



HP StorageWorks Enterprise Backup Solution Hardware/Software Compatibility Matrix

October 2003

This matrix includes tape automation compatibility details for Direct Attach Storage (DAS), Direct Attach Fibre (DAF or point-to-point fibre), and Storage Area Network (SAN) connection options.

[start here](#)

For information about tape drive compatibility and support, go to
<http://www.hp.com/go/connect>



STORAGE HARDWARE / SOFTWARE COMPATIBILITY MATRIX

Libraries Next>> | [AutoLoaders](#) | [Operating Systems](#) | [RAID Arrays](#) | [Infrastructure](#) | [Servers](#) | [Fibre HBAs](#)
[SCSI HBAs](#) | [Software](#) | [Disk Array Multipath](#) | [Firmware & Drivers](#) | [Backup App Details](#) | [Legacy Support](#)

October 2003

DAS, DAF, and SAN Support	HP Data Protector	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 (Ultrium 460)	✓			✓ ²	✓	✓	✓		✓	✓	✓
ESL 9595 (Ultrium 230)	✓			✓	✓	✓	✓ ⁵	✓	✓	✓	✓
ESL 9595 S2	✓			✓	✓	✓	✓	✓	✓	✓	✓
ESL 9595 SL	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ESL 9326 SL	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ESL 9326 DX ⁶	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ESL 9322 (Ultrium 460)	✓			✓ ²	✓	✓	✓		✓	✓	✓
ESL 9322 (Ultrium 230)	✓			✓	✓	✓	✓ ⁵	✓	✓	✓	✓
ESL 9322 S2	✓			✓	✓	✓	✓	✓	✓	✓	✓
ESL 9198 SL	✓	✓	✓	✓ ²	✓	✓	✓	✓	✓	✓	✓
ESL 9198 DLX ⁶	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ESL Multi-Unit Scalability ^{3,4}	✓				✓		✓		✓ ⁸		✓
Mid-Range Libraries											
MSL 6060 (Ultrium 460)	✓			✓	✓	✓	✓		✓	✓	✓
MSL 5060 (Ultrium 230)	✓			✓	✓	✓	✓ ⁵		✓	✓	✓
MSL 5052 S2	✓			✓	✓	✓	✓	✓	✓	✓	✓
MSL 5052 SL	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MSL 6030 (Ultrium 460)	✓			✓	✓	✓	✓		✓	✓	✓
MSL 5030 (Ultrium 230)	✓			✓	✓	✓	✓ ⁵		✓	✓	✓
MSL 5026 S2	✓			✓	✓	✓	✓	✓	✓	✓	✓
MSL 5026 SL	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MSL 5026 DLX ⁶	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MSL Multi-Unit Scalability ^{3,4}	✓			✓		✓	✓			✓	✓
SSL 2020 TL ⁶	✓	✓	✓	✓ ⁷		✓	✓ ¹	✓	✓ ¹	✓ ⁷	✓ ¹

NOTES:

- 1) Windows NT/2000 and Solaris support in homogeneous SAN environments only
- 2) Support is with CA BrightStor ARCserve for Windows NT/2000 v9.0 and CA BrightStor ARCserve for NetWare v7.0 in a homogeneous environment only
- 3) ESL multi-unit scalability is with a horizontal pass-through mechanism, and the MSL multi-unit scalability is with a vertical pass-through mechanism
- 4) Contact your ISV for scalability support
- 5) Ultrium 230 drives are not supported on W2003
- 6) Not supported with IA-64 operating systems
- 7) Windows support only
- 8) Support is with IBM 6228 HBA only

Interface Controller Support for Libraries >>

STORAGE HARDWARE / SOFTWARE COMPATIBILITY MATRIX

[<<Previous Libraries](#) |
 [AutoLoaders](#) |
 [Operating Systems](#) |
 [RAID Arrays](#) |
 [Infrastructure](#) |
 [Servers](#) |
 [Fibre HBAs](#) |
 [SCSI HBAs](#) |
 [Software](#) |
 [Disk Array Multipath](#) |
 [Firmware & Drivers](#) |
 [Backup App Details](#) |
 [Legacy Support](#)

October 2003

DAF and SAN Support ¹	E2400-160 FC Interface Controller	NSR E1200-160	NSR E2400	NSR E1200	NSR M2402	NSR N1200	MDR
Enterprise Libraries							
ESL 9595 (Ultrium 460)	✓				✓		
ESL 9595 (Ultrium 230)	✓		✓		✓	✓	
ESL 9595 S2	✓		✓		✓	✓	
ESL 9595 SL	✓		✓		✓	✓	✓
ESL 9326 SL	✓		✓		✓	✓	✓
ESL 9326 DX					✓	✓	✓
ESL 9322 (Ultrium 460)	✓				✓		
ESL 9322 (Ultrium 230)	✓		✓		✓	✓	
ESL 9322 S2	✓		✓		✓	✓	
ESL 9198 SL	✓		✓		✓	✓	✓
ESL 9198 DLX	✓		✓		✓	✓	✓
ESL Multi-Unit Scalability	✓		✓		✓	✓	✓
Interface Manager	✓						
Mid-Range Libraries							
MSL 6060 (Ultrium 460)		✓			✓		
MSL 5060 (Ultrium 230)		✓		✓	✓	✓	
MSL 5052 S2		✓		✓	✓	✓	
MSL 5052 SL		✓		✓	✓	✓	✓
MSL 6030 (Ultrium 460)		✓			✓		
MSL 5030 (Ultrium 230)		✓		✓	✓	✓	
MSL 5026 S2		✓		✓	✓	✓	
MSL 5026 SL		✓		✓	✓	✓	✓
MSL 5026 DLX		✓		✓	✓	✓	✓
MSL Multi-Unit Scalability		✓		✓	✓	✓	✓
SSL 2020 TL					✓	✓	✓

NOTE:

1) For ISV compatibility information with the routers, refer to the second [Infrastructure](#) page within this document or [click here](#).

STORAGE HARDWARE / SOFTWARE COMPATIBILITY MATRIX

Libraries | AutoLoaders | Operating Systems | RAID Arrays | Infrastructure | Servers | Fibre HBAs
SCSI HBAs | Software | Disk Array Multipath | Firmware & Drivers | Backup App Details | Legacy Support

October 2003

DAS Support	HP Data Protector	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
AutoLoaders¹											
SSL1016 Ultrium 460 Tape Autoloader	✓ ⁶			✓	✓ ³		✓		✓ ¹¹	✓	✓
1/8 Ultrium 230 Tape Autoloader	✓ ⁴			✓ ⁸	✓ ³	✓ ³	✓ ¹⁰		✓	✓ ⁵	✓ ⁹
1/8 DLT vs80 Tape Autoloader	✓ ¹³	✓ ³	✓ ³	✓	✓ ³	✓ ³	✓ ^{10,13}	✓ ³		✓ ⁵	
SSL1016 SDLT160/320 Tape Autoloader	✓ ¹³			✓	✓ ³	✓ ³	✓ ^{12,13}			✓	✓
SSL1016 DLT1 Tape Autoloader	✓ ^{3,13}	✓ ³	✓ ³	✓ ⁵	✓ ³	✓ ³	✓ ^{5,13}	✓ ³	✓ ¹¹	✓ ³	✓ ³

NOTES:

- 1) Autoloaders are only supported in Direct Attach SCSI configurations
- 2) Support with Windows NT/2000, HP-UX 11.0, and HP-UX 11.11 only
- 3) Support is with Windows NT/2000 only
- 4) Support for Windows NT/2000/2003, NetWare, and HP-UX 10.2, 11.0, 11.11, and 11.22 only
- 5) Not supported with Windows 2003
- 6) Support for Windows NT/2000/2003, NetWare, and HP-UX 10.2, 11.0, 11.11, and 11.22 only
- 7) HP-UX commands fbackup/frecover and backups launched using HP-UX Site Area Manager are not supported
- 8) Support for Windows NT/2000, Linux, and NetWare only
- 9) Support for Windows NT/2000, Linux, Solaris, and HP-UX 10.2, 11.0 & 11.11 only
- 10) Support for Windows NT/2000, Linux, and Solaris only
- 11) Support is with TSM 5.1.7 only
- 12) Not supported with LINUX RedHat Advanced Server 2.1
- 13) Not supported with HP-UX 11.23

STORAGE HARDWARE / SOFTWARE COMPATIBILITY MATRIX

Libraries | AutoLoaders | Operating Systems Next>> | RAID Arrays | Infrastructure | Servers | Fibre HBAs
SCSI HBAs | Software | Disk Array Multipath | Firmware & Drivers | Backup App Details | Legacy Support

October 2003

DAS, DAF, and SAN Support	HP Data Protector	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 Systems¹²											
HP-UX 11.0	✓		✓ ²		✓ ²	✓ ²	✓	✓ ²	✓		✓
HP-UX 11.11	✓	✓ ²			✓ ²	✓ ²	✓	✓ ²	✓		✓
HP-UX 11.22 ⁹	✓										
HP-UX 11.23 ¹¹	✓						✓				
Windows NT 4.0	✓	✓	✓	✓ ⁷	✓	✓	✓	✓	✓	✓	✓
Windows 2000 Server/AS	✓	✓	✓	✓ ⁷	✓	✓	✓	✓	✓	✓	✓
Windows Server 2003 (32-bit)	✓			✓ ⁷	✓	✓	✓			✓	✓ ¹⁰
Windows Server 2003 (64-bit)	✓						✓				
Tru64 5.1 ³							✓				✓
Tru64 5.1A ³	✓	✓	✓		✓	✓	✓	✓			✓
Tru64 5.1B ³	✓					✓	✓				✓
Linux Redhat Advanced Server 2.1 (32-bit)	✓						✓				✓
United Linux 1.0 (32-bit)							✓				
NetWare 5.1	✓		✓	✓ ⁷				✓		✓	
NetWare 6.0	✓			✓ ⁷		✓		✓		✓	
Solaris 7	✓					✓	✓		✓		✓
Solaris 8	✓	✓	✓		✓	✓	✓	✓	✓		✓
Solaris 9	✓				✓		✓				✓
AIX 4.3.3 (32-bit)	✓ ⁵		✓			✓	✓		✓		✓
AIX 5.1L (32-bit)						✓	✓ ¹		✓		✓
High Availability⁸											
HP-UX (Service Guard) ⁴	✓ ⁶										✓ ⁶
Windows (MSCS)	✓	✓	✓			✓	✓	✓	✓	✓	✓
Tru64 (TruCluster)		✓					✓	✓			✓
NetWare 5.1 (NWCS)										✓	
NetWare 6.0 (NWCS)								✓		✓	
Solaris											✓

NOTES:

- 1) DLT8000 products not supported
- 2) A-Class, L-Class, N-Class, and V-Class servers only
- 3) Ultrium 230 (LTO) not supported
- 4) Supported on XP and VA 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

- 8) Refer to the EBS Design Guide for details on failover configurations
- 9) Support for 32 bit emulation made only
- 10) Direct Attach SCSI support only
- 11) DAS and DAF support only
- 12) Other Operating Systems not listed above may be supported within EBS by the respective ISVs as LAN clients

OS Version Details >>

STORAGE HARDWARE / SOFTWARE COMPATIBILITY MATRIX

[Libraries](#) | [AutoLoaders](#) | [<<Previous Operating Systems](#) | [RAID Arrays](#) | [Infrastructure](#) | [Servers](#) | [Fibre HBAs](#)
[SCSI HBAs](#) | [Software](#) | [Disk Array Multipath](#) | [Firmware & Drivers](#) | [Backup App Details](#) | [Legacy Support](#)

October 2003

DAS, DAF, and SAN Support	Current Release	HP Data Protector	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	(HWE 1100) September 2003	(HWE 1100) September 2003		11.0		11.00 w/SP56 (HWE 11.0) PHKL_25769	11.0	(HWE 1100) September 2003	11.0	(HWE 1100) September 2003		(HWE 1100) September 2003
HP-UX 11.11	(HWEEnable11i) September 2003	(HWEEnable11i) September 2003	11.11			11.11 w/SP56 (HWE 11.11) PHKL_22857	11.11	(HWEEnable11i) September 2003	11.11	(HWEEnable11i) September 2003		(HWEEnable11i) September 2003
HP-UX 11.22	11.22	11.22										
Windows NT 4.0	sp6a	sp6a	sp6a	sp6a	sp6a	sp6a	sp6a	sp6a	sp6a	sp6a	sp6a	sp6a
Windows 2000 Server/AS	sp4	sp4	sp2	sp2	sp4	sp4	sp3	sp4	sp2	sp4	sp4	sp4
Windows Server 2003 (32-bit)	-	-			-	-	-	-			-	
Windows Server 2003 (64-bit)	-	-					-					
Tru64 5.1	5.1 pk6							5.1 pk6				5.1 pk6
Tru64 5.1A	5.1A pk4	5.1A pk4	5.1A	5.1A		5.1A pk4	5.1A pk4	5.1A pk4	5.1A pk2			5.1A pk4
Tru64 5.1B	5.1B pk1 (ipk)	5.1B pk1 (ipk)					5.1B pk1 (ipk)	5.1B pk1 (ipk)				5.1B pk1 (ipk)
Linux Redhat Advanced Server 2.1 (32-bit)	2.4.9-e24	2.4.9-e24						2.4.9-e24				2.4.9-e24
United Linux 1.0 (32-bit)	sp2a							sp2a				
NetWare 5.1	5.1 sp6	5.1 sp6		5.1 sp5	5.1 sp6				5.1 sp5		5.1 sp6	
NetWare 6.0	6.0 sp3	6.0 sp3			6.0 sp3		6.0 sp3		6.0 sp2		6.0 sp3	
Solaris 7	7	7					7	7		7		7
Solaris 8	8	8	8	8		8	8	8	8	8		8
Solaris 9	9	9				9		9				9
AIX 4.3.3 (32-bit)	4.3.3	4.3.3		4.3.3			4.3.3	4.3.3		4.3.3		4.3.3
AIX 5.1L (32-bit)	5.1L						5.1L	5.1L		5.1L		5.1L

STORAGE HARDWARE / SOFTWARE COMPATIBILITY MATRIX

Libraries | AutoLoaders | Operating Systems | RAID Arrays | Infrastructure | Servers | Fibre HBAs
SCSI HBAs | Software | Disk Array Multipath | Firmware & Drivers | Backup App Details | Legacy Support

October 2003

SAN Support	HP Data Protector	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	✓			✓	✓	HP-UX, NT/WIN 2000, WIN 2003, and Solaris only	✓		HP-UX and NT/WIN2K only	✓	✓
XP 48/512 ¹	✓			✓	✓	HP-UX, NT/WIN 2000, WIN 2003, and Solaris only	✓		HP-UX and NT/WIN2K only	✓	✓
Zero Downtime with XP	✓										
Instant Recovery with XP	✓										
Enterprise Virtual Array EVA 5000 ^{1,3}	Solaris, Tru64, NetWare, HP-UX, NT, W2000, and W2003	NT/WIN2K only	NT/WIN2K only	✓	✓	✓	✓	NT/WIN2K only	✓	✓	✓
Enterprise Virtual Array EVA 3000 ^{1,3}	Solaris, Tru64, NetWare, HP-UX, NT, W2000, and W2003	NT/WIN2K only	NT/WIN2K only	✓	✓	✓	✓	NT/WIN2K only	✓	✓	✓
VA 7410/7110 ¹	✓			✓			✓			✓	✓
VA 7400/7100 ¹	✓			✓			✓			✓	✓
EMA 16000 ¹	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EMA 12000/8000 ¹	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MSA1000 ^{2, 3}	✓	NT/WIN2K only	NT/WIN2K only	✓	✓	NT/WIN2K only	✓	NT/WIN2K only	✓	✓	✓

NOTES:

- 1) Consult with your hp solutions provider for disk array SAN compatibility information
- 2) For compatibility information about the optional MSA SAN Switch, refer to the [Infrastructure](#) page within this document for support details
- 3) NetWare 5.1 & 6.0 supported with FCA2210 HBA only

STORAGE HARDWARE / SOFTWARE COMPATIBILITY MATRIX

Libraries | AutoLoaders | Operating Systems | RAID Arrays | Infrastructure Next>> | Servers | Fibre HBAs
SCSI HBAs | Software | Disk Array Multipath | Firmware & Drivers | Backup App Details | Legacy Support

October 2003

SAN Support	E2400-160 FC Interface Controller	NSR E1200-160	NSR E2400	NSR E1200	NSR M2402	NSR N1200	MDR
Interconnects ¹							
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 SAN Switch 2/8	✓	✓	✓	✓	✓	✓	✓
MSA SAN Switch 6 ³				✓	✓		
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

3) Supported with Windows and NSR - no NetWare

STORAGE HARDWARE / SOFTWARE COMPATIBILITY MATRIX

Libraries | AutoLoaders | Operating Systems | RAID Arrays | <<Previous Infrastructure | Servers | Fibre HBAs
SCSI HBAs | Software | Disk Array Multipath | Firmware & Drivers | Backup App Details | Legacy Support

October 2003

DAF and SAN Support	HP Data Protector	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
Fibre Channel Interface Controller											
Interface Manager	✓			✓							✓
E2400-160 FC Interface Controller	✓			✓	✓		✓ ⁴			✓ ⁵	✓
NSR E1200-160	✓			✓	✓	✓	✓		✓	✓	✓
NSR E2400	✓			✓	✓	✓	✓		✓	✓	✓
NSR E1200	✓			✓	✓	✓	✓		✓	✓	✓
NSR M2402	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
NSR N1200	✓			✓	✓	✓	✓		✓	✓	✓
MDR ^{1,3}	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Serverless Backup (SAN Support Only)											
NSR E2400				Windows 2000 Serverless opt w/ HSG only	Windows 2000 Serverless opt w/ HSG only					Windows 2000 ServerFree opt with HSG, HSV, MSA1000 only	Sol 8 NBU 4.5 nbu_snap w/ HSG only ²
NSR E1200				Windows 2000 Serverless opt w/ HSG only	Windows 2000 Serverless opt w/ HSG only					Windows 2000 ServerFree opt with HSG, HSV, MSA1000 only	Sol 8 NBU 4.5 nbu_snap w/ HSG only ²
NSR M2402				Windows 2000 Serverless opt w/ HSG only	Windows 2000 Serverless opt w/ HSG only					Windows 2000 ServerFree opt with HSG, HSV, MSA1000 only	Sol 8 NBU 4.5 nbu_snap w/ HSG only ²
NSR N1200				Windows 2000 Serverless opt w/ HSG only	Windows 2000 Serverless opt w/ HSG only					Windows 2000 ServerFree opt with HSG, HSV, MSA1000 only	Sol 8 NBU 4.5 nbu_snap w/ HSG only ²

NOTES:

- 1) MDR does not support Ultrium 230, Ultrium 460, and SDLT 2 libraries
- 2) Master router configuration not supported
- 3) MDR does not support Direct Attach Fibre (DAF) configurations
- 4) Not supported with Windows 2003
- 5) Supported with NetWare only

<< SAN Switch Support

STORAGE HARDWARE / SOFTWARE COMPATIBILITY MATRIX

Libraries | AutoLoaders | Operating Systems | RAID Arrays | Infrastructure | Servers | Fibre HBAs
SCSI HBAs | Software | Disk Array Multipath | Firmware & Drivers | Backup App Details | Legacy Support

October 2003

DAS, DAF, and SAN Support	HP Data Protector	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 rx series (IA)	✓ ²						✓				
HP A, L, N, and V Class (pa-risc)	✓	✓	✓		✓	✓	✓	✓	✓		✓
HP K, R, and D Class (pa-risc) ¹	✓										
HP ProLiant	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
HP ProLiant Blade Server	✓					✓	✓		✓	✓	✓
HP NetServer	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
HP AlphaServer	✓	✓	✓		✓	✓	✓	✓			✓
IBM RS/6000	✓		✓			✓	✓		✓		✓
Sun UltraSPARC	✓	✓	✓		✓	✓	✓	✓	✓		✓
Sun Sun Fire	✓				✓	✓	✓		✓		✓
Third Party X86	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Workstations											
HP xz series (IA) ²	✓										
HP B-Class B2000 (pa-risc)	✓										✓
HP C-Class C3600, C3700 (pa-risc)	✓										✓
HP J-Class J6700, J6750 (pa-risc)	✓										✓
NAS											
NAS 8000	✓										
NAS Executor 7000	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
NAS B3000	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
NAS B2000	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

NOTES:

- 1) Ultrium 230 support only
- 2) Data Protector 5.0 support in 32-bit emulation mode

STORAGE HARDWARE / SOFTWARE COMPATIBILITY MATRIX

Libraries | AutoLoaders | Operating Systems | RAID Arrays | Infrastructure | Servers | Fibre HBAs Next>>
SCSI HBAs | Software | Disk Array Multipath | Firmware & Drivers | Backup App Details | Legacy Support

October 2003

SAN and DAF Support	HP Data Protector	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
Fibre Host Bus Adapters¹											
HP-UX (IA-64)											
A6795A (2G)	✓ ²						✓ ²				
A6826A (2G)	✓ ²										✓ ²
HP-UX (PA-RISC)											
A6795A (2G)	✓				✓	✓	✓		✓		✓
A6685A (1G)	✓						✓				✓
A5158A (1G)	✓	✓	✓		✓	✓	✓	✓	✓		✓
Tru64											
FCA2354 (2G - PCI)	✓				✓	✓	✓				✓
FCA2384 (2G - PCI-X)	✓						✓				✓
KGPSA -CA (1G - PCI)	✓	✓	✓		✓	✓	✓	✓			✓
Solaris											
FCA2257P (2G - PCI)	✓				✓	✓	✓		✓		✓
FCA2257C (1G - cPCI)	✓				✓	✓	✓		✓		✓
FCA2257S (1G - SBus)	✓				✓	✓	✓		✓		✓
SWSA4-SC 64-bit (1G - SBus)	✓	✓	✓		✓	✓	✓	✓	✓		✓
SWSA4-PC 32-bit (1G - PCI)							✓		✓		✓
FCX-6562/FCX2-6562 (2G - PCI)											
JNI FCE6460 (2G - PCI)	✓				✓	✓	✓		✓		✓
JNI FCC6460 (2G - cPCI)	✓				✓	✓	✓		✓		✓
JNI FCE6410 (1G - PCI)	✓						✓				✓
AIX											
IBM 6228 (2G)	✓					✓	✓		✓		✓
PCI-to-FC HBA for AIX (1G) 197819-B21	✓		✓				✓		✓		✓

NOTES:

1) Refer to [Heterogeneous Open SAN Design Reference Guide](http://h18000.www1.hp.com/products/storageworks/san/documentation.html) for 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) DAF support only

STORAGE HARDWARE / SOFTWARE COMPATIBILITY MATRIX

Libraries | AutoLoaders | Operating Systems | RAID Arrays | Infrastructure | Servers | << Previous Fibre HBAs
SCSI HBAs | Software | Disk Array Multipath | Firmware & Drivers | Backup App Details | Legacy Support

October 2003

SAN and DAF Support	HP Data Protector	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
Fibre Host Bus Adapters¹											
Windows - HP Branded											
FCA2355 (2G)	✓			✓	✓	✓	✓		✓	✓	✓
FCA2408 (2G)	✓			✓			✓		✓	✓	✓
ISP2312 (2G - BL20pG2 Blade Server)	✓					✓	✓		✓	✓	✓
FCA2101 (2G)	✓			✓	✓	✓	✓	✓	✓	✓	✓
FCA2404 (2G)	✓			✓			✓		✓	✓	✓
FCA2404DC (2G)	✓			✓			✓		✓	✓	✓
FCA2214/2214DC (2G)	✓					✓	✓		✓	✓	✓
64-bit/33MHz PCI to FC (1G) KGPSA-CB	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Windows - HP Branded (IA64)											
A7298A (2G)	✓						✓				
AB232A (2G)	✓						✓				
Windows - 3rd Party											
Emulex LP982 ⁶	✓										✓
LINUX											
FCA2214 (2G)	✓						✓				✓
ISP2312 (2G - BL20pG2 Blade Server)	✓						✓				✓
QLA2200 (1G)	✓						✓	✓			
NetWare											
FCA2210 (2G) ³	✓			✓		✓		✓		✓	
64-bit / 66 MHz PCI to FC HBA (1G) ^{2, 4, 5}	✓		✓	✓				✓		✓	
32-bit / 33 MHz HBA (1G) ^{2, 4, 5}	✓			✓				✓		✓	

NOTES:

1) Refer to [Heterogeneous Open SAN Design Reference Guide](http://h18000.www1.hp.com/products/storageworks/san/documentation.html) for 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) COMPAQ HBAs

3) Supports Enterprise Virtual Array and MSA1000.

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).

5) Not supported with CA ARCserve 9.0 for NetWare

6) Supported for tape connectivity only. Support is limited to full-port driver 2.21a0 and firmware 1.01a2

STORAGE HARDWARE / SOFTWARE COMPATIBILITY MATRIX

[Libraries](#) | [AutoLoaders](#) | [Operating Systems](#) | [RAID Arrays](#) | [Infrastructure](#) | [Servers](#) | [Fibre HBAs](#)
[SCSI HBAs](#) | [Software](#) | [Disk Array Multipath](#) | [Firmware & Drivers](#) | [Backup App Details](#) | [Legacy Support](#)

October 2003

SCSI Host Bus Adapters				
HP-UX	Tru64	Solaris	Windows	NetWare
A6829A (LVD Ultra-160 PCI)	3X-KZPCA-AA (LVD Ultra)	LSI 6603 (LVD Dual port)	154457-B21 (Ultra3 LVD, single channel)	348757-B21 (dual channel wide)
A6828A (LVD Ultra-160 PCI)		LSI 6602 (LVD Single port)	129803-B21 (Ultra3 LVD, dual channel)	268351-B21 (U320, dual channel) ¹
A5149A (LVD Ultra 2 PCI)			348757-B21 (dual channel wide)	C7474A
A5150A (LVD Ultra 2 PCI)			Adaptec 2940U2W ³	
A4974A ² (PCI Ultra SCSI Single Ended Adaptor)			Adaptec 2940U2B ³	
A4999A ² (PCI Ultra2 Low Voltage Diff SCSI adaptor)			Adaptec 29160	
A5838A (PCI 2 Port 100Base-T 2-Port Ultra2 SCSI)			Adaptec 39160	
A6829A 2-port			Qlogic 1280	
A5150A 2-port			Symbios/LSI 8951	
			Symbios/LSI 8952U	
			Symbios/LSI 22902	
			Symbios/LSI 22903	
			Symbios/LSI 22915	
			268351-B21 (U320, dual channel) ¹	
			C7474A	

NOTES:

- 1) Supported with VS80, DLT1, SDLT 160, SDLT 320, and Ultrium 230 drives only
- 2) Supported on HP-UX Workstations only
- 3) Supported on PCI Servers only (no PCI-X)

STORAGE HARDWARE / SOFTWARE COMPATIBILITY MATRIX

Libraries | AutoLoaders | Operating Systems | RAID Arrays | Infrastructure | Servers | Fibre HBAs
SCSI HBAs | Software | Disk Array Multipath | Firmware & Drivers | Backup App Details | Legacy Support

October 2003

	HP Data Protector	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
OpenView											
Storage Virtual Replicator				✓			✓		✓	✓	✓
OV-SAM	✓			✓	✓	✓	✓		✓	✓	✓
Zero Downtime with XP	✓										
Instant Recovery with XP	✓										
StorageWorks											
Command View for ESL	✓			✓							✓
Data Replication Manager				✓			✓		✓	✓	NT/WIN2K only
Business Copy EVA	✓	✓		✓		✓	✓		✓	NT/WIN2K only	NT/WIN2K only
Business Copy XP	✓										
Tools and Utilities											
Smart Start	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Insight Manager 7	✓			✓	✓	✓	✓		✓	✓	✓

STORAGE HARDWARE / SOFTWARE COMPATIBILITY MATRIX

Libraries | AutoLoaders | Operating Systems | RAID Arrays | Infrastructure | Servers | Fibre HBAs
SCSI HBAs | Software | Disk Array Multipath | Firmware & Drivers | Backup App Details | Legacy Support

October 2003

SAN Support	HP Data Protector	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
Disk Array Multipath¹											
AutoPath for HP-UX ¹	✓						✓				✓
Secure Path for HP-UX ¹	EVA Only				✓	EVA Only	EVA Only		✓		EVA Only
Secure Path for WIN NT ¹	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Secure Path for WIN 2000 ¹	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
AutoPath for Windows 2000 ¹	✓			✓			✓		✓	✓	✓
AutoPath for Windows 2003 ¹				✓			✓			✓	
Tru64 Multipath ²					✓	✓	✓	✓			✓
Secure Path for NetWare ¹				✓ ³						✓ ³	
Secure Path for Solaris ¹	✓				✓	✓	✓		✓		✓
Secure Path for AIX ^{1,4}						✓	✓		✓		✓
IBM DPO									✓		

NOTES:

1) Refer to [Heterogeneous Open SAN Design Reference Guide](http://h18000.www1.hp.com/products/storageworks/san/documentation.html) for 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) Multipath to tape supported

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

4) Supported in 32-bit mode only

STORAGE HARDWARE / SOFTWARE COMPATIBILITY MATRIX

Libraries | AutoLoaders | Operating Systems | RAID Arrays | Infrastructure | Servers | Fibre HBAs
SCSI HBAs | Software | Disk Array Multipath | Firmware & Drivers Next>> | Backup App Details | Legacy Support

October 2003

Components & Firmware	Current Release	HP Data Protector	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 (Ultrium 460)												
Robot FW	3.48	3.48			3.48	3.40	3.40	3.48		3.48	3.48	3.48
Drive FW Ultrium 460	F43W	F43W			F43W	F3CW	F3CW	F43W		F43W	F43W	F43W
ESL 9595 (Ultrium 230)												
Robot FW	3.48	3.48			3.48	3.40	3.40	3.48	3.31	3.48	3.48	3.48
Drive FW Ultrium 230	E38W	E38W			E38W	E33W	E33W	E38W	E30W (005.452)	E38W	E38W	E38W
ESL 9595 S2												
Robot FW	3.48	3.48			3.48	3.40	3.40	3.48	3.20	3.48	3.48	3.48
Drive FW SDLT 160/320	v75	v75			v75	v52	v52	v75	V35	v75	v75	v75
ESL 9595 SL												
Robot FW	3.48	3.48	3.20p5	3.20p5	3.48	3.40	3.40	3.48	3.20	3.48	3.48	3.48
Drive FW SDLT 110/220	v75	v75	V35	V35	v75	v51	v51	v75	V35	v75	v75	v75
ESL 9326 SL												
Robot FW	3.48	3.48	3.20p5	3.20p5	3.48	3.40	3.40	3.48	3.20	3.48	3.48	3.48
Drive FW SDLT 110/220	v75	v75	V35	V35	v75	v51	v51	v75	V35	v75	v75	v75
ESL 9326 DX												
Robot FW	3.48	3.48	3.20p5	3.20p5	3.48	3.40	3.40	3.48	3.20	3.48	3.48	3.48
Drive FW 40/80	v86	v86	V80	V80	v86	V80	V80	v86	V80	v86	v86	v86
ESL 9322 (Ultrium 460)												
Robot FW	3.48	3.48			3.48	3.40	3.40	3.48		3.48	3.48	3.48
Drive FW Ultrium 460	F43W	F43W			F43W	F3CW	F3CW	F43W		F43W	F43W	F43W
ESL 9322 (Ultrium 230)												
Robot FW	3.48	3.48			3.48	3.40	3.40	3.48	3.31	3.48	3.48	3.48
Drive FW Ultrium 230	E38W	E38W			E38W	E33W	E33W	E38W	E30W (005.452)	E38W	E38W	E38W
ESL 9322 S2												
Robot FW	3.48	3.48			3.48	3.40	3.40	3.48	3.20	3.48	3.48	3.48
Drive FW SDLT 160/320	v75	v75			v75	v52	v52	v75	V35	v75	v75	v75
ESL 9198 SL												
Robot FW	3.48	3.48	3.20p5	3.20p5	3.48	3.40	3.40	3.48	3.20	3.48	3.48	3.48
Drive FW SDLT 110/220	v75	v75	V35	V35	v75	v51	v51	v75	V35	v75	v75	v75
ESL 9198 DLX												
Robot FW	3.48	3.48	3.20p5	3.20p5	3.48	3.40	3.40	3.48	3.20	3.48	3.48	3.48
Drive FW 40/80	v86	v86	V80	V80	v86	v80	V80	v86	V80	v86	v86	v86

STORAGE HARDWARE / SOFTWARE COMPATIBILITY MATRIX

Libraries | AutoLoaders | Operating Systems | RAID Arrays | Infrastructure | Servers | Fibre HBAs
SCSI HBAs | Software | Disk Array Multipath | <<Previous Firmware & Drivers Next>> | Backup App Details | Legacy Support

October 2003

Components & Firmware	Current Release	HP Data Protector	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 6060 (Ultrium 460)												
Robot FW	4.21	4.21			4.21	4.14	4.14	4.21		4.21	4.21	4.21
Drive FW Ultrium 460	F43W	F43W			F43W	F3CW	F3CW	F43W		F43W	F43W	F43W
MSL 5060 L1												
Robot FW	4.21	4.21			4.21	4.14	4.14	4.21		4.21	4.21	4.21
Drive FW Ultrium 230	E38W	E38W			E38W	E33W	E33W	E38W		E38W	E38W	E38W
MSL 5052 S2												
Robot FW	4.21	4.21			4.21	4.14	4.14	4.21	3.11	4.21	4.21	4.21
Drive FW SDLT 160/320	v75	v75			v75	v52	v52	v75	V35	v75	v75	v75
MSL 5052 SL												
Robot FW	4.21	4.21	3.11	3.11	4.21	4.14	4.14	4.21	3.11	4.21	4.21	4.21
Drive FW SDLT 110/220	v75	v75	V35	V35	v75	v51	v51	v75	v35	v75	v75	v75
MSL 6030 (Ultrium 460)												
Robot FW	4.21	4.21			4.21	4.14	4.14	4.21		4.21	4.21	4.21
Drive FW Ultrium 460	F43W	F43W			F43W	F3CW	F3CW	F43W		F43W	F43W	F43W
MSL 5030 L1												
Robot FW	4.21	4.21			4.21	4.14	4.14	4.21		4.21	4.21	4.21
Drive FW Ultrium 230	E38W	E38W			E38W	E33W	E33W	E33W		E38W	E38W	E38W
MSL 5026 S2												
Robot FW	4.21	4.21			4.21	4.14	4.14	4.21	3.11	4.21	4.21	4.21
Drive FW SDLT 160/320	v75	v75			v75	v52	v52	v75	V35	v75	v75	v75
MSL 5026 SL												
Robot FW	4.21	4.21	3.11	3.11	4.21	4.14	4.14	4.21	3.11	4.21	4.21	4.21
SDLT 110/220 FW	v75	v75	V35	V35	v75	v51	v51	v75	v35	v75	v75	v75
MSL 5026 DLX												
Robot FW	4.21	4.21	3.11	3.11	4.21	4.14	4.14	4.21	3.11	4.21	4.21	4.21
Drive FW 40/80	v86	v86	V80	V80	v86	v80	V80	v86	v80	v86	v86	v86
SSL 2020 TL												
Robot FW	4.16	4.16	4.15	4.15	4.16		4.16	4.16	4.16	4.16	4.16	4.16
Drive FW AIT50	1.35	1.35	1.30	1.30	1.35		1.30	1.35	1.27	1.35	1.35	1.35

STORAGE HARDWARE / SOFTWARE COMPATIBILITY MATRIX

Libraries | AutoLoaders | Operating Systems | RAID Arrays | Infrastructure | Servers | Fibre HBAs
SCSI HBAs | Software | Disk Array Multipath | <<Previous Firmware & Drivers Next>> | Backup App Details | Legacy Support

October 2003

Components & Firmware	Current Release	HP Data Protector	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
Autoloaders												
SSL1016 Ultrium 460												
Tape Autoloader												
Robot FW	v10	v10			v10	v10		v10		v10	v10	v10
Drive FW Ultrium 460	F43W	F43W			F43W	F43W		F43W		F43W	F43W	F43W
1/8 Ultrium 230												
Tape Autoloader												
Robot FW	H33R	H33R			H33R	H33R	H33R	H33R		H33R	H33R	H33R
Drive FW Ultrium 230	E00P	E00P			E00P	E00P	E00P	E00P		E00P	E00P	E00P
1/8 DLT vs80												
Tape Autoloader												
Robot FW	0110	0110	0110	0110	0110	0110	0110	0110	0110		0110	
Drive FW vs80	v56	v56	v56	v56	v56	v56	v56	v56	v56		v56	
SSL1016 SDLT160/320												
Tape Autoloader												
Robot FW	v31	v31			v31	v31	v31	v31			v31	v31
Drive FW SDLT 160/320	v75	v75			v75	v52	v52	v75			v75	v75
SSL1016 DLT1												
Tape Autoloader												
Robot FW	v31	v31	v31	v31	v31	v13	v13	v31	v13	v31	v31	v31
Drive FW DLT 1	v53	v53	v53	v53	v53	v46	v46	v53	v46	v53	v53	v53
Fibre Channel Interface												
Controllers												
Interface Manager	1100	1100			1100							1100
NSR M2402	5.01.04	5.01.04	4.02	4.02	5.01.04	5.01.04	5.01.04	5.01.04	4.02.aw	4.03.21	4.03.21	5.01.04
NSR N1200	5.01.04	5.01.04			5.01.04	5.01.04	5.01.04	5.01.04		4.03.19	4.03.19	5.01.04
NSR E2400	5.01.04	5.01.04			5.01.04	5.01.04	5.01.04	5.01.04		4.03.19	4.03.19	5.01.04
NSR E2400-160	5.01.08	5.01.08			5.01.08	5.01.04		5.01.04			5.01.08	5.01.08
NSR E1200-160	5.01.04	5.01.04			5.01.04	5.01.04	5.01.04	5.01.04		4.03.24	4.03.24	5.01.04
NSR E1200	5.01.04	5.01.04			5.01.04	5.01.04	5.01.04	5.01.04		4.03.19	4.03.19	5.01.04
MDR	v1187	v1187	v1186	v1186	v1187	v1187	v1187	v1187	V1187	V1187	v1187	v1187
Tools and Utilities												
Smart Start	6.40	6.40	5.30	5.30	6.40	6.40	6.40	6.40	5.40	6.40	6.40	6.40
Insight Manager 7	6.40	6.40			6.40	6.40	6.40	6.40		6.40	6.40	6.40
Disk Array Multipath Support												
AutoPath for HP-UX	2.01.02	2.01.02						2.01.02				2.01.02
Secure Path for HP-UX	3.0C	3.0C				3.0B	3.0A, SP1	3.0C		3.0C		3.0C
Secure Path for WIN NT	4.0C	4.0C	v3.1A sp2	v3.1A sp2	4.0C	4.0B	4.0B	4.0C	4	4.0C	4.0C	4.0C
Secure Path for WIN 2000	4.0C	4.0C	v3.1A sp2	v3.1A sp2	4.0C	4.0B	4.0B	4.0C	4	4.0C	4.0C	4.0C
AutoPath for Windows 2000	2.01	2.01			2.01			2.01		2.01	2.01	2.01
AutoPath for Windows 2003	1.00				1.00			1.00			1.00	
Tru64 Multipath	Native					Native	Native	Native	Native			Native
Secure Path for NetWare	3.0C SP1				3.0C SP1						3.0C SP1	
Secure Path for Solaris	3.0B SP1	3.0B SP1				3.0B SP1	3.0A	3.0B SP1		3.0B SP1		3.0B SP1
Secure Path for AIX	2.0D						2.0B	2.0D		2.0D		2.0D
IBM DPO												

STORAGE HARDWARE / SOFTWARE COMPATIBILITY MATRIX

Libraries | AutoLoaders | Operating Systems | RAID Arrays | Infrastructure | Servers | Fibre HBAs
SCSI HBAs | Software | Disk Array Multipath | <<Previous Firmware & Drivers Next>> | Backup App Details | Legacy Support

October 2003

Components & Firmware	Current Release	HP Data Protector	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	05.01.00-24, HAFM 07.01.00 9	05.01.00-24, HAFM 07.01.00 9			05.01.00-24, HAFM 07.01.00 9	05.01.00-24, HAFM 07.01.00 9		05.01.00-24, HAFM 07.01.00 9		05.01.00-24, HAFM 07.01.00 9	05.01.00-24, HAFM 07.01.00 9	05.01.00-24, HAFM 07.01.00 9
Director Switch 2/64	05.01.00-24, HAFM 07.01.00 9	05.01.00-24, HAFM 07.01.00 9			05.01.00-24, HAFM 07.01.00 9	05.01.00-24, HAFM 07.01.00 9		05.01.00-24, HAFM 07.01.00 9		05.01.00-24, HAFM 07.01.00 9	05.01.00-24, HAFM 07.01.00 9	05.01.00-24, HAFM 07.01.00 9
Edge Switch 2/32	05.01.00-24, HAFM 07.01.00 9	05.01.00-24, HAFM 07.01.00 9			05.01.00-24, HAFM 07.01.00 9	05.01.00-24, HAFM 07.01.00 9		05.01.00-24, HAFM 07.01.00 9		05.01.00-24, HAFM 07.01.00 9	05.01.00-24, HAFM 07.01.00 9	05.01.00-24, HAFM 07.01.00 9
Edge Switch 2/24	05.01.00-24, HAFM 07.01.00 9	05.01.00-24, HAFM 07.01.00 9			05.01.00-24, HAFM 07.01.00 9	05.01.00-24, HAFM 07.01.00 9		05.01.00-24, HAFM 07.01.00 9		05.01.00-24, HAFM 07.01.00 9	05.01.00-24, HAFM 07.01.00 9	05.01.00-24, HAFM 07.01.00 9
Edge Switch 2/16	05.01.00-24, HAFM 07.01.00 9	05.01.00-24, HAFM 07.01.00 9			05.01.00-24, HAFM 07.01.00 9	05.01.00-24, HAFM 07.01.00 9		05.01.00-24, HAFM 07.01.00 9		05.01.00-24, HAFM 07.01.00 9	05.01.00-24, HAFM 07.01.00 9	05.01.00-24, HAFM 07.01.00 9
Core Switch 2/64	4.1.1	4.1.1			4.1.1	4.1.1		4.1.1		4.1.1	4.1.1	4.1.1
SAN Switch 2/32	4.1.1	4.1.1			4.1.1	4.1.1	4.0.2b	4.1.1		4.1.1	4.1.1	4.1.1
SAN Switch 2/16	3.1.1	3.1.1			3.1.1	3.1.1	3.0.2k	3.1.1	3.0.2e	3.1.1	3.1.1	3.1.1
SAN Switch 2/8	3.1.1	3.1.1			3.1.1	3.1.1	3.0.2k	3.1.1	3.0.2e	3.1.1	3.1.1	3.1.1
SAN Switch 2/16-EL	3.1.1	3.1.1			3.1.1	3.1.1	3.0.2k	3.1.1	3.0.2e	3.1.1	3.1.1	3.1.1
SAN Switch 2/8-EL	3.1.1	3.1.1			3.1.1	3.1.1	3.0.2k	3.1.1	3.0.2e	3.1.1	3.1.1	3.1.1
SAN Switch 16	2.6.1	2.6.1	2.6	2.6	2.6.1	2.6.1	2.6.0h	2.6.1	α2.6.0.c	2.6.1	2.6.1	2.6.1
SAN Switch 8	2.6.1	2.6.1	2.6	2.6	2.6.1	2.6.1	2.6.0h	2.6.1	α2.6.0.c	2.6.1	2.6.1	2.6.1
SAN Switch 16EL	2.6.1	2.6.1	2.6	2.6	2.6.1	2.6.1	2.6.0h	2.6.1	α2.6.0.c	2.6.1	2.6.1	2.6.1
SAN Switch 8EL	2.6.1	2.6.1	2.6	2.6	2.6.1	2.6.1	2.6.0h	2.6.1	α2.6.0.c	2.6.1	2.6.1	2.6.1
FC Switch 16B	3.1.1	3.1.1			3.1.1	3.1.1	3.0.2k	3.1.1	3.0.2e	3.1.1	3.1.1	3.1.1
FC Switch 8B	3.1.1	3.1.1			3.1.1	3.1.1	3.0.2k	3.1.1	3.0.2e	3.1.1	3.1.1	3.1.1
MSA SAN Switch 2/8	3.1.1	3.1.1			3.1.1	3.1.1	3.0.2k	3.1.1		3.1.1	3.1.1	3.1.1
MSA SAN Switch 6	101G12										101G12	
FC-AL Switch												
FC Loop Switch FW	1.20-g13	1.20-g13	1.20-g13	1.20-g13	1.20-g13		1.20-g13		1.20-g13		1.20-g13	
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	
HP OpenView Storage & StorageWorks Software												
OpenView												
Storage Virtual Replicator	3.0b sp1				3.0b sp1			3.0b sp1		3.0b sp1	3.0b sp1	3.0b sp1
OV-SAM	3.1	3.1			3.1	3.0.2	3.0.2	3.1		3.1	3.1	3.1
StorageWorks												
Data Replication Manager	2.0a				2.0a			2.0a		2.0a	2.0a	2.0a
Business Copy EVA	2.1	2.1	2.1		2.1		2.1	2.1		2.1	2.1	2.1

STORAGE HARDWARE / SOFTWARE COMPATIBILITY MATRIX

Libraries | AutoLoaders | Operating Systems | RAID Arrays | Infrastructure | Servers | Fibre HBAs
SCSI HBAs | Software | Disk Array Multipath | <<Previous Firmware & Drivers Next>> | Backup App Details | Legacy Support

October 2003

Components & Firmware	Current Release	HP Data Protector	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
Fibre Host Bus Adapters												
Windows - HP Branded												
FCA2355 (2G)												
FW	3.91a1	3.91a1			3.91a1	3.91a1	3.82a1	3.91a1		3.91a1	3.91a1	3.91a1
WIN NT 4.0 Driver	4-4.82a16	4-4.82a16			4-4.82a16	4-4.82a16	4-4.82a14	4-4.82a16		4-4.82a16	4-4.82a16	4-4.82a16
WIN 2000 Driver	5-4.82a16	5-4.82a16			5-4.82a16	5-4.82a16	5-4.82a14	5-4.82a16		5-4.82a16	5-4.82a16	5-4.82a16
WIN 2003 Driver	5-4.82a16	5-4.82a16			5-4.82a16	5-4.82a16	5-4.82a14	5-4.82a16			5-4.82a16	
FCA2408 (2G)												
FW	1.01a2	1.01a2			1.01a2			1.01a2		1.01a2	1.01a2	1.01a2
WIN NT 4.0 Driver	4-4.82a16	4-4.82a16			4-4.82a16			4-4.82a16		4-4.82a16	4-4.82a16	4-4.82a16
WIN 2000 Driver	5-4.82a16	5-4.82a16			5-4.82a16			5-4.82a16		5-4.82a16	5-4.82a16	5-4.82a16
WIN 2003 Driver	5-4.82a16	5-4.82a16			5-4.82a16			5-4.82a16		5-4.82a16	5-4.82a16	5-4.82a16
ISP2312 (2G - BL20pG2 Blade Server)												
FW	1.34	1.34					1.33			1.34	1.34	1.34
WIN 2000 Driver	8.2.0.73	8.2.0.73					8.2.0.72			8.2.0.73	8.2.0.73	8.2.0.73
WIN 2003 Driver	8.2.0.73	8.2.0.73					8.2.0.72			8.2.0.73	8.2.0.73	
FCA2101 (2G)												
FW	3.91a1	3.91a1			3.91a1	3.91a1	3.82a1	3.91a1	3.81a3	3.91a1	3.91a1	3.91a1
WIN NT 4.0 Driver	4-4.82a16	4-4.82a16			4-4.82a16	4-4.82a16	4-4.82a14	4-4.82a16		4-4.82a16	4-4.82a16	4-4.82a16
WIN 2000 Driver	5-4.82a16	5-4.82a16			5-4.82a16	5-4.82a16	5-4.82a14	5-4.82a16	5-4.53a9	5-4.82a16	5-4.82a16	5-4.82a16
WIN 2003 Driver	5-4.82a16	5-4.82a16			5-4.82a16	5-4.82a16	5-4.82a14	5-4.82a16			5-4.82a16	
FCA2404 (2G)												
FW	1.01a2	1.01a2			1.01a2			1.01a2		1.01a2	1.01a2	1.01a2
WIN NT 4.0 Driver	4-4.82a16	4-4.82a16			4-4.82a16			4-4.82a16		4-4.82a16	4-4.82a16	4-4.82a16
WIN 2000 Driver	5-4.82a16	5-4.82a16			5-4.82a16			5-4.82a16		5-4.82a16	5-4.82a16	5-4.82a16
WIN 2003 Driver	5-4.82a16	5-4.82a16			5-4.82a16			5-4.82a16		5-4.82a16	5-4.82a16	5-4.82a16
FCA2404DC (2G)												
FW	1.01a2	1.01a2			1.01a2			1.01a2		1.01a2	1.01a2	1.01a2
WIN NT 4.0 Driver	4-4.82a16	4-4.82a16			4-4.82a16			4-4.82a16		4-4.82a16	4-4.82a16	4-4.82a16
WIN 2000 Driver	5-4.82a16	5-4.82a16			5-4.82a16			5-4.82a16		5-4.82a16	5-4.82a16	5-4.82a16
WIN 2003 Driver	5-4.82a16	5-4.82a16			5-4.82a16			5-4.82a16		5-4.82a16	5-4.82a16	5-4.82a16
FCA2214/2214DC (2G)												
FW	1.34	1.34					1.33			1.34	1.34	1.34
WIN 2000 Driver	8.2.0.73	8.2.0.73					8.2.0.72			8.2.0.73	8.2.0.73	8.2.0.73
WIN 2003 Driver	8.2.0.73	8.2.0.73					8.2.0.72			8.2.0.73	8.2.0.73	
64-bit/33MHz PCI to FC (1G) KGPSA-CB												
FW	3.91a1	3.91a1	3.82a1	3.82a1	3.91a1	3.91a1	3.82a1	3.91a1	3.82a1	3.91a1	3.91a1	3.91a1
WIN NT 4.0 Driver	4-4.82a16	4-4.82a16			4-4.82a16	4-4.82a16	4-4.53a7	4-4.82a16	4-4.53a7	4-4.82a16	4-4.82a16	4-4.82a16
WIN 2000 Driver	5-4.82a16	5-4.82a16	5-4.52a9	5-4.52a9	5-4.82a16	5-4.82a16	5-4.52a9	5-4.82a16	5-4.53a7	5-4.82a16	5-4.82a16	5-4.82a16
WIN 2003 Driver	5-4.82a16	5-4.82a16			5-4.82a16	5-4.82a16		5-4.82a16			5-4.82a16	

STORAGE HARDWARE / SOFTWARE COMPATIBILITY MATRIX

[Libraries](#) | [AutoLoaders](#) | [Operating Systems](#) | [RAID Arrays](#) | [Infrastructure](#) | [Servers](#) | [Fibre HBAs](#)
[SCSI HBAs](#) | [Software](#) | [Disk Array Multipath](#) | [<<Previous](#) [Firmware & Drivers](#) [Next>>](#) | [Backup App Details](#) | [Legacy Support](#)

October 2003

Components & Firmware	Current Release	HP Data Protector	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
Fibre Host Bus Adapters												
Windows - HP Branded (IA64)												
A7298A (2G)												
FW	1.01a2	1.01a2						1.01a2				
WIN 2003 Driver	6-5.00a11	6-5.00a11						6-5.00a11				
AB232A (2G)												
FW	1.01a2	1.01a2						1.01a2				
WIN 2003 Driver	6-5.00a11	6-5.00a11						6-5.00a11				
Windows - 3rd Party												
Emulex LP982												
FW	1.01a2	1.01a2										1.01a2
WIN 2000 Driver	2.21a0	2.21a0										2.21a0
WIN 2003 Driver	2.21a0	2.21a0										2.21a0
LINUX												
FCA2214 (2G)												
FW	1.34	1.34						1.34				1.34
Linux Driver (Intel)	6.04.00	6.04.00						6.04.00				6.04.00
ISP2312 (2G - BL20pG2 Blade Server)												
FW	1.34	1.34						1.34				1.34
Linux Driver (Intel)	6.04.00	6.04.00						6.04.00				6.04.00
QLA2200 (1G)												
FW	1.76	1.76						1.76	1.76			
Linux Driver (Intel)	6.0.1c	6.0.1c						6.0.1c	6.0.1			
NetWare												
FCA2210 (2G)												
FW	1.34	1.34			1.34		1.28		1.29		1.34	
NetWare Driver	6.50y	6.50y			6.50y		6.50s		6.50s		6.50y	
64 Bit / 66 MHz PCI to FC HBA (1G)												
NetWare Driver	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	

STORAGE HARDWARE / SOFTWARE COMPATIBILITY MATRIX

[Libraries](#) | [AutoLoaders](#) | [Operating Systems](#) | [RAID Arrays](#) | [Infrastructure](#) | [Servers](#) | [Fibre HBAs](#)
[SCSI HBAs](#) | [Software](#) | [Disk Array Multipath](#) | [<<Previous](#) [Firmware & Drivers](#) [Next>>](#) | [Backup App Details](#) | [Legacy Support](#)

October 2003

Components & Firmware	Current Release	HP Data Protector	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
Fibre Host Bus Adapters												
HP-UX (IA-64)												
A6795A (2G)												
HP-UX Driver												
A6826A (2G)												
HP-UX Driver												
HP-UX (PA-RISC)												
A6795A (2G)												
HP-UX Driver	11.11.09 11.0.10	11.11.09 11.0.10				11.11.09 11.0.10	11.11.09 11.0.10	11.11.09 11.0.10		11.11.09 11.0.10		11.11.09 11.0.10
A6685A (1G)												
HP-UX Driver	11.11.09	11.11.09						11.11.09 11.0.10				11.11.09 11.0.10
A5158A (1G)												
HP-UX Driver	11.11.09 11.0.10	11.11.09 11.0.10	11.00.06	11.00.06		11.11.09 11.0.10	11.11.09 11.0.10	11.11.09 11.0.10	11.00.06	11.11.09 11.0.10		11.11.09 11.0.10
Tru64												
FCA2354												
FW	3.91a1	3.91a1				3.91a1	3.81a4	3.91a1				3.91a1
Tru64 Driver	2.06	2.06				2.06	1.32a	2.06				2.06
FCA2384 (2G - PCI-X)												
FW	1.00x6 w/LFU	1.00x6 w/LFU						1.00x6 w/LFU				1.00x6 w/LFU
Tru64 Driver												
KGPSA -CA												
FW	3.91a1	3.91a1	3.81a4	3.81a4		3.91a1	3.81a4	3.91a1	3.81a4			3.91a1
Tru64 Driver	2.06	2.06	1.32a	1.32a		2.06	1.32a	2.06	2.02			2.06
AIX												
IBM 6228 (2Gb)												
AIX 4.3.3 Driver	Maintenance Pack 10	Maintenance Pack 10					Maintenance Pack 10	Maintenance Pack 10		Maintenance Pack 10		Maintenance Pack 10
AIX 5.1L Driver	Native						Native	Native		Native		Native
PCI-to-FC HBA for AIX (1G) 197819-B21												
AIX Driver w/o Secure Path	1.5.19.0	1.5.19						1.5.19.0		1.5.19.0		1.5.19.0
AIX Driver w/ Secure Path	1.5.19.1											

STORAGE HARDWARE / SOFTWARE COMPATIBILITY MATRIX

October 2003

Components & Firmware	Current Release	HP Data Protector	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
Fibre Host Bus Adapters												
Solaris												
FCA2257P (2G - PCI)												
fw	3.1.2	3.1.2				3.1.2	3.1.2	3.1.2		3.1.2		3.1.2
Solaris Driver	4.11	4.11				3.26	3.26	4.11		4.11		4.11
FCA2257C (1G - PCI)												
fw	3.1.2	3.1.2				3.1.2	3.1.2	3.1.2		3.1.2		3.1.2
Solaris Driver	4.11	4.11				3.26	3.26	4.11		4.11		4.11
FCA2257S (1G - Sbus)												
fw	3.1.2	3.1.2				3.1.2	3.1.2	3.1.2		3.1.2		3.1.2
Solaris Driver	4.11	4.11				3.26	3.26	4.11		4.11		4.11
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		3.0.3
Solaris Driver	2.5.9							2.5.9		2.5.9		2.5.9
FCX-6562/FCX2-6562 (2G - PCI)												
Fcode												
Solaris Driver												
JNI FCE6460 (2G - PCI)												
Fcode	3.8.9	3.8.9				3.8.9	3.8.9	3.8.9		3.8.9		3.8.9
Solaris Driver	5.2.1	5.2.1				5.2.1	5.2.1	5.2.1		5.2.1		5.2.1
JNI FCC6460 (2G - cPCI)												
Fcode	3.8.9	3.8.9				3.8.9	3.8.9	3.8.9		3.8.9		3.8.9
Solaris Driver	5.2.1	5.2.1				5.2.1	5.2.1	5.2.1		5.2.1		5.2.1
JNI FCE6410 (1G - PCI)												
Fcode	3.9	3.9						3.9				3.9
Solaris Driver	4.13	4.13						4.13				4.13

STORAGE HARDWARE / SOFTWARE COMPATIBILITY MATRIX

Libraries | AutoLoaders | Operating Systems | RAID Arrays | Infrastructure | Servers | Fibre HBAs
SCSI HBAs | Software | Disk Array Multipath | Firmware & Drivers | Backup App Details | Legacy Support

October 2003

ISV DETAILS

Name	Version	Date Last Tested	Recommended Tape Driver	Application Information/Support
HP OpenView Storage Data Protector	5.0 and 5.1	Current	Use Data Protector Driver for Windows	Data Protector Product Information Data Protector Device Support Matrix
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 2030	Current	CABA Driver for Windows	support.ca.com
Computer Associates BrightStor ARCserve for NetWare	9.0	Current	HP Driver for Netware	support.ca.com
Computer Associates BrightStor Enterprise Backup	BEB v10.5	Oct-03		support.ca.com/
CommVault Galaxy	4.2 sp2	Jul-03	HP Driver for Windows	www.commvault.com
Legato NetWorker	7.0 and 6.1.3	Current	HP Driver for Windows	www.legato.com
Syncsort Backup Express	2.1.5B	Aug-02	Use Native Drivers	www.syncsort.com
Tivoli Storage Manager	5.2.1.x	Current	Tivoli Driver for Windows	www.tivoli.com
VERITAS Backup Exec for Windows Servers	9.0 build 4454	Current	BE Driver for Windows	www.veritas.com
VERITAS Backup Exec for NetWare	9.0 build 4202	Current	BE Driver for Netware	www.veritas.com
VERITAS NetBackup Windows	4.5 FP5/MP5 and 3.4.1 MP3	Current	HP Driver for Windows	www.veritas.com
VERITAS NetBackup UNIX	4.5 FP5/MP5 and 3.4 MP4	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.

STORAGE HARDWARE / SOFTWARE COMPATIBILITY MATRIX

[Libraries](#) | [AutoLoaders](#) | [Operating Systems](#) | [RAID Arrays](#) | [Infrastructure](#) | [Servers](#) | [Fibre HBAs](#)
[SCSI HBAs](#) | [Software](#) | [Disk Array Multipath](#) | [Firmware & Drivers](#) | [Backup App Details](#) | [Legacy Support](#)

October 2003

LEGACY AUTOMATION PRODUCT SUPPORT DETAILS

Device Name	Last EBS Compatibility Matrix Where Device Was Listed ¹
TL895	December 2002
TL891DLX	December 2002
ESL9326D	April 2002
TL891D	April 2002
DLT 35/70	April 2002

1) Consult your HP Account Representative to obtain legacy EBS Compatibility Matrices