding: 8Gbs HBAs)
NetApp	ONTAP 7.2.2, 7.2.3, 7.2.4, 7.2.5	Included in ONTAP O/S
Incipient iNSP	1.1	N/A
Data Domain O/S	4.3, 4.4, 4.5	Data Domain supplied

Table 1-51 3Par InServ Storage Server

Qualified Operating System		Host Bus Adapter
Type	Version	
Solaris	8, 9, 10 SPARC	Sun StorageTek: X6799A, X6727A, SG-XPCI1FC-QF2(QL2), SG-XPCI2FC-QF2(QF2-Z), SG-XPCI1FC-EM2, SG-XPCI2FC-EM2, SG-XPCI1FC-EM4-Z, SG-XPCI2FC-EM4-Z, SG-XPCIE1FC-EM4, SG-XPCIE2FC-EM4, SG-XPCI1FC-QF4, SG-XPCIE1FC-QF4, SG-XPCIE2FC-QF4  Emulex: LP9002S, LP9002L, LP9002DC, LP9802, LP10000, LP10000DC, LP10000ExDC, LP11000, LP11002  QLogic: QLA2300F, QLA2302F, QLA2310F(L), QLA2340(L), QLA2342(L), QLA2344, QLA2460, QLA2462
	10 x86, x64	Sun StorageTek: X6799A, X6727A, SG-XPCI1FC-QF2(QL2), SG-XPCI2FC-QF2(QF2-Z), SG-XPCI1FC-EM2, SG-XPCI2FC-EM2, SG-XPCI1FC-EM4-Z, SG-XPCI2FC-EM4-Z, SG-XPCIE1FC-EM4, SG-XPCIE2FC-EM4, SG-XPCI1FC-QF4, SG-XPCIE1FC-QF4, SG-XPCIE2FC-QF4,  QLogic: QLA2340(L)

## XIOtech

Table 1-52 Magnitude (Rel. 10.01/11.01), Magnitude 3D (Rel. 2.5/3.13), Magnitude 3D 3000 (Rel 4.1)

Operating System		Host Bus Adapter
Type	Version	
Windows 2000	Advanced Server (SP4)	<b>QLogic:</b> QLA2340, QLA2310, QLA2200
Windows 2003	Standard and Enterprise Editions	<b>Emulex:</b> LP9002L
Windows NT	4.0 (SP6a)	<b>QLogic:</b> QLA2340, QLA2200, QLA2310F
MacOS	10.3	<b>Apple:</b> M9274G/B
AIX	4.3.3, 5.1	<b>Cambex:</b> PC1000, PC2000
Linux	RedHat 8.0, AS 2.1, Enterprise 3.0	<b>QLogic:</b> QLA 2340, QLA 2310F, QLA2200
	Suse United 1.0, SLES 9	<b>QLogic:</b> QLA 2310F, QLA2340
HP-UX	11, 11i	<b>HP:</b> A6795A
		<b>Emulex:</b> LP9002L
Netware	5.1, 6, 6.5	<b>QLogic:</b> QLA 2310F, QLA 2340, QLA 2200
VMware	ESX Server	<b>QLogic:</b> QLA2310F
Solaris	7, 8, 9	<b>QLogic:</b> QLA2310F, QLA2200, QLA 2202FS, QSB 2340

Table 1-53 Emprise 5000 1.2.4

Operating System		Host Bus Adapter
Type	Version	
Windows 2000	Advanced Server (SP4)	<b>QLogic:</b> QLA2340, QLA2310, QLA2200
Windows 2003	Standard and Enterprise Editions	<b>Emulex:</b> LP9002L
Windows NT	4.0 (SP6a)	<b>QLogic:</b> QLA2340, QLA2200, QLA2310F
MacOS	10.3	<b>Apple:</b> M9274G/B
AIX	4.3.3, 5.1, 5.2, 5.3, 6.1	<b>Cambex:</b> PC1000, PC2000, PC 4000
Linux	RedHat 8.0, AS 2.1, Enterprise 3.0 CENT OS 4.7, 5.1 Linux Oracle EL 4.7, 5.1, 5.3 (x86, x64)	<b>QLogic:</b> QLA246x, QLA234x, QLE256x <b>Emulex:</b> LP9002L, LP 11000, LPe11000, LP1150, LPe1150 <b>Brocade:</b> 415, 425, 815, 825
	Suse United 1.0, SLES 9	<b>QLogic:</b> QLA 2310F, QLA2340
HP-UX	11, 11i, 11i V2 (PA-RISC & IA64)	<b>HP:</b> AB378B <b>Emulex:</b> LP9002L, LP 11000, LPe11000
Netware	5.1, 6, 6.5	<b>QLogic:</b> QLA 2310F, QLA 2340, QLA 2200
VMware	ESX Server	<b>QLogic:</b> QLA2310F
Solaris	7, 8, 9	<b>QLogic:</b> QLA2310F, QLA2200, QLA 2202FS, QSB 2340

Table 1-54 Emprise 7000 8.3.30

Operating System		Host Bus Adapter
Type	Version	
Windows 2000	Advanced Server (SP4)	<b>QLogic:</b> QLA2340, QLA2310, QLA2200
Windows 2003	Standard and Enterprise Editions	<b>Emulex:</b> LP9002L
Windows NT	4.0 (SP6a)	<b>QLogic:</b> QLA2340, QLA2200, QLA2310F
MacOS	10.3	<b>Apple:</b> M9274G/B
AIX	4.3.3, 5.1	<b>Cambex:</b> PC1000, PC2000
Linux	RedHat EL 2.1, 3.0, 4.5, 4.7, 4.8, 5.1, 5.2, 5.3 (x86, x64)	<b>QLogic:</b> QLA 234x, QLA 231x, QLA2200, QLA246x, QLx246 <b>Emulex:</b> LP11000, LPe1100x,
	SUSE ES 8, 9 SP2, 9SP3, 10 SP1, 10 SP2, 11 (x86, x64)	<b>QLogic:</b> QLA 2310F, QLA2340
HP-UX	11, 11i v2, 11iv3 (PA-RISC, IA64)	<b>Emulex:</b> LP11000, LPe1100x
Netware	5.1 SP7, 6.0 SP5, 6.5 SP3, 6.5 SP6, 6.5 SP8 (x86)	<b>QLogic:</b> QLA 231x, QLx 246x, QLA234x
VMware	ESX 3.5, vSphere 4.0	<b>QLogic:</b> QLA 231x, QLx 246x, QLA234x
Solaris	8, 7, 9, 10 (SPARC), 10 (x86, x64)	<b>Emulex:</b> LP11000, LPe1100x,

Table 1-55 Distance Extension<sup>1</sup>

Distance System	Maximum Distance	Network	Protocol	Storage System
MDS IPS-8	See note after this table.	DWDM	Geo-Replication (Sync mode)	Magnitude 10.01, 11.01
MDS IPS-4		CWDM		Magnitude 3D 2.5, 3.13
MPS-14/2		FCIP		Magnitude 3D 3000 4.1
MDS9216i				

- Supported distance is determined by XIOtech, based on customer's application requirement. XioTech accepts Cisco's qualification of the Cisco iSCSI drivers and Microsoft iSCSI drivers with the Cisco MDS 9000 Family switches

## NetApp

Table 1-56 FAS and V-series Product Families

Operating System	Data ONTAP Version	Cisco Switch Model
All NetApp FCP Host Kit w/Multipath	6.4 (6.4.2,6.4.3,6.4.4,6.4.5)	MDS 9216, MDS 9509
	6.4 (6.4.2,6.4.3,6.4.4,6.4.5)	
	6.5 (6.5.1,6.5.2)	
	6.5 (6.5.1,6.5.2)	MDS 9506
	6.5 (6.5.6.5.1,6.5.2)	MDS 9216i, 9509, 9506
	6.5 (6.5.3,6.5.4,6.5.5,6.5.6)	MDS, 9216i, 9509, 9506
	7.0 (7.0.7.0.1,7.0.2,7.0.3,7.0.4,7.0.5,7.0.6)	
	6.5 (6.5.4,6.5.5,6.5.6); 7.0 (7.0.7.0.1,7.0.2,7.0.3,7.0.4,7.0.5,7.0.6)	
	7.1 (7.1.7.1.0.1,7.1.1,7.1.1.1,7.1.2,7.1.2.1)	
	7.2 (7.2.1,7.2.1.1,7.2.2,7.2.2L1,7.2.3)	MDS 9216 A, 9216i, 9509, 9506
7.2 (7.2.4)		
7.2 (7.2.4L1)		
7.2 (7.2.2.1,7.2.1.1,7.2.2,7.2.2L1,7.2.3)		
7.2 (7.2.4)	MDS 9020	
7.2 (7.2.4L1)		
7.0 (7.0.1,7.0.2,7.0.3,7.0.4,7.0.5,7.0.6)		
7.1 (7.1.7.1.0.1,7.1.1,7.1.1.1,7.1.2,7.1.2.1)		
7.0 (7.0.3,7.0.4,7.0.5,7.0.6)	MDS 9216i, 9509, 9506	
7.1 (7.1.7.1.0.1,7.1.1,7.1.1.1,7.1.2,7.1.2.1)		
7.2 (7.2.7.2.1,7.2.1.1,7.2.2,7.2.2L1,7.2.3)		
7.2 (7.2.4)		
7.2 (7.2.4L1)		
7.0 (7.0.4,7.0.5,7.0.6); 7.1(7.1.7.1.0.1,7.1.1,7.1.1.1,7.1.2,7.1.2.1) 7.2(7.2.7.2.1,7.2.1.1,7.2.2,7.2.2L1,7.2.3)	MDS 9216i, 9509, 9506, 9513, 9222i	
7.2 (7.2.4)		
7.2 (7.2.4L1)		

Table 1-56 FAS and V-series Product Families (continued)

Operating System	Data ONTAP Version	Cisco Switch Model
	7.1 7.1.0.1-7.1.2.1 7.0 (7.0.5,7.0.6) 7.2 (7.2.4) 7.2 7.2-7.2.3 7.2 (7.2.4L1)	MDS 9216i, 9509, 9506, 9513, 9222i
	7.2 (7.2.4) 7.2 7.2-7.2.3 7.1 7.1.0.1-7.1.2.1 7.0 (7.0.5,7.0.6) 7.2 (7.2.4L1)	MDS 9124, 9513, 9509, 9506, 9216i, 9216A, 9222i Cisco- HP C-Class 9124e Cisco - IBM BladeCenter Blade DS-IBM-FC-K9
	7.2 (7.2.4) 7.0 7.0.5-7.0.6 7.1 7.1.0.1-7.1.2.1 7.2 7.2-7.2.3 7.2 (7.2.4L1) 7.2.5, 7.2.6, 7.3.2, 7.3.3, 8.0 7.2.7, 7.3.5.1, 8.0.1 7-mode, 8.0.2 7-mode	MDS 9124, 9513, 9509, 9506, 9216i, 9216A, 9124, 9134, 9222i Cisco 9134 N-Port Virtualizer (NPV) Cisco 9124 N-Port Virtualizer (NPV) Cisco- HP C-Class 9124e Cisco- HP C-Class 9124e N-Port Virtualizer (NPV) Cisco - IBM BladeCenter Blade DS-IBM-FC-K9, DS-IBM-FC-K9 DS-IBM-FC-K9, DS-IBM-FC-K9 N-Port Virtualizer (NPV)
	7.2.5.1, 7.2.6, 7.2.6.1, 7.2.7 7.3.1, 7.3.1.1, 7.3.1.1L1, 7.3.2, 7.3.3, 7.3.4 7.3.5.1,7.3.6 8.0 7-mode, 8.0.1 7-mode, 8.0.2 7-mode	MDS 9148, 9222i, 9513, 9509, 9506 FCoE in the Cisco Nexus 7000 Series 32-port 1/10 Gigabit Ethernet module (N7K-F132XP-15)

# Pillar Data Systems

**Table 1-57** Axiom Storage System 300, 500

Operating System		Host Bus Adapter	Multipath (APM driver)
Type	Version		
Windows 2000	Server with SP4 (x86); Advanced Server with SP4 (x86)	<b>Qlogic:</b> QLA2200, QLA2310, QLA2340/42/44, QLE2460/62, QLA2460/62, QMH2462 <b>Emulex:</b> LP982, LP1050, LP9402DC, LP9802/DC, LP10000/DC, LP/e1150, LP11000/2, LPe11000/2	2.2.8 2.3.4
Windows 2003	Standard Edition with SP1 (x86, x64); Enterprise Edition with SP1 (x86, x64, IA64)	<b>Qlogic:</b> QLA2200, QLA2310, QLA2340/42/44, QLE2460/62, QLA2460/62, QMH2462 <b>Emulex:</b> LP982, LP1050, LP9402DC, LP9802/DC, LP10000/DC, LP/e1150, LP11000/2, LPe11000/2	
Linux	RedHat ES 3.0/4.0/5.0 OEL4.0	<b>Qlogic:</b> QLA2310F/L QLA2340/2/4, QLA2460/2, QLE2460/2 <b>Emulex:</b> LP10000/DC, LP11000/2, LPe11000/2	2.2.2
	SUSE 9	<b>Qlogic:</b> QLA2310F/L QLA2340/2/4, QLA2460/2, QLE2460/2 <b>Emulex:</b> LP10000/DC, LP11000/2, LPe11000/2	
Solaris	8, 9,10	<b>Qlogic:</b> QLA2200, QLA2310, QLA2340/42/44, QCP2340/42 <b>Emulex:</b> LP952/L, LP982, LP9002/DC, LP9402DC, LP9802/DC, LP1050 LP10000/DC	01.04.05 2.02
AIX	5.2, 5.3	<b>IBM:</b> 5716, 5758,5759,6228, 6239	2.0.6 2.1.4
ONStor	EverON 1.2.8.6	Internal HBA	Native
VMware ESX	2.5.2, 3.0.2, 3.5	<b>Qlogic:</b> QLA2310, QLA234x	

# Apple Computer

**Table 1-58** Xserve RAID

Operating System		Host Bus Adapter
Type	Version	
Windows 2000	Advanced Server (SP4)	<b>LSI:</b> 44929O <b>QLogic:</b> QLA 2310F
MacOS X Server	10.3.2	<b>Apple:</b> Dual FC HBA P/N M8940 G/D

# ATTO

**Table 1-59** *ATTO Diamond V Class Array*

Operating System		Host Bus Adapter	Multipath
Type	Version		
Windows Server 2003	Enterprise Edition	ATTO: FC3300, FC-21PS, FC-22XH	No
Solaris	9	ATTO: FC-21PS	
Mac OSX (Tiger)	10.3.9, 10.4.2	ATTO: FC-41XS, FC-21PS	
Mac OSX (Panther)	10.3.9	ATTO: FC-21PS	

**Table 1-60** *HP EVA 4x00, 6x00, 8x00*

Operating System		Host Bus Adapter	Multipath
Type	Version		
MacOS	10.4.11	ATTO: Celerity FC-41XS, Celerity FC-41ES, Celerity FC-42ES, Celerity FC-44ES	No

# Compellent

**Table 1-61 Storage Center**

Operating System		Host Bus Adapter
Type	Version	
Mac OS X	10.5.8 Intel	<b>LSI:</b> LSI7202EP
HP-UX	11i v2, 11iv3	<b>HP:</b> A6795A, AD194 / <b>Emulex:</b> <b>Emulex:</b> LP9xxx, LP11xxx
Tru64	5.1A	<b>HP:</b> FCA2684
OpenVMS	8.3	<b>HP:</b> FCA2354
AIX	5.2, 5.3, 6.1	<b>Cambex:</b> PC2000, PC4000 <b>IBM:</b> 5758, 5759
Windows 2000	x86	<b>Qlogic:</b> QLA23xx
Windows 2003	x86, x64	<b>Qlogic:</b> QLA24xx, QLE24xx, QLA23xx <b>Emulex:</b> LP11xxx, LPe11xxx, LPe12xxx
Windows 2008	x86, x64	<b>Qlogic:</b> QLA23xx, QLA24xx <b>Emulex:</b> LPe11xxx, LPe12xxx
NetWare	6.5	<b>Qlogic:</b> QLA23xx, QLA24xx
Linux	SLES 10	<b>Qlogic:</b> QLA24xx, QLE24xx
	RHEL 5	<b>Qlogic:</b> QLA23xx, QLE24xx <b>Emulex:</b> LPe12xxx
Solaris	9, 10	<b>Qlogic:</b> QLA23xx, QLA24xx
VMWare	ESX 3.5, ESX 4.0	<b>Qlogic:</b> QLA23xx, QLA24xx, QLE24xx

# Nexsan

**Table 1-62 ATAboy-2X**

Qualified Operating System		Host Bus Adapter
Type	Version	
Windows 2000	Advanced Server (SP3)	QLogic: QLA 2312
Windows 2003		
RedHat	9	
RHEL	Update 3	

**Table 1-63 ATAbeast**

Qualified Operating System		Host Bus Adapter
Type	Version	
Windows 2000	Advanced Server (SP3)	QLogic: QLA 2312
Windows 2003		
RedHat	9	
RHEL	Update 3	

**Table 1-64 SATABoy**

Qualified Operating System		Host Bus Adapter
Type	Version	
Windows 2000	Advanced Server (SP3)	QLogic: QLA 2312
Windows 2003		
RedHat	9	
RHEL	Update 3	