



**Enterprise Backup Solution
Hardware/Software
Compatibility Matrix
March 2003**

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This compatibility matrix does not imply interoperability among all components listed. Please refer to either the Heterogeneous Open SAN Design Reference Guide or consult with your hp solutions provider for assistance.

**STORAGE HARDWARE / SOFTWARE
COMPATIBILITY MATRIX**

Libraries | Operating Systems | RAID Arrays | Infrastructure | Servers
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	HP Data Protector	HP Omniback II	Atempo Time Navigator	BakBone NetVault	CA BrightStor ARCserve	CA BrightStor EB	CommVault Galaxy	Legato NetWorker	Syncsort Backup Express	Tivoli Storage Manager	VERITAS Backup Exec	VERITAS NetBackup
Enterprise Libraries												
ESL 9595 L1	✓	✓			✓		✓	✓	✓		✓	✓
ESL 9595 S2	✓	✓			✓	✓	✓	✓	✓		✓	✓
ESL 9595 SL	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓
ESL 9326 SL	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ESL 9326 DX	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ESL 9322 L1	✓	✓			✓		✓	✓	✓		✓	✓
ESL 9322 S2	✓	✓			✓	✓	✓	✓	✓		✓	✓
ESL 9198 SL	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ESL 9198 DLX	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Mid-Range Libraries												
MSL 5060 L1	✓	✓			✓			✓			✓	✓
MSL 5052 S2	✓	✓			✓	✓	✓	✓	✓		✓	✓
MSL 5052 SL	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓
MSL 5030 L1	✓	✓			✓			✓			✓	✓
MSL 5026 S2	✓	✓			✓	✓	✓	✓	✓		✓	✓
MSL 5026 SL	✓	✓	✓	✓	✓	✓	✓	✓	✓	Standalone Only	✓	✓
MSL 5026 DLX	✓	✓	✓	✓	✓	✓	✓	✓	✓	Standalone Only	✓	✓
SSL 2020 TL	✓	✓	✓	✓	✓		✓	Windows/Solaris Homogeneous	✓	Windows/Solaris Homogeneous	✓	Windows/Solaris Homogeneous

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	HP Data Protector	HP Omniback II	Atempo Time Navigator	BakBone NetVault	CA BrightStor ARCserve	CA BrightStor EB	CommVault Galaxy	Legato NetWorker	Syncsort Backup Express	Tivoli Storage Manager	VERITAS Backup Exec	VERITAS NetBackup
Operating Systems												
HP-UX 11.0	✓	✓		✓ ²		✓ ²	✓ ²	✓	✓ ²			✓
HP-UX 11.11	✓	✓	✓ ²					✓	✓ ²			✓
HP-UX 11.22	✓											
WIN NT 4.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	TSM 4.1.x	✓	✓
WIN 2000 Server/AS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Tru64 5.1 ³								✓ ³				✓ ³
Tru64 5.1A ³	✓		✓ ³	✓ ³		✓ ³	✓ ³	✓ ³	✓ ³			✓ ³
Tru64 5.1B ³								✓ ³				
Linux Redhat Advanced Server 2.1												
Linux Redhat 7.1	✓	✓						✓	✓			
Linux Redhat 7.2	✓	✓						✓				
Linux Redhat 7.3								✓				
Linux SuSE 7.0								✓				
Linux SuSE 7.3								✓				
NetWare 5.1	✓	✓		✓	✓				✓		✓	
NetWare 6.0	✓				✓				✓		✓	
Solaris 7	✓	✓						✓		✓		✓
Solaris 8	✓	✓	✓	✓		✓	✓	✓	✓	✓		✓
Solaris 9	✓							✓				✓
AIX 4.3.3	✓ ⁵			✓				✓		✓		✓
AIX 5.1L								✓ ¹				
High Availability												
HP-UX (Service Guard) ⁴	✓	✓										✓ ⁶
Windows (MSCS)			✓	(no failover)			✓	MSCS (next scheduled job)	✓	MSCS (next scheduled job)	MSCS (Checkpoint Restart)	MSCS (Job restart)
Tru64 (TruCluster)			✓					✓	✓			✓
NetWare 5.1 (NWCS)											NWCS (no failover)	
NetWare 6.0 (NWCS)									✓		NWCS (no failover)	
Solaris												VERITAS Cluster Server (no failover)

NOTES:

- 1) DLT8000 products not supported
- 2) A-Class, L-Class, N-Class, and V-Class servers only
- 3) Ultrium generation 2 LTO support only when available
- 4) Supported on XP raid array products only
- 5) Robot control is performed on Windows platform
- 6) ATS is not supported
- 7) Supports ESL9000 libraries in a homogeneous environment only

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	HP Data Protector	HP Omniback II	Atempo Time Navigator	BakBone NetVault	CA BrightStor ARCserve	CA BrightStor EB	CommVault Galaxy	Legato NetWorker	Syncsort Backup Express	Tivoli Storage Manager	VERITAS Backup Exec	VERITAS NetBackup
RAID Arrays												
XP 1024/128 ¹	✓				✓			✓			✓	✓
XP 48/512 ¹	✓				✓			✓			✓	✓
Zero Downtime with XP	✓	✓										
Instant Recovery with XP	✓	✓										
Enterprise Virtual Array (EVA) ¹	Solaris, Tru64, HP- UX, and NT/WIN2K	NT/WIN2K only	NT/WIN2K only	NT/WIN2K only	✓ ³	NT/WIN2K only	NT/WIN2K only	✓	NT/WIN2K only		✓ ³	✓
VA 7410/7110 ¹	✓				✓			✓			✓	✓
VA 7400/7100 ¹	✓				✓			✓			✓	✓
EMA 16000 ¹	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EMA 12000/8000 ¹	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MSA1000 ^{2, 4}	NT/WIN2K only	NT/WIN2K only	NT/WIN2K only	NT/WIN2K only	✓	NT/WIN2K only	NT/WIN2K only	NT/WIN2K & LINUX	NT/WIN2K only		✓	NT/WIN2K only

NOTES:

- 1) Consult with your hp solutions provider for disk array SAN compatibility information
- 2) The MSA1000 can be configured as a stand alone raid array or used in conjunction with the optional MSA Fabric Switch 6.
For compatibility information about the optional MSA Fabric Switch 6, refer to the [Infrastructure](#) page within this document for support details
- 3) Netware 5.1 & 6.0 supported in single path configuration with FCA 2210 HBA only
- 4) NetWare 5.1 & 6.0 supported with FCA2210 HBA only

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	HP Data Protector	HP Omniback II	Atempo Time Navigator	BakBone NetVault	CA BrightStor ARCserve	CA BrightStor EB	CommVault Galaxy	Legato NetWorker	Syncsort Backup Express	Tivoli Storage Manager	VERITAS Backup Exec	VERITAS NetBackup
Interconnects¹												
Director Switch 2/140	✓	✓			✓	✓		✓			✓	✓
Director Switch 2/64	✓	✓			✓	✓		✓			✓	✓
Edge Switch 2/32	✓	✓			✓	✓		✓			✓	✓
Edge Switch 2/24	✓	✓			✓	✓		✓			✓	✓
Edge Switch 2/16	✓	✓			✓	✓		✓			✓	✓
Core Switch 2/64	✓	✓			✓	✓		✓			✓	✓
SAN Switch 2/32	✓	✓			✓	✓		✓			✓	✓
SAN Switch 2/16	✓	✓			✓	✓	✓	✓	✓		✓	✓
SAN Switch 2/8	✓	✓			✓	✓	✓	✓	✓		✓	✓
SAN Switch 2/16-EL	✓	✓			✓	✓	✓	✓	✓		✓	✓
SAN Switch 2/8-EL	✓	✓			✓	✓	✓	✓	✓		✓	✓
SAN Switch 16	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
SAN Switch 8	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
SAN Switch 16EL	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
SAN Switch 8EL	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
FC Switch 16B	✓	✓			✓	✓	✓	✓	✓		✓	✓
FC Switch 8B	✓	✓			✓	✓	✓	✓	✓		✓	✓
MSA Fabric Switch 6											✓	
FC-AL Switch ²	✓	✓	✓	✓	✓		✓		✓		✓	

NOTES:

- 1) Refer to [Heterogeneous Open SAN Design Reference Guide](http://h18000.www1.hp.com/products/storageworks/san/documentation.html) for switch configuration rules and guidelines located at:
<http://h18000.www1.hp.com/products/storageworks/san/documentation.html> or consult with your hp solutions provider for assistance
- 2) NSR products do not support FC-AL Switch

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	HP Data Protector	HP Omniback II	Atempo Time Navigator	BakBone NetVault	CA BrightStor ARCserve	CA BrightStor EB	CommVault Galaxy	Legato NetWorker	Syncsort Backup Express	Tivoli Storage Manager	VERITAS Backup Exec	VERITAS NetBackup
Bridges												
NSR M2402	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓
NSR N1200	✓	✓			✓			✓			✓	✓
NSR E1200	✓	✓			✓			✓			✓	✓
NSR E2400	✓	✓			✓			✓			✓	✓
MDR ³	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Serverless (3PC) Backup Support												
NSR M2402					Win2K Serverless opt w/ HSG only	Win2K Serverless opt w/ HSG only						Sol 8 NBU 4.5 nbu_snap w/ HSG only ⁴
NSR N1200					Win2K Serverless opt w/ HSG only	Win2K Serverless opt w/ HSG only						Sol 8 NBU 4.5 nbu_snap w/ HSG only ⁴
NSR E1200					Win2K Serverless opt w/ HSG only	Win2K Serverless opt w/ HSG only						Sol 8 NBU 4.5 nbu_snap w/ HSG only ⁴
NSR E2400					Win2K Serverless opt w/ HSG only	Win2K Serverless opt w/ HSG only						Sol 8 NBU 4.5 nbu_snap w/ HSG only ⁴

NOTES:

3) MDR does not support the following libraries:

- LTO-based libraries MSL5060L1, MSL5030L1, ESL9595L1 and ESL9322L1
- SDLT2-based libraries MSL5026S2, MSL5052S2, ESL9322S2 and ESL9595S2

4) Master router configuration not supported

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	HP Data Protector	HP Omniback II	Atempo Time Navigator	BakBone NetVault	CA BrightStor ARCserve	CA BrightStor EB	CommVault Galaxy	Legato NetWorker	Syncsort Backup Express	Tivoli Storage Manager	VERITAS Backup Exec	VERITAS NetBackup
Servers												
HP SuperDome (pa-risc)	✓	✓						✓				✓
HP rp series (pa-risc)	✓	✓						✓				✓
HP A, L, N, and V-Class	✓	✓	✓	✓		✓	✓	✓	✓			✓
HP ProLiant	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
HP NetServer	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
HP AlphaServer	✓		✓	✓		✓	✓	✓	✓			✓
IBM RS/6000	✓			✓				✓		✓		✓
Sun UltraSPARC	✓	✓	✓	✓		✓	✓	✓	✓	✓		✓
Third Party X86	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
NAS												
NAS 8000	✓	✓										
NAS Executor 7000	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓
NAS B3000	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓
NAS B2000	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓

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Host Bus Adapters¹												
HP-UX												
A6795A (2G)	✓	✓						✓				✓
A6685A (1G)	✓	✓						✓				✓
A5158A (1G)	✓	✓	✓	✓		✓	✓	✓	✓			✓
Tru64												
FCA2354 (2G)								✓		✓		✓
KGPSA -CA (1G)	✓		✓	✓		✓	✓	✓	✓			✓
Solaris												
FCA2257P (2G - PCI)												
FCA2257C (1G - cPCI)												
FCA2257S (1G - Sbus)												
SWSA4-SC 64-bit (1G - Sbus)	✓	✓	✓	✓		✓	✓	✓	✓	✓		✓
SWSA4-PC 32-bit (1G - PCI)								✓		✓		✓
JNI FCE6460 (2G - PCI)												
JNI FCC6460 (2G - cPCI)												
JNI FCE6410 (1G - PCI)	✓	✓						✓				✓
AIX												
IBM 6228 (2G)	✓	✓						✓				✓
PCto-FC HBA for AIX (1G) 197819-B21	✓	✓		✓				✓		✓		✓

NOTES:

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- 2) COMPAQ HBAs
- 3) Supports Enterprise Virtual Array (single path only) and MSA1000 (with external HP StorageWorks SAN switch only).
- 4) Heterogeneous Windows and NetWare configurations require FCA-2210 HBA for access to shared tape. If the configuration includes NetWare 6, HSG80-based disk storage (MA8000, EMA16000) and shared tape, servers must be configured with Compaq HBA's for disk storage and FCA-2210 HBA's for tape storage (separate switch zones for disk and tape).

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	HP Data Protector	HP Omniback II	Atempo Time Navigator	BakBone NetVault	CA BrightStor ARCserve	CA BrightStor EB	CommVault Galaxy	Legato NetWorker	Syncsort Backup Express	Tivoli Storage Manager	VERITAS Backup Exec	VERITAS NetBackup
Host Bus Adapters¹												
Windows												
FCA2355 (2G)	✓	✓			✓			✓		✓	✓	✓
ISP2312 (2G - BL20pG2 Blade Server)	✓										✓	✓
FCA2101 (2G)	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓
64-bit/33MHz PCI to FC (1G) KGPSA-CB	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
LINUX												
FCA2214 (2G)												
QLA2200 (1G)	✓	✓						✓	✓			
NetWare												
FCA2210 (2G)											✓ ³	
64-bit / 66 MHz PCI to FC HBA ^{2, 4} (1G)	✓	✓		✓	✓				✓		✓	
32-bit / 33 MHz HBA ^{2, 4} (1G)	✓	✓			✓				✓		✓	

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OpenView												
Storage Virtual Replicator					✓			✓		✓	✓	✓
OV-SAM	✓	✓			✓			✓			✓	✓
StorageWorks												
Data Replication Manager					✓			✓		✓	✓	NT/WIN2K only
Enterprise Volume Manager			✓		✓		✓	✓		✓	NT/WIN2K only	NT/WIN2K only
Tools and Utilities												
Smart Start	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Insight Manager 7					✓			✓		✓	✓	✓

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Disk Array Multipath¹												
AutoPath for HP-UX ¹	✓	✓						✓				✓
Secure Path for HP-UX ¹	EVA Only							EVA Only				EVA Only
Secure Path for WIN NT ¹	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Secure Path for WIN 2000 ¹	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
AutoPath for Windows 2000 ¹											✓	
Tru64 Multipath ²								✓	✓			✓
Secure Path for NetWare ¹											✓ ³	
Secure Path for Solaris ¹								✓		✓		✓
Secure Path for AIX ¹												
IBM DPO										✓		

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<http://h18000.www1.hp.com/products/storageworks/san/documentation.html> or consult with your hp solutions provider for assistance

2) Multipath to tape supported

3) MSA1000 requires 3.0c with FCA-2210, HSG80's require 3.0b with COMPAQ HBAs

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Components & Firmware	Current Release	HP Data Protector	HP OmniBack	Atempo Time Navigator	BakBone NetVault	CA BrightStor ARCserve	CA BrightStor EB	CommVault Galaxy	Legato NetWorker	Syncsort Backup Express	Tivoli Storage Manager	VERITAS Backup Exec	VERITAS NetBackup
Enterprise Libraries													
ESL 9595 L1													
Robot FW	3.31	3.31	3.31			3.31		3.31	3.31	3.31		3.31	3.31
Drive FW Ultrium LTO Gen1	E30W (005.452)	E30W (005.452)	E30W (005.452)			E30W (005.452)		E30W (005.452)	E30W (005.452)	E30W (005.452)		E30W (005.452)	E30W (005.452)
ESL 9595 S2													
Robot FW	3.31	3.31	3.31			3.31	3.20	3.20	3.31	3.20		3.31	3.31
Drive FW SDLT 160/320	v51	v51	v51			v51	V35	V35	v51	V35		v51	v51
ESL 9595 SL													
Robot FW	3.31	3.31	3.31	3.20p5	3.20p5	3.31	3.20	3.20	3.31	3.20		3.31	3.31
Drive FW SDLT 110/220	v51	v51	v51	V35	V35	v51	V35	V35	v51	V35		v51	v51
ESL 9326 SL													
Robot FW	3.31	3.31	3.31	3.20p5	3.20p5	3.31	3.20	3.20	3.31	3.20		3.31	3.31
Drive FW SDLT 110/220	v51	v51	v51	V35	V35	v51	V35	V35	v51	V35		v51	v51
ESL 9326 DX													
Robot FW	3.31	3.31	3.31	3.20p5	3.20p5	3.31	3.20	3.20	3.31	3.20		3.31	3.31
Drive FW 40/80	V80	V80	V80	V80	V80	V80	V80	V80	V80	V80		V80	V80
ESL 9322 L1													
Robot FW	3.31	3.31	3.31			3.31		3.31	3.31	3.31		3.31	3.31
Drive FW Ultrium LTO Gen1	E30W (005.452)	E30W (005.452)	E30W (005.452)			E30W (005.452)		E30W (005.452)	E30W (005.452)	E30W (005.452)		E30W (005.452)	E30W (005.452)
ESL 9322 S2													
Robot FW	3.31	3.31	3.31			3.31	3.20	3.20	3.31	3.20		3.31	3.31
Drive FW SDLT 160/320	v51	v51	v51			v51	V35	V35	v51	V35		v51	v51
ESL 9198 SL													
Robot FW	3.31	3.31	3.31	3.20p5	3.20p5	3.31	3.20	3.20	3.31	3.20		3.31	3.31
Drive FW SDLT 110/220	v51	v51	v51	V35	V35	v51	V35	V35	v51	V35		v51	v51
ESL 9198 DLX													
Robot FW	3.31	3.31	3.31	3.20p5	3.20p5	3.31	3.20	3.20	3.31	3.20		3.31	3.31
Drive FW 40/80	v80	v80	v80	V80	V80	v80	V80	V80	v80	V80		v80	v80

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Components & Firmware	Current Release	HP Data Protector	HP OmniBack	Atempo Time Navigator	BakBone NetVault	CA BrightStor ARCserve	CA BrightStor EB	CommVault Galaxy	Legato NetWorker	Syncsort Backup Express	Tivoli Storage Manager	VERITAS Backup Exec	VERITAS NetBackup
Mid-Range Libraries													
MSL 5060 L1													
Robot FW	4.08	4.08	4.08			4.08			4.08			4.08	4.08
Drive FW Ultrium LTO Gen1	E30W (005.452)	E30W (005.452)	E30W (005.452)			E30W (005.452)			E30W (005.452)			E30W (005.452)	E30W (005.452)
MSL 5052 S2													
Robot FW	4.08	4.08	4.08			4.08	3.11	3.11	4.08	3.11		4.08	4.08
Drive FW SDLT 160/320	v51	v51	v51			v51	v35	V35	v51	V35		v51	v51
MSL 5052 SL													
Robot FW	4.08	4.08	4.08	3.11	3.11	4.08	3.11	3.11	4.08	3.11		4.08	4.08
Drive FW SDLT 110/220	v51	v51	v51	V35	V35	v51	v35	V35	v51	v35		v51	v51
MSL 5030 L1													
Robot FW	4.08	4.08	4.08			4.08			4.08			4.08	4.08
Drive FW Ultrium LTO Gen1	E30W (005.452)	E30W (005.452)	E30W (005.452)			E30W (005.452)			E30W (005.452)			E30W (005.452)	E30W (005.452)
MSL 5026 S2													
Robot FW	4.08	4.08	4.08			4.08	3.11	3.11	4.08	3.11		4.08	4.08
Drive FW SDLT 160/320	v51	v51	v51			v51	v35	V35	v51	V35		v51	v51
MSL 5026 SL													
Robot FW	4.08	4.08	4.08	3.11	3.11	4.08	3.11	3.11	4.08	3.11		4.08	4.08
SDLT 110/220 FW	v51	v51	v51	V35	V35	v51	V35	V35	v51	v35		v51	v51
MSL 5026 DLX													
Robot FW	4.08	4.08	4.08	3.11	3.11	4.08	3.11	3.11	4.08	3.11		4.08	4.08
Drive FW 40/80	v80	v80	v80	V80	V80	v80	v80	V80	v80	v80		v80	v80
SSL 2020 TL													
Robot FW	4.16	4.16	4.16	4.15	4.15	4.16		4.16	4.16	4.16		4.16	4.16
Drive FW AIT50	1.32	1.32	1.32	1.30	1.30	1.32		1.30	1.32	1.27		1.32	1.32
RAID Arrays													
XP 1024/128	21.04.04.00/00	21.04.04.00/00				21.04.04.00/00			21.04.04.00/00			21.04.04.00/00	21.04.04.00/00
XP 48/512	01.18.48.00/00	01.18.48.00/00				01.18.48.00/00			01.18.48.00/00			01.18.48.00/00	01.18.48.00/00
Zero Downtime with XP													
Instant Recovery with XP													
Enterprise Virtual Array (EVA) FW	2.002	2.002	2.002	v2_w020214-2000	v2_w020214-2000	2.002	2.0	2.0	2.002	2.0		2.002	2.002
VA 7410/7110	ha A100	ha A100				ha A100			ha A100			ha A100	ha A100
VA 7400/7100	hp18	hp18				hp18			hp18			hp18	hp18
EMA 16000	ACS 8.7	ACS 8.7	ACS 8.7	8.6	8.6	ACS 8.7	8.6	8.6	ACS 8.7	8.6		ACS 8.7	ACS 8.7
EMA 12000/8000	ACS 8.7	ACS 8.7	ACS 8.7	8.6	8.6	ACS 8.7	8.6	8.6	ACS 8.7	8.6		ACS 8.7	ACS 8.7
MSA1000													
MSA1000 Controller	2.38	2.38	2.38	1.14	1.14	2.38	1.14	1.14	2.38	1.14		2.38	2.38
MSA1000 GEM	1.86	1.86	1.86			1.86			1.86			1.86	1.86
MSA1000 Fabric Switch 6	101G12											101G12	
Bridges													
NSR M2402	4.03.19	4.03.19	4.03.19	4.02	4.02	4.03.19	4.02.aw	4.02.aw	4.03.19	4.02.aw		4.03.19	4.03.19
NSR N1200	4.03.19	4.03.19	4.03.19			4.03.19			4.03.19			4.03.19	4.03.19
NSR E2400	4.03.19	4.03.19	4.03.19			4.03.19			4.03.19			4.03.19	4.03.19
NSR E1200	4.03.19	4.03.19	4.03.19			4.03.19			4.03.19			4.03.19	4.03.19
MDR	v1187	v1187	v1187	v1186	v1186	v1187	v1187	v1187	v1187	V1187		v1187	v1187

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Components & Firmware	Current Release	HP Data Protector	HP OmniBack	Atempo Time Navigator	BakBone NetVault	CA BrightStor ARCserve	CA BrightStor EB	CommVault Galaxy	Legato NetWorker	Syncsort Backup Express	Tivoli Storage Manager	VERITAS Backup Exec	VERITAS NetBackup
Interconnects													
Director Switch 2/140	v4.01.02, HAFM (required) v06.03.01	v4.01.02, HAFM (required) v06.03.01	v4.01.02, HAFM (required) v06.03.01			v4.01.02, HAFM (required) v06.03.01	v4.01.02, HAFM (required) v06.03.01		v4.01.02, HAFM (required) v06.03.01			v4.01.02, HAFM (required) v06.03.01	v4.01.02, HAFM (required) v06.03.01
Director Switch 2/64	v4.01.02, HAFM (required) v06.03.01	v4.01.02, HAFM (required) v06.03.01	v4.01.02, HAFM (required) v06.03.01			v4.01.02, HAFM (required) v06.03.01	v4.01.02, HAFM (required) v06.03.01		v4.01.02, HAFM (required) v06.03.01			v4.01.02, HAFM (required) v06.03.01	v4.01.02, HAFM (required) v06.03.01
Edge Switch 2/32	v4.01.02, HAFM (required) v06.03.01	v4.01.02, HAFM (required) v06.03.01	v4.01.02, HAFM (required) v06.03.01			v4.01.02, HAFM (required) v06.03.01	v4.01.02, HAFM (required) v06.03.01		v4.01.02, HAFM (required) v06.03.01			v4.01.02, HAFM (required) v06.03.01	v4.01.02, HAFM (required) v06.03.01
Edge Switch 2/24	v4.01.02, HAFM (required) v06.03.01	v4.01.02, HAFM (required) v06.03.01	v4.01.02, HAFM (required) v06.03.01			v4.01.02, HAFM (required) v06.03.01	v4.01.02, HAFM (required) v06.03.01		v4.01.02, HAFM (required) v06.03.01			v4.01.02, HAFM (required) v06.03.01	v4.01.02, HAFM (required) v06.03.01
Edge Switch 2/16	v4.01.02, HAFM (required) v06.03.01	v4.01.02, HAFM (required) v06.03.01	v4.01.02, HAFM (required) v06.03.01			v4.01.02, HAFM (required) v06.03.01	v4.01.02, HAFM (required) v06.03.01		v4.01.02, HAFM (required) v06.03.01			v4.01.02, HAFM (required) v06.03.01	v4.01.02, HAFM (required) v06.03.01
Core Switch 2/64	4.0.2b	4.0.2b	4.0.2b			4.0.2b	4.0.2b		4.0.2b			4.0.2b	4.0.2b
SAN Switch 2/32	3.0.2k	3.0.2k	3.0.2k			3.0.2k	3.0.2e		3.0.2k			3.0.2k	3.0.2k
SAN Switch 2/16	3.0.2k	3.0.2k	3.0.2k			3.0.2k	3.0.2e	3.0.2e	3.0.2k	3.0.2e		3.0.2k	3.0.2k
SAN Switch 2/8	3.0.2k	3.0.2k	3.0.2k			3.0.2k	3.0.2e	3.0.2e	3.0.2k	3.0.2e		3.0.2k	3.0.2k
SAN Switch 2/16-EL	3.0.2k	3.0.2k	3.0.2k			3.0.2k	3.0.2e	3.0.2e	3.0.2k	3.0.2e		3.0.2k	3.0.2k
SAN Switch 2/8-EL	3.0.2k	3.0.2k	3.0.2k			3.0.2k	3.0.2e	3.0.2e	3.0.2k	3.0.2e		3.0.2k	3.0.2k
SAN Switch 16	2.6.0h	2.6.0h	2.6.0h	2.6	2.6	2.6.0h	a2.6.0.c	a2.6.0.c	2.6.0h	a2.6.0.c		2.6.0h	2.6.0h
SAN Switch 8	2.6.0h	2.6.0h	2.6.0h	2.6	2.6	2.6.0h	a2.6.0.c	a2.6.0.c	2.6.0h	a2.6.0.c		2.6.0h	2.6.0h
SAN Switch 16EL	2.6.0h	2.6.0h	2.6.0h	2.6	2.6	2.6.0h	a2.6.0.c	a2.6.0.c	2.6.0h	a2.6.0.c		2.6.0h	2.6.0h
SAN Switch 8EL	2.6.0h	2.6.0h	2.6.0h	2.6	2.6	2.6.0h	a2.6.0.c	a2.6.0.c	2.6.0h	a2.6.0.c		2.6.0h	2.6.0h
FC Switch 16B	3.0.2k	3.0.2k	3.0.2k			3.0.2k	3.0.2e	3.0.2e	3.0.2k	3.0.2e		3.0.2k	3.0.2k
FC Switch 8B	3.0.2k	3.0.2k	3.0.2k			3.0.2k	3.0.2e	3.0.2e	3.0.2k	3.0.2e		3.0.2k	3.0.2k
MSA Fabric Switch 6	101G12											101G12	
FC-AL Switch													
FC Loop Switch FW	1.20-g07	1.20-g07	1.20-g07	1.20-g07	1.20-g07	1.20-g07		1.20-g07		1.20-g07		1.20-g07	
FC Loop Switch ROM	V1.2-b2	V1.2-b2	V1.2-b2	V1.2-b2	V1.2-b2	V1.2-b2		V1.2-b2		V1.2-b2		V1.2-b2	
HP OpenView SANworks Support													
OpenView													
Storage Virtual Replicator	3.0b sp1					3.0b sp1			3.0b sp1			3.0b sp1	3.0b sp1
OV-SAM	3.0.1	3.0.1	3.0.1			3.0.1			3.0.1			3.0.1	3.0.1
StorageWorks													
Data Replication Manager	2.0a					2.0a			2.0a			2.0a	2.0a
Enterprise Volume Manager	V2.0			V2.0		V2.0		V2.0	V2.0			V2.0	V2.0
Tools and Utilities													
Smart Start	6.2	6.2	6.2	5.2, 5.3	5.2, 5.3	6.2	5.2, 5.3, 5.4	5.2, 5.3	6.2	5.2, 5.3, 5.4		6.2	6.2
Insight Manager 7	7					7			7			7	7

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Disk Array Multipath Support													
AutoPath for HP-UX	2.01	2.01	2.01						2.01				2.01
Secure Path for HP-UX	3.0a, SP1	3.0a, SP1							3.0a, SP1				3.0a, SP1
Secure Path for WIN NT	4.0a	4.0a	4.0a	v3.1a sp2	v3.1a sp2	4.0a	4	4	4.0a	4		4.0a	4.0a
Secure Path for WIN 2000	4.0a	4.0a	4.0a	v3.1a sp2	v3.1a sp2	4.0a	4	4	4.0a	4		4.0a	4.0a
AutoPath for Windows 2000												02.00.00	
Tru64 Multipath	Native								Native	Native			Native
Secure Path for NetWare	3.0c											3.0c	
Secure Path for Solaris	3.0a, SP1								3.0a, SP1				3.0a, SP1
Secure Path for AIX	2.0b												
IBM DPO													
Operating System													
HP-UX	11.11 w/SP56 (HWE 11.11) PHKL_22857 11.00 w/SP56 (HWE 11.0) PHKL_25769	11.11 w/SP56 (HWE 11.11) PHKL_22857 11.00 w/SP56 (HWE 11.0) PHKL_25769	11.11 w/SP56 (HWE 11.11) PHKL_22857 11.00 w/SP56 (HWE 11.0) PHKL_25769	11.11	11.0		11.0	11.0	11.11 w/SP56 (HWE 11.11) PHKL_22857 11.00 w/SP56 (HWE 11.0) PHKL_25769	11.0, 11.11			11.11 w/SP56 (HWE 11.11) PHKL_22857 11.00 w/SP56 (HWE 11.0) PHKL_25769
Win NT 4.0 Server	sp6a	sp6a	sp6a	sp6a	sp6a	sp6a	sp6a	sp6a	sp6a	sp6a		sp6a	sp6a
Win 2000 Server	sp3	sp3	sp3	sp2	sp2	sp3	sp2	sp2	sp3	sp2		sp3	sp3
Tru64 UNIX	5.1 pk6, 5.1A pk4 5.1B pk1 (ipk)	5.1A pk4		5.1A	5.1A		5.1A	5.1A pk1	5.1 pk6, 5.1A pk4 5.1B pk1 (ipk)	5.1A pk2			5.1 pk6, 5.1A pk4
Linux – Red Hat	7.1, 7.2, 7.3, and AS 2.1	7.1, 7.2	7.1, 7.2						7.1, 7.2, 7.3	7.1			
Linux – SuSE	7.0, 7.3								7.0, 7.3				
NetWare	5.1 sp5 6.0 sp2	5.1 sp5 6.0 sp2	5.1 sp5		5.1 sp5	5.1 sp5 6.0 sp2				5.1 sp5 6.0 sp2		5.1 sp5 6.0 sp2	
Solaris UNIX	7, 8, and 9	7, 8, and 9	7, 8	8	8		8	8	7, 8, and 9	8			7, 8, and 9
AIX	4.3.3 and 5.1L	4.3.3			4.3.3				4.3.3 and 5.1L				4.3.3

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Components & Firmware	Current Release	HP Data Protector	HP OmniBack	Atempo Time Navigator	BakBone NetVault	CA BrightStor ARCserve	CA BrightStor EB	CommVault Galaxy	Legato NetWorker	Syncsort Backup Express	Tivoli Storage Manager	VERITAS Backup Exec	VERITAS NetBackup
Host Bus Adapters													
Windows													
FCA2355 (2G)													
FW	3.82a1	3.82a1	3.82a1			3.82a1			3.82a1			3.82a1	3.82a1
WIN NT 4.0 Driver	4-4.82a9	4-4.82a9	4-4.82a9			4-4.82a9			4-4.82a9			4-4.82a9	4-4.82a9
WIN 2000 Driver	5-4.82a9	5-4.82a9	5-4.82a9			5-4.82a9			5-4.82a9			5-4.82a9	5-4.82a9
ISP2312 (2G - BL20pG2 Blade Server)													
FW	1.33	1.33										1.33	1.33
WIN Driver	8.2.0.72	8.2.0.72										8.2.0.72	8.2.0.72
FCA2101 (2G)													
FW	3.82a1	3.82a1	3.82a1			3.82a1	3.81a3	3.81a3	3.82a1	3.81a3		3.82a1	3.82a1
WIN NT 4.0 Driver	4-4.82a9	4-4.82a9	4-4.82a9			4-4.82a9			4-4.82a9			4-4.82a9	4-4.82a9
WIN 2000 Driver	5-4.82a9	5-4.82a9	5-4.82a9			5-4.82a9	5-4.54a7	5-4.81a9	5-4.82a9	5-4.53a9		5-4.82a9	5-4.82a9
64-bit/33MHz PCI to FC (1G - Windows) KGPSA-CB													
FW	3.82a1	3.82a1	3.82a1	3.82a1	3.82a1	3.82a1	3.82a1	3.82a1	3.82a1	3.82a1		3.82a1	3.82a1
WIN NT 4.0 Driver	4-4.82a9	4-4.82a9	4-4.82a9			4-4.82a9	4-4.53a7	4-4.53a7	4-4.82a9	4-4.53a7		4-4.82a9	4-4.82a9
WIN 2000 Driver	5-4.82a9	5-4.82a9	5-4.82a9	5-4.52a9	5-4.52a9	5-4.82a9	5-4.53a7	5-4.52a9	5-4.82a9	5-4.53a7		5-4.82a9	5-4.82a9
LINUX													
FCA2214 (2G)													
FW	1.29												
Linux Driver (Intel)	6.04.00												
QLA2200 (1G)													
FW	1.76	1.76	1.76						1.76	1.76			
Linux Driver (Intel)	6.0.1c	6.0.1c	6.0.1c						6.0.1c	6.0.1			
NetWare													
FCA2210 (2G)													
FW	1.29											1.29	
NetWare Driver	6.50s3											6.50s3	
64 Bit / 66 MHz PCI to FC HBA (1G)													
NetWare Driver	2.52	2.52	2.52		2.52	2.52				2.52		2.52	
32-bit / 33 MHz HBA (1G)													
NetWare Driver	2.52	2.52	2.52			2.52				2.52		2.52	

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Host Bus Adapters													
HP-UX													
A6795A (2G)													
FW													
HP-UX Driver	11.11.09	11.11.09	11.11.09						11.11.09				11.11.09
A6685A (1G)													
FW													
HP-UX Driver	11.11.09	11.11.09	11.11.09						11.11.09				11.11.09
A5158A (1G)													
FW													
HP-UX Driver	11.11.09	11.11.09	11.11.09	11.00.06	11.00.06		11.00.06	11.00.06	11.11.09	11.00.06			11.11.09
Tru64													
FCA2354													
FW	3.81a4								3.81a4				3.81a4
Tru64 Driver	2.06								2.06				2.06
KGPSA -CA													
FW	3.81a4	3.81a4		3.81a4	3.81a4		3.81a4	3.81a4	3.81a4	3.81a4			3.81a4
Tru64 Driver	2.06	2.06		1.32a	1.32a		1.32a	1.32a	2.06	2.02			2.06
Solaris													
FCA2257P (2G - PCI)													
Fcode	3.1.2												
Solaris Driver	3.26												
FCA2257C (1G - PCI)													
Fcode	3.1.2												
Solaris Driver	3.26												
FCA2257S (1G - Sbus)													
Fcode	3.1.2												
Solaris Driver	3.26												
SWSA4-SC 64-bit Sbus													
Fcode	13.3.7	13.3.7	13.3.7	13.3.7	13.3.7		13.3.7	13.3.7	13.3.7	13.3.7			13.3.7
Solaris Driver	2.5.9	2.5.9	2.5.9	2.5.9	2.5.9		2.5.9	2.5.9	2.5.9	2.5.9			2.5.9
SWSA4-PC 32-bit PCI													
Fcode	3.0.3								3.0.3				3.0.3
Solaris Driver	2.5.9								2.5.9				2.5.9
JNI FCE6460 (2G - PCI)													
JNI FCC6460 (2G - cPCI)													
JNI FCE6410 (1G - PCI)													
AIX													
IBM 6228 (2Gb)													
FW													
AIX Driver													
PCHo-FC HBA for AIX (1G) 197819B21													
FW													
AIX Driver	1.5.19	1.5.19	1.5.19				1.5.11.1		1.5.19				1.5.19

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Libraries | Operating Systems | RAID Arrays | Infrastructure | Servers
HBAs | Software | Disk Array Multipath | Firmware & Drivers | Backup App Details

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ISV DETAILS

Name	Version	Date Last Tested	Application Information/Support
HP OpenView Storage Data Protector	5.0	Current	www.openview.hp.com/products/dataprotector/
HP OpenView Storage Omniback II	4.10	Current	www.openview.hp.com/products/omniback/
Atempo Time Navigator	3.6	Mar-02	www.atempo.com
BakBone NetVault	6.5.1	Mar-02	www.bakbone.com
Computer Associates BrightStor ARCserve for Windows NT/2000	ARCserve v9.0 build 1868	Current	support.ca.com
Computer Associates BrightStor ARCserve for NetWare	9.0	Current	support.ca.com
Computer Associates BrightStor Enterprise Backup	BEB v10.0 SP4 Bd. 1400	Aug-02	support.ca.com/
CommVault Galaxy	4.1.0	Aug-02	www.commvault.com
Legato NetWorker	6.1.3 and 6.2 only for Windows	Current	www.legato.com
Syncsort Backup Express	v2.1.5B	Aug-02	www.syncsort.com
Tivoli Storage Manager	4.2.1	Oct-01	www.tivoli.com
VERITAS Backup Exec for Windows Servers	9.0 build 4367.2	Current	www.veritas.com
VERITAS Backup Exec for NT/2000	8.6 build 3878	Current	www.veritas.com
VERITAS Backup Exec for NetWare	9.0 build 4175.1	Current	www.veritas.com
VERITAS NetBackup Windows	4.5 FP3 and 3.4.1 MP3	Current	www.veritas.com
VERITAS NetBackup UNIX	4.5 FP3 and 3.4 MP3	Current	www.veritas.com

NOTE: All ISV certifications have been completed with a minimum configuration of 16 servers by 16 drives.

This does not imply any limitations of the ISV backup and restore application or HP StorageWorks SAN products.
Refer to the ISV website or your ISV representative for maximum configuration details.