



**Hewlett Packard**  
Enterprise

# HPE StoreEver Compatibility Matrix

Compatibility HPE StoreEver Tape Products

## September 2019

### Key Updates:

- Added OS support page for driver-based Path Failover
- Added driver-based failover support for RHEL 7.3-7.6 and RHEL 6.10
- Updated Storage Networking page with new Switch Firmware
- Added support for Atto SAS adapter for StoreOpen software page

**Legacy Support can be found in older Matrices.**  
**Links are provided on the [Legacy Support](#) page.**

**[Solution Whitepapers](#) click here.**

**For the most up to date Matrix [click here](#).**

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# Hewlett Packard Enterprise - How To Use This Document

The HPE Data Availability, Protection and Retention Compatibility Matrix provides information for designing data protection solutions, including backup/restore/archiving using storage products. The StoreEver products have interoperability (IOP) details shown in their respective the operating systems pages.

The matrix is a rolling support document with new products/firmware/software support being added monthly and when appropriate older products removed or moved to Legacy support. Legacy support means that product is no longer being actively tested, but still supported with the configuration shown in the last matrix in which it was listed. When a device or operating systems is removed from the matrix an update to the 'Legacy Device Support' page will be added to show which matrix was the last to show support.

NOTE: Data Protection applications are tested with HPE Storage and communicated in this document. The software and hardware support information provided by the software vendor should also be checked to verify application, file system, operating system and storage hardware compatibility.

Updates/changes to individual fields within the Matrix will be highlighted **in RED**. Products highlighted in **YELLOW** will be removed from the StorEver Compatibility Matrix in the next release. Previous versions of the Matrix are available on the 'Legacy Support' page within this Matrix. The most current Matrix can always be found at <https://www.hpe.com/Storage/StoreEverSupportMatrix>.

1. Determine which HPE Products you are interested in finding support about, then review that entire section for compatibility with HPE firmware, advanced features, connectivity compatibility and Independent Software Vendors (ISV) .
2. Consult the Independent Software Vendors (ISV) product compatibility guide(s) for support details such as product versions, OS versions, hotfixes, patches, special notes, driver details and hardware devices supported by the vendor. See the ISV Compatibility Links page in this matrix for direct links to the vendor websites.
3. Check the 'Legacy Support' page (near the end of the matrix) to see if the product/OS has been moved to legacy support. If so, note the month at which support was moved to legacy support and find the older matrix link.
4. Due to differences in support, it is very important to verify which servers and OS's are supported by your HBA or controller by referring their individual QuickSpec. There are direct hyperlinks to HPE Server QuickSpecs in the StoreEver section in this Matrix. HPE QuickSpecs online: [hpe.com/info/qs](http://hpe.com/info/qs)
5. HPE storage products should always run latest firmware, OS, drivers and software versions. Systems running older versions face an increased risk from exposure to known (and unknown) issues. If a system is running older versions and encounters an issue, HPE Support will request upgrading to current versions. Each section of this matrix provides the current firmware, OS, drivers or system software code that is supported by each platform.
6. Additional technical information, guidelines and rules can be found in the 'HPE Backup, Recovery and Archive (BURA) Solutions design guide' and various Backup Application Implementation Guides and whitepapers located on the [HPE Solution Whitepapers page](#) in this matrix.
7. This Matrix only shows compatibility for FC SAN media servers. A FC SAN media server is defined as a server with direct access to backup devices. Other operating systems may be supported within Matrix by the respective ISVs as LAN clients, where a LAN client does not have direct access to the backup device but is backed up over a LAN connection to a server with direct access to backup devices.
8. Receive support alerts (such as Customer Advisories), driver updates, software, firmware, and customer replaceable components, in your e-mail through HPE Subscriber's Choice. Sign up for Subscriber's Choice Driver, Patch, Security, and Support alerts at: [hpe.com/info/myadvisory](http://hpe.com/info/myadvisory)
9. For usage of non-HPE branded HBA's and switches, HPE recommends that such hardware be made "HPE-like", through the deployment of same versions of firmware, BIOS, NVRAM, configurations and, where applicable, HBA drivers. In cases where non-HPE storage infrastructure is used, the vendor who supplied and delivered hardware is responsible for break/fix support.

# Hewlett Packard Enterprise - ISV Compatibility Links

## Software Partners

Product	LTFS Support	Link to Whitepapers	Software Compatibility List	Hardware Compatibility List
HPF SGLDME			SCL	HCL
HPF StoreOpen Software	✓	White-papers	NA	NA
Acronis Backup Advanced			SCL	HCL
Archiware P5			SCL	HCL
Arcserve Backup			SCL	HCL
Arcserve UDP			SCL	NA
Agfa HealthCare		White-papers	NA	NA
Asigra Cloud Backup			NA	NA
Atempo Time Navigator			SCL	HCL
AvePoint DocAve			SCL	NA
Barracuda Yosemite Server Backup			SCL	HCL
BridgeHead HDM Suite			NA	NA
Catalogic DPX (SyncSort DPX)			SCL	HCL
Citrix ShareFile		White-papers	NA	NA
Commvault		White-papers	SCL	HCL
Dell EMC NetWorker		White-papers	SCL	HCL
ETI-NET Backbox			NA	NA
GE Centricity		White-papers	NA	NA
Genetec Security Center		White-papers	NA	NA
IBM Spectrum Protect (TSM)		White-papers	SCL	HCL
Interica IDS, PARS			NA	NA
iTernity iCAS		White-papers	NA	NA
Masstech FlashNet (SGL)	✓		NA	NA
McAfee VirusScan		White-papers	NA	NA
MDA Archive Management System			NA	NA
Micro Focus Data Protector		White-papers	SCL	HCL
Micro Focus VM Explorer			SCL	HCL
Microsoft System Center DPM			SCL	HCL
Milestone XProtect		White-papers	NA	NA
MT-C NODEUM	✓		NA	NA

## Software Partners (Continued)

Product	LTFS Support	Link to Whitepapers	Software Compatibility List	Hardware Compatibility List
Novastor - DataCenter			SCL	NA
Oracle DIV Archive (Front Porch Digital)			SCL	HCL
Oracle Secure Backup			SCL	HCL
Prime Factors Inc.			NA	NA
QStar Archive Manager	✓	White-papers	SCL	HCL
Quantum StorNext	✓		SCL	HCL
Quest NetVault			SCL	HCL
Quest vRanger			NA	NA
Retrospect			SCL	HCL
SEP sesam			SCL	HCL
Seven10 StorFirst			SCL	HCL
SoleraTec			SCL	NA
StorageDNA DNA Evolution	✓		SCL	HCL
Ultraback Software			SCL	NA
Veritas Backup Exec		White-papers	SCL	HCL
Veritas NetBackup		White-papers	SCL	HCL
TOLIS BRU Server	✓		SCL	HCL
Veeam Backup & Replication		White-papers	SCL	HCL
VMS Software, Inc. (VSI)			SCL	HCL
XenData Archive Series	✓		SCL	HCL
Yoyotta	✓		SCL	HCL

## Hardware Partners

Product	LTFS Support	Link to Whitepapers	Software Compatibility List	Hardware Compatibility List
ProMax ProCache Appliance	✓		NA	NA
Crossroads ReadVerify Appliance			NA	NA
Crossroads SPHiNX			NA	NA
FalconStor VTL			SCL	HCL
NetApp Data ONTAP (NDMP)			SCL	HCL
StrongBox Data Solutions (Crossroads)	✓		NA	NA
Tributary Storage Director			NA	NA

## **Hewlett Packard Enterprise - StoreOnce Systems and Software**

This section includes the following:

- StoreOnce compatibility is now available in a separate document that can be found at this link - <https://www.hpe.com/Storage/StoreOnceSupportMatrix>

This section includes the following:

- StoreEver Standalone Tape Drives
- StoreEver Tape Library Systems
- StoreEver OS, HBA, Switch Support
- StoreEver Virtual Machine Support

**Important:** For complete StoreEver compatibility, review every page in this section.

This section includes the following:

- StoreEver Standalone Tape Drive Firmware & Windows drivers versions
- StoreEver Standalone Tape - DAS Partner Support
- StoreEver Standalone Tape - Native App Tape Support
- StoreEver Standalone Tape - DAS Appliance Support
- StoreEver Standalone Server Tape Support
- StoreEver Standalone Tape Cables
- StoreEver Standalone Tape Rack-mount Kits Support

**Important:** For complete StoreEver compatibility, review every page in this section.

# Hewlett Packard Enterprise - StoreEver Standalone Tape Drive firmware and drivers

## Supported Ultrium LTO Tape Drives <sup>4</sup>

Ultrium LTO Tape Drives <sup>1</sup>	Description	Firmware <sup>2</sup>
<b>LTO-8 Ultrium 30750</b>	(LTO-8 HH SAS)	K4K1
<b>LTO-7 Ultrium 15000</b>	(LTO-7 HH SAS)	K4K1
<b>LTO-6 Ultrium 6650</b>	(LTO-6 FH SAS)	05ID
<b>LTO-6 Ultrium 6250</b>	(LTO-6 HH SAS)	35GD
<b>LTO-5 Ultrium 3280</b>	(LTO-5 FH SAS)	X6ED
<b>LTO-5 Ultrium 3000</b>	(LTO-5 HH SAS)	Z6ED
<b>LTO-4 Ultrium 1840</b>	(LTO-4 FH SAS)	A63D
<b>LTO-4 Ultrium 1760</b>	(LTO-4 HH SAS)	U64D
<b>LTO-3 Ultrium 920</b>	(LTO-3 HH SAS)	Q51D / C26D <sup>2</sup>

HP Ultrium LTO Tape Blades <sup>1</sup>	Description	Firmware <sup>2</sup>
<b>LTO-5 Ultrium SB3000c</b>	(LTO-5 HH SAS)	Z6ED
<b>LTO-4 Ultrium SB1760c</b>	(LTO-4 HH SAS)	U64D

## Microsoft Windows Drivers for Tape Drives

Operating System	Server Platform	Driver version <sup>3,5</sup>
<b>2019</b>	x64	1.0.9.3
<b>2016</b>	x64	1.0.9.3
<b>2012 R2</b>	x64	1.0.9.3
<b>2012</b>	x64	1.0.9.3
<b>2008 R2</b>	x64	1.0.9.3

### Notes

1. LTO Media type and compatibility details can be found under "[Product Highlights](#)".
2. Refer to [Library and Tape Tools](#) or [HPE Support Center](#) to download correct FW and driver versions for tape drives.
3. LTO-7 Supported with 1.0.9.1 or later
4. Support applies to HP & HPE branded drives.
5. LTO-8 Supported with 1.0.9.2 or later



# Hewlett Packard Enterprise - StoreEver Standalone Tape Drives - Software Partner Support (1 of 2)

IMPORTANT: Consult the software vendor's compatibility lists to confirm software versions and specific device support.

Hyperlinks provided on [ISV Compatibility Links](#) page.

## Software Partner Support for SAS Connectivity

Application	Latest Tested Version	HPE LTO-8 Ultrium 30750	HPE LTO-7 Ultrium 15000	HP LTO-6 Ultrium	HP LTO-6 Ultrium	HP LTO-5 Ultrium	HP LTO-5 Ultrium	SB3000c Tape
		(Minimum ISV Version)	(Minimum ISV Version)	6650	6250	3280	3000	Blade
		HH SAS	HH SAS	FH SAS	HH SAS	FH SAS	HH SAS	HH SAS
<b>Acronis Advanced Backup</b>	12.x	✓ (11.7)	✓	✓	✓	✓	✓	✓
<b>Arcserve Backup</b>	17.5	✓ (17.5 SP1)	✓ (v17) <sup>2</sup>	✓	✓	✓	✓	✓
<b>Archiware P5</b>	5.x	✓ (v5.x)	✓ (v5.3.3)	✓	✓	✓	✓	✓
<b>Atempo Time Navigator</b>	4.x	✓ (4.6.2)	✓ (v4.4 SP2)	✓	✓	✓	✓	✓
<b>Barracuda Yosemite Server Backup</b>	10.x		✓ (10.5)	✓	✓	✓	✓	✓
<b>BridgeHead HDM Suite</b>	18a	✓ (16B)	✓ (15A)	✓	✓	✓	✓	✓
<b>Catalogic DPX (SyncSort DPX)</b>	4.x			✓	✓	✓	✓	✓
<b>Commvault</b>	11.x	✓ (v11 SP10)	✓ (10.11)	✓	✓	✓	✓	✓
<b>Dell EMC NetWorker</b>	9.0		✓ (9.0.0.5 & 8.2.3)	✓	✓	✓	✓	✓
<b>ETI-NET</b>								
<b>IBM Spectrum Protect (TSM)</b>	8.1.x	✓ (v8.1.4)	✓ (7.1.3)	✓	✓	✓	✓	✓
<b>Interica IDS, PARS</b>								
<b>Masstech FlashNet (SGL)</b>	6.6.x		✓ (6.4.x)	✓	✓	✓	✓	✓
<b>MDA Archive Management System</b>								
<b>Micro Focus Data Protector</b>	10.x	✓ (10.2)	✓ ( 8.15 & 9.05 )	✓	✓	✓	✓	✓
<b>Micro Focus VM Explorer<sup>4</sup></b>	N/S		N/S	N/S	N/S	N/S	N/S	N/S
<b>Microsoft System Center DPM</b>	2016, 2012 & R2	✓	✓	✓	✓	✓	✓	✓
<b>MT-C NODEUM</b>								
<b>NovaStor DataCenter</b>	7.3.x, 6.4.2	✓ (6.4.2, 7.2.0)	✓	✓	✓	✓	✓	✓
<b>Oracle DIVArchive (Front Porch Digital)</b>								
<b>Oracle Secure Backup</b>	12.x	✓ (12.2.0.1.0)	✓	✓	✓	✓	✓	✓
<b>Quest NetVault</b>	12.x	✓ (11.0)	✓ (11.0)	✓	✓	✓	✓	✓
<b>Retrospect</b>	16.x Win, 16.x OS X	✓ (12.x Win, 12x Mac)	✓ (Win. 10.5, Mac 12.5)	✓	✓	✓	✓	✓
<b>SEP sesam</b>	4.4	✓ (4.4)	✓ (4.4)	✓	✓	✓	✓	✓
<b>Seven10 StorFirst</b>	4.8.x			✓	✓	✓	✓	✓
<b>SGL StorHouse (FileTek)</b>								
<b>SoleraTec Phoenix</b>	v6.5.3		✓ (v6.5.3)	✓	✓	✓	✓	✓
<b>StorageDNA DNA Evolution</b>								
<b>TOLIS BRU Server</b>	2.0.x	✓ (2.0.2)	✓ (2.0.3)	✓	✓	✓	✓	✓
<b>TOLIS BRU Producer's Edition</b>	Linux 4.0, Win 4.0, Osx 3.1	✓ (Linux 4.0, Win 4.0, OSx 3.1)	✓ (3.1.16)	✓	✓	✓	✓	✓
<b>Ultrabac Software<sup>3</sup></b>								
<b>Veeam Backup &amp; Replication</b>	v9.x	✓ (9.5 U3)	✓ (v9)	✓	✓	✓	✓	✓
<b>Veritas Backup Exec</b>	20	✓ (BE 16 +FP2)	✓ (v15 FP1) <sup>3</sup>	✓	✓	✓	✓	✓
<b>Veritas NetBackup</b>	8.x	✓ (7.7.x)	✓ (v7.5)	✓	✓	✓	✓	✓
<b>VSI OpenVMS ABS/MRU backup app<sup>5</sup></b>								
<b>XenData Archive Series</b>	6.x	✓ (6.22p1)	✓ (v6)	✓	✓	✓	✓	✓
<b>Yoyotta YoyottalD<sup>1</sup></b>	2.2		✓	✓	✓	✓	✓	✓

Key:  
 ✓ Supported  
 ✓^ Supported in conjunction with note x

Notes:

1. Not supported with ATTO Multipath Driver
2. Arcserve r17.0 only requires patch P00000379 with latest tapeeng.dll to support LTO7 tape drives. See <https://arcserve.zendesk.com/hc/en-us/articles/211502943>.
3. Not supported with WORM media at this time.
4. Not currently supported with Standalone Tape drives (no unlabeled media support).
5. See [OpenVMS Tape Drive Support page](#) in this matrix for more details.

# Hewlett Packard Enterprise - StoreEver Standalone Tape Drives - Software Partner Support (2 of 2)

IMPORTANT: Consult the software vendor's compatibility lists to confirm software versions and specific device support.

Hyperlinks provided on [ISV Compatibility Links](#) page.

Software Partner Support for SAS Connectivity

Application	Latest Tested Version	HP LTO-4 Ultrium 1840	HP LTO-4 Ultrium 1760	HP LTO-3 Ultrium 920	HP LTO-4 Ultrium SB1760c Tape Blade
		FH SAS	HH SAS	HH SAS	HH SAS
<b>Acronis Advanced Backup</b>	12.x				
<b>Arcserve Backup</b>	17.5	✓	✓	✓	✓
<b>Archware P5</b>	5.x	✓	✓	✓	✓
<b>Atempo Time Navigator</b>	4.x	✓	✓	✓	✓
<b>Barracuda Yosemite Server Backup</b>	10.x	✓	✓	✓	✓
<b>BridgeHead HDM Suite</b>	18a	✓	✓	✓	✓
<b>Catalogic DPX (SyncSort DPX)</b>	4.x	✓	✓	✓	✓
<b>Commvault</b>	11.x	✓	✓	✓	✓
<b>Dell EMC NetWorker</b>	9.0	✓	✓	✓	✓
<b>ETI-NET</b>		✓	✓		
<b>IBM Spectrum Protect (TSM)</b>	8.1.x	✓	✓	✓	✓
<b>Interica IDS, PARS</b>		✓	✓	✓	
<b>Masstech FlashNet (SGL)</b>	6.6.x	✓	✓	✓	✓
<b>MDA Archive Management System</b>					
<b>Micro Focus Data Protector</b>	10.x	✓	✓	✓	✓
<b>Micro Focus VM Explorer <sup>2</sup></b>	N/S	N/S	N/S	N/S	N/S
<b>Microsoft System Center DPM</b>	2016, 2012 & R2	✓	✓	✓	
<b>MT-C NODEUM</b>	1.x	N/S	N/S	N/S	N/S
<b>Oracle DIVArchive (Front Porch Digital)</b>	7.x	✓	✓	✓	
<b>Oracle Secure Backup</b>	12.x	✓	✓	✓	✓
<b>Quest NetVault</b>	12.x	✓	✓	✓	✓
<b>Retrospect</b>	16.x Win, 16.x OS X	✓	✓	✓	✓
<b>Seven10 StorFirst</b>	4.8.x	✓	✓	✓	✓
<b>SGI StorHouse (FileTek)</b>		✓	✓	✓	✓
<b>SoleraTec Phoenix</b>	v6.5.3				
<b>StorageDNA DNA Evolution</b>					
<b>TOLIS BRU Server</b>	2.0.x	✓	✓	✓	✓
<b>TOLIS BRU Producer's Edition</b>	3.1.x	✓	✓	✓	✓
<b>Veeam Backup &amp; Replication</b>	v9.x	✓	✓	✓	✓
<b>Veritas Backup Exec</b>	20	✓	✓	✓	✓
<b>Veritas NetBackup</b>	8.x	✓	✓	✓	✓
<b>VSI OpenVMS ABS/MRU backup app <sup>3</sup></b>	4.6	✓	✓	✓	✓
<b>XenData Archive Series</b>	6.x	✓	✓		✓
<b>Yoyotta YoyottalD <sup>1</sup></b>	2.2				

Key:

- ✓ Supported
- ✓x Supported in conjunction with note x

Notes:

1. Not supported with ATTO Multipath Driver
2. Not currently supported with Standalone Tape drives (no unlabeled media support).
3. See [OpenVMS Tape Drive Support page](#) in this matrix for more details.

# Hewlett Packard Enterprise - StoreEver Tape - Native Backup Support

Operating System / Native Backup Utility <sup>3</sup>

Operating System Version	TAR	CPIO	DD	MT
<b>RHEL 7.x (x64)</b>	✓	✓	✓	✓
<b>RHEL 6.x (x64)</b>	✓	✓	✓	✓
<b>RHEL 6.x (x86)</b>	✓	✓	✓	✓
<b>SLES 12 (x64)</b>	✓	✓	✓	✓
<b>SLES 11 (x64)</b>	✓	✓	✓	✓
<b>SLES 11 (x86)</b>	✓	✓	✓	✓
<b>HP-UX 11iv3 (11.31) (Integrity)</b>	✓	✓	✓	✓
<b>Solaris 11 (x64)</b>	✓	✓	✓	✓
<b>Solaris 11 (x86)</b>	✓	✓	✓	✓
<b>Solaris 11 (SPARC)</b>	✓	✓	✓	✓
<b>Solaris 10 (SPARC)</b>	✓	✓	✓	✓
<b>AIX 7.2 (Power) <sup>2</sup></b>	✓	✓	✓	✓
<b>AIX 7.1 (Power) <sup>1</sup></b>	✓	✓	✓	✓
<b>HPE NonStop</b>				

Key:

✓ Supported

Notes:

1. Atape Driver version 12.10.7.0 is the minimum level required for HPE Ultrium LTO-7 & LTO-8 support on IBM AIX. This version supports Single-Path tape library operations only.
2. Atape Driver version 8 13.0.18.0 is the minimum level required for HPE Ultrium LTO-7 & LTO-8 support on IBM AIX. This version supports Single-Path tape library operations only.
3. When used in tape libraries, both 'mtx' and 'mt' robot commands are supported on UNIX OS(s) that support those commands. For AIX, ATape driver is also supported.

# Hewlett Packard Enterprise - StoreEver Standalone Tape Drives - Appliance Partner Support

IMPORTANT: Consult the Appliance vendor's compatibility lists to confirm versions and specific device support.  
Hyperlinks provided on [ISV Compatibility Links](#) page.

## Storage Appliance Partner Support for SAS Connectivity

		HPE LTO-8 Ultrium 30750 (Minimum ISV Version)	HPE LTO-7 Ultrium 15000 (Minimum ISV Version)	HP LTO-6 Ultrium 6650	HP LTO-6 Ultrium 6250	HP LTO-5 Ultrium 3280	HP LTO-5 Ultrium 3000	HP LTO-4 Ultrium 1840	HP LTO-4 Ultrium 1760	HP LTO-3 Ultrium 920	HP LTO-5 Ultrium SB3000c Tape Blade	HP LTO-4 Ultrium SB1760c Tape Blade
Hardware Appliance	Latest Tested Version	LTO-8 HH SAS	LTO-7 HH SAS	LTO-6 FH SAS	LTO-6 HH SAS	LTO-5 FH SAS	LTO-5 HH SAS	LTO-4 FH SAS	LTO-4 HH SAS	LTO-3 HH SAS	LTO-5 HH SAS	LTO-4 HH SAS
<b>HPE NonStop Servers</b>						✓ <sup>1</sup>	✓ <sup>1</sup>					
<b>ProMAX ProCache Appl.</b>				✓	✓	✓	✓					
<b>ProMAX PowerCache Appl.</b>				✓	✓	✓	✓					
<b>Crossroads ReadVerify Appl.</b>								✓	✓			
<b>Crossroads SPHiNX</b>												
<b>StrongBox Data Solutions (Crossroads)</b>												
<b>Crossroads Virtual TapeServer</b>								✓	✓			
<b>FalconStor VTL</b>												
<b>NetApp Data ONTAP (NDMP)</b>	7.2.x 7.3.x					✓	✓	✓	✓	✓		
<b>NetApp Data ONTAP (NDMP)</b>	8.x		✓ (v8.2.4) <sup>2</sup>	✓	✓	✓	✓	✓	✓	✓		
<b>NetApp NearStore VTL Series</b>								✓	✓			

Key:  
✓ Supported

Notes:

- Requires connectivity of tape drive to HPE Virtual TapeServer for NonStop Systems.
- To enable the support of the corresponding tape devices go to [http://mysupport.netapp.com/NOW/download/tools/tape\\_config/](http://mysupport.netapp.com/NOW/download/tools/tape_config/)

# Hewlett Packard Enterprise - StoreEver Standalone Tape Support - ProLiant DL, BL, & ML Servers (Page 1 of 3)

IMPORTANT: Consult the individual Server QuickSpecs for supported Storage Controller (HBAs).

IMPORTANT: To find the supported HBA firmware and drivers see the [Operating Systems pages](#) in this Matrix.

IMPORTANT: This page is for StoreEver SAS Tape drives only, for FC and tape library support see the [Operating Systems pages](#).

IMPORTANT: To find the Server QuickSpecs to verify tape support search for the specific server model on the [HPE Support Center Page](#).

## HPE ProLiant DL & ML Servers / Standalone Tape drives <sup>1</sup>

Server Model	HPE LTO-8 Ultrium 30750	HPE LTO-7 Ultrium 15000	HP LTO-6 Ultrium 6250	HP LTO-5 Ultrium 3000
	LTO-8 HH SAS	LTO-7 HH SAS	LTO-6 HH SAS	LTO-5 HH SAS
<b>All ProLiant DL Servers</b>	✓E	✓E	✓E	✓E
<b>All ProLiant BL Servers</b>	✓E	✓E	✓E	✓E
<b>ML350 Gen10</b> <sup>7,8</sup>	✓I/E	✓I/E	✓I/E	✓I/E
<b>ML350 Gen9</b> <sup>2,3</sup>	✓I/E	✓I/E	✓I/E	✓I/E
<b>ML350p Gen8</b>	✓I/E	✓I/E	✓I/E	✓I/E
<b>ML350e Gen8 v2</b>	✓I/E	✓I/E	✓I/E	✓I/E
<b>ML350e Gen8</b>	✓I/E	✓I/E	✓I/E	✓I/E
<b>ML150 Gen9</b> <sup>3,5</sup>	✓I/E	✓I/E	✓I/E	✓I/E
<b>ML30 Gen10</b> <sup>6</sup>	✓I/E	✓I/E	✓I/E	✓I/E
<b>ML30 Gen9</b> <sup>6</sup>	✓I/E	✓I/E	✓I/E	✓I/E
<b>ML310e Gen8 v2</b> <sup>4</sup>	✓I/E	✓I/E	✓I/E	✓I/E
<b>ML310e Gen8</b> <sup>4</sup>	✓I/E	✓I/E	✓I/E	✓I/E
<b>ML110 Gen10</b>	✓E	✓E	✓E	✓E
<b>ML110 Gen9</b>	✓E	✓E	✓E	✓E
<b>ML10 Gen9</b>	✓E	✓E	✓E	✓E
<b>ML10 v2</b> <sup>4</sup>	✓I/E	✓I/E	✓I/E	✓I/E
<b>MicroServer Gen8</b>	✓E	✓E	✓E	✓E

Notes:

1. HPE LTO Media type and compatibility details can be found under "Product Highlights".
2. Optional Media Cage Kits are required to install HPE StoreEver Tape drives inside of the ML350 Gen9 Servers (726545-B21 for SFF, 726561-B21 for LFF servers).
3. Internal tape only supported on HP H240 Smart Host Bus Adapter.
4. Full height tape drives only supported internally with DVD drive removed.
5. Supported on servers with Hot-plug configs only.
6. HPE ML30 Gen9 server requires a power adapter for internal tape drive support - Cable Kit (851615-B21).
7. Internal tape only supported on HPE E208i-p Smart Array Controller
8. Optional Media Drive Support Kit (874570-B21) required for tape/LTO devices, up to 2.

Key:

✓E Supported Externally

✓I/E Supported both Internally and Externally

## Hewlett Packard Enterprise - StoreEver Standalone Tape Support - Other Servers (Page 2 of 3)

IMPORTANT: Consult the individual Server QuickSpecs for supported Storage Controller (HBAs).

IMPORTANT: To find the supported HBA firmware and drivers see the [Operating Systems](#) pages in this Matrix.

IMPORTANT: This page is for StoreEver SAS Tape drives only, for FC and tape library support see the [Operating Systems](#) pages.

IMPORTANT: To find the Server QuickSpecs to verify tape support search for the specific server model on the [HPE Support Center Page](#).

### Other Servers / Standalone Tape drives <sup>1</sup>

Server Model	HPE LTO-8 Ultrium 30750	HPE LTO-7 Ultrium 15000	HP LTO-6 Ultrium 6250	HP LTO-5 Ultrium 3000
	LTO-8 HH SAS	LTO-7 HH SAS	LTO-6 HH SAS	LTO-5 HH SAS
Apollo 4510 Gen10	✓E	✓E	✓E	✓E
Apollo 4530 / 4520 / 4510 Gen9	✓E	✓E	✓E	✓E
Apollo 4200	✓E	✓E	✓E	✓E
Apollo 2000 / XL190r Gen10	✓E	✓E	✓E	✓E
Apollo 2000 / XL190r Gen9	✓E	✓E	✓E	✓E
Apollo 2000 / XL170r Gen10	✓E	✓E	✓E	✓E
Apollo 2000 / XL170r Gen9	✓E	✓E	✓E	✓E
Integrity rx6600		✓E	✓E	✓E
Integrity rx3600		✓E	✓E	✓E
Integrity rx2800 i6	✓E	✓E	✓E	✓E
Integrity rx2800 i4	✓E <sup>2</sup>	✓E	✓E	✓E
Integrity rx2800 i2	✓E <sup>2</sup>	✓E	✓E	✓E
Integrity rx2660		✓E	✓E	✓E
Superdome Flex	✓E	✓E	✓E	✓E
Superdome 2 (Integrity)		✓E	✓E	✓E
Superdome sx2000 (Integrity)		✓E	✓E	✓E
StoreEasy 3840 Gateway	✓E	✓E	✓E	✓E
StoreEasy 1840, 1850 & 1860	✓E	✓E	✓E	✓E
StoreEasy 1640, 1650, 1650 Expanded & StoreEasy 1660	✓E	✓E	✓E	✓E
StoreEasy 1550, 1560	✓E	✓E	✓E	✓E
StoreEasy 1540	✓I/E	✓I/E	✓I/E	✓I/E
StoreEasy 1430, 1440 & 1450, 1460	✓E	✓E	✓E	✓E
StoreEasy 3840 & 3850 Blade	✓E	✓E	✓E	✓E
StoreVirtual 3000 File Controller	✓E	✓E	✓E	✓E

Notes:

1. HPE LTO Media type and compatibility details can be found under "Product Highlights".
2. Supported with VSI OpenVMS only, No HPUX support.

Key:

- ✓E Supported Externally
- ✓I/E Supported both Internally and Externally

## Hewlett Packard Enterprise - StoreEver Standalone Tape Support - Workstations (Page 3 of 3)

IMPORTANT: Consult the individual Workstation QuickSpecs for supported Storage Controller (HBAs).

IMPORTANT: To find the supported HBA firmware and drivers see the [Operating Systems pages](#) in this Matrix.

### HP Workstations / Standalone Tape drives <sup>1</sup>

Workstation Model	Server QuickSpec	HPE LTO-8 Ultrium 30750	HPE LTO-7 Ultrium 15000	HP LTO-6 Ultrium 6250	HP LTO-5 Ultrium 3000
		LTO-8 HH SAS	LTO-7 HH SAS	LTO-6 HH SAS	LTO-5 HH SAS
<b>z840</b> <sup>2</sup>	<a href="#">QuickSpec</a>	✓E	✓E	✓E	✓E
<b>z820</b> <sup>2</sup>	<a href="#">QuickSpec</a>	✓E	✓E	✓E	✓E
<b>z640</b>	<a href="#">QuickSpec</a>	✓E	✓E	✓E	✓E
<b>z620</b>	<a href="#">QuickSpec</a>	✓E	✓E	✓E	✓E
<b>z440</b>	<a href="#">QuickSpec</a>	✓I/E	✓I/E	✓I/E	✓I/E
<b>z420</b>	<a href="#">QuickSpec</a>	✓I/E	✓I/E	✓I/E	✓I/E
<b>z230</b>	<a href="#">QuickSpec</a>				
<b>z230 SFF</b>	<a href="#">QuickSpec</a>				
<b>z220</b>	<a href="#">QuickSpec</a>	✓I/E	✓I/E	✓I/E	✓I/E

Key:

- ✓E Supported Externally
- ✓I/E Supported both Internally and Externally

Notes:

1. HPE LTO Media type and compatibility details can be found under "[Product Highlights](#)".
2. Requires HP XW Workstation Int-Ext SAS Back Panel Connector Kit (EM164AA)

# Hewlett Packard Enterprise - StoreEver Standalone Tape Controllers and SAS Cables

Important: See "HPE StoreEver MSL SAS Tape Library Controllers and SAS Cables page" for additional cables.

## Server Controllers

Controller/HBA	Tape Drives	Internal Drive Cables	External Drive Cable	1U Rack-Mount Kit (BC029A)	1U (AE459A or AE459B) 3U (AG576A or AG576B) Rack-Mount Kit
<b>Smart Array P408e-m, P408e-p, E208e-p</b>	ALL LTO SAS Tape drives	--	716191-B21	876805-B21	716193-B21
<b>Smart Array P816i-a, P408i-a, P408i-p, E208i-a, E208i-p</b>	LTO-8, LTO-7, LTO-6 & LTO-5	518885-003 <sup>2,5</sup>	--	--	--
<b>Smart HBA H241, Smart Array P441, P841</b>	ALL LTO SAS Tape drives	--	716191-B21	876805-B21	716193-B21
<b>Smart HBA H240, H240ar, Smart Array P440ar, HP HBA H220</b>	LTO-8, LTO-7, LTO-6 & LTO-5	518885-003 <sup>2,5</sup>	--	--	--
<b>Smart Array P431</b>	ALL LTO SAS Tape drives	--	716191-B21	876805-B21	716193-B21
<b>Smart Array P421, HP Host Bus Adapter H221</b>	ALL LTO SAS Tape drives	--	AE470A	876804-B21	AE465A
<b>Smart Array P222, P822, P212<sup>4</sup>, P812, HP Host Bus Adapter H222</b>	LTO-8, LTO-7, LTO-6 & LTO-5	518885-003 <sup>2,5</sup>	AE470A	876804-B21	AE465A
<b>Smart Array P410</b>	LTO-8, LTO-7, LTO-6 & LTO-5	518885-003 <sup>2,5</sup>	--	--	--
<b>Smart Array P411, P812</b>	ALL LTO SAS Tape drives	--	AE470A	876804-B21	AE465A
<b>LSI 3041E 4-Port SAS 3Gb RAID Card</b>	ALL LTO SAS Tape drives	--	AE470A <sup>1</sup>	--	--

## Workstation Only Controllers

Controller/HBA	Tape Drives	Internal Drive Cables	External Drive Cable	1U Rack-Mount Kit (BC029A)	1U & 3U Rack-Mount Kit
<b>LSI 2308 Controller (Integrated)</b>	ALL LTO SAS Tape drives	--	EM164AA <sup>3</sup> + AE470A	876804-B21	EM164AA + AE470A <sup>2</sup>
<b>LSI 9270-8i SAS 6Gb ROC RAID</b>	LTO-8, LTO-7, LTO-6 & LTO-5	518885-003 <sup>2,5</sup>	--	--	--
<b>LSI 9217-4i4e SAS 6Gb</b>	LTO-8, LTO-7, LTO-6 & LTO-5	518885-003 <sup>2,5</sup>	EM164AA <sup>3</sup> + AE470A	876804-B21	EM164AA + AE470A
<b>LSI MegaRAID 9260-8i SAS 6Gb</b>	LTO-8, LTO-7, LTO-6 & LTO-5	518885-003 <sup>2,5</sup>	--	--	--
<b>LSI 9212-i SAS 6Gb</b>	LTO-8, LTO-7, LTO-6 & LTO-5	--	EM164AA <sup>3</sup> + AE470A	876804-B21	EM164AA + AE470A

## Recommended Controllers

Recommended Controllers for these Servers	Tape Drives	External Connect	Internal Connect
<b>ProLiant DL &amp; ML Gen10</b>	LTO-8, LTO-7, LTO-6, LTO-5	E208e-p	
<b>ProLiant DL(160,180,360,380) Gen9</b>	LTO-8, LTO-7, LTO-6, LTO-5	H241	--
<b>ProLiant ML350 Servers Gen9</b>	LTO-8, LTO-7, LTO-6, LTO-5	H241	H240
<b>ProLiant DL + ML Servers Gen8</b>	LTO-8, LTO-7, LTO-6, LTO-5	H222	H222

### Notes

1. Requires HP XW Workstation Int-Ext SAS Back Panel Connector Kit (EM164AA)
2. Cable is provided with the tape drive.
3. This is an internal cable connects the internal SAS channel to the bulkhead. This in turn connects to a AE470A external cable.
4. For block sizes larger than 64KB order cached version of P212 card ( Part # 462834-B21 ). Zero memory version of P212 not recommended for tape.
5. This is not an orderable part.



# Hewlett Packard Enterprise - StoreEver Standalone SAS Cables

Important: See "HPE StoreEver MSL SAS Tape Library Controllers and SAS Cables page" for additional cables.

SAS Cable Included with drives <sup>1</sup>

Tape Drive Form Factor	Tape Technology	Cable included W/Drive	Description
<b>LTO SAS External Tape</b>	LTO-8, LTO-7,LTO-6, LTO-5	Cable included W/Drive	MINI SAS HD TO MINI SAS, EXTERNAL, 4-LANE <sup>2</sup>
<b>LTO SAS Internal Tape</b>	LTO-8, LTO-7,LTO-6, LTO-5	Cable included W/Drive	Int 8482 w/power to 2 x Int Mini SAS 8087, 0.89M <sup>2</sup>

## SAS Cable Part Numbers, Descriptions and Uses

Cable Part Number	Description	Use cases
<b>716191-B21</b>	HPE 2.0m External Mini SAS High Density to Mini SAS Cable	Use this cable to connect HPE StoreEver SAS external tape devices to HPE SAS controllers with external Mini-SAS HD (SFF8644) connectors.
<b>716193-B21</b>	HPE 4.0m External Mini SAS High Density to Mini SAS Cable	Use this cable to connect HPE StoreEver SAS external tape devices to HPE SAS controllers with external Mini-SAS HD (SFF8644) connectors.
<b>AE470A</b>	2M External Mini-SAS (SFF8088) to Mini-SAS (SFF8088) 1x SAS Cable	Use this cable to connect HPE StoreEver SAS external tape devices to HPE SAS controllers with external Mini-SAS (SFF8088) connectors.
<b>AE465A</b>	4M External Mini-SAS (SFF8088) to Mini-SAS (SFF8088) 1x SAS Cable	Use this cable to connect HPE StoreEver SAS external tape devices to HPE SAS controllers with external Mini-SAS (SFF8088) connectors.

### Notes:

1. For additional information about SAS cable kits, please see the product QuickSpecs for the applicable tape drive at: [hpe.com/info/qs](http://hpe.com/info/qs).
2. Use of this cable in a HPE ProLiant Gen9 server requires that all (x4) SAS ports be dedicated to the tape drive and cannot be used to connect to the hard drive

# Hewlett Packard Enterprise - StoreEver Standalone Tape Rack-mount Kits Support

IMPORTANT: Consult the individual Tape Drive QuickSpecs ([hpe.com/info/qs](http://hpe.com/info/qs)) for additional details

Rack-mount Kits / Standalone Tape drives <sup>1</sup>

HPE Ultrium Drives	Interface	1U SAS Rack-mount Kit BC029A	1U SAS Rack-mount Kit AE459A or AE459B	3U SAS Rack-mount Kit AG576A or AG576B
HPE LTO-8 Ultrium 30750	(LTO-8 HH SAS)	✓	✓	
HPE LTO-7 Ultrium 15000	(LTO-7 HH SAS)	✓	✓	
HP LTO-6 Ultrium 6650	(LTO-6 FH SAS)			✓
HP LTO-6 Ultrium 6250	(LTO-6 HH SAS)	✓	✓	✓
HP LTO-5 Ultrium 3280	(LTO-5 FH SAS)			✓
HP LTO-5 Ultrium 3000	(LTO-5 HH SAS)	✓	✓	✓

**Key**

✓ Supported

Notes:

1. HPE LTO Media type and compatibility details can be found under "[Product Highlights](#)".

This section includes the following:

- Tape Library Firmware
- Tfinity & T950 Tape Library Systems
- Tape Library Backup and Archive Application Support
- Tape Library Features
- Tape Library Cables

**Important:** For complete StoreEver compatibility, review every page in this section.

IMPORTANT: HPE is partnering with Spectra Logic to deliver two enterprise tape archive solutions: the HPE T950 and HPE TFinity ExaScale Edition. This page provides links about Spectra Logic product compatibility with components (HBAs, switches, backup software applications).

### HPE TFinity ExaScale Edition Tape Library

For Product overview and features see: [hpe.com/storage/tfinity](https://hpe.com/storage/tfinity)

For Technical Specs and Options see: [Tfinity Quickspec](#)

For IOP and ISV compatibility see: [Compatibility Information \(IOP and ISV\)](#)

### HPE T950 Tape Library

For Product overview and features see: [hpe.com/storage/t950](https://hpe.com/storage/t950)

For Technical Specs and Options see: [T950 Quickspec](#)

For IOP and ISV compatibility see: [Compatibility Information \(IOP and ISV\)](#)

# Hewlett Packard Enterprise - StoreEver Tape Libraries, Autoloaders, Drive firmware & drivers

## Enterprise Libraries <sup>1, 5</sup>

Tape Libraries	Description	Firmware <sup>2</sup>
<b>ESL G3 Tape Library</b>	(MCB Ver. 2)	752H.GS10800
	(MCB Ver. 1) <sup>4</sup>	656H.GS10801
<b>LTO-7 Ultrium 15750</b>	(LTO-7 FH FC)	JAYE
<b>LTO-6 Ultrium 6650</b>	(LTO-6 FH FC)	J5SW
<b>LTO-5 Ultrium 3280</b>	(LTO-5 FH FC)	I6RW
<b>LTO-4 Ultrium 1840</b>	(LTO-4 FH FC)	H6HW

## Microsoft Windows Drivers for Tape Libraries and Tape Drives

	2019 x64	2016 x64	2012 R2 x64	2012 x64	2008 R2 x64
<b>HPE LTO Tape Driver</b> <sup>3,7</sup>	1.0.9.3	1.0.9.3	1.0.9.3	1.0.9.3	1.0.9.3
<b>ESL G3 Tape Library</b>		7.5.8.3	7.5.8.2	7.5.8.1	7.5.7.1
<b>MSL3040 Tape Library</b>	3.0.0.6	3.0.0.6	3.0.0.6	3.0.0.6	3.0.0.6
<b>MSL6480 Tape Library</b>	3.0.0.6	3.0.0.6	3.0.0.6	3.0.0.6	3.0.0.6
<b>MSL8096, 8048, 4048, 2024</b>	3.0.0.6	3.0.0.6	3.0.0.6	3.0.0.6	3.0.0.6
<b>1/8 G2 Tape Autoloader</b>	3.0.0.6	3.0.0.6	3.0.0.6	3.0.0.6	3.0.0.6

### Notes

1. LTO Media type and compatibility details can be found under "[Product Highlights](#)".
2. Refer to [HPE Support Center](#) to download correct FW and driver versions for tape drives.
3. LTO-7 supported with 1.0.9.1 or later
4. LTO-7 not supported with MCB Ver. 1
5. Support applies to HP & HPE branded drives
6. MSL8096 & MSL8048 not supported with LTO-7 or LTO-8 drives
7. LTO-8 Supported with 1.0.9.2 or later
8. This firmware version is for use ONLY when using FIPS Secure Mode with a supported hardware-based encryption solution.

## Mid-Range Libraries & Autoloaders <sup>1, 5</sup>

Tape Libraries	Description	Firmware <sup>2</sup>
<b>MSL6480</b>	(FC or SAS Drives only)	5.70
<b>MSL3040</b>	(FC or SAS Drives only)	3220
<b>MSL8096 <sup>6</sup> / 8048 <sup>6</sup></b>	(MSL G3 Series)	1200
<b>MSL4048</b>	(MSL G3 Series)	9.60
<b>MSL2024</b>	(MSL G3 Series)	7.10
<b>1/8 G2 Autoloader (HH Drives only)</b>	(MSL G3 Series)	5.20
<b>LTO-8 Ultrium 30750</b>	(LTO-8 HH FC)	K4K1
<b>LTO-8 Ultrium 30750 (Secure Mode) <sup>8</sup></b>	(LTO-8 HH FC)	K4K1
<b>LTO-8 Ultrium 30750</b>	(LTO-8 HH SAS)	K4K1
<b>LTO-8 Ultrium 30750 (Secure Mode) <sup>8</sup></b>	(LTO-8 HH SAS)	K4K1
<b>LTO-7 Ultrium 15000</b>	(LTO-7 HH FC)	K4K1
<b>LTO-7 Ultrium 15000 (Secure Mode) <sup>8</sup></b>	(LTO-7 HH FC)	K4K1
<b>LTO-7 Ultrium 15000</b>	(LTO-7 HH SAS)	K4K1
<b>LTO-7 Ultrium 15000 (Secure Mode) <sup>8</sup></b>	(LTO-7 HH SAS)	K4K1
<b>LTO-6 Ultrium 6250</b>	(LTO-6 HH FC)	25MW
<b>LTO-6 Ultrium 6250</b>	(LTO-6 HH SAS)	35PW
<b>LTO-5 Ultrium 3280</b>	(LTO-5 FH FC)	I6RW
<b>LTO-5 Ultrium 3000</b>	(LTO-5 HH FC)	Y6PW
<b>LTO-5 Ultrium 3000</b>	(LTO-5 HH SAS)	Z6MW
<b>LTO-4 Ultrium 1840</b>	(LTO-4 FH FC)	H6FW
<b>LTO-4 Ultrium 1760</b>	(LTO-4 HH SAS)	U62W

## Hewlett Packard Enterprise - StoreEver Tape Libraries & Autoloaders - Software Partner (1 of 2)

IMPORTANT: Consult the Software vendor's compatibility lists to confirm software versions and specific device support.

Hyperlinks provided on [ISV Compatibility Links](#) page.

### Software Partner Support for SAN Connectivity

Application	Latest Tested Version	HP ESL G3 Tape Library	HP LTO-7	HP LTO-6	HP LTO-5	HP LTO-4
			Ultrium 15750 (Minimum ISV Version)	Ultrium 6650	Ultrium 3280	Ultrium 1840
			FH FC	FH FC	FH FC	FH FC
HPE SGI DMF	6.7	✓	✓ (6.7)	✓	✓	
Acronis Advanced Backup	12.x	✓	✓	✓	✓	✓
Arcserve Backup	17.5	✓	✓ (v17) <sup>2</sup>	✓	✓	✓
Archiware P5	5.x	✓	✓ (v5.3.3)	✓	✓	✓
Atempo Time Navigator	4.x	✓	✓ (v4.4 SP2)	✓	✓	✓
Barracuda Yosemite Backup	10.x	✓	✓ (10.5)	✓	✓	✓
BridgeHead HDM Suite	18a	✓	✓ (15A)	✓	✓	✓
Catalogic DPX (SyncSort DPX)	4.x	✓		✓	✓	✓
Commvault	11.x	✓	✓ (10.11)	✓	✓	✓
Dell EMC NetWorker	9.0	✓	✓ (9.0.0.5 & 8.2.3)	✓	✓	✓
ETI-NET						
IBM Spectrum Protect (TSM)	8.1.x	✓	✓ (7.1.3)	✓	✓	✓
Interica IDS, PARS		✓			✓	✓
Masstech FlashNet (SGL)	6.6.x	✓	✓ (6.4.x)	✓	✓	✓
MDA Archive Management System		✓			✓	
Micro Focus Data Protector	10.x	✓	✓ (8.15 & 9.05)	✓	✓	✓
Micro Focus VM Explorer	6.x	N/S	N/S	N/S	N/S	N/S
Microsoft System Center DPM	2016, 2012 & R2	✓	✓	✓	✓	✓
MT-C NODEUM	1.x	✓	✓	✓	✓	N/S
NovaStor Datacenter	7.3.x, 6.4.x	✓	✓ (7.2.0, 7.1.1, 6.4.2)	✓	✓	✓
Oracle DIVArchive (Front Porch Digital)	7.x	✓	✓ (7.3)	✓	✓	✓
Oracle Secure Backup	12.x	✓	✓	✓	✓	✓
QStar Archive Storage Manager	7.x/6.x	✓	✓ (6.12)	✓	✓	✓
Quantum StorNext	5.4.x, 6.x	✓	✓ (5.3.2.x)	✓	✓	✓
Quest NetVault	12.x	✓	✓ (11.0)	✓	✓	✓
Retrospect	16.x Win, 16.x OS X					
Seven10 StorFirst	4.8.x	✓			✓	✓
SoleraTec Phoenix	v6	✓	✓ (v6.5.3)	✓	✓	
StorageDNA DNA Evolution		✓		✓	✓	
TOLIS BRU Server	2.0.x	✓	✓ (2.0.3)	✓	✓	✓
TOLIS BRU Producer's Edition	Linux 4.0, Win 4.0, Osx 3.1	✓	✓ (3.1.16)	✓	✓	✓
Veeam Backup & Replication	v9.x	✓	✓ (v9)	✓	✓	
Veritas Backup Exec	20	✓	✓ (v15 FP1) <sup>3</sup>	✓	✓	✓
Veritas NetBackup	8.x	✓	✓ (v7.5)	✓	✓	✓
VSI OpenVMS ABS/MRU backup app <sup>4</sup>	4.6	✓	✓	✓	✓	✓
XenData Archive Series	6.x	✓	✓ (v6)	✓	✓	✓
Yoyotta YoyottaID <sup>1</sup>	2.2					

Key:

✓ Supported

✓<sup>1</sup> Supported in conjunction with note x

N/S Not supported

Notes

1. Not supported with ATTO Multipath Driver

2. Arcserve r17.0 only requires patch P00000379 with latest tapeeng.dll to support LTO7 tape drives. See <https://arcserve.zendesk.com/hc/en-us/articles/211502943>

3. Not supported with WORM media at this time.

4. See [OpenVMS Tape Library Support page](#) in this matrix for more details.

# Hewlett Packard Enterprise - StoreEver Tape Libraries & Autoloaders - Software Partners (2 of 2)

IMPORTANT: Consult the Software vendor's compatibility lists to confirm software versions and specific device support.  
 Hyperlinks provided on [ISV Compatibility Links](#) page.

Software Partner Support for DAS and SAN Connectivity

Application	Latest Tested Version	MSL6480	MSL3040	MSL8096 <sup>4</sup>	HPE LTO-8 Ultrium	HPE LTO-7	HP LTO-6	HP LTO-6	HP LTO-5	HP LTO-5	HP LTO-5	HP LTO-4	HP LTO-4
		Scalable Tape Library	Scalable Tape Library	MSL4048 MSL2024 1/8 G2 AL	30750 HH FC & HH SAS	Ultrium 15000 HH FC & HH SAS	Ultrium 6250 HH FC	Ultrium 6250 HH SAS	Ultrium 3280 FH FC	Ultrium 3000 HH FC	Ultrium 3000 HH SAS	Ultrium 1840 FH FC	Ultrium 1760 HH SAS
HPE SGI DMF	6.7	✓		✓ <sup>8</sup>	✓ (6.7) RHEL7.4, SLES12SP3	✓ (6.7 - FC only)	✓		✓	✓			
Acronis Advanced Backup	12.x	✓		✓	✓ (11.7)	✓	✓	✓	✓	✓			
Arcserve Backup	17.5	✓ <sup>1</sup>	✓	✓ <sup>1</sup>	✓ (17.5 SP1)	✓ (v17) <sup>5</sup>	✓	✓	✓	✓	✓	✓	✓
Archware P5	5.x	✓	✓ (v5.x)	✓	✓ (v5.x)	✓ (v5.3.3)	✓	✓	✓	✓	✓	✓	✓
Atempo Time Navigator	4.x	✓	✓ (4.6.2)	✓		✓ (v4.4 SP2)	✓	✓	✓	✓	✓	✓	✓
Barracuda Yosemite Backup	10.x	✓		✓		✓ (10.5)	✓	✓	✓	✓	✓	✓	✓
BridgeHead HDM Suite	18a	✓	✓	✓	✓ (16B)	✓ (15A)	✓	✓	✓	✓	✓	✓	✓
Catalogic DPX (SyncSort DPX)	4.x	✓		✓			✓	✓	✓	✓	✓	✓	✓
Commvault	11.x	✓	✓	✓	✓ (v11 Sp10)	✓ (10.11)	✓	✓	✓	✓	✓	✓	✓
Dell EMC NetWorker	9 & 18.1 <sup>9</sup>	✓		✓	✓ (18.1)	✓ (9.0.0.2 & 8.2.2.3)	✓	✓	✓	✓	✓	✓	✓
ETI-NET				✓									✓
IBM Spectrum Protect (TSM)	8.1.x	✓	✓	✓	✓ (v8.1.4)	✓ (7.1.3)	✓	✓	✓	✓	✓	✓	✓
Interica IDS, PARS				✓									✓
Masstech FlashNet (SGL)	6.6.x	✓		✓		✓ (6.4.x)	✓	✓	✓	✓	✓	✓	✓
Micro Focus Data Protector	10.x	✓	✓	✓	✓ (10.2)	✓ (8.15 & 9.05)	✓	✓	✓	✓	✓	✓	✓
Micro Focus VM Explorer	6.x	✓		✓		✓ (6.2)	✓	✓	✓	✓	✓	✓	✓
Microsoft System Center DPM	2016, 2012 & R2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MT-C NODEUM	1.x	✓		✓			✓	✓	✓	✓	✓	✓	✓
NovaStor Datacenter	7.3.x, 6.4.x	✓	✓	✓	✓ (7.2.0.7.1.1.6.4.2)	✓	✓	✓	✓	✓	✓	✓	✓
Oracle DIVArchive (Front Porch Digital)	7.x	✓		✓		✓ (7.3)	✓	✓	✓	✓	✓	✓	✓
Oracle Secure Backup	12.x	✓	✓ (12.2.0.1.0)	✓	✓ (12.2.0.1.0)	✓	✓	✓	✓	✓	✓	✓	✓
QStar Archive Storage Manager	7.x/6.x	✓	✓	✓	✓ (6.1.5)	✓ (6.1.2)	✓	✓	✓	✓	✓	✓	✓
Quantum StorNext	5.4.x, 6.x	✓		✓			✓	✓	✓	✓	✓	✓	✓
Quest NetVault	12.x	✓	✓ (11.0)	✓		✓ (11.0)	✓	✓	✓	✓	✓	✓	✓
Retrospect	16.x Win, 16.x OS X	✓	✓	✓	✓ (12.x Win) (12x Mac)	✓ (10.5 Win) (12.5 Mac)	✓	✓	✓	✓	✓	✓	✓
SEP sesam	4,4	✓ (4.4)	✓ (4.4)	✓	✓ (4.4)	✓ (4.4)	✓	✓	✓	✓	✓	✓	✓
Seven10 StorFirst	4,8.x			✓									✓
SoleraTec Phoenix	v6	✓		✓		✓ (v6.5.3)	✓	✓	✓	✓	✓	✓	✓
StorageDNA DNA Evolution		✓		✓			✓	✓	✓	✓	✓	✓	✓
TOLIS BRU Server	2.0.x	✓	✓	✓	✓ (2.0.2)	✓ (2.0.3)	✓	✓	✓	✓	✓	✓	✓
TOLIS BRU Producer's Edition	Linux 4.0 Win 4.0 OSx 3.1	✓	✓	✓	✓ (Linux 4.0, Win 4.0, OSx 3.1)	✓ (3.1.16)	✓	✓	✓	✓	✓	✓	✓
Ultrabac Software <sup>3</sup>	10.1.4.3343	✓ (10.1.4.3343)	✓ (10.1.4.3343)	✓	✓ (10.1.4.3343)	✓ (10.1.4.3343)							
Veeam Backup & Replication	v9.x	✓	✓	✓	✓ (9.5 U3)	✓ (v9)	✓	✓	✓	✓	✓	✓	✓
Veritas Backup Exec	20	✓	✓	✓	✓ (BE16 +FP2)	✓ (v15 FP1) <sup>5</sup>	✓	✓	✓	✓	✓	✓	✓
Veritas NetBackup	8.x	✓	✓	✓	✓ (7.7x)	✓ (v7.5)	✓	✓	✓	✓	✓	✓	✓
VSI OpenVMS ABS/MRU backup app <sup>6</sup>	4,6	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
XenData Archive Series	6.x	✓ <sup>1</sup>	✓	✓	✓ (6.22p1)	✓ (v6)	✓	✓	✓	✓	✓	✓	✓
Yovotta YovottalD <sup>2</sup>	2.2	✓		✓			✓	✓	✓	✓	✓	✓	✓

Key:  
 ✓ Supported  
 ✓ Supported in conjunction with note x

Notes  
 1. HPE ProLiant Agentless Management Service causes MSL libraries to never become ready when running Arcserve Backup software. Disable the service in Windows then reboot to fix.  
 2. Not supported with ATTO Multipath Driver  
 3. Not supported with WORM media at this time.  
 4. MSL8096 & MSL8048 not supported with LTO-7 & LTO-8 drives

Notes Continued  
 5. Arcserve r17 requires patch P00000379 with latest tapeeng.dll to support LTO7 tape drives. See <https://arcserve.zendesk.com/hc/en-us/articles/211502943>  
 6. See OpenVMS Tape Library Support page in this matrix for more details.  
 7. Not supported with multiple partitions.  
 8. Only tested with MSL6480 and MSL4048, with LTO-7, 6 & 5 FC drives only.  
 9. Recommendation only, tested by HPE but not officially supported by Networker.

# Hewlett Packard Enterprise - StoreEver Tape Libraries & Autoloaders - Appliance Partner Support

IMPORTANT: Consult the Appliance vendor's compatibility lists to confirm versions and specific device support.  
Hyperlinks provided on [ISV Compatibility Links](#) page.

## Storage Appliance Partner Support for DAS and SAN Connectivity

Hardware Appliances	Latest Tested Version	HP ESL G3 Tape Library	HPE	HP	HP	HP	MSL6480 Scalable Tape Library	MSL3040 Scalable Tape Library	MSL8096 <sup>2</sup> MSL4048 MSL2024 1/8 G2 AL	HPE	HPE	HP	HP	HP	HP	HP	HP	HP
			LTO-7 Ultrium 15750 FH FC	LTO-6 Ultrium 6650 FH FC	LTO-5 Ultrium 3280 FH FC	LTO-4 Ultrium 1840 FH FC				LTO-7 Ultrium 15000 HH FC	LTO-7 Ultrium 15000 HH SAS	LTO-6 Ultrium 6250 HH FC	LTO-6 Ultrium 6250 HH SAS	LTO-5 Ultrium 3280 FH FC	LTO-5 Ultrium 3000 HH FC	LTO-5 Ultrium 3000 HH SAS	LTO-4 Ultrium 1840 FH FC	LTO-4 Ultrium 1760 HH SAS
<b>HPE NonStop Servers</b>																		
<b>ProMAX ProCache Appl.</b>									✓				✓				✓	
<b>ProMAX PowerCache Appl.</b>									✓				✓				✓	
<b>Crossroads ReadVerify Appl.</b>	✓				✓				✓					✓	✓			✓
<b>Crossroads SPHiNX</b>									✓									✓
<b>StrongBox Data Solutions (Crossroads)</b>	✓		✓	✓	✓	✓		✓	✓	✓				✓	✓			
<b>Crossroads Virtual TapeServer</b>																		
<b>FalconStor VTL</b>																		
<b>NetApp Data ONTAP (NDMP) 8.x</b>	✓		✓ <sup>3,4</sup>	✓	✓	✓	✓		✓	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓	✓	✓	✓	✓	✓	✓
<b>NetApp Data ONTAP (NDMP) 7.2.x 7.3.</b>	✓			✓ <sup>1</sup>	✓	✓	✓		✓			✓ <sup>1</sup>	✓ <sup>1</sup>	✓	✓	✓	✓	✓
<b>NetApp NearStore VTL Series</b>									✓									✓
<b>Tributary Systems Storage Director</b>									✓				✓	✓	✓			✓

Key:  
✓ Supported

- Notes:
- v7.3.7 or later required for LTO-6.
  - MSL8096 & MSL8048 not supported with LTO-7 & LTO-8 drives.
  - Minimum NetAPP Data ONTAP version required for LTO-7 required is v8.2.4 or later
  - To enable the support of the corresponding tape devices go to [http://mysupport.netapp.com/NOW/download/tools/tape\\_config/](http://mysupport.netapp.com/NOW/download/tools/tape_config/)



# Hewlett Packard Enterprise - StoreEver Archiving Solution Partners

IMPORTANT: Consult the Appliance vendor's compatibility lists to confirm versions and specific device support.  
Hyperlinks provided on [ISV Compatibility Links](#) page.

## Software Partners

Application	Feature	Support for Linear Tape File System (LTFS)
<b>HPE StoreOpen Software</b>	Free utility for basic LTFS connectivity to HPE tape drives and MSL Library & HPE 1/8 G2 Autoloader	✓
<b>Atempo - Time Navigator</b>	Advanced protection and archival solution	
<b>Commvault</b>	Archive, retrieve, and backup relational and file-based information	
<b>SGI StorHouse (FileTek)</b>	Archive, retrieve, and backup relational and file-based information	✓
<b>Oracle DIVArchive (Front Porch Digital)</b>	Content Storage Management system for digital media	
<b>Interica IDS &amp; PARS</b>	Archiving solutions to preserve the value and integrity of information	
<b>MDA Archive Management System</b>	Surveillance, Intelligence, Communication, and Advanced Technology solutions	
<b>QStar Archive Storage Manager</b>	Provides data archive functionality and auto migration	✓
<b>Quantum StorNext</b>	High Performance Workflow and Intelligent Archiving	✓
<b>Seven10 StorFirst Altus &amp; EAS</b>	Enterprise file system archiving and disaster recovery software	
<b>Masstech FlashNet (SGL)</b>	Content storage and archive management	✓
<b>StorageDNA DNA Evolution</b>	Designed for Nearline and Archival of media assets.	✓
<b>TOLIS BRU</b>	Artists/producers can now easily drag-and-drop to create session archives	✓
<b>XenData Archive Series</b>	Powerful, scalable digital archives	✓
<b>Yoyotta YoyottaID</b>	Archive assets to LTFS	✓

## Hardware Partners

Product	Feature	Support for Linear Tape File System (LTFS)
<b>ProMAX PowerCache Appliance</b>	Long Term management of media data in and out of archives	✓
<b>Crossroads ReadVerify Appliance</b>	Monitors and verifies readability of data written to tape	
<b>StrongBox Data Solutions (Crossroads)</b>	File-based and fully portable storage solution for long- term data retention	✓

Key:  
✓ Supported

# Hewlett Packard Enterprise - ESL Advanced StoreEver Library Features

## ESL G3 Tape Library Features

Feature	Arcserve Backup	Acronis Advanced Backup	Archivare P5	Commvault	Dell EMC NetWorker	IBM Spectrum Protect (TSM)	Micro Focus Data Protector	Quantum StorNext Software	Quest NetVault	Veeam Backup	Veritas Backup Exec	Veritas NetBackup
<b>Dual Robot Support</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>High Density Expansion Module (HDEM)</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>Automated Media Pool (AMP)</b> <sup>1</sup>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>LTO-5 &amp; LTO-6 Basic Control Path Failover</b> <sup>3</sup>	✓	N/S	✓	✓	✓	N/S	✓				N/S	✓
<b>LTO-5 &amp; LTO-6 Basic Data Path Failover</b> <sup>3</sup>	✓	N/S	✓	✓	✓	N/S	✓				✓	✓
<b>LTO-6 driver-based Adv. Control Path Failover</b> <sup>2</sup>	N/S	N/S	✓ <sup>7</sup>	✓ <sup>5,13</sup>	✓ <sup>6</sup>	✓ <sup>6</sup>	✓	✓			N/S	✓ <sup>10,11</sup>
<b>LTO-6 driver-based Adv. Data Path Failover</b> <sup>2</sup>	N/S	N/S	✓ <sup>7</sup>	✓ <sup>5,13</sup>	✓ <sup>6</sup>	✓ <sup>6</sup>	✓	✓			N/S	✓ <sup>10,11</sup>
<b>LTO-7+ driver-based Control Path Failover</b> <sup>2,8</sup>	N/S			✓ <sup>13</sup>	✓	✓ <sup>12</sup>	✓			✓ <sup>14</sup>	N/S	✓ <sup>10,11</sup>
<b>LTO-7+ driver-based Data Path Failover</b> <sup>2,8</sup>	N/S			✓ <sup>13</sup>	✓	✓ <sup>12</sup>	✓			✓ <sup>14</sup>	N/S	✓ <sup>10,11</sup>
<b>Expansion Module support</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>Library Partitioning</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>Mixed Media</b>	✓	✓		✓	✓	✓	✓	✓	✓		✓	✓
<b>Application encryption key management</b> <sup>4</sup>	✓	N/S	N/S	✓	N/S	✓	✓	N/S	✓		✓	✓

### Key:

- ✓ Supported
- N/S Not Supported issues found

### Notes:

1. Supported by using partitions.
2. **Driver-based** Path Failover requires x64 OS drivers.  
For more details see: [HPE StoreEver Tape Libraries Failover User Guide](#) or [HPE StoreEver Tape Libraries LTO-7+ Path Failover User Guide](#).  
**Driver-based** path failover functions with HPE E series and Q series FC HBAs. Advanced path failover is not compatible with HPE B series FC HBAs.  
**Driver-based** path failover functions with HPE B series, C series, and H series FC switches.
3. Failover behavior may vary based on configuration.  
For more details see the: [HPE StoreEver Tape Libraries Failover User Guide](#).
4. For tape drives with hardware encryption support (LTO-7, LTO-6, LTO-5 & LTO-4). Consult ISV vendor for detailed instruction on how to setup the ISV for Key management.  
For more information see the following technical white paper: [Encryption technology for HPE StoreEver LTO Ultrium Tape Drives](#).
5. Legacy HP-UX 11.31 devices file must first be removed.
6. Not currently supported with HP-UX APF drivers.
7. Supported with Linux only.
8. **ESL G3 only support LTO-7.**
9. HPE H series switches with LTO-7 may see excessive CRC errors at 8Gbps speeds, set the port speed to 4Gbps for stable communication.
10. **Veritas NetBackup LTO-6 APF or LTO-7+ PF is not supported with RHEL 7.x or later.**
11. **Veritas NetBackup 8.x or later does not support HPE driver-based failover.**
12. For details on IBM Spectrum Protect support of LTO-7 Path Failover please consult <http://www-01.ibm.com/support/docview.wss?uid=swg21986885>
13. Only supported with v11.0 SP4a or later or v10.0 SP14 or later. For more details see [Customer Advisory: c05225626](#).
14. Veeam 9.5.x or later.

# Hewlett Packard Enterprise - MSL Advanced StoreEver Library Features

## MSL Library Features

Feature	Arcserve Backup	Acronis Advanced Backup	Archiware P5	Commvault	Dell EMC NetWorker	IBM Spectrum Protect (TSM)	Micro Focus Data Protector	Microsoft System Center DPM	Quantum StorNext Software	Quest NetVault	Veeam Backup	Veritas Backup Exec	Veritas NetBackup
<b>Library Extender Kit</b> <sup>1</sup>	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓
<b>Library Partitioning</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>LTO-5 &amp; LTO-6 Basic Control Path Failover</b> <sup>3</sup>	✓	N/S	✓	✓	✓	N/S	✓					N/S	✓
<b>LTO-5 &amp; LTO-6 Basic Data Path Failover</b> <sup>3</sup>	✓	N/S	✓	✓	✓	N/S	✓					✓	✓
<b>LTO-6 driver-based Adv. Control Path Failover (MSL6480 &amp; MSL3040)</b> <sup>2</sup>	N/S	N/S	✓ <sup>5</sup>	✓ <sup>7,13</sup>	✓ <sup>6</sup>	✓ <sup>6</sup>	✓		✓				✓ <sup>10,11</sup>
<b>LTO-6 driver-based Adv. Data Path Failover (MSL6480 &amp; MSL3040)</b> <sup>2</sup>	N/S	N/S	✓ <sup>5</sup>	✓ <sup>7,13</sup>	✓ <sup>6</sup>	✓ <sup>6</sup>	✓		✓				✓ <sup>10,11</sup>
<b>LTO-7+ driver-based Control Path Failover (MSL6480 &amp; MSL3040)</b> <sup>2,8,9</sup>				✓ <sup>13</sup>	✓	✓ <sup>12</sup>	✓				✓ <sup>14</sup>		✓ <sup>10,11</sup>
<b>LTO-7+ driver-based Data Path Failover (MSL6480 &amp; MSL3040)</b> <sup>2,8,9</sup>				✓ <sup>13</sup>	✓	✓ <sup>12</sup>	✓				✓ <sup>14</sup>		✓ <sup>10,11</sup>
<b>Application encryption key management</b> <sup>4</sup>	✓	N/S	N/S	✓	N/S	✓	✓	N/S	N/S	✓		✓	✓

### Key:

✓ Supported

N/S Not Supported issues found

### Notes:

1. Only supported on the MSL8096 / 8048 / 4048 / 2024 Libraries. The first time you install the Extender you must update the firmware in each Library individually.

2. **Driver-based** path Failover requires x64 OS drivers.

For more details see: [HPE StoreEver Tape Libraries Failover User Guide](#) or [HPE StoreEver Tape Libraries LTO-7+ Path Failover User Guide](#).

**Driver-based** path failover functions with HPE E series and Q series FC HBAs. Advanced path failover is not compatible with HPE B series FC HBAs.

**Driver-based** failover functions with HPE B series, C series, and H series FC switches.

3. Failover behavior may vary based on configuration. For more details see the:

[HPE StoreEver Tape Libraries Failover User Guide](#).

4. For tape drives with hardware encryption support (LTO-8, LTO-7, LTO6, LTO5 & LTO4). Consult ISV vendor for detailed instruction on how to setup the ISV for Key management. For more information see the following technical white paper: [Encryption technology for HPE StoreEver LTO Ultrium Tape Drives](#).

5. Supported with Linux only.

6. Not currently supported with HP-UX APF drivers.

7. Legacy HP-UX 11.31 devices file must first be removed.

8. LTO-7+ Path Failover supports LTO-7 and LTO-8.

9. HPE H series switches with LTO-7 may see excessive CRC errors at 8Gbps speeds, set the port speed to 4Gbps for stable communication.

10. **Veritas NetBackup LTO-6 APF or LTO-7+ PF is not supported with RHEL 7.x or later.**

11. **Veritas NetBackup 8.x or later does not support HPE driver-based failover.**

12. For details on IBM Spectrum Protect support of LTO-7+ Path Failover please consult <http://www-01.ibm.com/support/docview.wss?uid=swg21986885>. LTO7+ Path Failover supports LTO-7 and LTO-8.

13. Only supported with v11.0 SP4a (special request to Commvault support) or later or v10.0 SP14 or later. For more details see [Customer Advisory: c05225626](#).

14. Veeam 9.5.x or later.

# Hewlett Packard Enterprise - ESL & MSL Driver-Based Path Failover Operating System Support

## ESL & MSL HPE StoreEver Failover Driver Support

Operating System	LTO-6 High Availability Path Failover Driver - ESL G3	LTO-6 High Availability Path Failover Driver - MSL3040	LTO-6 High Availability Path Failover Driver - MSL6480	LTO-7+ Path Failover Driver - ESL G3 <sup>1</sup>	LTO-7+ Path Failover Driver - MSL3040 <sup>2</sup>	LTO-7+ Path Failover Driver - MSL6480 <sup>2</sup>
Win 2016	N/S	N/S	N/S	6.2.6.4	6.2.6.4	6.2.6.4
Win 2012 R2	1.0.10.1	1.0.10.1	1.0.10.1	6.2.6.4	6.2.6.4	6.2.6.4
Win 2012	1.0.10.1	1.0.10.1	1.0.10.1	6.2.6.4	6.2.6.4	6.2.6.4
Win 2008 R2	1.0.7.9 <sup>3</sup>	N/S	1.0.7.9 <sup>3</sup>	N/S	N/S	N/S
RHEL 7.6	N/S	9.2.23-1 <sup>4</sup>	9.2.23-1 <sup>4</sup>	N/S	N/S	N/S
RHEL 7.5	N/S	9.2.22-1	9.2.22-1	N/S	N/S	N/S
RHEL 7.4	N/S	9.2.22-1	9.2.22-1	N/S	N/S	N/S
RHEL 7.3	N/S	9.2.22-1	9.2.22-1	3.0.21	3.0.21	3.0.21
RHEL 7.2	7.1.19-1	7.1.19-1	7.1.19-1	3.0.21	3.0.21	3.0.21
RHEL 7.1	7.1.19-1	7.1.19-1	7.1.19-1	3.0.21	3.0.21	3.0.21
RHEL 7.0	N/S	N/S	N/S	N/S	N/S	N/S
RHEL 6.10	N/S	9.0.21-2 <sup>5</sup>	9.0.21-2 <sup>5</sup>	N/S	N/S	N/S
RHEL 6.9	8.0.20-1	9.0.21-2	9.0.21-2	3.0.21	3.0.21	3.0.21
RHEL 6.8	8.0.20-1	9.0.21-2	9.0.21-2	3.0.21	3.0.21	3.0.21
RHEL 6.7	8.0.20-1	9.0.21-2	9.0.21-2	3.0.21	3.0.21	3.0.21
RHEL 6.6	8.0.20-1	8.0.20-1	8.0.20-1	3.0.21	3.0.21	3.0.21
RHEL 6.5	N/S	N/S	N/S	3.0.21	3.0.21	3.0.21
HP-UX 11i v3 (11.31)	PHKL_43680 PHKL_43681 PHKL_43819	N/S	PHKL_43680 PHKL_43681 PHKL_43819	N/S	N/S	N/S

### Key:

N/S Not Supported issues found

### Notes:

1. LTO-7+ driver used with ESL G3 libraries will only support LTO-7 drives. each Library individually.
2. LTO-7+ driver used with MSL3040 and MSL6480 libraries supports both LTO-7 and LTO-8 drives
3. Driver version frozen with no further development.
4. QLogic 32Gb and 16Gb Fibre Channel Host Bus Adapters requires driver version 10.01.00.33.07.6-k or later for full failover support.
5. QLogic 32Gb and 16Gb Fibre Channel Host Bus Adapter driver version that comes with the RHEL 6.10 requires server reboot to present a restored path.after a failover event.

# Hewlett Packard Enterprise - Command View for Tape Libraries (CVTL)

	ESL G3	MSL6480	MSL3040	MSL8096 / 8048 / 4048 / 2024 & 1/8G2 Autoloader
<b>Command View for Tape Libraries (CVTL)</b> <sup>1,5</sup>	5.7 Build 50	5.7 Build 50	5.7 Build 50	5.7 Build 50
<b>Library firmware</b>	Use latest FW listed on " <a href="#">Tape Library Firmware</a> " Page in this Document			
<b>HPE StoreEver Data Verification API Support</b> <sup>4</sup>	QStar Archive Manager v6.1.3.5600 or later <sup>3</sup>	QStar Archive Manager v6.1.3.5600 or later <sup>3</sup>		
<b>JAVA Run Time (minimum version)</b>	1.8			

## Notes:

1. Data Verification feature requires at a minimum version 3.8.00.
2. MSL6480 Firmware 4.60 or later required for support of CVTL 3.9.00 or later.
3. CVTL 3.9.00 or later is required for QStar Support for ESL G3. CVTL 3.9.01 or later is required for MSL6480.
4. Data Verification is not supported with ESL G3 code version 738H\_GS00800. Use 736H\_GS00500 instead.
5. CVTL is not supported with HP Storage Essentials Software Suite.
6. MSL3040 Firmware 3000 or later required for support of CVTL 5.3.00 or later.

# Hewlett Packard Enterprise - Encryption Key Appliances

Important: Supported using the latest firmware listed on the [Tape Library Firmware](#) page.

Appliance or Software Key Manager	ESL G3	MSL6480	MSL3040	MSL8096 / 8048 / 4048 / 2024 & 1/8 G2 Autoloader
<b>HPE Enterprise Secure Key Manager 5.x<sup>1,2</sup> (using ESKM or KMIP 1.0, 1.1 &amp; 1.2 standards)</b>	7.0.9 Firmware or later <sup>8</sup>	7.0.9 Firmware or later <sup>8</sup>	7.0.9 Firmware or later <sup>3,8</sup>	7.0.9 Firmware or later <sup>3,8</sup>
<b>HPE Enterprise Secure Key Manager 4.x<sup>1,2,9</sup> (using ESKM or KMIP 1.0, 1.1 &amp; 1.2 standards)</b>	6.0.0 Firmware or later	6.0.0 Firmware or later	6.0.0 Firmware or later	6.0.0 Firmware or later <sup>3</sup>
<b>Gemalto SafeNet KeySecure models k150<sup>5</sup>, k150v, k250, k450, K450v or k460<sup>6</sup> (KMIP standard)</b> <sup>8,9,0</sup>		8.6.0	8.6.0	8.6.0
<b>Prime Factors - EncryptRIGHT (KMIP standard)</b> <sup>4</sup>	4.10.18	4.10.18		4.10.18

Notes:

1. For more details visit: [www.utimaco.com](http://www.utimaco.com)
2. Refer to the [KeySecure Interoperability website](#) for additional information.
3. KMIP only
4. For more details visit: [www.primefactors.com/secure-data-encryptright](http://www.primefactors.com/secure-data-encryptright)
5. End of life cycle, last supported release was 8.5
6. Units based on the R610 chassis are end of life cycle, last supported release was 8.5. Successive releases of the k460 on the R320 chassis and R330 appliances are still supported.
7. For more information see: <https://safenet.gemalto.com/data-protection/keysecure-interoperability/>
8. Minimum FW required.
9. ESKM 4.x Lightweight patch p01 required

# Hewlett Packard Enterprise - StoreEver MSL SAS Tape Library Controllers and SAS Cables

Important: See [HPE StoreEver Standalone Tape SAS Cables page](#) for additional cables.

## Server Controllers

Controller/HBA	Tape Drives	Tape Library SAS Cable	Description
<b>Smart Array P408e-m, P408e-p, E208e-p</b>	ALL LTO SAS Tape drives	K2R09A - 805150-001 K2R10A - 805151-001	2M External Mini-SAS HD (SFF8644) 1x to Mini-SAS (SFF8088) 4x fanout SAS Cable 4M External Mini-SAS HD (SFF8644) 1x to Mini-SAS (SFF8088) 4x fanout SAS Cable
<b>Smart Host Bus Adapter H241 Smart Array P441, P841</b>	ALL LTO SAS Tape drives	K2R09A - 805150-001 K2R10A - 805151-001	2M External Mini-SAS HD (SFF8644) 1x to Mini-SAS (SFF8088) 4x fanout SAS Cable 4M External Mini-SAS HD (SFF8644) 1x to Mini-SAS (SFF8088) 4x fanout SAS Cable
<b>Smart Array P431</b>	ALL LTO SAS Tape drives	K2R09A - 805150-001 K2R10A - 805151-001	2M External Mini-SAS HD (SFF8644) 1x to Mini-SAS (SFF8088) 4x fanout SAS Cable 4M External Mini-SAS HD (SFF8644) 1x to Mini-SAS (SFF8088) 4x fanout SAS Cable
<b>Smart Array P421 HPE Host Bus Adapter H221</b>	ALL LTO SAS Tape drives	AN975A AN976A	2M External Mini-SAS (SFF8088) 1x to Mini-SAS (SFF8088) 4x fanout SAS Cable 4M External Mini-SAS (SFF8088) 1x to Mini-SAS (SFF8088) 4x fanout SAS Cable
<b>Smart Array P222, P822, P212<sup>1</sup>, P812 HPE Host Bus Adapter H222</b>	LTO-7, LTO-6 & LTO-5	AN975A AN976A	2M External Mini-SAS (SFF8088) 1x to Mini-SAS (SFF8088) 4x fanout SAS Cable 4M External Mini-SAS (SFF8088) 1x to Mini-SAS (SFF8088) 4x fanout SAS Cable
<b>Smart Array P222, P822, P212<sup>1</sup>, P812 HPE Host Bus Adapter H222</b>	LTO-4	AN975A AN976A	2M External Mini-SAS (SFF8088) 1x to Mini-SAS (SFF8088) 4x fanout SAS Cable 4M External Mini-SAS (SFF8088) 1x to Mini-SAS (SFF8088) 4x fanout SAS Cable
<b>Smart Array P411, P812</b>	ALL LTO SAS Tape drives	AN975A AN976A	2M External Mini-SAS (SFF8088) 1x to Mini-SAS (SFF8088) 4x fanout SAS Cable 4M External Mini-SAS (SFF8088) 1x to Mini-SAS (SFF8088) 4x fanout SAS Cable

## Recommended Controllers

Controller/HBA	Tape Drives	Recommended HPE Controllers
<b>ProLiant DL &amp; ML Gen10</b>	LTO-8, LTO-7, LTO-6 , LTO-5, LTO-4	E208e-p HPE Smart Array E208i-p SR Gen10 (8 Internal Lanes/No Cache) 12G SAS PCIe
<b>ProLiant DL(160,180,360,380) Gen9</b>	LTO-8, LTO-7, LTO-6 , LTO-5, LTO-4	H241
<b>ProLiant ML350 Servers Gen9</b>	LTO-8, LTO-7, LTO-6 , LTO-5, LTO-4	H241
<b>ProLiant DL + ML Servers Gen8</b>	LTO-7, LTO-6 , LTO-5, LTO-4	H222
<b>ProLiant DL + ML Servers G7</b>	LTO-7, LTO-6 , LTO-5, LTO-4	P212 <sup>1</sup>

### Notes

1. For block sizes larger than 64KB order cached version of P212 card ( Part # 462834-B21 ). Zero memory version of P212 not recommended for tape.

This section includes the following:

- StoreEver Operating System Support
- StoreEver FC, FCoE and SAS HBA Support
- StoreEver Switch Support

IMPORTANT: This section applies to StoreEver only. All Tape Libraries/Drives are supported, unless otherwise noted.



# Hewlett Packard Enterprise - StoreEver - HP-UX (Integrity)

IMPORTANT: Consult your ISV/IHV vendor's compatibility guides ([Compatibility Links Page](#)) to confirm product & OS version support details. Consult the individual Server QuickSpec for supported storage controllers.

See the [HP-UX Support matrix](#) for server & operating systems support details.

## HP-UX (Integrity)<sup>3,6,8</sup> Direct Attached & SAN Support

Operating Systems	Version
HP-UX 11i v3 (11.31) <sup>2,7</sup>	HWE & QPK bundles, May 2019

Servers	Supported
HPE Integrity Superdome 2 and rx Series (i2 / i4 / i6)	✓
HPE BladeSystem c-Class Integrity Servers (i2 / i4 / i6)	✓

Adapter	Description	Interface	Firmware	11iv3 Driver
CN1100E (AT111A) <sup>1</sup>	10GbE CNA	PCI-e	4.9.416.17	B.11.31.1705
NC553m (613431-B21) <sup>1</sup>	10GbE HPE BladeSystem CNA		4.9.416.17	B.11.31.1705
NC551m <sup>1</sup>	10GbE HPE BladeSystem CNA		4.9.416.17	B.11.31.1705
SN1000Q (B9F23A & B9F24A) <sup>4,5</sup>	16Gb FC HBA	PCI-e	8.05.43	B.11.31.1905
81Q (AH400A) & 82Q (AH401A) <sup>5</sup>	8Gb FC HBAs	PCI-e	5.06.06	B.11.31.1905
81E (AH402A) & 82E (AH403A) <sup>5</sup>	8Gb FC HBAs	PCI-e	2.02x2	B.11.31.1805
AT094A (FC) <sup>5</sup>	8Gb FC HBAs	PCI-e	2.02x2	B.11.31.1805
AT094A (FCoE)	10Gb FCoE HBAs	PCI-e	4.9.416.17	B.11.31.1805
QMH2562 (451871-B21) <sup>5</sup>	8Gb HPE BladeSystem c-Class FC HBA		5.06.06	B.11.31.1905
LPe1205 (456972-B21) <sup>5</sup>	8Gb HPE BladeSystem c-Class FC HBA		2.02x2	B.11.31.1805
P441 (Q9X08A)	12Gb 8-Channel SAS HBA	PCI-e	6.30	B.11.31.1806
P711m	6Gb 8-Channel SAS HBA	PCI-e	6.42B0	B.11.31.1806
P812 (AM312A) & P411 (AM311A)	6Gb 8-Channel SAS HBA	PCI-e	6.42	B.11.31.1806
P700m	3Gb 8-Channel SAS HBA	PCI-e	6.42	B.11.31.1806

### Notes:

- Not supported with Library and Tape Tools.
- LTO-7 support is enabled by patch PHKL\_44253 delivered via the 1603 OE update for HP-UX 11.31.
- Advanced path failover functions with HPE E series and Q series FC HBAs. Advanced path failover is not compatible with HPE B series FC HBAs or Converged Network Adapters.
- Not supported in direct attach mode with HPE LTO drives when Speed=Auto. A fixed speed must be selected.
- Supports Direct Attach to LTO-7 & LTO-8 but only when using a private loop topology.
- LTO-8 supported on i6 servers only
- Supports Direct Attach to LTO-7 & LTO-8 but only when running 8Gb or 4GB speed using a private loop topology.
- Ignite boot from tape supported through LTO-8.

# Hewlett Packard Enterprise - StoreEver - Windows (20GbE CNAs)

IMPORTANT: Consult your ISV/IHV vendor's compatibility guides ([Compatibility Links Page](#)) to confirm product & OS version support details. Consult the individual Server QuickSpec for supported storage controllers. See the [HPE Servers Support & Certification Matrices](#) website for server & operating systems support details.

## Windows SAN Support

Operating Systems	Version
Windows Server 2019 x64	✓
Windows Server 2016 x64, (Windows 2016 Hyper-V Server) <sup>4</sup> , (Windows Storage Server 2016) <sup>1</sup>	✓
Windows Server 2012 R2 & 2012 x64, (Windows 2012 Hyper-V Server) <sup>5</sup> , (Windows Storage Server 2012 / 2012 R2) <sup>1</sup>	✓
Windows Server 2008 R2 x64 (Windows Storage Server 2008 R2) <sup>2</sup>	sp1

Server Platforms	Supported
HPE ProLiant DL, ML & HPE ProLiant BladeSystem c-Class	✓
HPE Synergy Compute Module	✓
HPE Integrity Superdome X (BL920s Gen9 Only)	✓
HPE StoreEasy Storage <sup>1</sup> / 3Par StoreServ File Controller <sup>1</sup> / StoreVirtual File Controller <sup>1</sup>	✓

Adapter	Description	Interface	Firmware	FC StorPort Driver	NIC Driver	iSCSI StorPort Driver
CN1300R (Q0F09A) <sup>6</sup>	10/25Gb CNA	PCI-e	5.1.4.0	8.37.37.0	8.37.37.0	8.37.37.0
630FLB (700065-B21) <sup>3</sup> & 630M (700076-B21) <sup>3</sup>	20GbE HPE BladeSystem CNA	PCI-e	7.14.3	Win 2019, 2016 & 2012R2:7.14.18 Win2008R2: 7.14.10	Win 2019 & 2016 & 2012R2: 7.13.150.0 2008R2 - 7.13.103.0	Win 2019 & 2016 & 2012R2 - 7.14.11.0 Win 2008R2 - 7.14.3.0
650FLB (700763-B21) (PCI-e) & 650M (700767-B21)	20GbE HPE BladeSystem CNA	PCI-e	Win2016 & 2019: 12.0.1216.0 Win2012R2: 12.0.1216.0 Win2008R2: 11.1.183.62	Win2019:12.0.1192.0(b) Win2016:12.0.1109.0 Win2012R2:12.0.1109.0 Win2008R2:11.1.145.16	Win 2019:12.0.1195.0 Win 2016:12.0.1195.0 Win 2012R2:12.0.1195.0 Win 2008R2:11.1.145.30(b)	Win 2019:12.0.1171.0 Win 2016:12.0.1171.0 Win 2012R2:12.0.1171.0 Win 2008R2:11.1.185.0(b)
Synergy 4820C (876449-B21) <sup>6</sup>	10/25Gb CNA	PCI-e	5.1.4.0	8.37.37.0	8.37.37.0	8.37.37.0
Synergy 3820C (777430-B21) <sup>6</sup>	20GbE HPE Synergy CNA	PCI-e	7.14.3	Win 2019, 2016 & 2012R2:7.14.18	Win 2019 & 2016 & 2012R2: 7.13.150.0	Win 2019 & 2016 & 2012R2: 7.14.11.0

### Notes:

- Supports HPE StoreEasy: 3840, 1860, 1850, 1840, 1660, 1650, 1640, 1560, 1550, 1540, 1460, 1450, 1440, HPE StoreEasy Gateway Storage Blade: 3850, 3840, HPE 3PAR StoreServ File Controller v2 & HPE StoreVirtual 3000 File Controller.
- Supports Messaging Systems E5300, E5500, E5700 and HPE Network Storage Systems X5520 G2, X3800sb G2, X3800 G2, X3400 G2, X3000 G2, X1800 G2.
- Supported block sizes up to 256K only.
- Virtual FC HBA Driver only supported on Windows 2016 and Windows 2012 & 2012 R2 Guest VM's
- Virtual FC HBA Driver only supported on Windows 2012 & 2012 R2 Guest VM
- Windows 2008R2 is not supported

# Hewlett Packard Enterprise - StoreEver - Windows (10GbE CNAs)

IMPORTANT: Consult your ISV/IHV vendor's compatibility guides ([Compatibility Links Page](#)) to confirm product & OS version support details. Consult the individual Server QuickSpec for supported storage controllers. See the [HPE Servers Support & Certification Matrices](#) website for server & operating systems support details.

## Windows SAN Support

Operating Systems	Version
Windows Server 2019 x64	✓
Windows Server 2016 x64, (Windows 2016 Hyper-V Server) <sup>5</sup> , (Windows Storage Server 2016) <sup>1</sup>	✓
Windows Server 2012 R2 & 2012 x64, (Windows 2012 Hyper-V Server) <sup>6</sup> , (Windows Storage Server 2012 / 2012 R2)	✓
Windows Server 2008 R2 x64 (Windows Storage Server 2008 R2) <sup>2</sup>	sp1

Server Platforms	Supported
HPE ProLiant DL, ML & HPE ProLiant BladeSystem c-Class	✓
HPE Integrity Superdome X (BL920s Gen9 Only)	✓
HPE StoreEasy Storage <sup>1</sup> / 3Par StoreServ File Controller <sup>1</sup> / StoreVirtual File Controller <sup>1</sup>	✓

Adapter	Description	Interface	Firmware	FC StorPort Driver	NIC Driver	iSCSI StorPort Driver
CN1000E (AW520A)	10GbE HPE CNA	PCI-e			iSCSI support only	
CN1000Q (BS668A) <sup>4</sup> & 526FLR (629138-B21) <sup>4</sup>	10GbE HPE CNA	PCI-e	4.0.0.21 C	Win2012R2 & 2008R2: 9.1.13.10	Win2012R2 & 2008R2: 5.3.32.1130	Win2012R2 & 2008R2:: 2.1.6.10
CN1200E (E7Y06A)	10GbE HPE CNA	PCI-e	Win2016 & 2019: 12.0.1216.0 Win2012R2: 12.0.1216.0 Win2008R2: 11.1.183.62	Win2019:12.0.1192.0(b) Win2016:12.0.1109.0 Win2012R2:12.0.1109.0 Win2008R2:11.1.145.16	Win 2019:12.0.1195.0 Win 2016:12.0.1195.0 Win 2012R2:12.0.1195.0 Win 2008R2:11.1.145.30(b)	Win 2019:12.0.1171.0 Win 2016:12.0.1171.0 Win 2012R2:12.0.1171.0 Win 2008R2:11.1.185.0(b)
556FLR (727060-B21) <sup>3</sup>	10GbE HPE CNA	PCI-e	Win2016 & 2012R2:12.0.1110.11 Win2008R2:11.1.183.62	Win2016:12.0.1109(b) Win2012R2:12.0.1109(b) Win2008R2:11.1.145.16	Win 2016:12.0.1115.0(b) Win 2012R2:12.0.1115.0 Win 2008R2:11.1.145.30(b)	Win 2016:12.0.1104.0(b) Win 2012R2:12.0.1104.0 Win 2008R2:11.1.185.0(b)
CN1100E (BK835A)	10GbE HPE CNA	PCI-e	Win 2016 & 2012R2 & 2008R2: 11.1.183.23	Win 2016 & 2012R2 & 11.1.145.16	Win 2016:11.1.196.4(B) Win 2012R2:11.1.145.30(B) Win 2008R2:11.1.145.30(B)	Win 2016 & 2012R2 & 11.1.185.0(B)
554FLR (629142-B21)	10GbE HPE CNA	PCI-e	Win 2016 & 2012R2 & 2008R2: 11.1.183.23	Win 2016 & 2012R2 & 11.1.145.16	Win 2016:11.1.196.4(B) Win 2012R2:11.1.145.30(B) Win 2008R2:11.1.145.30(B)	11.1.185.0(B)
CN1100R (QW990A)	10GbE HPE CNA	PCI-e	7.14.3	Win 2019, 2016, 2012R2:7.14.18 Win2008R2: 7.14.10	Win 2019, 2016, 2012R2 - 7.13.150.0 Win 2008R2 - 7.13.103.0	Win 2019, 2016, 2012R2 - 7.14.11.0 Win 2008R2 - 7.14.3.0
534FLR (700751-B21) <sup>3</sup>	10GbE HPE CNA	PCI-e	7.14.3	Win 2019, 2016 & 2012R2:7.14.18 Win2008R2: 7.14.10	Win 2019, 2016, 2012R2 - 7.13.150.0 Win 2008R2 - 7.13.103.0	Win 2019, 2016, 2012R2 - 7.14.11.0 Win 2008R2 - 7.14.3.0

### Notes:

- Supports HPE StoreEasy: 3840, 1860, 1850, 1840, 1660, 1650, 1640, 1560, 1550, 1540, 1460, 1450, 1440, HPE StoreEasy Gateway Storage Blade: 3850, 3840, HPE 3PAR StoreServ File Controller v2 & HPE StoreVirtual 3000 File Controller.
- Supports Messaging Systems E5300, E5500, E5700 and HPE Network Storage Systems X5520 G2, X3800sb G2, X3800 G2, X3400 G2, X3000 G2, X1800 G2.
- Supported block sizes up to 256K only.
- There is a potential for network interruption when using Qlogic StorPort driver 9.11.1.16, 9.1.11.20 or 9.1.11.24 during the reboot or FW update of StoreEver products. It is recommended that the StoreEver product be disabled or disconnected from the network during reboot or FW update.
- Virtual FC HBA Driver only supported on Windows 2016 and Windows 2012 & 2012 R2 Guest VM's
- Virtual FC HBA Driver only supported on Windows 2012 & 2012 R2 Guest VM

# Hewlett Packard Enterprise - StoreEver - Windows (10GbE Blade CNAs)

IMPORTANT: Consult your ISV/IHV vendor's compatibility guides ([Compatibility Links Page](#)) to confirm product & OS version support details. Consult the individual Server QuickSpec for supported storage controllers.

See the [HPE Servers Support & Certification Matrices](#) website for server & operating systems support details.

## Windows SAN Support

Operating Systems	Version
Windows Server 2019 x64	✓
Windows Server 2016 x64, (Windows 2016 Hyper-V Server) <sup>3</sup> , (Windows Storage Server 2016) <sup>1</sup>	✓
Windows Server 2012 R2 & 2012 x64, (Windows 2012 Hyper-V Server) <sup>4</sup> , (Windows Storage Server 2012 / 2012 R2) <sup>1</sup>	✓
Windows Server 2008 R2 x64 (Windows Storage Server 2008 R2) <sup>2</sup>	sp1

Server Platforms	Supported
HPE ProLiant DL, ML & HPE ProLiant BladeSystem c-Class	✓
HPE Synergy Compute Module	✓
HPE Integrity Superdome X (BL920s Gen9 Only)	✓
HPE StoreEasy Storage <sup>1</sup> / 3Par StoreServ File Controller <sup>1</sup> / StoreVirtual File Controller <sup>1</sup>	✓

Adapter	Description	Interface	Firmware	FC StorPort Driver	NIC Driver	iSCSI StorPort Driver
Synergy 2820C (794538-B21) <sup>6</sup>	10GbE HPE Synergy CNA	PCI-e	7.14.3	Win 2019, 2016, 2012R2:7.14.18	Win 2019 & 2016 & 2012R2: 7.13.150.0	Win 2019 & 2016: 7.14.11.0 2012R2 - 7.14.11.0
NC551m (580151-B21) & NC551i	10GbE HPE BladeSystem CNA	PCI-e			iSCSI support only	
534M (700748-B21) & 536FLB (766490-B21)	10GbE HPE BladeSystem CNA	PCI-e	7.14.3	Win 2019, 2016, 2012R2:7.14.18 Win2008R2: 7.14.10	Win 2019, 2016, 2012R2 - 7.13.150.0 Win 2008R2 - 7.13.103.0	Win 2019, 2016, 2012R2 - 7.14.11.0 Win 2008R2 - 7.14.3.0
534FLB (700741-B21)	10GbE HPE BladeSystem CNA	PCI-e	7.14.3	Win 2016, 2012R2: 7.14.10 Win2008R2: 7.14.10	Win 2016, 2012R2: 7.13.103.0 Win2008R2: 7.13.103.0	Win 2016, 2012R2: 7.14.3.0 Win2008R2: 7.14.3.0
NC553m (613431-B21) <sup>5</sup>	10GbE HPE BladeSystem CNA	PCI-e	10.7.110.31	10.7.110.20	Win 2012R2:10.5.121.7 Win 2008R2:10.5.121.7	10.5.121.7
NC553i, 554M (647590-B21) & 554FLB (647586-B21)	10GbE HPE BladeSystem CNA	PCI-e	11.1.183.23	11.1.145.16	Win 2016:11.1.196.4(B) Win 2012R2:11.1.145.30(B) Win 2008R2:11.1.145.30(B)	11.1.185.0(B)

### Notes:

1. Supports HPE StoreEasy: 3840, 1860, 1850, 1840, 1660, 1650, 1640, 1560, 1550, 1540, 1460, 1450, 1440, HPE StoreEasy Gateway Storage Blade: 3850, 3840, HPE 3PAR StoreServ File Controller v2 & HPE StoreVirtual 3000 File Controller.
2. Supports Messaging Systems E5300, E5500, E5700 and HPE Network Storage Systems X5520 G2, X3800sb G2, X3800 G2, X3400 G2, X3000 G2, X1800 G2.
3. Virtual FC HBA Driver only supported on Windows 2016 and Windows 2012 & 2012 R2 Guest VM's
4. Virtual FC HBA Driver only supported on Windows 2012 & 2012 R2 Guest VM
5. Windows 2016 not supported
6. Windows 2008R2 not supported

# Hewlett Packard Enterprise - StoreEver - Windows (32 / 16Gb FC HBAs)

IMPORTANT: Consult your ISV/IHV vendor's compatibility guides ([Compatibility Links Page](#)) to confirm product & OS version support details. Consult the individual Server QuickSpec for supported storage controllers.

See the [HPE Servers Support & Certification Matrices](#) website for server & operating systems support details.

## Windows <sup>4</sup> Direct Attached & SAN Support

### Operating Systems

	Version
Windows Server 2019 x64	✓
Windows Server 2016 x64, (Windows 2016 Hyper-V Server) <sup>6</sup> , (Windows Storage Server 2016) <sup>1</sup>	✓
Windows Server 2012 R2 & 2012 x64, (Windows 2012 Hyper-V Server) <sup>7</sup> , (Windows Storage Server 2012 / 2012 R2) <sup>1</sup>	✓
Windows Server 2008 R2 x64 (Windows Storage Server 2008 R2) <sup>2</sup>	sp1

### Server Platforms

	Supported
HPE Apollo 4500 Systems / Apollo 4200 Systems / Apollo 2000 Systems	✓
HPE ProLiant DL, ML & HPE ProLiant BladeSystem c-Class <sup>6</sup>	✓
HPE Synergy Compute Module <sup>6</sup>	✓
HPE Integrity Superdome X (BL920s Gen9 Only) / HPE Integrity Superdome Flex	✓
HPE StoreEasy Storage <sup>1</sup> / 3Par StoreServ File Controller <sup>1</sup> / StoreVirtual File Controller <sup>1</sup>	✓
Third Party <sup>7</sup>	✓

Adapter	Description	Interface	Firmware	Win 2019 & 2016 FC StorPort Driver	2012 R2 FC StorPort Driver	2008 R2 FC StorPort Driver
SN1600E (Q0L11A & Q0L12A) <sup>8</sup>	32Gb HPE FC HBA	PCI-e	Win2019 & Win2016 & 2012R2: 12.0.346.12.0.318.0		12.0.318.0	
SN1600Q ((P9M75A & P9M76A) <sup>3</sup>	32Gb HPE FC HBA	PCI-e	Win2019 & Win2016 & 2012R2: 8.08.204 9.2.9.22		9.2.9.22	
Synergy 5830C (777456-B21)	32Gb HPE Synergy Fibre Channel HBA	PCI-e	Win2019 & Win2016 & 2012R2: 8.08.204 9.2.9.22		9.2.9.22	
Synergy 5330C (870828-B21)	32Gb HPE Synergy Fibre Channel HBA	PCI-e	Win2019 & Win2016 & 2012R2: 12.0.346.12.0.318.0		12.0.318.0	
SN1200E (Q0L13A & Q0L14A) <sup>8</sup>	16Gb HPE FC HBA	PCI-e	Win2019 & Win2016 & 2012R2: 12.0.346.9	12.0.318.0	12.0.318.0	11.1.145.16 (C)
SN1100Q (P9D93A & P9D94A) <sup>9</sup>	16Gb HPE FC HBA	PCI-e	Win2019 & 2016 & 2012R2: 8.08.204 Win2008R2: 8.03.05	9.2.9.22	9.2.9.22	9.2.2.20
SN1000Q (QW971A & QW972A) <sup>6 9</sup>	16Gb HPE FC HBA	PCI-e	Win2019 & 2016 & 2012R2: 8.08.203 Win2008R2: 8.02.51	9.2.9.22	9.2.9.22	9.2.2.20
SN1000E (QR558A/QR559A) <sup>8</sup>	16Gb HPE FC HBA	PCI-e	Win2019 & Win2016 & 2012R2: 12.0.346.9	12.0.318.0	12.0.318.0	11.1.145.16 (C)
SN1100E (P9D99A, C8R38A & C8R39A) <sup>8</sup>	16Gb HPE FC HBA	PCI-e	Win2019 & Win2016 & 2012R2: 12.0.346.9	12.0.318.0	12.0.318.0	11.1.145.16 (C)
LPe1605 (718203-B21) <sup>8</sup>	16Gb HPE BladeSystem c-Class FC HBA	PCI-e	Win2019 & Win2016 & 2012R2: 12.0.346.9	12.0.318.0	12.0.318.0	11.1.145.16 (C)
QMH2672 (710608-B21)	16Gb HPE BladeSystem c-Class FC HBA	PCI-e	Win2019 & 2016 & 2012R2: 8.08.203 Win2008R2: 8.02.51	9.2.9.22	9.2.9.22	9.1.17.25
Synergy 3830C (777454-B21)	16Gb HPE Synergy Fibre Channel HBA	PCI-e	Win2019 & 2016 & 2012R2: 8.08.203	9.2.9.22	9.2.9.22	
Synergy 3530C (777452-B21)	16Gb HPE Synergy Fibre Channel HBA	PCI-e	Win2019 & Win2016 & 2012R2: 12.0.346.12.0.318.0		12.0.318.0	

#### Notes:

- Supports HPE StoreEasy: 3840, 1860, 1850, 1840, 1660, 1650 & 1650 Expanded, 1640, 1560, 1550, 1540, 1460, 1450, 1440, HPE StoreEasy Gateway Storage Blade: 3850, 3840, HPE 3PAR StoreServ File Controller v2 & HPE StoreVirtual 3000 File Controller.
- Supports Messaging Systems E5300, E5500, E5700 and HPE Network Storage Systems X5520 G2, X3800sb G2, X3800 G2, X3400 G2, X3000 G2, X1800 G2.
- Supports Direct Attach to LTO7 & LTO-8, but only when running 8Gb speed using a private loop topology.
- Virtual FC HBA Driver only supported on Windows 2016 and Windows 2012 & 2012 R2 Guest VM's.
- Virtual FC HBA Driver only supported on Windows 2012 & 2012 R2 Guest VM.
- Direct Attached configuration is not Supported on ProLiant BladeSystem c-Class enclosure & Synergy Frame
- Support on third party servers require HPE drivers & firmware on a non-HPE adapters.
- Not supported with LTO-7 & LTO-8 in Direct Attach topology.
- Supports Direct Attach to LTO7 & LTO-8, but only when running 8Gb or 4GB speed using a private loop topology.

# Hewlett Packard Enterprise - StoreEver - Windows (8 Gb FC HBAs)

IMPORTANT: Consult your ISV/IHV vendor's compatibility guides ([Compatibility Links Page](#)) to confirm product & OS version support details. Consult the individual Server QuickSpec for supported storage controllers. See the [HPE Servers Support & Certification Matrices](#) website for server & operating systems support details.

## Windows Direct Attached<sup>4</sup> & SAN Support

### Operating Systems

	Version
Windows Server 2019 x64	✓
Windows Server 2016 x64, (Windows 2016 Hyper-V Server) <sup>5</sup> , (Windows Storage Server 2016) <sup>1</sup>	✓
Windows Server 2012 R2 & 2012 x64, (Windows 2012 Hyper-V Server) <sup>6</sup> , (Windows Storage Server 2012 / 2012 R2) <sup>1</sup>	✓
Windows Server 2008 R2 x64 (Windows Storage Server 2008 R2) <sup>2</sup>	sp1

### Servers

	Supported
HPE Apollo 4500 Systems / Apollo 4200 Systems / Apollo 2000 Systems	✓
HPE ProLiant DL, ML & HPE ProLiant BladeSystem c-Class <sup>8</sup>	✓
HPE StoreEasy Storage <sup>1</sup> / 3Par StoreServ File Controller <sup>1</sup> / StoreVirtual File Controller <sup>1</sup>	✓
Third Party <sup>9</sup>	✓

Adapter	Description	Interface	Firmware 2019 & 2016	Firmware 2012 R2	Firmware 2008 R2	FC StorPort Driver 2019 & 2016	FC StorPort Driver 2012R2	FC StorPort Driver 2008R2
81Q (AK344A) & 82Q (AJ764A) & 84Q (P9D91A)	8Gb HPE FC HBAs	PCI-e	8.08.01	8.08.01	8.02.00	9.2.9.22	9.2.9.22	2008R2 - 9.2.2.0
QLE2560 <sup>3</sup> & QLE2562 <sup>3</sup> & QLE2564 <sup>3</sup>	8Gb Qlogic FC HBAs	PCI-e	8.08.01	8.08.01	8.02.00	9.2.9.22	9.2.9.22	2008R2 - 9.2.2.0
81E (AJ762A/B) & 82E (AJ763A/B) & 84E (E7Y63A)	8Gb HPE FC HBAs	PCI-e	2.10X6	2.10X6	2.03x6	12.0.318.0	12.0.318.0	11.1.145.16 (C)
LPe12000 <sup>3</sup> & LPe12002 <sup>3</sup> & LPe12004 <sup>3</sup>	8Gb Emulex FC HBAs	PCI-e	2.10X6	2.10X6	2.03x6	12.0.318.0	12.0.318.0	11.1.145.16 (C)
81B (AP769A/B) & 82B (AP770A/B)	8Gb HPE FC HBAs	PCI-e		3.2.5.0	3.2.5.0		3.2.5.0	3.2.5.0
815 <sup>3</sup> & 825 <sup>3</sup>	8Gb Brocade FC HBAs	PCI-e		3.2.5.0	3.2.5.0		3.2.5.0	3.2.5.0
QMH2572 (651281-B21)	8Gb HPE BladeSystem c-Class FC HBAs	PCI-e	8.08.01	8.08.01	8.02.00	9.2.9.22	9.2.9.22	2008R2 - 9.2.2.0
QMH2562 (451871-B21) <sup>7</sup>	8Gb HPE BladeSystem c-Class FC HBAs	PCI-e	8.02.00	8.02.00	8.02.00	Win2016: 9.2.2.20(A)	9.1.17.26	9.1.17.25
LPe1205A (659818-B21)	8Gb HPE BladeSystem c-Class FC HBAs	PCI-e	2.10X6	2.10X6	2.03x6	12.0.318.0	12.0.318.0	11.1.145.16 (C)
LPe1205 (456972-B21)	8Gb HPE BladeSystem c-Class FC HBAs	PCI-e	2016: 2.03x6	2.03x6	2.03x6	2016: 11.1.145.16 (C)	11.1.145.16 (C)	11.1.145.16 (C)
804 (590647-B21)	8Gb HPE BladeSystem c-Class FC HBAs	PCI-e		3.2.5.0	3.2.5.0		3.2.5.0	3.2.5.0

#### Notes:

- Supports HPE StoreEasy: 3840, 1860, 1850, 1840, 1660, 1650 & 1650 Expanded, 1640, 1560, 1550, 1540, 1460, 1450, 1440, HPE StoreEasy Gateway Storage Blade: 3850, 3840, HPE 3PAR StoreServ File Controller v2 & HPE StoreVirtual 3000 File Controller.
- Supports Messaging Systems E5300, E5500, E5700 and HPE Network Storage Systems X5520 G2, X3800sb G2, X3800 G2, X3400 G2, X3000 G2, X1800 G2.
- Third Party adapters require HPE drivers and firmware.
- Direct attached Fibre Channel Point-to-Point is not supported with LTO-7 & LTO-8. If Direct attached FC is required, use Private loop.
- Virtual FC HBA Driver only supported on Windows 2016 and Windows 2012 & 2012 R2 Guest VM's
- Virtual FC HBA Driver only supported on Windows 2012 & 2012 R2 Guest VMs
- Windows 2019 not supported
- Direct Attached configuration is not Supported on ProLiant BladeSystem c-Class enclosure
- Support on third party servers require HPE drivers & firmware on a non-HPE adapters.

# Hewlett Packard Enterprise - StoreEver - Windows (SAS HBAs)

IMPORTANT: Consult your ISV/IHV vendor's compatibility guides ([Compatibility Links Page](#)) to confirm product & OS version support details. Consult the individual Server QuickSpec for supported storage controllers. See the [HPE Servers Support & Certification Matrices](#) website for server & operating systems support details.

## Windows SAS Support

### Operating Systems

Operating Systems	Version
Windows Server 2019 x64	✓
Windows Server 2016 x64, (Windows Storage Server 2016) <sup>1</sup>	✓
Windows Server 2012 R2 & 2012 x64 (Windows Storage Server 2012 / 2012 R2) <sup>1</sup>	✓
Windows Server 2008 R2 x64 (Windows Storage Server 2008 R2) <sup>2</sup>	sp1

### Servers

Servers	Supported
HPE Apollo 4500 Systems / Apollo 4200 Systems / Apollo 2000 Systems	✓
HPE ProLiant DL, ML & HPE ProLiant BladeSystem c-Class	✓
HPE StoreEasy Storage <sup>1</sup> / 3Par StoreServ File Controller <sup>1</sup> / StoreVirtual File Controller <sup>1</sup>	✓
HPE Integrity Superdome Flex	✓
Third Party <sup>10</sup>	✓

Adapter	Description	Interface	Firmware	Driver 2019 & 2016	Driver 2012R2 & 2012	Driver 2008R2
P816i-a, P408e-m, P408e-p, P408i-a, P408i-p	12Gb HPE SAS Smart Array Controllers	PCI-e	1.98	106.84.2.64	106.84.2.64	
E208e-p, E208i-a, E208i-p	12Gb HPE SAS Smart Array Controllers	PCI-e	1.98	106.84.2.64	106.84.2.64	
P841, P441, P440ar <sup>3</sup> , H241, H240 <sup>3</sup> , H240ar <sup>3</sup>	12Gb HPE SAS Smart Array Controllers	PCI-e	6.88	106.26.0.64(B)	106.26.0.64(B)	6.20.064
P431	12Gb HPE SAS Smart Array Controllers	PCI-e	4.54(A)	100.20.0.64(B)	100.20.0.64(B)	6.20.064
P822, P222 8 <sup>8</sup> , P420 <sup>4</sup> & P421	6Gb HPE SAS Smart Array Controllers	PCI-e	8.32C	100.20.0.64(B)	100.20.0.64(B)	6.20.064
H220 <sup>3</sup> , H222	6Gb HPE HBA	PCI-e	2016 & 2012 & 2008R2: 15.10.10.00	2016: 2.68.64.2 (A)	2.68.64.0	2.68.64.0
H221	6Gb HPE HBA	PCI-e	2016 & 2012R2: 15.10.10.00(E) 2008R2: 15.10.10.00	2016: 2.68.64.2 (C)	2.68.64.0 (B)	2.68.64.0
P812, P212 6 <sup>6,7,8</sup> , P410 <sup>4</sup> & P411	6Gb HPE SAS Smart Array Controllers	PCI-e	2012R2 & 2008R2: 6.64 (B)	Not Supported	62.28.0.64 C	62.28.0.64 C
HPE 9300-8e (H7B70A) <sup>11</sup>	12Gb 8p Ext SAS Controller	PCI-e	16.00.01.00	2.51.24.00	2.51.24.00	
P741m (BL Generation 9 servers only)	6Gb HPE BladeSystem c-Class SAS Smart Array Contro	PCI-e	6.88	106.26.0.64(B)	106.26.0.64(B)	6.20.064
P731m (BL Generation 8 servers only)	6Gb HPE BladeSystem c-Class SAS Smart Array Contro	PCI-e	4.54(A)	100.20.0.64(B)	100.20.0.64(B)	6.20.064
P721m (BL Generation 8 servers only)	6Gb HPE BladeSystem c-Class SAS Smart Array Contro	PCI-e	8.32C	100.20.0.64(B)	100.20.0.64(B)	6.20.064
P711m & P712m <sup>9</sup>	6Gb HPE BladeSystem c-Class SAS Smart Array Contro	PCI-e	2012R2 & 2008R2: 6.64 (B)	Not Supported	62.28.0.64 C	62.28.0.64 C

## Adapters Supported on 3rd Party Servers

### Third Party Adapters<sup>5</sup>

Third Party Adapters <sup>5</sup>	Description	Interface	Firmware	Driver 2012 R2
Avago LSI 9217-4i4e (equivalent OEM HBA running chipset LSI SAS2308) <sup>9</sup>	6Gb HBA	PCI-e	2012 R2: 20.00.04.00	2.00.76.00

#### Notes:

- Supports HPE StoreEasy: 3840, 1860, 1850, 1840, 1660, 1650 & 1650 Expanded, 1640, 1560, 1550, 1540, 1460, 1450, 1440, HPE StoreEasy Gateway Storage Blade: 3850, 3840, HPE 3PAR StoreServ File Controller v2 & HPE StoreVirtual 3000 File Controller.
- Supports Messaging Systems E5300, E5500, E5700 and HPE Network Storage Systems X5520 G2, X3800sb G2, X3800 G2, X3400 G2, X3000 G2, X1800 G2.
- Only supported with internal tape drives.
- SAS Expander card 468406-B21 is required to connect external tape.
- See server manufacturer's compatibility documentation to confirm support.
- LTO-7 & LTO-8 not supported on Windows Server 2008

#### Notes:

- For block sizes larger than 64KB order cached version of P212 card ( Part # 462834-B21 ). Zero memory version of P212 not recommended for tape.
- StoreOpen Software is not supported with P212/Zero Memory Smart Array Controller. P212/256 (Part # 462834-B21) is supported.
- StoreOpen Software does not support P222 and P212 Smart Array Controllers on x86 Windows Operating system
- Windows 2016 not supported on this adapter
- Support on third party servers require HPE drivers & firmware on a non-HPE adapters.
- Supported on Superdome Flex only.

# Hewlett Packard Enterprise - StoreEver - Windows (SAS for Workstations HBAs)

IMPORTANT: Consult your ISV/IHV vendor's compatibility guides ([Compatibility Links Page](#)) to confirm product & OS version support details. Consult the individual Server QuickSpec for supported storage controllers. See the [HPE Servers Support & Certification Matrices](#) website for server & operating systems support details.

## Windows SAS Support for Workstations

Operating Systems <sup>1</sup>	Version
Windows 10	✓
Windows 8.1	✓
Windows 8	✓
Windows 7 (x64) Pro	✓
Workstations	Supported
HP Z Workstations	✓

HP Inc. Adapters	Workstations Supported On	Integrated	Firmware	Windows 10 Driver	Windows 8.1 Driver	Windows 8 Driver	Windows 7 (x64) Pro
LSI 2308 Controller (Integrated)	Z840, Z820	✓	P18110 A	2.0.76.80	2.00.69.05 A	2.00.69.05 A	2.00.69.05 L
LSI 9270-8i (E0X21AA)	Z840, Z820, Z640, Z620, Z440, Z420		3.340.25		6.702.08.00 A	6.702.08.00 A	6.702.08.00 F
LSI 9217-4i4e (E0X20AA)	Z640, Z440, Z620, Z420		18.00.00.00 A	2.0.76.80	2.00.69.05 A	2.00.69.05 A	2.00.69.05 A
MicroSemi SmartHBA2100-4i4e SAS Controller (1FV90AA)	Z4, Z6, Z8		1.98	106.84.2.64			

Notes:

1. Listed Operating Systems Supported on HP Workstations only



# Hewlett Packard Enterprise - StoreEver - Linux (20GbE CNAs)

IMPORTANT: Consult your ISV/IHV vendor's compatibility guides ([Compatibility Links Page](#)) to confirm product & OS version support details. Consult the individual Server QuickSpec for supported storage controllers. See the [HPE Servers Support & Certification Matrices](#) website for server & operating systems support details.

## Linux <sup>2</sup> SAN Support

Operating Systems	Version
RHEL 7 [AS/ES] (x64) <sup>1,3</sup>	7.6
RHEL 6 [AS/ES] (x86/x64) <sup>1</sup>	6.10
SLES 15 (x64)	15.0
SLES 12 (x64)	12.4
SLES 11 (x86/x64)	11.4

Servers	Supported
HPE ProLiant DL, ML & HPE ProLiant BladeSystem c-Class	✓
HPE Synergy Compute Module <sup>5</sup>	✓
HPE Integrity Superdome X (BL920s Gen9 Only)	✓

Converged Network Adapters	Description	Interface	FW	FC driver	iSCSI Driver	NIC Driver
CN1300R (Q0F09A)	10/25Gb CNA	PCI-e	1.6.27	8.37.31.0-2	2.11.5.10-3	8.37.31.0-2
Synergy 4820C (876449-B21)	10/25Gb CNA	PCI-e	1.6.27	8.37.31.0-2	2.11.5.10-3	8.37.31.0-2
Synergy 3820C (777430-B21)	20GbE HPE Synergy CNA	PCI-e	7.14.3	RHEL 7: 7.14.48-1 RHEL 6: 7.14.48.01-1 SLES 15 & 12: 7.14.48-1 SLES 11: 7.14.48-2	RHEL 7: 2.11.5.10-3 RHEL 6: 2.11.5.10-3 SLES 15 & 12 & 11: 2.11.5.10-3	1.714.25
630FLB (700065-B21) <sup>4</sup> & 630M (700076-B21) <sup>4</sup>	20GbE HPE BladeSystem CNAs	PCI-e	7.14.3	RHEL 7: 7.14.48-1 RHEL 6: 7.14.48.01-1 SLES 15 & 12: 7.14.48-1 SLES 11: 7.14.48-2	RHEL 7: 2.11.5.10-3 RHEL 6: 2.11.5.10-3 SLES 15 & 12 & 11: 2.11.5.10-3	1.714.25
650FLB (700763-B21) & 650M (700767-B21)	20GbE HPE BladeSystem CNAs	PCI-e	12.0.1216.0	RHEL7: 12.0.1216.0 RHEL6: 12.0.1216.0 SLES 15: 12.0.1216.0 SLES 12 & 11: 12.0.1216.0	RHEL7: 12.0.1216.1-1 RHEL6: 12.0.1216.1-1 SLES 15: 12.0.1216.1-1-1 SLES 12 & 11: 12.0.1216.1-1	RHEL7: 12.0.1216.1-1 RHEL6: 12.0.1216.1-1 SLES 15: 12.0.1216.1-1-1 SLES 12 & 11: 12.0.1216.1-1

### Notes:

1. RHEL kernel versions include support for Oracle Linux (OL) with Red Hat Compatible Kernel (RHCK).
2. Advanced path failover functions with HPE E series and Q series FC HBAs on supported versions of RHEL. Advanced path failover is not compatible with SLES or HPE B series FC HBAs.
3. SCSI generic (sg) driver may not load automatically on boot. If this happens issuing the modprob sg command will create the sg & st device files.
4. Supported block sizes up to 256K only.
5. Direct Attached configuration is not Supported on ProLiant BladeSystem c-Class enclosure & Synergy Frame

# Hewlett Packard Enterprise - StoreEver - Linux (10GbE CNAs)

IMPORTANT: Consult your ISV/IHV vendor's compatibility guides ([Compatibility Links Page](#)) to confirm product & OS version support details. Consult the individual Server QuickSpec for supported storage controllers. See the [HPE Servers Support & Certification Matrices](#) website for server & operating systems support details.

## Linux <sup>2</sup> Direct Attached & SAN Support

Operating Systems	Version
RHEL 7 [AS/ES] (x64) <sup>1</sup>	7.6 <sup>3</sup>
RHEL 6 [AS/ES] (x86/x64) <sup>1</sup>	6.10
SLES 15 (x64)	15.0
SLES 12 (x64)	12.4
SLES 11 (x86/x64)	11.4

Servers	Supported
HPE ProLiant DL, ML & HPE ProLiant BladeSystem c-Class	✓
HPE Synergy Compute Module <sup>6</sup>	✓

Converged Network Adapters	Description	Interface	FW	FC driver	iSCSI Driver	NIC Driver
CN1000E (AW520A)	10 GbE HPE CNA	PCI-e			iSCSI support only	
CN1000Q (BS668A) & 526FLR (629138-B21) <sup>5</sup>	10 GbE HPE CNAs	PCI-e	4.20.1	RHEL 7.3: 8.07.00.34.07.0-k1(b) RHEL 6.9: 8.07.00.34.06.0-k1(b) SLES 12.2: 8.07.00.34.12.0-k1(c) SLES 11.4: 8.07.00.34.11.3-k1(b)	RH 7.3: 5.04.01.12.00.00-2(B) RH 6.9: 5.04.01.12.00.00-3 SLES 12.2: 5.04.01.12.00.00-2(B) SLES 11.4: 5.04.01.12.00.00-5	RH 7.3 & RH 6.9 & SLES 12.2 & SLES 11.4: 5.3.63-3
CN1200E (E7Y06A) & 556FLR (FlexibleLOM, 727060-B21)	10 GbE HPE CNAs	PCI-e	12.0.1216.0	RHEL7: 12.0.1216.0 RHEL6: 12.0.1216.0 SLES 15: 12.0.1216.0 SLES 12 & 11: 12.0.1216.0	RHEL7: 12.0.1216.1-1 RHEL6: 12.0.1216.1-1 SLES 15: 12.0.1216.1-1-1 SLES 12 & 11: 12.0.1216.1-1	RHEL7: 12.0.1216.1-1 RHEL6: 12.0.1216.1-1 SLES 15: 12.0.1216.1-1-1 SLES 12 & 11: 12.0.1216.1-1
556FLR (FlexibleLOM, 727060-B21)	10 GbE HPE CNAs	PCI-e	12.0.1110.11	RHEL7.5: 12.0.1110.20 RHEL6.10: 12.0.1110.27-1 SLES 15: 12.0.1110.6151 SLES 12.3 & 11.4: 12.0.1110.20	RHEL7.5: 12.0.1110.21-1 RHEL6.10: 12.0.1110.30-1 SLES 15: 12.0.1110.21-1 SLES 12.4 & 11.4: 12.0.1110.21-1	RHEL7.5: 12.0.1110.20-1 RHEL6.10: 12.0.1110.27-1 SLES 15.0: 12.0.1110.20-1 SLES 12.3 & 11.4: 12.0.1110.20-1
CN1100E (BK835A) <sup>5</sup>	10 GbE HPE CNAs	PCI-e	11.1.183.23	RHEL 7.2 & 6.8: 11.1.183.21(C) SLES 12.1 & 11.4: 11.1.183.21(C)	RHEL 7.2 & 6.8: 10.7.110.34-1 RHEL 6.8: 10.7.110.20-1 SLES 12.1: 10.7.110.34-1 SLES 11.4: 10.7.110.20-1	RHEL 7.2: 11.1.145.27-1 RHEL 6.8: 11.1.183.21-1 SLES 12.1: 11.1.145.27-1 SLES 11.4: 11.1.145.27-1
CN1100R (QW990A) <sup>4</sup> & 534FLR (700751-B21) <sup>4</sup>	10 GbE HPE CNAs	PCI-e	7.14.3	RHEL 7: 7.14.48-1 RHEL 6: 7.14.48.01-1 SLES 15 & 12: 7.14.48-1 SLES 11: 7.14.48-2	RHEL 7: 2.11.5.10-3 RHEL 6: 2.11.5.10-3 SLES 15 & 12 & 11: 2.11.5.10-3	1.714.25

### Notes:

1. RHEL kernel versions include support for Oracle Linux (OL) with Red Hat Compatible Kernel (RHCK).
2. Advanced path failover functions with HPE E series and Q series FC HBAs on supported versions of RHEL. Advanced path failover is not compatible with SLES or HPE B series FC HBAs.
3. SCSI generic (sg) driver may not load automatically on boot. If this happens issuing the modprobe sg command will create the sg & st device files.
4. Supported block sizes up to 256K only.
5. Not currently supported on SLES 15.
6. Direct Attached configuration is not Supported on ProLiant BladeSystem c-Class enclosure & Synergy Frame

# Hewlett Packard Enterprise - StoreEver - Linux (10GbE Blade CNAs)

IMPORTANT: Consult your ISV/IHV vendor's compatibility guides ([Compatibility Links Page](#)) to confirm product & OS version support details. Consult the individual Server QuickSpec for supported storage controllers. See the [HPE Servers Support & Certification Matrices](#) website for server & operating systems support details.

## Linux <sup>2</sup> Direct Attached & SAN Support Operating Systems

Operating Systems	Version
RHEL 7 [AS/ES] (x64) <sup>1,3</sup>	7.6
RHEL 6 [AS/ES] (x86/x64) <sup>1</sup>	6.10
SLES 15 (x64)	15.0
SLES 12 (x64)	12.4
SLES 11 (x86/x64)	11.4

Servers	Supported
HPE ProLiant DL, ML & HPE ProLiant BladeSystem c-Class	✓
HPE Synergy Compute Module <sup>6</sup>	✓

Converged Network Adapters	Description	Interface	FW	FC driver	iSCSI Driver	NIC Driver
<b>Synergy 2820C (794538-B21)</b>	10GbE HPE Synergy CNAs	PCI-e	7.14.3	RHEL 7: 7.14.48-1 RHEL 6 : 7.14.48.01-1 SLES 15 & 12: 7.14.48-1 SLES 11: 7.14.48-2	RHEL 7: 2.11.5.10-3 RHEL 6: 2.11.5.10-3 SLES 15 & 12 & 11: 2.11.5.10-3	1.714.25
<b>NC551m (580151-B21) &amp; NC551i</b>	10 GbE HPE BladeSystem CNAs	PCI-e			iSCSI support only	
<b>NC553m (613431-B21) <sup>5</sup></b>	10 GbE HPE BladeSystem CNAs	PCI-e	10.7.110.31	RHEL 7.2 & 6.7: 10.7.110.34 SLES 12.1 & 11.4: 10.7.110.34	RHEL 7.2 & 6.7: 10.5.154.0-1 SLES 12.1 & 11.4: 10.5.154.0-1	RHEL 7.2 & 6.7: 10.5.154.0-1 SLES 12.1 & 11.4: 10.5.154.0-1
<b>NC553i &amp; 554M (647590-B21) <sup>5</sup> &amp; 554FLB (647586-B21) <sup>5</sup> &amp; 554FLR (629142-B21) <sup>5</sup></b>	10 GbE HPE BladeSystem CNAs	PCI-e	11.1.183.23	RHEL 7.2 & 6.8: 11.1.183.21(C) SLES 12.1 & 11.4: 11.1.183.21(C)	RHEL 7.2: 1.1.145.26-1 RHEL 6.8: 11.1.183.21-1 SLES 12.1 & 11.4: 11.1.145.26-1	RHEL 7.2: 11.1.145.27-1 RHEL 6.8: 11.1.183.21-1 SLES 12.1 & 11.4: 11.1.145.27-1
<b>534M (700748-B21) <sup>4</sup> &amp; 536FLB (766490-B21) <sup>4</sup></b>	10 GbE HPE BladeSystem CNAs	PCI-e	7.14.3	RHEL 7: 7.14.48-1 RHEL 6 : 7.14.48.01-1 SLES 15 & 12: 7.14.48-1 SLES 11: 7.14.48-2	RHEL 7: 2.11.5.10-3 RHEL 6: 2.11.5.10-3 SLES 15 & 12 & 11: 2.11.5.10-3	1.714.25
<b>534FLB (700751-B21) <sup>4,5</sup></b>	10 GbE HPE BladeSystem CNAs	PCI-e	7.14.3	RHEL 7.2 & 6.8: 7.14.07-1 SLES 12.1 & 11.4: 7.2:7.14.07-1	RHEL 7.2 & 6.8: 2.11.4.0-2(C) SLES 12.1 & 11.4: 7.2.11.4.0-2(C)	RHEL 7.2 & 6.8: 1.714.0 SLES 12.1 & 11.4: .714.0

### Notes:

1. RHEL kernel versions include support for Oracle Linux (OL) with Red Hat Compatible Kernel (RHCK).
2. Advanced path failover functions with HPE E series and Q series FC HBAs on supported versions of RHEL. Advanced path failover is not compatible with SLES or HPE B series FC HBAs.
3. SCSI generic (sg) driver may not load automatically on boot. If this happens issuing the modprob sg command will create the sg & st device files.
4. Supported block sizes up to 256K only.
5. Not currently supported on SLES 15.
6. Direct Attached configuration is not Supported on ProLiant BladeSystem c-Class enclosure & Synergy Frame

# Hewlett Packard Enterprise - StoreEver - Linux (32 / 16 / 8Gb FC HBAs)

IMPORTANT: Consult your ISV/IHV vendor's compatibility guides ([Compatibility Links Page](#)) to confirm product & OS version support details. Consult the individual Server QuickSpec for supported storage controllers. See the [HPE Servers Support & Certification Matrices](#) website for server & operating systems support details.

## Linux <sup>2</sup> Direct Attached <sup>4</sup> & SAN Support

Operating Systems	Version
RHEL 7 [AS/ES] (x64) <sup>1,3</sup>	7.6
RHEL 6 [AS/ES] (x86/x64) <sup>1</sup>	6.10
SLES 15 (x64)	15.0
SLES 12 (x64)	12.4
SLES 11 (x86/x64)	11.4

Servers	Supported
HPE Apollo 4500 Systems / Apollo 4200 Systems / Apollo 2000 Systems	✓
HPE ProLiant DL, ML & HPE ProLiant BladeSystem c-Class <sup>8</sup>	✓
HPE Synergy Compute Module <sup>8</sup>	✓
HPE Integrity Superdome X (BL920s Gen9 Only) / HPE Integrity Superdome Flex <sup>9</sup>	✓
Third Party <sup>7</sup>	✓

FC Host Bus Adapters (Part Number)	Description	Interface	Firmware	RHEL 7 Driver	RHEL 6 Driver	SLES 15 Driver	SLES 12 Driver	SLES 11 Driver
SN1600E (QOL11A & QOL12A)	32Gb HPE FC Host Bus Adapter	PCI-e	12.0.346.9	12.0.346.15	12.0.346.15	12.0.346.15	12.0.346.15	12.0.346.15
SN1600Q ((P9M75A & P9M76A) <sup>6</sup>	32Gb HPE FC HBAs	PCI-e	8.08.204	10.01.00.33.07.6-k2	8.08.00.08.06.0-k10	10.01.00.33.15.0-k2	10.01.00.33.12.4-k2	8.08.00.08.11.3-k9
Synergy 5830C (777456-B21)	32Gb HPE Synergy Fibre Channel HBA	PCI-e	8.08.204	10.01.00.33.07.6-k2	8.08.00.08.06.0-k10	10.01.00.33.15.0-k2	10.01.00.33.12.4-k2	8.08.00.08.11.3-k9
Synergy 5330C (870828-B21)	32Gb HPE Synergy Fibre Channel HBA	PCI-e	12.0.346.9	12.0.346.15	12.0.346.15	12.0.346.15	12.0.346.15	12.0.346.15
SN1200E (QOL13A & QOL14A)	16Gb HPE FC HBAs	PCI-e	12.0.346.9	12.0.346.15	12.0.346.15	12.0.346.15	12.0.346.15	12.0.346.15
SN1100Q (P9D93A & P9D94A) <sup>6</sup>	16Gb HPE FC HBAs	PCI-e	8.08.204	10.01.00.33.07.6-k2	8.08.00.08.06.0-k10	10.01.00.33.15.0-k2	10.01.00.33.12.4-k2	8.08.00.08.11.3-k9
SN1000Q (QW971A & QW972A) <sup>6</sup>	16Gb HPE FC HBAs	PCI-e	8.08.203	10.01.00.33.07.6-k2	8.08.00.08.06.0-k10	10.01.00.33.15.0-k2	10.01.00.33.12.4-k2	8.08.00.08.11.3-k9
SN1100E (P9D99A, C8R38A & C8R39A)	16Gb HPE FC HBAs	PCI-e	12.0.346.9	12.0.346.15	12.0.346.15	12.0.346.15	12.0.346.15	12.0.346.15
SN1000E (QR558A/QR559A)	16Gb HPE FC HBAs	PCI-e	12.0.346.9	12.0.346.15	12.0.346.15	12.0.346.15	12.0.346.15	12.0.346.15
Synergy 3830C (777454-B21)	16Gb HPE Synergy FC HBAs	PCI-e	8.08.203	10.01.00.33.07.6-k2	8.08.00.08.06.0-k10	10.01.00.33.15.0-k2	10.01.00.33.12.4-k2	8.08.00.08.11.3-k9
Synergy 3530C (777452-B21)	16Gb HPE Synergy FC HBAs	PCI-e	12.0.346.9	12.0.346.15	12.0.346.15	12.0.346.15	12.0.346.15	12.0.346.15
LPe1605 (718203-B21)	16Gb HPE BladeSystem c-Class FC HBAs	PCI-e	12.0.346.9	12.0.346.15	12.0.346.15	12.0.346.15	12.0.346.15	12.0.346.15
QMH2672 (710608-B21)	16Gb HPE BladeSystem c-Class FC HBAs	PCI-e	8.08.203	10.01.00.33.07.6-k2	8.08.00.08.06.0-k10	10.01.00.33.15.0-k2	10.01.00.33.12.4-k2	8.08.00.08.11.3-k9
81Q (AK344A) & 82Q (AJ764A) & 84Q (P9D91A)	8Gb HPE FC HBAs	PCI-e	8.08.01	10.01.00.33.07.6-k2	8.08.00.08.06.0-k10	10.01.00.33.15.0-k2	10.01.00.33.12.4-k2	8.08.00.08.11.3-k9
QLE2560 <sup>3</sup> & QLE2562 <sup>3</sup> & QLE2564 <sup>3</sup>	8Gb QLogic FC HBAs	PCI-e	8.08.01	10.01.00.33.07.6-k2	8.08.00.08.06.0-k10	10.01.00.33.15.0-k2	10.01.00.33.12.4-k2	8.08.00.08.11.3-k9
81E (AJ762A/B) & 82E (AJ763A/B) & 84E (E7Y63A)	8Gb HPE FC HBAs	PCI-e	2.10X6	12.0.346.15	12.0.346.15	12.0.346.15	12.0.346.15	12.0.346.15
LPe12000 <sup>3</sup> & LPe12002 <sup>3</sup> & LPe12004 <sup>3</sup>	8Gb Emulex FC HBAs	PCI-e	2.10X6	12.0.346.15	12.0.346.15	12.0.346.15	12.0.346.15	12.0.346.15
81B (AP769A & AP769B) & 82B (AP770A & AP770B)	8Gb HPE FC HBAs	PCI-e	RHEL 7 & 6:3.2.5.0 SLES 11: 3.2.1.0	RHEL 7.0: 3.2.5.0	RHEL 6.7: 3.2.5.0			SLES 11.3: 3.2.1.0
815 <sup>3</sup> & 825 <sup>3</sup>	8Gb Brocade FC HBAs	PCI-e	RHEL 7 & 6:3.2.5.0 SLES 11: 3.2.1.0	RHEL 7.0: 3.2.5.0	RHEL 6.7: 3.2.5.0			SLES 11.3: 3.2.1.0
QMH2572 (651281-B21)	8Gb HPE BladeSystem c-Class FC HBAs	PCI-e	8.08.01	10.01.00.33.07.6-k2	8.08.00.08.06.0-k10	10.01.00.33.15.0-k2	10.01.00.33.12.4-k2	8.08.00.08.11.3-k9
QMH2562 (451871-B21)	8Gb HPE BladeSystem c-Class FC HBAs	PCI-e	8.02.00	RHEL 7.3: 8.07.00.34.07.0-k1	RHEL 6.9: 8.07.00.34.06.0-k1		SLES 12.2: 8.07.00.34.12.0-k1(c)	SLES 11.4: 8.07.00.34.11.3-k (b)
LPe1205A (659818-B21)	8Gb HPE BladeSystem c-Class FC HBA	PCI-e	2.10X6	12.0.346.15	12.0.346.15	12.0.346.15	12.0.346.15	12.0.346.15
LPe1205 (456972-B21)	8Gb HPE BladeSystem c-Class FC HBA	PCI-e	2.03x6	RHEL 7.2: 11.1.183.21(C)	RHEL 6.8: 11.1.183.21(C)		SLES 12.1: 11.1.183.21(C)	11.1.183.21(C)
804 (590647-B21)	8Gb HPE BladeSystem c-Class FC HBA	PCI-e	RHEL 7 & 6:3.2.5.0 SLES 11: 3.2.1.0	RHEL 7.0: 3.2.5.0	RHEL 6.7: 3.2.5.0			SLES 11.3: 3.2.1.0

- Notes:
- RHEL kernel versions include support for Oracle Linux (OL) with Red Hat Compatible Kernel (RHCK).
  - Advanced path failover functions with HPE E-series and Q-series FC HBAs on supported versions of RHEL. Advanced path failover is not compatible with SLES or HPE B-series FC HBAs.
  - Third Party adapters require HPE drivers and firmware.
  - Supports Direct Attach to LTO7 & LTO-8, but only when running 8Gb speed using a private loop topology.
  - SCSI generic (sg) driver may not load automatically on boot. If this happens issuing the modprob sg command will create the sg & st

- Notes Continued:
- Not supported in non-fabric mode with HP LTO drives when Speed=Auto. A fixed speed must be selected.
  - Support on third party servers require HPE drivers & firmware on a non-HPE adapters.
  - Direct Attached configuration is not Supported on ProLiant BladeSystem c-Class enclosure & Synergy Frame
  - Superdome Flex not currently supported on SAS controllers.

# Hewlett Packard Enterprise - StoreEver - Linux (SAS HBAs)

IMPORTANT: Consult your ISV/IHV vendor's compatibility guides ([Compatibility Links Page](#)) to confirm product & OS version support details. Consult the individual Server QuickSpec for supported storage controllers. See the [HPE Servers Support & Certification Matrices](#) website for server & operating systems support details.

## Linux Direct Attached & SAN Support

Operating Systems	Version
RHEL 7 [AS/ES] x64 <sup>1</sup>	7.6 <sup>6</sup>
RHEL 6 [AS/ES] (x86/x64) <sup>1</sup>	6.10
SLES 15 (x64)	15.0
SLES 12 (x64)	12.4
SLES 11 (x86/x64)	11.4

  

Servers	Supported
HPE Apollo 4500 Systems / Apollo 4200 Systems / Apollo 2000 Systems	✓
HPE ProLiant DL, ML & HPE ProLiant BladeSystem c-Class	✓
Third Party <sup>13</sup>	✓

  

SAS Host Bus Adapters	Description	Interface	Firmware	RHEL 7 Driver	RHEL 6 Driver	SLES 15 Driver	SLES 12 Driver	SLES 11 Driver
P816i-a, P408e-m, P408e-p, P408i-a, P408i-p	12Gb HPE SAS Smart Array Controllers	PCI-e	1.98	1.2.4-065	1.2.4-065	1.2.4-065	1.2.4-065	1.2.4-065
E208e-p, E208i-a, E208i-p	12Gb HPE SAS Smart Array Controllers	PCI-e	1.98	1.2.4-065	1.2.4-065	1.2.4-065	1.2.4-065	1.2.4-065
P841, P441, P440ar, H241, H240 & H240ar	12Gb HPE SAS Smart Array Controllers	PCI-e	6.88	3.4.20.151	3.4.20.145	3.4.20.145	3.4.20.152	3.4.20.145
P431	12Gb HPE SAS Smart Array Controllers	PCI-e	4.54(B)	3.4.20.151	3.4.20.145	3.4.20.145	3.4.20.152	3.4.20.145
P822, P222, P420 <sup>2</sup> & P421	6Gb HPE SAS Smart Array Controllers	PCI-e	8.32	3.4.20.151	3.4.20.145	3.4.20.145	3.4.20.152	3.4.20.145
H220 <sup>12</sup> , H222 <sup>12</sup>	6Gb HPE HBAs	PCI-e	15.10.10.0	15.10.09.00-2	15.10.08.00-2		SLES 12.3: 15.10.06.00-6	15.10.08.00-2
H221	6Gb HPE HBAs	PCI-e	15.10.10.0(C)	15.10.09.00-2	15.10.08.00-2(A)		15.10.09.00-1	15.10.04.00-5(C)
P812, P212 <sup>4, 5, 9</sup> P410 <sup>2</sup> & P411	6Gb HPE SAS Smart Array Controllers	PCI-e	6.64 (B)		RH6.9 3.4.18-108			SLES 11.3: 4.6.28-24 (A) <sup>7</sup>
P741m (for BL Gen9 servers only)	12Gb HPE BladeSystem c-Class SAS Smart Array Controller	PCI-e	6.88	3.4.20.151	3.4.20.145	3.4.20.145	3.4.20.152	3.4.20.145
P731m (for BL Gen8 servers only)	12Gb HPE BladeSystem c-Class SAS Smart Array Controller	PCI-e	4.54(B)	3.4.20.151	3.4.20.145	3.4.20.145	3.4.20.152	3.4.20.145
P721m (for BL Gen8 servers only)	6Gb HPE BladeSystem c-Class SAS Smart Array Controller	PCI-e	8.32	3.4.20.151	3.4.20.145	3.4.20.145	3.4.20.152	3.4.20.145
P711m & P712m	6Gb HPE BladeSystem c-Class SAS Smart Array Controller	PCI-e	6.64 (B)		RH6.9 3.4.18-108			SLES 11.3: 4.6.28-24 (A) <sup>7</sup>

  

Third Party Host Bus Adapters <sup>3</sup>	Description	Interface	Firmware	RHEL 6 Driver	RHEL 7 Driver	SLES 11 Driver	SLES 12 Driver
Avago LSI 9217-4i4e (Equivalent OEM HBA running chipset LSI SAS2308) <sup>10, 11</sup>	6Gb Host Bus Adapter for Third-Party Servers	PCI-e	20.00.04.00	20.00.00.00-1 <sup>8</sup>	20.00.00.00-1	20.00.00.00-1	3.4.10-0

### Notes:

1. RHEL kernel versions include support for Oracle Linux (OL) with Red Hat Compatible Kernel (RHCK).
2. SAS Expander card 468406-B21 is required to connect external tape.
3. See server manufacturer's compatibility documentation to confirm support.
4. For block sizes larger than 64KB order cached version of P212 card (Part # 462834-B21). Zero memory version of P212 not recommended for tape.
5. IBM TSM and EMC NetWorker: P212 Zero Memory HBA supported with v7.6.1.1 or later. For NetWorker 7.5.4, supported with v7.5.4.6 or later.
6. SCSI generic (sg) driver may not load automatically on boot. If this happens issuing the modprob sg command will create the sg & st device files.
7. Supported with SLES 11.3 Driver
8. Only supported up to RHEL 6.5
9. StoreOpen Software is not supported with P212/Zero Memory Smart Array Controller. P212/256 (Part # 462834-B21) is supported.
10. RHEL 7.3 not yet supported
11. SLES 12.2 not yet supported
12. Only supported up to RHEL 6.8, RHEL 7.4
13. Support on third party servers require HPE drivers & firmware on a non-HPE adapters

# Hewlett Packard Enterprise - StoreEver - Linux (SAS for Workstations HBAs)

IMPORTANT: Consult your ISV/IHV vendor's compatibility guides ([Compatibility Links Page](#)) to confirm product & OS version support details. Consult the individual Server QuickSpec for supported storage controllers. See the [HPE Servers Support & Certification Matrices](#) website for server & operating systems support details.

## Windows SAS Support for Workstations

Operating Systems <sup>1</sup>	Version
RHEL 7 [Workstation] (x64)	7.6
RHEL 6 [Workstation] (x86/x64)	6.10
SLED 15 (x64)	15.0
SLED 11 (x86/x64)	11.4
SLED 12 (x64)	12.3
Workstations	Supported
HP Z Workstations	✓

HP Inc. Adapters	Workstations Supported On	Integrated	Firmware	RHEL 7 Driver	RHEL 6 Driver	SLES 15	SLED 12 Driver	SLED 11 Driver
LSI 2308 Controller (Integrated)	Z840, Z820	✓	P18110 A	RH 7.1: 3.4.4-1	RH 6.7: 3.4.4-1		SLES 12.0: 3.4.10-0	SLES 11.4: 3.4.4-1
LSI 9270-8i (EOX21AA)	Z840, Z820, Z640, Z620, Z440, Z420		3.340.25	RH 7.1: In-box	RH 6.7: In-box		SLES 12.0: In-box	SLES 11.4: In-box
LSI 9217-4i4e (EOX20AA)	Z640, Z440, Z620, Z420		20.00.04.00	RH 7.1: 3.4.4-1	RH 6.7: 3.4.4-1-RH4		SLES 12.0:3.4.10-0	SLES 11.4: 3.4.8-1

### Notes:

1. Listed Operating Systems Supported on HP Workstations only

# Hewlett Packard Enterprise - StoreEver - Apple OS X Support

IMPORTANT: Consult your ISV/IHV vendor's compatibility guides ([Compatibility Links Page](#)) to confirm product & OS version support details.

Operating Systems	Version
OS X <sup>1</sup>	10.7 through 10.11

Servers	Supported
Apple Mac Pro G6	✓ <sup>1</sup>
Apple Mac Pro G5	✓ <sup>1</sup>

Adapter	Description	Interface	Supported Operating Systems	Microcode (FW)
OS X Adapter support is provided by our partner Attotech.com. Please consult their IOP / Certification website to see what is supported with HPE Tape libraries and drives. <a href="https://www.attotech.com/support/interoperability/">https://www.attotech.com/support/interoperability/</a> <sup>2</sup>				

## Notes:

1. OS X support is provided by our partner Attotech.com. Please consult their IOP / Certification website to see what is supported with HPE Tape libraries and drives. <https://www.attotech.com/support/interoperability/>.
2. Not supported with ATTO multipath drivers.

# Hewlett Packard Enterprise - StoreEver - Solaris (x64)

IMPORTANT: Consult your ISV/IHV vendor's compatibility guides ([Compatibility Links Page](#)) to confirm product & OS version support details. See the [HPE Servers Support & Certification Matrices](#) website for server / operating systems support details.

## Solaris Direct Attached<sup>3</sup> & SAN Support

Operating Systems	Version
Solaris 11 (x64)	Update 3
Solaris 10 (x86/x64) <sup>1</sup>	Update 11

Servers	Supported
HPE ProLiant DL, ML & HPE ProLiant BladeSystem c-Class	✓

Adapter Name (Part number)	Description	Interface	Firmware	Driver
CN1000Q (BS668A)	10GbE HP CNAs <sup>2</sup>	PCI-e	4.0.0.21.c	Native
CN1100E (BK835A)	10GbE HPE CNAs <sup>2</sup>	PCI-e	iSCSI support only	Native
CN1000E (AW520A)	10GbE HP CNAs <sup>2</sup>	PCI-e	iSCSI support only	Native
NC551m (580151-B21) & NC551i	10GbE HP BladeSystem CNAs <sup>2</sup>	PCI-e	iSCSI support only	Native
NC553m (613431-B21) / NC553i / 554FLR (629142-B21) / 554M (647590-B21) / 554FLB (647586-B21)	10GbE HP BladeSystem CNAs <sup>2</sup>	PCI-e	iSCSI support only	Native
Emulex LPe12000 / LPe12002 & 81E (AJ762A & AJ762B) / 82E (AJ763A & AJ763B)	8Gb FC HBAs <sup>2</sup>	PCI-e	2.0.3x14	Native
QLogic QLE2560 / QLE2562 & 81Q (AK344A) / 82Q (AJ764A)	8Gb FC HBAs <sup>2</sup>	PCI-e	4.0.0.21c	Native

### Notes:

1. Supported with Solaris 10 x64 only. (AMD64 and Intel EM64T)
2. HPE branded HBAs supported on ProLiant only.
3. Supports Direct Attach to LTO7 and LTO-8, but only when using a private loop topology



# Hewlett Packard Enterprise - StoreEver - Solaris (SPARC)

IMPORTANT: Consult your ISV/IHV vendor's compatibility guides ([Compatibility Links Page](#)) to confirm product & OS version support details. See the [HPE Servers Support & Certification Matrices](#) website for server / operating systems support details.

## Solaris Direct Attached<sup>1</sup> & SAN Support

Operating Systems	Version
Solaris 11 SPARC	Update 3
Solaris 10 SPARC	Update 11

Servers	Supported
Oracle SPARC	✓

Adapter Name (Part number)	Description	Interface	Firmware	Driver
7101674	(16 Gb FC / 10 Gb FCoE) PCIe Universal HBA, Qlogic	PCI-e	3.60.17 (Multi-Boot Image Update Kit)	Native
7101684	(16 Gb FC / 10 Gb FCoE) PCIe Universal HBA, Emulex	PCI-e	10.6.230.0	Native
SG-XPCIEFCOE2-Q-SR	10 Gb FCoE PCIe Dual Port Adapter, Qlogic	PCI-e	2.04.04 (Multi-Boot Image Update Kit)	Native
SG-XPCIE1FC-EM8-Z & SG-XPCIE2FC-EM8-Z	8Gb FC HBAs	PCI-e	2.01a4	Native
SG-XPCIE1FC-QF8-Z & SG-XPCIE2FC-QF8-Z	8Gb FC HBAs	PCI-e	3.80.02 (Multi-Boot Image Update Kit)	Native

### Notes:

1. Supports Direct Attach to LTO7 and LTO-8, but only when using a private loop topology.

# Hewlett Packard Enterprise - StoreEver - Solaris (SAS HBAs)

IMPORTANT: Consult your ISV/IHV vendor's compatibility guides ([Compatibility Links Page](#)) to confirm product & OS version support details. See the [HPE Servers Support & Certification Matrices](#) website for server / operating systems support details.

## Solaris Direct Attached & SAN Support

Operating Systems	Version
Solaris 11 (x64)	Update 2
Solaris 11 SPARC	Update 2
Solaris 10 (x86/x64) <sup>1</sup>	Update 11
Solaris 10 SPARC	Update 11

Servers	Supported
Oracle SPARC	✓
HPE ProLiant DL, ML & HPE ProLiant BladeSystem c-Class	✓

Adapter Name (Part number)	Description	Interface	Supported
P711m	6Gb SAS 8-Channel HBAs and Controllers	PCI-e	✓
P712m	6Gb SAS 6-Channel HBAs and Controllers	PCI-e	✓
LSI 9212-4i4e	6Gb SAS 8-Channel HBAs and Controllers <sup>2,3</sup>	PCI-e	✓
P212 <sup>6</sup> , P410, P411 & P700m	3Gb SAS 8-Channel HBAs and Controllers <sup>5</sup>	PCI-e	✓
SG-XPCIE8SAS-E-Z	3Gb SAS 8-Channel HBAs and Controllers <sup>4</sup>	PCI-e	✓
SG-XPCI8SAS-E-Z	3Gb SAS 8-Channel HBAs and Controllers <sup>4</sup>	PCI-X	✓

### Notes:

- Supported with Solaris 10 x64 only. (AMD64 and Intel EM64T)
- Supported with Solaris 10.x only.
- SAS supported for Solaris SPARC/x64 with NWR 8.1 or later.
- Support for Oracle servers only.
- Supported with Solaris 10 x64 Update 8 (10/09) or newer with MSL SAS direct attach.
- For block sizes larger than 64KB order cached version of P212 card ( Part # 462834-B21 ). Zero memory version of P212 not recommended for tape.

# Hewlett Packard Enterprise - StoreEver - AIX, PowerVM Support (FC & SAS)

IMPORTANT: Consult your ISV/IHV vendor's compatibility guides ([Compatibility Links Page](#)) to confirm product & OS version support details. Consult IBM's [System Storage Interoperation Center](#) to verify adapter support for specific servers.

## AIX (Power) Direct Attached & SAN Support

### Operating Systems

Operating Systems	Version	
AIX <sup>1,2,3,4</sup>	V7.1.3 and higher	(Atape Driver: 12.10.7.0 Minimum Level Required)
PowerVM	V2.2.3.2 and higher	

### Servers

Servers	Supported
IBM Power 7, 8 Servers	✓

Adapter	Description	Interface	Supported Operating Systems	AIX Microcode (FW)
IBM EN0H & EN0J	10GbE IBM CNAs	PCI-e2	AIX	00010000020025201913
IBM 5708	10GbE IBM CNA	PCI-e2	AIX	020118
IBM EN0A <sup>5</sup> & EN0B <sup>5</sup>	16Gb IBM Single & Dual Port HBAs	PCI-e2	PowerVM, AIX	00010000020025201919
IBM EN0Y <sup>5</sup>	8Gb IBM Quad Port HBA	PCI-e2	PowerVM, AIX	0320080200
IBM 5729 <sup>5</sup> , 5273 <sup>5</sup> & 5735 <sup>5</sup>	8Gb IBM Single, Dual & Quad Port HBAs	PCI-e	PowerVM, AIX	203305
IBM 5773 <sup>5</sup> & 5774 <sup>5</sup>	4Gb IBM Single & Dual Port HBAs	PCI-e	PowerVM, AIX	271315
IBM 1905 & 5758	4Gb IBM HBAs	PCI-X 2.0	PowerVM, AIX	271304
IBM 5759 <sup>5</sup>	4Gb IBM HBA	PCI-X 2.0	PowerVM, AIX	271310

Adapter	Description	Interface	Supported Operating Systems	AIX Microcode (FW)
IBM (EJ10 & EJ11) <sup>6</sup>	6Gb SAS	PCI-e3	AIX	15511800

#### Notes:

1. Data Protector: Robot control is not supported for Physical or Virtual HP Tape Devices.
2. For HPE Tape Devices preceding Ultrium LTO-7, Robot control must be on a different OS-platform, other than AIX, for all ISVs other than IBM Spectrum Protect.
3. For HPE Ultrium LTO-7 & LTO-8 Single-Path Support, IBM Tape Device Driver version 12.10.7.0, or higher is required.
4. For HPE Ultrium LTO-7 & LTO-8 Multi-Path Support, IBM Atape version 13.0.1.0, or higher is required in addition to the HPE StoreEver LTO-7 & LTO-8 Tape Library Multi-Path Failover License.
5. Direct attached Fibre Channel Point-to-Point is not support with LTO-7 & LTO-8. If Direct attached FC is required, use Private loop.
6. LTO7 & LTO-8 tape drives only.

# Hewlett Packard Enterprise - StoreEver - Storage Networking

## StoreFabric SAN Switches <sup>1, 3, 10</sup>

<b>B-series</b> <sup>4, 6, 9</sup>	<b>Firmware Streams</b>
HPE StoreFabric SN6650B 32Gb Switch	8.2.1c, 8.1.2h, 8.0.2f
HPE SN8600B SAN Director Switch, SN6600B Fibre Channel Switch & SN3600B SAN Switch	8.2.1c, 8.1.2h, 8.0.2f
HPE SN8000B SAN Director Switch, SN6500B, SN6000B & SN3000B Fibre Channel Switch	8.2.1c, 8.1.2h, 8.0.2f, 7.4.2d
HPE StoreFabric SN4000B Extension Switch	8.2.1c, 8.1.2h, 8.0.2f, 7.4.2d
HP Encryption SAN Switch and FS8-18 FC Blade	7.4.2d
HPE DC SAN Backbone Director, HPE DC04 SAN Director	7.4.2d
HPE 8/8, 8/24, 8/40, 8/80 SAN Switches	7.4.2d
Brocade 16Gb SAN Switch for HPE Synergy	8.2.1c, 8.1.2h, 8.0.2f
Brocade 8Gb SAN Switch for HPE BladeSystem c-Class (8/12c and 8/24c)	7.4.2d
Brocade 16Gb SAN Switch for HPE BladeSystem c-Class	8.2.1c, 8.1.2h, 8.0.2f, 7.4.2d
<b>C-series</b>	<b>Firmware Streams</b>
HPE SN8500C Director, HPE C-Series Family (MDS 9710)	8.3(2), 8.2(2), 8.1(1a), 7.3(1)DY(1), 6.2(27)
HPE SN8000C Directors, HPE C-series Family (MDS 9506/ MDS 9509/ MDS 9513)	7.3(1)DY(1), 6.2(27), 5.2(8h)
HPE StoreFabric SN6610C & SN6620C 32Gb 12-port/48-port 16Gb Fibre Channel Switch	8.3(2), 8.2(2), 8.1(1a)
HPE StoreFabric SN6010C 12-port/48-port 16Gb Fibre Channel Switch	8.3(2), 8.2(2), 8.1(1a), 7.3(1)DY(1), 6.2(27)
HPE SN6000C 8Gb Fibre Channel Switch (MDS 9148)	6.2(27), 5.2(8h)
Cisco Nexus 5548UP / 5596UP Converged Network Switch	7.3(5)N1(1), 5.2(1)N1(9b)
Cisco MDS 9222i	6.2(27), 5.2(8h)
Cisco MDS 8Gb Fabric Switch for HPE BladeSystem c-Class	6.2(27), 5.2(8h)
Cisco MDS 9124 Fabric Switch (C-Series)	5.2(8h)
<b>H-series</b> <sup>7</sup>	<b>Firmware</b>
HPE SN6000 Stackable Fibre Channel Switch <sup>6</sup>	8.0.14.19.00
HPE 8/20q Fibre Channel Switch <sup>6</sup>	8.0.14.19.00
<b>Multi-Protocol Routers, Gateways, and Virtual Connect</b> <sup>1</sup> (All Series)	<b>Firmware Streams</b>
HPE StoreFabric SN6500C 16Gb FC/FCIP/FCoE Multi-service Switch	8.3(2), 8.2(2), 8.1(1a), 7.3(1)DY(1), 6.2(27)
HPE FlexFabric 5930 Switch Series	Version 7.1 Release: 7.10.R2612P02
HPE FlexFabric 5900CP Switch	Version 7.1 Release: 7.10.R2432P06
HPE Synergy 10Gb Pass-Thru Module	3.00.00
HPE Virtual Connect SE 40Gb F8 Module for HPE Synergy	3.00.00
HPE Virtual Connect FlexFabric 20/40 F8 Module for c-class Blade System	4.75a
HPE Virtual Connect FlexFabric 10Gb/24-Port Module for c-Class BladeSystem	4.75a
HPE 1606 Extension SAN Switch <sup>2</sup> and DC SAN Director Switch Multiprotocol Ext. Blade <sup>2</sup>	7.4.2d
HPE Virtual Connect SE 16Gb Fibre Channel Module for Synergy	3.00.00
HP 16Gb 24-port Virtual Connect FC Module for c-Class BladeSystem <sup>5</sup>	4.75a
HPE 8Gb 24-Port Virtual Connect FC Module (VC-FC) <sup>5</sup>	4.75a
HPE 4Gb/8Gb 20 Port Virtual Connect FC Module (VC-FC) <sup>5</sup>	4.75a
Brocade VDX6740	7.2.0, 7.1.0b, 7.0.1c, 6.0.2f, 5.0.2c, 4.1.3d
<b>SAS Switches</b>	<b>Firmware</b>
HPE 3Gb SAS BL Switch	2.2.17.0 (b)
HPE 6Gb/s SAS BL Switch	4.3.6.0(B)

Notes:

1. Refer to HPE SAN Design Reference Guide for more configuration details
2. Tape Pipelining supported
3. Recommended latest supported versions for various supported code streams.
4. Access Gateway (AG) mode supported. See [SPOCK](#) for detailed support information.
5. For Tape support on Virtual Connect switches, an external switch is required.
6. Platform support is restricted. Please reference the switches' QuickSpec on '[hpe.com/info/qs](http://hpe.com/info/qs)' for supported operating systems and host bus adapters.
7. HPE H series switches with LTO-7 & LTO-8 may see excessive CRC errors at 8Gbps speeds, set the port speed to 4GB for stable communication.
8. HPE LTO-7 & LTO-8 supported with 7.1.2b1 or later.
9. StoreEver Tape Basic Path Failover with LTO-5 Full Height drives is only supported with 7.1.2a, 7.3.0a, 7.2.1c or later.
10. LTO-6 Advanced path failover & LTO-7 & LTO-8 path failover functions with HPE B series, C series, and H series FC switches.

# Hewlett Packard Enterprise - StoreEver - Virtual Machine Support

VM Data Protection Partners	Arcserve Backup	Commvault	Dell EMC NetWorker	IBM Spectrum Protect (TSM)	Micro Focus Data Protector	Veritas Backup Exec	Veritas NetBackup
For detailed support see Partner support websites <a href="#">Compatibility Matrix</a>		<a href="#">VMware Compatibility Hyper-V Compatibility</a>	<a href="#">Software Compatibility Guide</a>	<a href="#">Support for Virtual Machines</a>	<a href="#">Virtualization Support Matrix</a>	<a href="#">Software Compatibility</a>	<a href="#">Virtual Environments</a>

## Virtual Machine connectivity to Tape (StoreEver) backup targets

VM Product	StoreEver Direct Attached SAS	StoreEver FC & FCoE SAN	Support Notes
Citrix XenServer Host	No	No	No support statement for tape at this time.
Citrix XenServer Guest VM	No	No	
HPVM Host	Yes	Yes	Tape drive/media changer must not be attached to a guest VM while being used by the host.
HPVM Guest VM	Yes	Yes	Tape drive/media changer must only be attached to a single guest VM at a time.
Hyper-V Host	Yes	Yes	
Hyper-V Guest VM	No	No	
VMware ESXi Host	No	No <sup>1</sup>	<p>HPE does not test or validate direct attached SCSI tape on VMware ESX/ESXi hosts and does not provide support for tape drives and tape libraries in such configurations.</p> <p><a href="#">For ESX 4.1 Server tape support see ESX 4.1 Fibre Channel SAN Configuration Guide.</a></p> <p><a href="#">For ESX 5.0 Server tape support see the ESXi 5.0 vSphere Storage Guide.</a></p> <p><a href="#">For ESX 5.1 Server tape support see the ESXi 5.1 vSphere Storage Guide.</a></p> <p><a href="#">For ESX 5.5 Server tape support see the ESXi 5.5 vSphere Storage Guide.</a></p> <p><a href="#">For ESX 6.0 Server tape support see the ESXi 6.0 vSphere Storage Guide.</a></p>
VMware Guest VM	No	No	HPE does not test or validate direct attached SCSI tape on VMware guest VMs and does not provide support for tape drives and tape libraries in such configurations.
VMware vStorage API for Data Protection	Yes	Yes	See VM data protection partner links above for supported Windows and LINUX operating systems. Fibre Channel SANs and shared tape devices are limited to a physical backup server.

Notes:

1. SAN tape devices (FC) are not supported directly by VMware ESXi host. vStorage API for Data Protection use a backup server and virtual machine software snapshots to allow FC backups.

This section includes the following:

- StoreOpen Software Support

# Hewlett Packard Enterprise - StoreOpen Software Support

HPE StoreOpen Software version <sup>3</sup> 3.4.2

## Supported Operating Systems for HPE StoreOpen Software

Tape Products	Windows Server 2016	Windows Server 2012 R2	Windows Server 2012	Windows Server 2008 R2	Windows 10 <sup>1</sup>	Windows 8.1 <sup>1</sup>	Windows 8 <sup>1</sup>	Windows 7	RHEL 7 Server	RHEL 6 Server <sup>2</sup>	RHEL (Desktop)	Mac OS X 10.x <sup>4,5</sup>
<b>HPE LTO-8 Standalone</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>HPE LTO-7 Standalone</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>HP LTO-6 Standalone</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>HP LTO-5 Standalone</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>HPE StoreEver MSL2024, 4048, 6480, and 3040 tape libraries<sup>6</sup></b>	✓	✓	✓	✓	✓	✓	✓	✓				
<b>HPE 1/8 G2 Autoloader<sup>6</sup></b>	✓	✓	✓	✓	✓	✓	✓	✓				

IMPORTANT: To find the supported HBAs, firmware and drivers see the [Operating Systems pages](#) in this Matrix.

## Additional Supported Hardware Platforms not shown in the "StoreEver Operating System" pages.

HPE StoreOpen Software can be used on laptops and workstations that can connect to a tape drive via a supported HBA or a Thunderbolt to SAS converter

The following adapters and converters have been tested

- ATTO H644, H680 (Host Bus Adapter)
- ATTO Thunder Link SH1068/SH2068 (Thunderbolt to SAS converter)
- ATTO Thunder Link SH3128 12GB SAS/SATA (Thunderbolt to SAS converter)

For more information about HP StoreOpen tape-based file system, please visit our web site at [hpe.com/storage/StoreOpen](http://hpe.com/storage/StoreOpen)

Key:  
✓ Supported

### Notes:

1. Administrator access is required to run StoreOpen Software with Windows 8, 8.1, & 10.
2. RHEL 6.0 through 6.8
3. Currently not supported with HP Path Failover drivers.
4. Mac OSX 10.7 through 10.13
5. StoreOpen Software requires 'FUSE for MacOS' 3.5.4 and ICU 50.1.2. 'FUSE for MacOS' can be downloaded from <https://osxfuse.github.io>.
6. Supported on LTO-5, LTO-6, LTO-7 and LTO-8.

This section includes the following:

IMPORTANT: Support for OpenVMS is independent from the entirety of this Compatibility Matrix.

- Support OpenVMS Server & FC Storage Networking Support
- Support OpenVMS Server & Converged Storage Networking Support
- Support OpenVMS Server & SAS Storage Networking Support
- Support OpenVMS Server & Blade Server Storage Networking Support
- Support OpenVMS Tape Drive Support
- Support OpenVMS Tape Library Support
- Support Classic OpenVMS Tape Library Support



# Hewlett Packard Enterprise - OpenVMS Server & FC Storage Networking Support

IMPORTANT: Support for OpenVMS is independent from the entirety of this Compatibility Matrix.

## OpenVMS Rackmount Server FC Adapter Compatibility

<b>16Gb Fibre Channel Host Bus Adapters</b>		<b>rx 2620</b>	<b>rx 2660</b>	<b>rx 3600</b>	<b>rx 4640</b>	<b>rx 6600</b>	<b>rx 7620</b>	<b>rx 7640</b>	<b>rx 8620</b>	<b>rx 8640</b>	<b>Super dome sx1000</b>	<b>Super dome sx2000</b>	<b>rx 2800 i2</b>	<b>rx 2800 i4</b>	<b>rx 2800 i6</b>
<b>B9F23A</b>	HP PCIe 1-port 16Gb FC (QLogic)												✓ <sup>1</sup>	✓ <sup>1</sup>	✓ <sup>5</sup>
<b>B9F24A</b>	HP PCIe 2-port 16Gb FC (QLogic)												✓ <sup>1</sup>	✓ <sup>1</sup>	✓ <sup>5</sup>
<b>8Gb Fibre Channel Host Bus Adapters</b>		<b>rx 2620</b>	<b>rx 2660</b>	<b>rx 3600</b>	<b>rx 4640</b>	<b>rx 6600</b>	<b>rx 7620</b>	<b>rx 7640</b>	<b>rx 8620</b>	<b>rx 8640</b>	<b>Super dome sx1000</b>	<b>Super dome sx2000</b>	<b>rx 2800 i2</b>	<b>rx 2800 i4</b>	<b>rx 2800 i6</b>
<b>AH403A</b>	HP PCIe 2-port 8Gb FC (Emulex)														
<b>AH402A</b>	HP PCIe 1-port 8Gb FC (Emulex)														
<b>AH401A</b>	HP PCIe 2-port 8Gb FC (QLogic)		✓ <sup>2,3</sup>	✓ <sup>2,3</sup>		✓ <sup>2,3</sup>		✓ <sup>1,3</sup>		✓ <sup>1,3</sup>	✓ <sup>3</sup>	✓ <sup>3</sup>	✓ <sup>2,3</sup>	✓ <sup>2</sup>	
<b>AH400A</b>	HP PCIe 1-port 8Gb FC (QLogic)		✓ <sup>2,3</sup>	✓ <sup>2,3</sup>		✓ <sup>2,3</sup>		✓ <sup>1,3</sup>		✓ <sup>1,3</sup>	✓ <sup>3</sup>	✓ <sup>3</sup>	✓ <sup>2,3</sup>	✓ <sup>2</sup>	
<b>4Gb Fibre Channel Host Bus Adapters</b>		<b>rx 2620</b>	<b>rx 2660</b>	<b>rx 3600</b>	<b>rx 4640</b>	<b>rx 6600</b>	<b>rx 7620</b>	<b>rx 7640</b>	<b>rx 8620</b>	<b>rx 8640</b>	<b>Super dome sx1000</b>	<b>Super dome sx2000</b>	<b>rx 2800 i2</b>	<b>rx 2800 i4</b>	<b>rx 2800 i6</b>
<b>AD300A</b>	HP PCIe 2-port 4Gb FC (Qlogic)		✓ <sup>2,3,4</sup>	✓ <sup>2,3,4</sup>		✓ <sup>2,3,4</sup>		✓ <sup>1,3,4</sup>		✓ <sup>1,3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>2</sup>	
<b>AD299A</b>	HP PCIe 1-port 4Gb FC (Emulex)		✓ <sup>3,4</sup>	✓ <sup>3,4</sup>		✓ <sup>3,4</sup>		✓ <sup>3,4</sup>		✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>2</sup>	
<b>AD355A</b>	HP PCIe 2-port 4Gb FC (Emulex)		✓ <sup>3,4</sup>	✓ <sup>3,4</sup>		✓ <sup>3,4</sup>		✓ <sup>3,4</sup>		✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>			
<b>AB379B</b>	HP PCI-X 2-port 4Gb FC(Qlogic)	✓ <sup>2,3,4</sup>	✓ <sup>2,3,4</sup>	✓ <sup>2,3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>2,3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>1,3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>1,3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>			
<b>AB378B</b>	HP PCI-X 1-port 4Gb FC(Qlogic)	✓ <sup>2,3,4</sup>	✓ <sup>2,3,4</sup>	✓ <sup>2,3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>2,3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>1,3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>1,3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>			
<b>AB379A</b>	HP PCI-X 2-port 4Gb FC(Qlogic)			✓ <sup>3,4</sup>		✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>			
<b>AB378A</b>	HP PCI-X 1-port 4Gb FC(Qlogic)			✓ <sup>3,4</sup>		✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>			

Notes:

1. VSI OpenVMS v8.4-2 or later
2. VSI OpenVMS v8.4-1H1 or later
3. HPE OpenVMS v8.4- with patch VMS84I\_UPDATE-V0100 or later
4. HPE OpenVMS v8.3-1H1 with patch VMS831H1I\_UPDATE-V0100 & VMS831H1I\_FIBRE\_SCSI-V0200 or later
5. VSI OpenVMS v8.4-2L1 or later

# Hewlett Packard Enterprise - OpenVMS Server & Converged Storage Networking Support

IMPORTANT: Support for OpenVMS is independent from the entirety of this Compatibility Matrix.

## OpenVMS Rackmount Server Multi-function Adapters Compatibility

Multi-function Adapters (Storage/LAN)		rx 2620	rx 2660	rx 3600	rx 4640	rx 6600	rx 7620	rx 7640	rx 8620	rx 8640	Super dome sx1000	Super dome sx2000	rx 2800 i2	rx 2800 i4	rx 2800 i6
<b>AT111A</b>	HP Integrity CN1100E PCIe 2-port CNA												✓ <sup>2</sup>	✓ <sup>2</sup>	✓ <sup>5</sup>
<b>AD394A</b>	HP PCIe 2-port 8Gb FC(Emulex) and 2-Port 1/10Gb Ethernet														
<b>AD393A</b>	HP PCIe 2-port 4Gb FC(Emulex) and 2-Port 1000BSX Adapter		✓ <sup>3</sup>	✓ <sup>3</sup>		✓ <sup>3</sup>		✓ <sup>3</sup>		✓ <sup>3</sup>	✓ <sup>3</sup>	✓ <sup>3</sup>	✓ <sup>3</sup>	✓ <sup>2</sup>	
<b>AD222A</b>	HP PCIe 2-port 4Gb FC(Emulex) and 2-Port 1000BT Adapter		✓ <sup>3</sup>	✓ <sup>3</sup>		✓ <sup>3</sup>		✓ <sup>3</sup>		✓ <sup>3</sup>	✓ <sup>3</sup>	✓ <sup>3</sup>	✓ <sup>3</sup>	✓ <sup>2</sup>	
<b>AD221A</b>	HP PCIe 1-port 4Gb FC(Emulex) and 1-Port 1000BT Adapter		✓ <sup>3</sup>	✓ <sup>3</sup>		✓ <sup>3</sup>		✓ <sup>3</sup>		✓ <sup>3</sup>	✓ <sup>3</sup>	✓ <sup>3</sup>	✓ <sup>3</sup>	✓ <sup>2</sup>	
<b>AD194A</b>	HP PCI-X 2-port 4Gb FC(Qlogic)/2-port GigE Adapter	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>
<b>AD193A</b>	HP PCI-X 1-port 4Gb FC(Qlogic)/1-port GigE Adapter	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>
<b>A9782A</b>	HP PCI-X 1-port 2Gb FC(Qlogic)/1000 Base-SX Adapter	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>
<b>A9784A</b>	HP PCI-X 2-port 2Gb FC(Qlogic)/1000 Base-SX Adapter	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>
<b>AB465A</b>	HP PCI-X 2-port 2Gb FC(Qlogic)/2-port 1000 Base-T Adapter	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>	✓ <sup>3,4</sup>

Notes:

1. VSI OpenVMS v8.4-2 or later.
2. VSI OpenVMS v8.4-1H1 or later.
3. HPE OpenVMS v8.4- with patch VMS84I\_UPDATE-V0100 or later.
4. HPE OpenVMS v8.3-1H1 with patch VMS831H1I\_UPDATE-V0100 & VMS831H1I\_FIBRE\_SCSI-V0200 or later.
5. VSI OpenVMS v8.4-2L1 or later

(OpenVMS v8.3 and v8.3-1H1 goes out of Standard Support 31-Dec-2015. These versions will be on PriorVersionSupport w/o Sustained Engg (PVS w/o SE) till 31-Dec-2018.)

# Hewlett Packard Enterprise - OpenVMS Server & SAS Storage Networking Support

IMPORTANT: Support for OpenVMS is independent from the entirety of this Compatibility Matrix.

## OpenVMS Rackmount Server SAS Adapter Compatibility

SAS Host Bus Adapters		rx 2620	rx 2660	rx 3600	rx 4640	rx 6600	rx 7620	rx 7640	rx 8620	rx 8640	Super dome sx1000	Super dome sx2000	rx 2800 i2	rx 2800 i4	rx 2800 i6
<b>AM312A</b>	HP PCIe Smart Array P812/1GB 6Gb 4-port SAS Controller			✓ <sup>2,3</sup>		✓ <sup>2,3</sup>							✓ <sup>2,3</sup>	✓ <sup>2</sup>	✓ <sup>5</sup>
<b>AM311A</b>	HP PCIe Smart Array P411/256MB 6Gb 2-port SAS adapter		✓ <sup>2,3</sup>	✓ <sup>2,3</sup>		✓ <sup>2,3</sup>					✓ <sup>3</sup>	✓ <sup>3</sup>	✓ <sup>2,3</sup>	✓ <sup>2</sup>	✓ <sup>5</sup>
<b>AD335A</b>	HP PCIe P800 3G SAS adapter		✓ <sup>2,3</sup>	✓ <sup>2,3</sup>		✓ <sup>2,3</sup>		✓ <sup>1,3</sup>		✓ <sup>1,3</sup>	✓ <sup>3</sup>	✓ <sup>3</sup>			
<b>AB037A</b>	HP PCI-X internal SAS adapter					✓ <sup>3,4</sup>									
<b>AB036B</b>	HP PCI-X internal SAS adapter		✓ <sup>3,4</sup>	✓ <sup>3,4</sup>		✓ <sup>3,4</sup>									
<b>AD397A</b>	HP Smart Array P400 - PCIe rx2660 core I/O		✓ <sup>3,4</sup>												
<b>AD348A</b>	HP Smart Array P400 - PCIe rx3600/6600 core I/O			✓ <sup>3,4</sup>		✓ <sup>3,4</sup>									

Notes:

1. VSI OpenVMS v8.4-2 or later.
2. VSI OpenVMS v8.4-1H1 or later.
3. HPE OpenVMS v8.4-with patch VMS84I\_UPDATE-V0600 or later.
4. HPE OpenVMS v8.3-1H1 with patch VMS831H1I\_UPDATE-V0100 & VMS831H1I\_FIBRE\_SCSI-V0200 or later.
5. VSI OpenVMS v8.4-2L1 or later

(OpenVMS v8.3 and v8.3-1H1 goes out of Standard Support 31-Dec-2015. These versions will be on PriorVersionSupport w/o Sustained Engg (PVS w/o SE) till 31-Dec-2018.)

# Hewlett Packard Enterprise - OpenVMS Server & Blade Server Storage Networking Support

IMPORTANT: Support for OpenVMS is independent from the entirety of this Compatibility Matrix.

## OpenVMS Rackmount Blade Server Adapter Compatibility

OpenVMS Blade Server FCoE Adapter Compatibility	BL 860c	BL 870c	BL 860c i2	BL 870c i2	BL 890c i2	BL 860c i4	BL 870c i4	BL 890c i4	BL 860c i6	BL 870c i6	BL 890c i6
<b>613431-B21</b> HP BLc NC553m FlexFabric Adptr			✓ <sup>2</sup>	✓ <sup>2</sup>	✓ <sup>2</sup>	✓ <sup>2</sup>	✓ <sup>2</sup>	✓ <sup>2</sup>	✓ <sup>8</sup>	✓ <sup>8</sup>	✓ <sup>8</sup>
OpenVMS Blade Server FC Adapter Compatibility	BL 860c	BL 870c	BL 860c i2	BL 870c i2	BL 890c i2	BL 860c i4	BL 870c i4	BL 890c i4	BL 860c i6	BL 870c i6	BL 890c i6
<b>456972-B21</b> HP PCIe 2-port 8Gb FC Mezz (Emulex) HBA											
<b>451871-B21</b> HP PCIe 2-port 8Gb FC Mezz (QLogic) HBA	✓ <sup>3</sup>	✓ <sup>3</sup>	✓ <sup>2,3</sup>	✓ <sup>2,3</sup>	✓ <sup>2,3</sup>	✓ <sup>2</sup>	✓ <sup>2</sup>	✓ <sup>2</sup>	✓ <sup>8</sup>	✓ <sup>8</sup>	✓ <sup>8</sup>
<b>403619-B21</b> HP PCIe 2-port 4Gb FC Mezz (QLogic) HBA	✓ <sup>4,6</sup>	✓ <sup>4,6</sup>	✓ <sup>4,6</sup>	✓ <sup>4,6</sup>	✓ <sup>4,6</sup>						
<b>403621-B21</b> HP PCIe 2-port 4Gb FC Mezz (Emulex) HBA	✓ <sup>4,6</sup>	✓ <sup>4,6</sup>	✓ <sup>4,6</sup>	✓ <sup>4,6</sup>	✓ <sup>4,6</sup>						
OpenVMS Blade Server SAS Adapter Compatibility	BL860c	BL870c	BL860c i2	BL870c i2	BL890c i2	BL860c i4	BL870c i4	BL890c i4	BL 860c i6	BL 870c i6	BL 890c i6
<b>513778-B21</b> HP PCIe SAS Smart Array(P711m) 6Gb/s Mezz HBA			✓ <sup>2,5</sup>	✓ <sup>2,5</sup>	✓ <sup>2,5</sup>	✓ <sup>2</sup>	✓ <sup>2</sup>	✓ <sup>2</sup>	✓ <sup>8</sup>	✓ <sup>8</sup>	✓ <sup>8</sup>
<b>508226-B21</b> HP PCIe SAS Smart Array(P700m) 3Gb/s Mezz HBA	✓ <sup>4,7</sup>	✓ <sup>4,7</sup>	✓ <sup>2</sup>	✓ <sup>2</sup>	✓ <sup>2</sup>						

- Notes:
1. VSI OpenVMS v8.4-2 or later.
  2. VSI OpenVMS v8.4-1H1 or later.
  3. HPE OpenVMS v8.4- with patch VMS84I\_UPDATE-V0200 or later.
  4. HPE OpenVMS v8.4- with patch VMS84I\_UPDATE-V0100 or later.
  5. HPE OpenVMS v8.4- with patch VMS84I\_UPDATE-V0700 or later
  6. HPE OpenVMS v8.3-1H1 with patch VMS831H1I\_UPDATE-V0100 & VMS831H1I\_FIBRE\_SCSI-V0200 or later.
  7. HPE OpenVMS v8.3-1H1 with patch VMS831H1I\_PCSI-V0100 & VMS831H1I\_UPDATE-V0400 & VMS831H1I\_FIBRE\_SCSI-V0400 or later.
  8. VSI OpenVMS v8.4-2L1 or later

(OpenVMS v8.3 and v8.3-1H1 goes out of Standard Support 31-Dec-2015. These versions will be on PriorVersionSupport w/o Sustained Engg (PVS w/o SE) till 31-Dec-2018.)

# Hewlett Packard Enterprise - OpenVMS Tape Drive Support

IMPORTANT: Support for OpenVMS is independent from the entirety of this Compatibility Matrix.

IMPORTANT: Supported HBAs can be found on the [OpenVMS HBA pages](#) in the Operating System section of this Matrix.

HPE Tape drives		VSI OpenVMS <sup>2</sup>	HPE OpenVMS V8.4 <sup>2</sup>	HPE OpenVMS V8.31h1 1, <sup>2</sup>
<b>HPE LTO-8 Ultrium 30750</b>	(LTO-8 HH FC)	v8.4-1H1		
<b>HPE LTO-8 Ultrium 30750</b>	(LTO-8 HH SAS)	v8.4-1H1		
<b>HPE LTO-7 Ultrium 15750</b>	(LTO-7 FH FC)	8.4-1H1	VMS84I_UPDATE-V1100	
<b>HPE LTO-7 Ultrium 15000</b>	(LTO-7 HH FC & SAS)	8.4-1H1	VMS84I_UPDATE-V1100	
<b>HP LTO-6 Ultrium 6650</b>	(LTO-6 FH FC & SAS)	8.4-1H1	VMS84I_PCSI-V0400 VMS84I_UPDATE-V0900 VMS84I_FIBRE_SCSI-V0600	
<b>HP LTO-6 Ultrium 6250</b>	(LTO-6 HH FC & SAS)	8.4-1H1	VMS84I_PCSI-V0400 VMS84I_UPDATE-V0900 VMS84I_FIBRE_SCSI-V0600	
<b>HP LTO-5 Ultrium 3280</b>	(LTO-5 FH FC & SAS)	8.4-1H1	VMS84I_PCSI-V0200 VMS84I_UPDATE-V0500	VMS831H1I_PCSI-V0200 VMS831H1I_UPDATE-V0900 VMS831H1I_FIBRE_SCSI-V0800
<b>HP LTO-5 Ultrium 3000</b>	(LTO-5 HH FC & SAS)	8.4-1H1	VMS84I_PCSI-V0200 VMS84I_UPDATE-V0500	VMS831H1I_PCSI-V0200 VMS831H1I_UPDATE-V0900 VMS831H1I_FIBRE_SCSI-V0800
<b>HP LTO-4 Ultrium 1840</b>	(LTO-4 FH SAS)	8.4-1H1	VMS84I_UPDATE-V0100	VMS831H1I_ADDENDUM-V0100 VMS831H1I_FIBRE_SCSI-V0100 VMS831H1I_IPB_V0100
<b>HP LTO-4 Ultrium 1760</b>	(LTO-4 HH SAS)	8.4-1H1	VMS84I_UPDATE-V0100	VMS831H1I_ADDENDUM-V0100 VMS831H1I_FIBRE_SCSI-V0100 VMS831H1I_IPB_V0100
<b>HP LTO-3 Ultrium 920</b>	(LTO-3 HH SAS)	8.4-1H1	VMS84I_UPDATE-V0100	VMS831H1I_ADDENDUM-V0100 VMS831H1I_FIBRE_SCSI-V0100 VMS831H1I_IPB_V0100

Notes:

1. HPE OpenVMS v8.3 and v8.3-1H1 goes out of Standard Support 31-Dec-2015. These versions will be on PriorVersionSupport w/o Sustained Engg (PVS w/o SE) till 31-Dec-2018.

2. Minimum version for Tape Drive support.

# Hewlett Packard Enterprise - OpenVMS Tape Library Support

IMPORTANT: Support for OpenVMS is independent from the entirety of this Compatibility Matrix.

IMPORTANT: Supported HBAs can be found on the [OpenVMS HBA pages](#) in the Operating System section of this Matrix.

## Archive Backup System (ABS) - Minimum Versions

HPE Tape Library	HPE LTO-8 <sup>1</sup>	HPE LTO-7 <sup>1</sup>	HPE LTO-6 <sup>1</sup>	HPE LTO-5 <sup>1</sup>	HPE LTO-4 <sup>1</sup>	HPE LTO-3 <sup>1</sup>
<b>ESL G3</b>	4.6 - VSI <sup>2</sup>	4.6 - VSI <sup>2</sup> 4.5 (1202) - HPE	4.6 - VSI <sup>2</sup> 4.5 (1202) - HPE	4.6 - VSI <sup>2</sup> 4.5 (1201) - HPE	4.6 - VSI <sup>2</sup> 4.5 (1201) - HPE	Not Available
<b>MSL6480</b>	4.6 - VSI <sup>2</sup>	4.6 - VSI <sup>2</sup> 4.5 (1202) - HPE	4.6 - VSI <sup>2</sup> 4.5 (1202) - HPE	4.6 - VSI <sup>2</sup> 4.5 (1201) - HPE	4.6 - VSI <sup>2</sup>	Not Available
<b>MSL3040 Scalable Tape Library</b>	4.6 - VSI <sup>2</sup>	4.6 - VSI <sup>2</sup>	4.6 - VSI <sup>2</sup>	4.6 - VSI <sup>2</sup>	4.6 - VSI <sup>2</sup>	
<b>MSL G3 (2024, 4048, 8096)</b>	4.6 - VSI <sup>2</sup>	4.6 - VSI <sup>2</sup> 4.5 (1202) - HPE	4.6 - VSI <sup>2</sup> 4.5 (1202) - HPE	4.6 - VSI <sup>2</sup> 4.4A - HPE	4.6 - VSI <sup>2</sup> 4.4A - HPE	4.6 - VSI <sup>2</sup>
<b>1/8 G2 Autoloader</b>	4.6 - VSI <sup>2</sup>	4.6 - VSI <sup>2</sup> 4.5 (1202) - HPE	4.6 - VSI <sup>2</sup> 4.5 (1201) - HPE	4.6 - VSI <sup>2</sup> 4.4A - HPE	4.6 - VSI <sup>2</sup>	4.6 - VSI <sup>2</sup>

Notes:

1. Minimum version for Tape Drive support.
2. Minimum MRU version is 1.9

## Hewlett Packard Enterprise - Classic OpenVMS Tape Library Support

IMPORTANT: Support for OpenVMS is independent from the entirety of this Compatibility Matrix.

IMPORTANT: Supported HBAs can be found on the [OpenVMS page](#) in the Operating System section of this Matrix.

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For the latest information on the enterprise backup strategy for HP OpenVMS click the appropriate links below:

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Enterprise Backup Utilities and Products

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<http://h41379.www4.hpe.com/openvms/storage/enterprise.html>

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Tape and Virtual Library Connectivity

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[http://h41379.www4.hpe.com/openvms/storage/smstape\\_matrix.html](http://h41379.www4.hpe.com/openvms/storage/smstape_matrix.html)

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Supported Networking

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[http://h41379.www4.hpe.com/openvms/integrity/integrity\\_io\\_options.html](http://h41379.www4.hpe.com/openvms/integrity/integrity_io_options.html)

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# Hewlett Packard Enterprise - Legacy Support

IMPORTANT: For Standalone tape drives, support can be leveraged from the library tape drives listed in older matrices.

<b>Product(s)</b>	<b>Last Matrix Where Device Was Listed</b>	<b>2017- 2015</b> <a href="#">Links to Legacy Matrices</a> <sup>1</sup>	<b>2015 - 2013</b> <a href="#">Links to Legacy Matrices</a>
<b>Cisco MDS 9124e, 9134 &amp; Brocade 8Gb embedded SAN Switch for EVA4400</b>	<a href="#">August 2017</a>	<a href="#">March 2018</a>	<a href="#">December 2015</a>
<b>4Gb FC adapters FC2143 &amp; FC2243, 41B &amp; 42B, 415 &amp; 425</b>	<a href="#">August 2017</a>	<a href="#">February 2018</a>	<a href="#">November 2015</a>
<b>HPE StoreEver Archive Manager / Migrator</b>	<a href="#">July 2017</a>	<a href="#">December 2017</a>	<a href="#">October 2015</a>
<b>Dell EMC NetWorker v7.x</b>	<a href="#">July 2017</a>	<a href="#">October 2017</a>	<a href="#">September 2015</a>
<b>Commvault Backup v9.x</b>	<a href="#">July 2017</a>	<a href="#">September 2017</a>	<a href="#">August 2015</a>
<b>Micro Focus Data Protector 8.1x</b>	<a href="#">June 2017</a>	<a href="#">August 2017</a>	<a href="#">July 2015</a>
<b>Bridgehead Software Healthcare Data Management 14a &amp; 13a Release Set</b>	<a href="#">June 2017</a>	<a href="#">July 2017</a>	<a href="#">June 2015</a>
<b>HP Workstations Z800, Z600 &amp; Z400</b>	<a href="#">May 2017</a>	<a href="#">June 2017</a>	<a href="#">May 2015</a>
<b>Veritas Backup Exec 2012</b>	<a href="#">May 2017</a>	<a href="#">May 2017</a>	<a href="#">April 2015</a>
<b>HP Enterprise Secure Key Manager 3.0, 2.1 and SKM 1.1</b>	<a href="#">February 2017</a>	<a href="#">April 2017</a>	<a href="#">March 2015</a>
<b>HPE StoreAll Storage</b>	<a href="#">September 2016</a>	<a href="#">March 2017</a>	<a href="#">February 2015</a>
<b>Data Protector 7.x &amp; 8.0x</b>	<a href="#">June 2016</a>	<a href="#">February 2017</a>	<a href="#">January 2015</a>
<b>P800, P700m SAS HBAs</b>	<a href="#">April 2016</a>	<a href="#">January 2017</a>	<a href="#">December 2014</a>
<b>Standalone LTO3 SCSI, LTO4 SCSI drives, SCSI HBAs &amp; SCSI cables</b>	<a href="#">November 2015</a>	<a href="#">December 2016</a>	<a href="#">November 2014</a>
<b>MSL Libraries LTO3 SAS &amp; SCSI, LTO4 SCSI drives</b>	<a href="#">October 2015</a>	<a href="#">November 2016</a>	<a href="#">October 2014</a>
<b>4Gb Storage Networking SAN switches</b>	<a href="#">October 2015</a>	<a href="#">October 2016</a>	<a href="#">September 2014</a>
<b>HP DAT Standalone Tape Drives</b>	<a href="#">June 2015</a>	<a href="#">September 2016</a>	<a href="#">August 2014</a>
<b>HP StoreEver LTO-2 Ultrium Drives</b>	<a href="#">April 2015</a>	<a href="#">August 2016</a>	<a href="#">July 2014</a>
<b>HP DAT320</b>	<a href="#">March 2015</a>	<a href="#">July 2016</a>	<a href="#">June 2014</a>
<b>HP ProLiant Generation 6 (G6) Servers</b>	<a href="#">February 2015</a>	<a href="#">June 2016</a>	<a href="#">May 2014</a>
<b>HP-UX (PA-RISC) Platform</b>	<a href="#">June 2014</a>	<a href="#">May 2016</a>	<a href="#">April 2014</a>
<b>EML E-Series Tape Libraries</b>	<a href="#">December 2013</a>	<a href="#">April 2016</a>	<a href="#">March 2014</a>
<b>HP B-Series 4/32 SAN switch</b>	<a href="#">July 2013</a>	<a href="#">March 2016</a>	<a href="#">February 2014</a>
<b>HP Virtual Library Systems (VLS)</b>	<a href="#">June 2013</a>	<a href="#">February 2016</a>	<a href="#">January 2014</a>
<b>ESL E-Series Tape Library</b>	<a href="#">June 2013</a>	<a href="#">January 2016</a>	<a href="#">December 2013</a>
			<a href="#">November 2013</a>
			<a href="#">October 2013</a>
			<a href="#">September 2013</a>
			<a href="#">August 2013</a>
			<a href="#">July 2013</a>
			<a href="#">June 2013</a>
			<a href="#">May 2013</a>
			<a href="#">April 2013</a>
			<a href="#">March 2013</a>
			<a href="#">February 2013</a>
			<a href="#">January 2013</a>
<b>Legacy Operating System Support</b>	<b>Last Matrix Where Device Was Listed</b>		
<b>Windows Server 2008 x64 SP2</b>	<a href="#">Feb 2019</a>		
<b>AIX 6.1 &amp; IBM i on power 6</b>	<a href="#">March 2017</a>		
<b>RHEL 5 for StoreEver</b>	<a href="#">January 2016</a>		
<b>Solaris 9</b>	<a href="#">December 2015</a>		
<b>HP-UX 11i v2 (11.23)</b>	<a href="#">December 2015</a>		
<b>SLES/SLED &amp; RHEL 5 Support for StoreOpen</b>	<a href="#">April 2015</a>		
<b>SUSE Linux Enterprise Server 10</b>	<a href="#">April 2014</a>		
<b>AIX 5.3</b>	<a href="#">September 2013</a>		
<b>Tru64</b>	<a href="#">July 2013</a>		
<b>Windows Server 2003</b>	<a href="#">October 2012</a>		
<b>Red Hat Enterprise Linux 4</b>	<a href="#">March 2012</a>		
<b>HP-UX 11i v1 (11.11)</b>	<a href="#">April 2011</a>		
<b>SUSE Linux Enterprise Server 9</b>	<a href="#">August 2010</a>		

Notes:

1. Compatibility Matrix's after March 2018 are archived in SPOCK - <https://www.hpe.com/Storage/StoreEverSupportMatrix>



# Hewlett Packard Enterprise - Useful Links

<b>Product Family</b>	<b>Website (URL)</b>
<b>HPE Complete (Purchase third party branded products for a complete solution)</b>	<a href="http://www.hpe.com/storage/HPEComplete">http://www.hpe.com/storage/HPEComplete</a>
<b>HPE StoreEver Compatibility Matrix</b>	<a href="https://www.hpe.com/Storage/StoreEverSupportMatrix">https://www.hpe.com/Storage/StoreEverSupportMatrix</a>
<b>Micro Focus Data Protector Software</b>	<a href="http://hpe.com/software/dataprotector">hpe.com/software/dataprotector</a>
<b>HPE Firmware &amp; Driver Downloads</b>	<a href="http://hpe.com/support/hpesc">hpe.com/support/hpesc</a>
<b>HPE Library and Tape Tools (LTT)</b>	<a href="http://hpe.com/storage/tapetools">hpe.com/storage/tapetools</a>
<b>HPE Partner Ready Partner Program</b>	<a href="http://hpe.com/partners/technology">hpe.com/partners/technology</a>
<b>HPE QuickSpecs</b>	<a href="http://hpe.com/info/qs">hpe.com/info/qs</a>
<b>HPE SAN Design Reference Guide</b>	<a href="http://hpe.com/storage/spock">hpe.com/storage/spock</a>
<b>HPE Storage Media</b>	<a href="http://hpe.com/storage/storagemedia">hpe.com/storage/storagemedia</a>
<b>HPE StoreEver CVTL</b>	<a href="http://hpe.com/storage/cvttl">hpe.com/storage/cvttl</a>
<b>HPE StoreEver Data Verification</b>	<a href="http://hpe.com/storage/dataverification">hpe.com/storage/dataverification</a>
<b>HPE StoreEver Tape Assure</b>	<a href="http://hpe.com/storage/tapeassure">hpe.com/storage/tapeassure</a>
<b>HPE StoreEver Tape Libraries</b>	<a href="http://hpe.com/storage/tape">hpe.com/storage/tape</a>
<b>HPE StoreOpen (LTFS)</b>	<a href="http://hpe.com/storage/storeopen">hpe.com/storage/storeopen</a>
<b>HPE Support Center</b>	<a href="http://hpe.com/support/hpesc">hpe.com/support/hpesc</a>

# Hewlett Packard Enterprise - Solution Whitepapers

## Data Availability, Protection and Retention Solution Whitepapers

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### Cross Platform

[Design Guide for Backup and Archive](#)  
[Example Configuration Guide for Backup and Archive](#)  
[Tiered Data Protection for HPE Storage](#)  
[HPE StoreEver Tape Library Drive Upgrade Matrix](#)

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### Products

[HPE Object Storage \(Apollo\)](#)  
[HPE StoreEver Tape](#)  
[Commvault](#)  
[Genetec Security Center](#)

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### Data Protection, Archive and Security Vendors

[HPE ControlPoint](#)  
[Micro Focus Data Protector](#)  
[HPE Records Manager](#)  
[HPE Storage Optimizer](#)  
[Dell EMC NetWorker](#)  
[IBM Spectrum Protect \(TSM\)](#)  
[McAfee VirusScan](#)  
[Milestone XProtect](#)  
[QStar Archive Manager](#)  
[Scality](#)  
[Symantec Protection Engine](#)  
[Trend Micro Server Protect](#)  
[Veeam Software](#)  
[Veritas NetBackup](#)  
[Microsoft Exchange](#)  
[Microsoft Hyper-V](#)

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### Databases and Virtual Machines

[Microsoft SQL](#)  
[Oracle](#)  
[SAP HANA](#)  
[VMware](#)

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