



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

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**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.**

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

# 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

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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
<b>Enterprise Libraries</b>											
ESL 9595 (Ultrium 460)	✓			✓ <sup>2</sup>		✓	✓		✓	✓	✓
ESL 9595 (Ultrium 230)	✓			✓		✓	✓ <sup>6</sup>	✓	✓	✓	✓
ESL 9595 S2	✓			✓	✓	✓	✓	✓	✓	✓	✓
ESL 9595 SL	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ESL 9326 SL	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ESL 9326 DX	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ESL 9322 (Ultrium 460)	✓			✓ <sup>2</sup>		✓	✓		✓	✓	✓
ESL 9322 (Ultrium 230)	✓			✓		✓	✓ <sup>6</sup>	✓	✓	✓	✓
ESL 9322 S2	✓			✓	✓	✓	✓	✓	✓	✓	✓
ESL 9198 SL	✓	✓	✓	✓ <sup>2</sup>	✓	✓	✓	✓	✓	✓	✓
ESL 9198 DLX	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ESL Multi-Unit Scalability <sup>3,4</sup>	✓						✓		✓		✓
<b>Mid-Range Libraries</b>											
MSL 6060 (Ultrium 460)	✓			✓		✓	✓		✓ <sup>5</sup>	✓	✓
MSL 5060 (Ultrium 230)	✓			✓		✓	✓ <sup>6</sup>		✓	✓	✓
MSL 5052 S2	✓			✓	✓	✓	✓	✓		✓	✓
MSL 5052 SL	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MSL 6030 (Ultrium 460)	✓			✓		✓	✓		✓ <sup>5</sup>	✓	✓
MSL 5030 (Ultrium 230)	✓			✓		✓	✓ <sup>6</sup>		✓	✓	✓
MSL 5026 S2	✓			✓	✓	✓	✓	✓		✓	✓
MSL 5026 SL	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MSL 5026 DLX	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MSL Multi-Unit Scalability <sup>3,4</sup>	✓			✓		✓	✓			✓	✓
SSL 2020 TL	✓	✓	✓	✓		✓	✓ <sup>1</sup>	✓	✓ <sup>1</sup>	✓	✓ <sup>1</sup>

## 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) Support is with TSM 5.1.7 only
- 6) Ultrium 230 drives are not supported on W2003

# 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

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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
<b>AutoLoaders<sup>1</sup></b>											
SSL1016 Ultrium 460 Tape Autoloader	✓ <sup>6</sup>			✓			✓		✓ <sup>11</sup>	✓ <sup>5</sup>	✓
1/8 Ultrium 230 Tape Autoloader	✓ <sup>4</sup>			✓ <sup>8</sup>		✓ <sup>3</sup>	✓ <sup>10</sup>		✓	✓ <sup>5</sup>	✓ <sup>9</sup>
1/8 DLT vs80 Tape Autoloader	✓	✓ <sup>3</sup>	✓ <sup>3</sup>	✓	✓ <sup>3</sup>	✓ <sup>3</sup>	✓ <sup>10</sup>	✓ <sup>3</sup>		✓ <sup>5</sup>	
SSL1016 SDLT160/320 Tape Autoloader	✓			✓ <sup>3</sup>		✓ <sup>3</sup>	✓ <sup>12</sup>			✓ <sup>3</sup>	✓ <sup>2</sup>
SSL1016 DLT1 Tape Autoloader	✓ <sup>3</sup>	✓ <sup>3</sup>	✓ <sup>3</sup>	✓ <sup>5</sup>	✓ <sup>3</sup>	✓ <sup>3</sup>	✓ <sup>5</sup>	✓ <sup>3</sup>	✓ <sup>11</sup>	✓ <sup>3</sup>	✓ <sup>3</sup>

## 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, 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

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Libraries | AutoLoaders | Operating Systems | RAID Arrays | Infrastructure | Servers | Fibre HBAs  
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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
<b>Operating Systems</b>											
HP-UX 11.0	✓		✓ <sup>2</sup>		✓ <sup>2</sup>	✓ <sup>2</sup>	✓	✓ <sup>2</sup>	✓		✓
HP-UX 11.11	✓	✓ <sup>2</sup>				✓ <sup>2</sup>	✓	✓ <sup>2</sup>	✓		✓
HP-UX 11.22 <sup>9</sup>	✓										
Windows NT 4.0	✓	✓	✓	✓ <sup>7</sup>	✓	✓	✓	✓	✓	✓	✓
Windows 2000 Server/AS	✓	✓	✓	✓ <sup>7</sup>	✓	✓	✓	✓	✓	✓	✓
Windows Server 2003 (32-bit)	✓			✓ <sup>7</sup>		✓	✓			✓	
Tru64 5.1 <sup>3</sup>							✓				✓
Tru64 5.1A <sup>3</sup>	✓	✓	✓		✓	✓	✓	✓			✓
Tru64 5.1B <sup>3</sup>	✓					✓	✓				✓
Linux Redhat Advanced Server 2.1 (32-bit)	✓						✓				
NetWare 5.1	✓		✓	✓ <sup>7</sup>				✓		✓	
NetWare 6.0	✓			✓ <sup>7</sup>		✓		✓		✓	
Solaris 7	✓					✓	✓		✓		✓
Solaris 8	✓	✓	✓		✓	✓	✓	✓	✓		✓
Solaris 9	✓						✓				✓
AIX 4.3.3 (32-bit)	✓ <sup>5</sup>		✓			✓	✓		✓		✓
AIX 5.1L (32-bit)						✓	✓ <sup>1</sup>		✓		✓
<b>High Availability<sup>8</sup></b>											
HP-UX (Service Guard) <sup>4</sup>	✓ <sup>6</sup>										✓ <sup>6</sup>
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 mode only

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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
<b>RAID Arrays</b>											
XP 1024/128 <sup>1</sup>	✓			✓		HP-UX, NT/WIN 2000, WIN 2003, and Solaris only	✓		HP-UX and NT/WIN2K only	✓	✓
XP 48/512 <sup>1</sup>	✓			✓		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 <sup>1</sup>	Solaris, Tru64, NetWare <sup>3</sup> , HP-UX, NT, W2000, and W2003	NT/WIN2K only	NT/WIN2K only	✓ <sup>3</sup>	NT/WIN2K only	✓	✓	NT/WIN2K only	✓	✓ <sup>3</sup>	✓
Enterprise Virtual Array EVA 3000 <sup>1</sup>	Solaris, Tru64, NetWare <sup>3</sup> , HP-UX, NT, W2000, and W2003	NT/WIN2K only	NT/WIN2K only	✓ <sup>3</sup>	NT/WIN2K only	✓	✓	NT/WIN2K only	✓	✓ <sup>3</sup>	✓
VA 7410/7110 <sup>1</sup>	✓			✓			✓			✓	✓
VA 7400/7100 <sup>1</sup>	✓			✓			✓			✓	✓
EMA 16000 <sup>1</sup>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EMA 12000/8000 <sup>1</sup>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MSA1000 <sup>2, 4</sup>	NT/WIN2K and NetWare 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) 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 in single path configuration with FCA 2210 HBA only
- 4) NetWare 5.1 & 6.0 supported with FCA2210 HBA only

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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
<b>Interconnects<sup>1</sup></b>											
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 <sup>3</sup>										✓	
FC-AL Switch <sup>2</sup>	✓	✓	✓	✓		✓		✓		✓	

## 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

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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
<b>Fibre Channel Interface Controller</b>											
E2400-160 FC Interface Controller	✓			✓			✓ <sup>4</sup>			✓ <sup>5</sup>	✓
NSR E1200-160	✓			✓		✓	✓		✓	✓	✓
NSR E2400	✓			✓		✓	✓		✓	✓	✓
NSR E1200	✓			✓		✓	✓		✓	✓	✓
NSR M2402	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
NSR N1200	✓			✓		✓	✓		✓	✓	✓
MDR <sup>1,3</sup>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>Serverless (3PC) Backup Support</b>											
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 <sup>2</sup>
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 <sup>2</sup>
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 <sup>2</sup>
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 <sup>2</sup>

**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

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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
<b>Servers</b>											
HP SuperDome (pa-risc)	✓						✓				✓
HP rp series (pa-risc)	✓						✓		✓		✓
HP rx series (IA) <sup>2</sup>	✓										
HP A, L, N, and V Class (pa-risc)	✓	✓	✓		✓	✓	✓	✓	✓		✓
HP K, R, and D Class (pa-risc) <sup>1</sup>	✓										
HP ProLiant	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
HP NetServer	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
HP AlphaServer	✓	✓	✓		✓	✓	✓	✓			✓
IBM RS/6000	✓		✓			✓	✓		✓		✓
Sun UltraSPARC	✓	✓	✓		✓	✓	✓	✓	✓		✓
Sun Sun Fire	✓					✓	✓		✓		✓
Third Party X86	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>Workstations</b>											
HP xz series (IA) <sup>2</sup>	✓										
HP B-Class B2000 (pa-risc)	✓										✓
HP C-Class C3600, C3700 (pa-risc)	✓										✓
HP J-Class J6700, J6750 (pa-risc)	✓										✓
<b>NAS</b>											
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



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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
<b>Fibre Host Bus Adapters<sup>1</sup></b>											
<b>HP-UX</b>											
A6795A (2G)	✓					✓	✓		✓		✓
A6685A (1G)	✓						✓				✓
A5158A (1G)	✓	✓	✓		✓	✓	✓	✓	✓		✓
<b>Tru64</b>											
FCA2354 (2G - PCI)	✓					✓	✓				✓
FCA2384 (2G - PCI-X)											✓
KGPSA -CA (1G - PCI)	✓	✓	✓		✓	✓	✓	✓			✓
<b>Solaris</b>											
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)	✓						✓				✓
<b>AIX</b>											
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

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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
<b>Fibre Host Bus Adapters</b> <sup>1</sup>											
<b>Windows</b>											
FCA2355 (2G)	✓			✓		✓	✓		✓	✓	✓
ISP2312 (2G - BL20pG2 Blade Server)	✓					✓				✓	✓
FCA2101 (2G)	✓			✓	✓	✓	✓	✓	✓	✓	✓
FCA2404 (2G)	✓			✓			✓			✓	
FCA2214/2214DC (2G)	✓					✓				✓	✓
64-bit/33MHz PCI to FC (1G) KGPSA-CB	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>LINUX</b>											
FCA2214 (2G)	✓						✓				
QLA2200 (1G)	✓						✓	✓			
<b>NetWare</b>											
FCA2210 (2G) <sup>3</sup>	✓			✓		✓				✓	
64-bit / 66 MHz PCI to FC HBA (1G) <sup>2, 4, 5</sup>	✓		✓	✓				✓		✓	
32-bit / 33 MHz HBA (1G) <sup>2, 4, 5</sup>	✓			✓				✓		✓	

## 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 (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).

5) Not supported with CA ARCserve 9.0 for NetWare

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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) <sup>1</sup>
A5149A (LVD Ultra 2 PCI)			348757-B21 (dual channel wide)	C7474A
A5150A (LVD Ultra 2 PCI)			Adaptec 2940U2W <sup>3</sup>	
A4974A <sup>2</sup> (PCI Ultra SCSI Single Ended Adaptor)			Adaptec 2940U2B <sup>3</sup>	
A4999A <sup>2</sup> (PCI Ultra2 Low Voltage Diff SCSI adaptor)			Adaptec 29160	
A5838A (PCI 2 Port 100Base-T 2-Port Ultra2 SCSI)			Adaptec 39160	
A6826A <sup>4</sup> 2-Port 2G			Qlogic 1280	
A6829A 2-port			Symbios/LSI 8951	
A5150A 2-port			Symbios/LSI 8952U	
			Symbios/LSI 22902	
			Symbios/LSI 22903	
			Symbios/LSI 22915	
			268351-B21 (U320, dual channel) <sup>1</sup>	
			C7474A	

## NOTES:

- 1) Supported with driver 1.08.18 only
- 2) Supported on HP-UX Workstations only
- 3) Supported on PCI Servers only (no PCI-X)
- 4) Support on Superdome, rp7410, pr8400 with HP-UX 11.11 only

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	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
<b>OpenView</b>											
Storage Virtual Replicator				✓			✓		✓	✓	✓
OV-SAM	✓			✓		✓	✓		✓	✓	✓
<b>StorageWorks</b>											
Data Replication Manager				✓			✓		✓	✓	NT/WIN2K only
Business Copy EVA	✓	✓		✓		✓	✓		✓	NT/WIN2K only	NT/WIN2K only
<b>Tools and Utilities</b>											
Smart Start	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Insight Manager 7	✓			✓		✓	✓		✓	✓	✓

# STORAGE HARDWARE / SOFTWARE COMPATIBILITY MATRIX

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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
<b>Disk Array Multipath<sup>1</sup></b>											
AutoPath for HP-UX <sup>1</sup>	✓						✓				✓
Secure Path for HP-UX <sup>1</sup>	EVA Only					EVA Only	EVA Only		✓		EVA Only
Secure Path for WIN NT <sup>1</sup>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Secure Path for WIN 2000 <sup>1</sup>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
AutoPath for Windows 2000 <sup>1</sup>	✓			✓			✓			✓	✓
AutoPath for Windows 2003 <sup>1</sup>				✓			✓				
Tru64 Multipath <sup>2</sup>						✓	✓	✓			✓
Secure Path for NetWare <sup>1</sup>										✓ <sup>3</sup>	
Secure Path for Solaris <sup>1</sup>	✓					✓	✓		✓		✓
Secure Path for AIX <sup>1</sup>						✓					
IBM DPO									✓		

## NOTES:

1) Refer to [Heterogeneous Open SAN Design Reference Guide](#) 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 3.0c with FCA-2210, HSG80's require 3.0b with COMPAQ HBAs

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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
<b>Enterprise Libraries</b>												
<b>ESL 9595 (Ultrium 460)</b>												
Robot FW	3.40	3.40			3.40		3.40	3.40		3.40	3.40	3.40
Drive FW Ultrium 460	F3CW	F3CW			F3CW		F3CW	F3CW		F3CW	F3CW	F3CW
<b>ESL 9595 (Ultrium 230)</b>												
Robot FW	3.40	3.40			3.40		3.40	3.40	3.31	3.40	3.40	3.40
Drive FW Ultrium 230	E33W	E33W			E33W		E33W	E33W	E30W (005.452)	E33W	E33W	E33W
<b>ESL 9595 S2</b>												
Robot FW	3.40	3.40			3.40	3.20	3.40	3.40	3.20	3.40	3.40	3.40
Drive FW SDLT 160/320	v52	v52			v52	V35	v52	v52	V35	v52	v52	v52
<b>ESL 9595 SL</b>												
Robot FW	3.40	3.40	3.20p5	3.20p5	3.40	3.20	3.40	3.40	3.20	3.40	3.40	3.40
Drive FW SDLT 110/220	v51	v51	V35	V35	v51	V35	v51	v51	V35	v51	v51	v51
<b>ESL 9326 SL</b>												
Robot FW	3.40	3.40	3.20p5	3.20p5	3.40	3.20	3.40	3.40	3.20	3.40	3.40	3.40
Drive FW SDLT 110/220	v51	v51	V35	V35	v51	V35	v51	v51	V35	v51	v51	v51
<b>ESL 9326 DX</b>												
Robot FW	3.40	3.40	3.20p5	3.20p5	3.40	3.20	3.40	3.40	3.20	3.40	3.40	3.40
Drive FW 40/80	V80	V80	V80	V80	V80	V80	V80	V80	V80	V80	V80	V80
<b>ESL 9322 (Ultrium 460)</b>												
Robot FW	3.40	3.40			3.40		3.40	3.40		3.40	3.40	3.40
Drive FW Ultrium 460	F3CW	F3CW			F3CW		F3CW	F3CW		F3CW	F3CW	F3CW
<b>ESL 9322 (Ultrium 230)</b>												
Robot FW	3.40	3.40			3.40		3.40	3.40	3.31	3.40	3.40	3.40
Drive FW Ultrium 230	E33W	E33W			E33W		E33W	E33W	E30W (005.452)	E33W	E33W	E33W
<b>ESL 9322 S2</b>												
Robot FW	3.40	3.40			3.40	3.20	3.40	3.40	3.20	3.40	3.40	3.40
Drive FW SDLT 160/320	v52	v52			v52	V35	v52	v52	V35	v52	v52	v52
<b>ESL 9198 SL</b>												
Robot FW	3.40	3.40	3.20p5	3.20p5	3.40	3.20	3.40	3.40	3.20	3.40	3.40	3.40
Drive FW SDLT 110/220	v51	v51	V35	V35	v51	V35	v51	v51	V35	v51	v51	v51
<b>ESL 9198 DLX</b>												
Robot FW	3.40	3.40	3.20p5	3.20p5	3.40	3.20	3.40	3.40	3.20	3.40	3.40	3.40
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	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
<b>Mid-Range Libraries</b>												
<b>MSL 6060 (Ultrium 460)</b>												
Robot FW	4.14	4.14			4.14		4.14	4.14		4.14	4.14	4.14
Drive FW Ultrium 460	F3CW	F3CW			F3CW		F3CW	F3CW		F3CW	F3CW	F3CW
<b>MSL 5060 L1</b>												
Robot FW	4.14	4.14			4.14		4.14	4.14		4.14	4.14	4.14
Drive FW Ultrium 230	E33W	E33W			E33W		E33W	E33W		E33W	E33W	E33W
<b>MSL 5052 S2</b>												
Robot FW	4.14	4.14			4.14	3.11	4.14	4.14	3.11		4.14	4.08
Drive FW SDLT 160/320	v52	v52			v52	v35	v52	v52	V35		v52	v52
<b>MSL 5052 SL</b>												
Robot FW	4.14	4.14	3.11	3.11	4.14	3.11	4.14	4.14	3.11	4.14	4.14	4.14
Drive FW SDLT 110/220	v51	v51	V35	V35	v51	v35	v51	v51	v35	v51	v51	v51
<b>MSL 6030 (Ultrium 460)</b>												
Robot FW	4.14	4.14			4.14		4.14	4.14		4.14	4.14	4.14
Drive FW Ultrium 460	F3CW	F3CW			F3CW		F3CW	F3CW		F3CW	F3CW	F3CW
<b>MSL 5030 L1</b>												
Robot FW	4.14	4.14			4.14		4.14	4.14		4.14	4.14	4.14
Drive FW Ultrium 230	E33W	E33W			E33W		E33W	E33W		E33W	E33W	E33W
<b>MSL 5026 S2</b>												
Robot FW	4.14	4.14			4.14	3.11	4.14	4.14	3.11		4.14	4.14
Drive FW SDLT 160/320	v52	v52			v52	v35	v52	v52	V35		v52	v52
<b>MSL 5026 SL</b>												
Robot FW	4.14	4.14	3.11	3.11	4.14	3.11	4.14	4.14	3.11	4.14	4.14	4.14
SDLT 110/220 FW	v51	v51	V35	V35	v51	V35	v51	v51	v35	v51	v51	v51
<b>MSL 5026 DLX</b>												
Robot FW	4.14	4.14	3.11	3.11	4.14	3.11	4.14	4.14	3.11	4.14	4.14	4.14
Drive FW 40/80	v80	v80	V80	V80	v80	v80	V80	v80	v80	v80	v80	v80
<b>SSL 2020 TL</b>												
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	1.32	1.32	1.30	1.30	1.32		1.30	1.32	1.27	1.32	1.32	1.32

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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
<b>Autoloaders</b>												
<b>SSL1016 Ultrium 460</b>												
<b>Tape Autoloader</b>												
Robot FW	v10	v10			v10			v10		v10	v10	v10
Drive FW Ultrium 460	F3CW	F3CW			F3CW			F3CW		F3CW	F3CW	F3CW
<b>1/8 Ultrium 230</b>												
<b>Tape Autoloader</b>												
Robot FW	H33R	H33R			H33R		H33R	H33R		H33R	H33R	H33R
Drive FW Ultrium 230	E00P	E00P			E00P		E00P	E00P		E00P	E00P	E00P
<b>1/8 DLT vs80</b>												
<b>Tape Autoloader</b>												
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	
<b>SSL1016 SDLT160/320</b>												
<b>Tape Autoloader</b>												
Robot FW	v31	v31			v31		v31	v31			v31	v31
Drive FW SDLT 160/320	v52	v52			v52		v52	v52			v52	v52
<b>SSL1016 DLT1</b>												
<b>Tape Autoloader</b>												
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
<b>RAID Arrays</b>												
XP 1024/128	21.05.06.00/00	21.05.06.00/00			21.05.06.00/00		21.05.06.00/00	21.05.06.00/00		21.05.06.00/00	21.05.06.00/00	21.05.06.00/00
XP 48/512	01.18.71.00/00	01.18.71.00/00			01.18.71.00/00		01.18.71.00/00	01.18.71.00/00		01.18.71.00/00	01.18.71.00/00	01.18.71.00/00
Zero Downtime with XP												
Instant Recovery with XP												
Enterprise Virtual Array EVA 5000 FW	2.003	2.003	v2_w020214-2000	v2_w020214-2000	2.003	2.0	2.02	2.003	2.0	2.003	2.003	2.003
Enterprise Virtual Array EVA 3000 FW	2.004	2.004	v2_w020214-2000	v2_w020214-2000	2.004	2.0	2.004	2.004	2.0	2.004	2.004	2.004
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	8.6	8.6	ACS 8.7	8.6	8.6	ACS 8.7	8.6	ACS 8.7	ACS 8.7	ACS 8.7
EMA 12000/8000	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	ACS 8.7
<b>MSA1000</b>												
MSA1000 Controller	2.38	2.38	1.14	1.14	2.38	1.14	2.24	2.38	1.14	2.38	2.38	2.38
MSA1000 GEM	1.86	1.86			1.86			1.86		1.86	1.86	1.86
<b>Fibre Channel Interface</b>												
<b>Controllers</b>												
NSR M2402	5.01.04	5.01.04	4.02	4.02	5.01.04	4.02.aw	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		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		4.03.19	4.03.19	5.01.04
NSR E2400-160	5.01.04	5.01.04			5.01.04			5.01.04			5.01.04	5.01.04
NSR E1200-160	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		4.03.19	4.03.19	5.01.04
MDR	v1187	v1187	v1186	v1186	v1187	v1187	v1187	v1187	V1187	V1187	v1187	v1187



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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
<b>Interconnects</b>												
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	4.1.0	4.1.0			4.1.0	4.0.2b		4.1.0		4.1.0	4.1.0	4.1.0
SAN Switch 2/32	4.1.0	4.1.0			4.1.0	4.0.2b	4.0.2b	4.1.0		4.1.0	4.1.0	4.1.0
SAN Switch 2/16	3.1.0	3.1.0			3.1.0	3.0.2e	3.0.2k	3.1.0	3.0.2e	3.1.0	3.1.0	3.1.0
SAN Switch 2/8	3.1.0	3.1.0			3.1.0	3.0.2e	3.0.2k	3.1.0	3.0.2e	3.1.0	3.1.0	3.1.0
SAN Switch 2/16-EL	3.1.0	3.1.0			3.1.0	3.0.2e	3.0.2k	3.1.0	3.0.2e	3.1.0	3.1.0	3.1.0
SAN Switch 2/8-EL	3.1.0	3.1.0			3.1.0	3.0.2e	3.0.2k	3.1.0	3.0.2e	3.1.0	3.1.0	3.1.0
SAN Switch 16	2.6.1	2.6.1	2.6	2.6	2.6.1	a2.6.0.c	2.6.0h	2.6.1	a2.6.0.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	a2.6.0.c	2.6.0h	2.6.1	a2.6.0.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	a2.6.0.c	2.6.0h	2.6.1	a2.6.0.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	a2.6.0.c	2.6.0h	2.6.1	a2.6.0.c	2.6.1	2.6.1	2.6.1
FC Switch 16B	3.1.0	3.1.0			3.1.0	3.0.2e	3.0.2k	3.1.0	3.0.2e	3.1.0	3.1.0	3.1.0
FC Switch 8B	3.1.0	3.1.0			3.1.0	3.0.2e	3.0.2k	3.1.0	3.0.2e	3.1.0	3.1.0	3.1.0
MSA SAN Switch 2/8	3.1.0	3.1.0			3.1.0	3.0.2k	3.0.2k	3.1.0		3.1.0	3.1.0	3.1.0
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	
<b>HP OpenView Storage &amp; StorageWorks Software</b>												
<b>OpenView</b>												
Storage Virtual Replicator	3.0b sp1				3.0b sp1			3.0b sp1		3.0b sp1	3.0b sp1	3.0b sp1
OV-SAM	3.0.2	3.0.2			3.0.2		3.0.2	3.0.2		3.0.2	3.0.2	3.0.2
<b>StorageWorks</b>												
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

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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
<b>Tools and Utilities</b>												
Smart Start	6.40	6.40	5.30	5.30	6.40	5.40	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
<b>Disk Array Multipath Support</b>												
AutoPath for HP-UX	2.01.02	2.01.02						2.01.02				2.01.02
Secure Path for HP-UX	3.0a, SP1	3.0a, SP1					3.0a, SP1	3.0a, SP1		3.0a, SP1		3.0a, SP1
Secure Path for WIN NT	4.0b	4.0b	v3.1a sp2	v3.1a sp2	4.0b	4	4.0b	4.0b	4	4.0b	4.0b	4.0b
Secure Path for WIN 2000	4.0b	4.0b	v3.1a sp2	v3.1a sp2	4.0b	4	4.0b	4.0b	4	4.0b	4.0b	4.0b
AutoPath for Windows 2000	2.01	2.01			2.01			2.01			2.01	2.01
AutoPath for Windows 2003	1.00				1.00			1.00				
Tru64 Multipath	Native						Native	Native	Native			Native
Secure Path for NetWare	3.0c										3.0c	
Secure Path for Solaris	3.0b	3.0b					3.0a	3.0b		3.0a, SP1		3.0b
Secure Path for AIX	2.0c						2.0b					
IBM DPO												
<b>Operating Systems</b>												
HP-UX	11.11 w/SP56 (HWE 11.11) PHKL_22857 11.00 w/SP56 (HWE 11.0) PHKL_25769 11.22	11.11 w/SP56 (HWE 11.11) PHKL_22857 11.00 w/SP56 (HWE 11.0) PHKL_25769 11.22	11.11	11.0		11.0	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	11.0, 11.11	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 11.22
Win NT 4.0 Server	sp6a	sp6a	sp6a	sp6a	sp6a	sp6a	sp6a	sp6a	sp6a	sp6a	sp6a	sp6a
Win 2000 Server	sp3	sp3	sp2	sp2	sp3	sp2	sp3	sp3	sp2	sp3	sp3	sp3
Win 2003 Server (32-bit)	-	-			-		-	-			-	
Win 2003 Server (32-bit)	-	-					-					
Tru64 UNIX	5.1 pk6, 5.1A pk4 5.1B pk1 (ipk)	5.1A pk4 5.1B pk1 (ipk)	5.1A	5.1A		5.1A	5.1A pk4 5.1B pk1 (ipk)	5.1 pk6, 5.1A pk4 5.1B pk1 (ipk)	5.1A pk2			5.1 pk6, 5.1A pk4 5.1B pk1 (ipk)
Linux – Red Hat	Advanced Server 2.1	Advanced Server 2.1						Advanced Server 2.1				
NetWare	5.1 sp6 6.0 sp3	5.1 sp6 6.0 sp3		5.1 sp5	5.1 sp6 6.0 sp3		6.0 sp3		5.1 sp5 6.0 sp2		5.1 sp5 6.0 sp2	
Solaris UNIX	7, 8, and 9	7, 8, and 9	8	8		8	7,8	7, 8, and 9	8	7,8		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 and 5.1L		4.3.3 and 5.1L		4.3.3 and 5.1L

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<b>Fibre Host Bus Adapters</b>												
<b>Windows</b>												
FCA2355 (2G)												
FW	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		4-4.82a14	4-4.82a16		4-4.82a16	4-4.82a16	4-4.82a16
WIN 2000 Driver	5-4.82a16	5-4.82a16			5-4.82a16		5-4.82a14	5-4.82a16		5-4.82a16	5-4.82a16	5-4.82a16
WIN 2003 Driver	5-4.82a16	5-4.82a16			5-4.82a16		5-4.82a14	5-4.82a16			5-4.82a16	
ISP2312 (2G - BL20pG2 Blade Server)												
FW	1.33	1.33					1.33				1.33	1.33
WIN 2000 Driver	8.2.0.72	8.2.0.72					8.2.0.72				8.2.0.72	8.2.0.72
WIN 2003 Driver	8.2.0.72	8.2.0.72					8.2.0.72				8.2.0.72	
FCA2101 (2G)												
FW	3.91a1	3.91a1			3.91a1	3.81a3	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		4-4.82a14	4-4.82a16		4-4.82a16	4-4.82a16	4-4.82a16
WIN 2000 Driver	5-4.82a16	5-4.82a16			5-4.82a16	5-4.54a7	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		5-4.82a14	5-4.82a16			5-4.82a16	
FCA2404 (2G)												
FW	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	
WIN 2000 Driver	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	
FCA2214/2214DC (2G)												
FW	1.33	1.33					1.33				1.33	1.33
WIN 2000 Driver	8.2.0.72	8.2.0.72					8.2.0.72				8.2.0.72	8.2.0.72
WIN 2003 Driver	8.2.0.72	8.2.0.72					8.2.0.72				8.2.0.72	
FCA7298A (2G - PCI-X)												
FW												
WIN 2003 (64-bit) Driver												
64-bit/33MHz PCI to FC (1G - Windows) KGPSA-CB												
FW	3.91a1	3.82a1	3.82a1	3.82a1	3.91a1	3.82a1	3.82a1	3.91a1	3.82a1	3.91a1	3.91a1	3.91a1
WIN NT 4.0 Driver	4-4.82a16	4-4.82a14			4-4.82a16	4-4.53a7	4-4.53a7	4-4.82a16	4-4.53a7	4-4.82a16	4-4.82a16	4-4.82a16
WIN 2000 Driver	5-4.82a16	5-4.82a14	5-4.52a9	5-4.52a9	5-4.82a16	5-4.53a7	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	
<b>LINUX</b>												
FCA2214 (2G)												
FW	1.29	1.29										
Linux Driver (Intel)	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			

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<b>Fibre Host Bus Adapters</b>												
<b>NetWare</b>												
FCA2210 (2G)												
FW	1.29	1.29			1.29		1.28				1.29	
NetWare Driver	6.50s3	6.50s3			6.50s3		6.50s				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	
32-bit / 33 MHz HBA (1G)												
NetWare Driver	2.52	2.52			2.52				2.52		2.52	
<b>AIX</b>												
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
PCHo-FC HBA for AIX (1G) 197819-B21												
AIX Driver w/o Secure Path	1.5.19.0	1.5.19		1.5.11.1				1.5.19.0		1.5.19.0		1.5.19.0
AIX Driver w/ Secure Path	1.5.19.1											
<b>HP-UX</b>												
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
A6685A (1G)												
HP-UX Driver	11.11.09	11.11.09						11.11.09 11.0.10				11.11.09 11.0.10
A6684A (1G)												
HP-UX Driver												
A5158A (1G)												
HP-UX Driver	11.11.09 11.0.10	11.11.09 11.0.10	11.00.06	11.00.06		11.00.06	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
<b>Tru64</b>												
FCA2354												
FW	3.91a1	3.91a1					3.81a4	3.91a1				3.91a1
Tru64 Driver	2.06	2.06					1.32a	2.06				2.06
FCA2384 (2G - PCI-X)												
FW	1.00x6 w/LFU											1.00x6 w/LFU
Tru64 Driver												
KGPSA -CA												
FW	3.91a1	3.91a1	3.81a4	3.81a4		3.81a4	3.81a4	3.91a1	3.81a4			3.91a1
Tru64 Driver	2.06	2.06	1.32a	1.32a		1.32a	1.32a	2.06	2.02			2.06

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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
<b>Fibre Host Bus Adapters</b>												
<b>Solaris</b>												
FCA2257P (2G - PCI)												
fw	3.1.2	3.1.2					3.1.2	3.1.2		3.1.2		3.1.2
Solaris Driver	3.26	3.26					3.26	3.26		3.26		3.26
FCA2257C (1G - PCI)												
fw	3.1.2	3.1.2					3.1.2	3.1.2		3.1.2		3.1.2
Solaris Driver	3.26	3.26					3.26	3.26		3.26		3.26
FCA2257S (1G - Sbus)												
fw	3.1.2	3.1.2					3.1.2	3.1.2		3.1.2		3.1.2
Solaris Driver	3.26	3.26					3.26	3.26		3.26		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		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
Solaris Driver	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
Solaris Driver	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

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## 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	<a href="#">Data Protector Product Information</a> <a href="#">Data Protector Device Support Matrix</a>
Atempo Time Navigator	3.6	Mar-02		<a href="http://www.atempo.com">www.atempo.com</a>
BakBone NetVault	6.5.1	Mar-02		<a href="http://www.bakbone.com">www.bakbone.com</a>
Computer Associates BrightStor ARCserve for Windows NT/2000	ARCserve v9.0 build 2030	Current	CABA Driver for Windows	<a href="http://support.ca.com">support.ca.com</a>
Computer Associates BrightStor ARCserve for NetWare	9.0	Current	HP Driver for Netware	<a href="http://support.ca.com">support.ca.com</a>
Computer Associates BrightStor Enterprise Backup	BEB v10.0 SP4 Bd. 1400	Aug-02		<a href="http://support.ca.com/">support.ca.com/</a>
CommVault Galaxy	4.2 sp2	Jul-03		<a href="http://www.commvault.com">www.commvault.com</a>
Legato NetWorker	7.0 and 6.1.3	Current	HP Driver for Windows	<a href="http://www.legato.com">www.legato.com</a>
Syncsort Backup Express	2.1.5B	Aug-02	Use Native Drivers	<a href="http://www.syncsort.com">www.syncsort.com</a>
Tivoli Storage Manager	5.1.6.2 (minimum level support) 5.1.7 (support for MSL6000 series and autoloaders only) and 5.2	Current	Tivoli Driver for Windows	<a href="http://www.tivoli.com">www.tivoli.com</a>
VERITAS Backup Exec for Windows Servers	9.0 build 4454	Current	BE Driver for Windows	<a href="http://www.veritas.com">www.veritas.com</a>
VERITAS Backup Exec for NetWare	9.0 build 4175.1	Current	BE Driver for Netware	<a href="http://www.veritas.com">www.veritas.com</a>
VERITAS NetBackup Windows	4.5 FP3 and 3.4.1 MP3	Current	HP Driver for Windows	<a href="http://www.veritas.com">www.veritas.com</a>
VERITAS NetBackup UNIX	4.5 FP4 and 3.4 MP4	Current		<a href="http://www.veritas.com">www.veritas.com</a>

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.