

## HP Data Protector Express Single Server Edition

# Hardware and Software Compatibility Matrix

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Operating System Support	. 2
Platform Support by Operating System	. 3
File System Support by Operating System	
HP Tape Devices	
HP Tape Autoloaders	
HP Tape Library Systems	
HP Virtual Tape Library Systems	
HP CD & DVD Writers	

#### Scope and Limitations

This document contains the operating systems, applications and backup devices tested by HP to be compatible with **Data Protector Express Single Server Edition 3.5 SP2 (new entries with this release are listed in bold).** HP provides best efforts to test and support Data Protector Express Single Server Edition with as many different operating systems, service packs, applications and hardware devices as possible and as demanded by customers. However, due to the large number of software and hardware combinations, it is not possible to test all combinations. If a particular device, service pack or version is not included in this document it may be compatible with Data Protector Express Single Server Edition but has not been tested by HP with Data Protector Express. To deliver the comprehensive HP support, this support is only valid when Data Protector Express Single Server Edition is used in combination with software and hardware listed in this document.

HP Data Protector Express Single Server Edition is based on HP Data Protector Express. It is a component of the HP tape drives and HP tape autoloaders solutions and delivers a subset of the functionality of Data Protector Express. It also delivers a subset of the software and hardware compatibility of Data Protector Express. The functionality and compatibility of Data Protector Express Single Server Edition provides a robust solution for protecting a single machine by backing up to a HP tape drive or HP tape autoloader. The full functionality and compatibility of Data Protector Express can be acquired through purchasing an upgrade from Data Protector Express Single Server Edition to Data Protector Express using SKU BB117ET

**Operating System Support** 

Component	Operating system <sup>1</sup>
Backup Server	Microsoft Windows Unified Data Storage Server (incl. R2) Microsoft Windows Server 2003 Enterprise Edition (incl. R2) Microsoft Windows Server 2003 Standard Edition (incl. R2) Microsoft Windows Storage Server 2003 (incl. R2) <sup>2</sup> Microsoft Windows 2000 Advanced Server SP4 Microsoft Windows 2000 Server SP4 Microsoft Windows Small Business 2003 Server Premium (incl. R2) Microsoft Windows Small Business 2003 Server Standard (incl. R2) Microsoft Windows Small Business Server 2000 SP4 Microsoft Windows XP Professional SP2 Microsoft Windows XP Home SP2 Microsoft Windows 2000 Professional SP4
	Red Hat Enterprise Linux (WS/ES/AS) 5 <sup>3</sup> Red Hat Enterprise Linux (WS/ES/AS) 4 Red Hat Enterprise Linux (WS/ES/AS) 3 SuSE Linux Enterprise Server 10 <sup>3</sup> SuSE Linux Enterprise Server 9
	NetWare 6.5 SP2 NetWare 6.0 SP3
Microsoft Small Business Server Package <sup>4</sup>	Microsoft Windows Small Business 2003 Server Premium (incl. R2) Microsoft Windows Small Business 2003 Server Standard (incl. R2) Microsoft Windows Small Business Server 2000 SP4
Operating systems no longer supported with Data Protector Express 3.5	Microsoft Windows NT4 Server SP6A SuSE Linux Enterprise Server 8 NetWare 5.1 SP8

At your own risk you can activate the sgio driver by adding the following lines in the .ini files located in the "config" directory:

In dpconfig.ini:

[Linux SG Driver]

skipKernelVersionCheck=yes

In dpdetect.ini:

[lin]

limit1BlockTransfers=no

<sup>&</sup>lt;sup>1</sup> Where Service Packs, Updates or Support Packs are given, these are the minimum levels required for Data Protector Express to run on the listed operating system. Higher versions are supported.

<sup>&</sup>lt;sup>2</sup> Microsoft Windows Storage Server 2003 is supported only with HP ProLiant Storage Servers

<sup>&</sup>lt;sup>3</sup> Intermittently the Linux sgio driver will cause a system to hang. This can happen with SCSI connected devices on systems running kernel version 2.6.18. For your safety we check this kernel version and disable all devices, which would use the sgio driver. Once you update to a newer kernel the system will work correctly.

<sup>&</sup>lt;sup>4</sup> Note that because the Data Protector Express Microsoft Exchange and Data Protector Express Microsoft SQL Server Online Backup Agents run on the Microsoft Small Business Server operating system the application specific procedures must be followed as described in the backup section of the Data Protector Express Users Guide.

**Platform Support by Operating System** 

Operating system	Supported processor platform
Microsoft Windows	x86 (for 32-bit Windows)
Microsoft Windows	x86_64 (for 64-bit Windows)
Red Hat Enterprise Linux 5 Red Hat Enterprise Linux 4 Red Hat Enterprise Linux 3 SuSE Linux Enterprise Server 10 SuSE Linux Enterprise Server 9	x86 (for 32-bit Linux)
Red Hat Enterprise Linux 5 Red Hat Enterprise Linux 4 SuSE Linux Enterprise Server 10 SuSE Linux Enterprise Server 9	x86_64 (for 64-bit Linux)
NetWare	x86

File System Support by Operating System

Operating system	File systems
Windows	NTFS, including Microsoft Windows Volume Shadow Services (VSS) FAT16 FAT32 CIFS
Linux (Red Hat, SuSE)	ext3, ext2 ReiserFS VFAT jfs, xfs
NetWare	NetWare FS (classic volumes) Supported namespaces: MAC, NFS, OS/2 (LONG), DOS NSS (Netware NSS volumes)

### **HP Tape Devices**

Model	Format	Interface	Inquiry String⁵	OBDR support <sup>6</sup>
HP SureStore Tape 2000 (DDS-1 2GB)	DAT	SCSI	HP*****35470A	no
HP SureStore Tape 5000 (DDS-1 2/4 GB)	DAT	SCSI	HP*****35480A	no
HP SureStore DAT8 (DDS-2 4/8GB)	DAT	SCSI	HP******C1533A	no
HP SureStore DAT24 (DDS-3 12/24GB)	DAT	SCSI	HP******C1537A	yes
HP StorageWorks DAT24 (DDS-3 12/24GB)	DAT	USB	HP******C1537A	yes

<sup>&</sup>lt;sup>5</sup> The "\*" character denotes a space in the inquiry string.

If the tape drive is connected using the embedded U320 SCSI controller, the firmware must be a minimum of 5.05.19

For the ProLiant ML350 G4: Download system ROM dated 8/16/2005 or later For the ProLiant ML370 G4: Download system ROM dated 11/09/2005 or later For the ProLiant ML570 G3: Download system ROM dated 10/25/2005 or later

If the tape drive is connected using the single channel (374654-B21) U320 SCSI HBA or the dual channel (268351-B21) U320 SCSI HBA the firmware needs to be minimum of 5.05.20

If the tape drive is connected using the Smart Array SA5x RAID controller (embedded or HBA) OBDR is not supported.

If the tape drive is connected to the ProLiant, running Linux, using the Smart Array SA6x controller (embedded or HBA), the following CCISS driver is required:

RHEL3 minimum version 2.4.60-8

SUSE8 minimum version 2.4.60-8

RHEL4 minimum version 2.6.10-8

SUSE9 minimum version 2.6.10-8

If the tape drive is connected to the ProLiant, running Linux, using a LSI U320 SCSI controller (embedded and HBA) the following non-RAID drivers are required:

RHEL3 minimum version 2.06.24-4

SUSE8 minimum version 2.06.24-4

RHEL4 minimum version 3.02.56-4

SUSE9 minimum version 3.02.56-4

These referenced drivers are available on <a href="http://www.hp.com">http://www.hp.com</a>

For the latest information please see <a href="http://www.hp.com/qo/obdr">http://www.hp.com/qo/obdr</a>

<sup>&</sup>lt;sup>6</sup> The HP One-Button Disaster Recovery feature (OBDR) allows a system to boot from a locally attached tape drive with any full backup tape loaded with no additional preparation steps required. OBDR is supported via the Data Protector Express Bare Metal Disaster Recovery option. Data Protector Express supports OBDR on HP ProLiant servers on all supported Windows and Linux operating systems but not on NetWare. The following ProLiant specific requirements must be met:

DAT DAT DAT	SCSI SCSI USB	HP******C5683A	<mark>support<sup>6</sup></mark> yes
DAT DAT	USB	HP*****C5683A	
DAT			yes
	6.66:	HP*****C5683A	yes
DAT	SCSI	HP*****C7438A	yes
	USB	HP******C7438A	yes
DAT	SCSI	HP*****DAT160	yes
DAT	USB	HP*****DAT160	yes
DAT	SAS	HP*****DAT160	yes
DLT	SCSI	HP******DLT*VS80	no
DLT	SCSI	HP******DLT*VS160	no
DLT	SCSI	COMPAQ**SDLT320	yes
SDLT	SCSI	COMPAQ**SDLT600	yes
LTO	SCSI	HP******Ultrium*1-SCSI	yes
LTO	SCSI	HP******Ultrium*1-SCSI	yes
LTO	SCSI	HP******Ultrium*1-SCSI	yes
LTO	SCSI	HP******Ultrium*2-SCSI	yes
LTO	SAS	HP******Ultrium*2-SCSI	yes
LTO	SCSI	HP******Ultrium*2-SCSI	yes
LTO	SCSI	HP******Ultrium*3-SCSI	yes
LTO	SAS	HP******Ultrium*3-SCSI	yes
LTO	SCSI	HP******Ultrium*3-SCSI	yes
LTO	SAS	HP******Ultrium*4-SCSI	yes
LTO	SCSI	HP******Ultrium*4-SCSI	yes
		1	
	DLT  DLT  SDLT  LTO  LTO  LTO  LTO  LTO  LTO  LTO	DIT SCSI  DIT SCSI  DIT SCSI  SDIT SCSI  LTO SAS	DLT SCSI HP*****DLT*VS160  DLT SCSI COMPAQ**SDLT320  SDLT SCSI COMPAQ**SDLT600  LTO SCSI HP*****Ultrium*1-SCSI  LTO SCSI HP*****Ultrium*1-SCSI  LTO SCSI HP*****Ultrium*1-SCSI  LTO SCSI HP*****Ultrium*2-SCSI  LTO SCSI HP*****Ultrium*2-SCSI  LTO SCSI HP*****Ultrium*3-SCSI  LTO SCSI HP*****Ultrium*3-SCSI

For details on Operating System Support, please check www.hp.com/go/connect

## **HP Tape Autoloaders**

Model	Format	Slots / Drives	Interface	Inquiry String <sup>7</sup>
HP SureStore 12000 DAT8 Autoloader (DDS-2 Six Tape Autoloader)	DAT	6/1	SCSI	HP******C1553A
HP SureStore DAT24x6 Autoloader (DDS-3 Six Tape Autoloader)	DAT	6/1	SCSI	HP******C1557A
HP SureStore DAT40x6 Autoloader (DDS-4 Six Tape Autoloader)	DAT	6/1	SCSI	HP******C5713A
HP StorageWorks DAT72x6 Autoloader (DAT72 Six Tape Autoloader)	DAT	6/1	SCSI	HP*****DAT72x6
HP StorageWorks DAT72x10 Autoloader (DAT72 Ten Tape Autoloader)	DAT	10/1	SCSI	HP******C7438A
HP StorageWorks VS80 1/8 Autoloader (C9264CB)	DLT	8 / 1	SCSI	HP******C9264CB-VS80
HP StorageWorks 1/8 DLT vs80 Autoloader (Library ID : HP C9264CB-VS80)	DLT	8 / 1	SCSI	HP******C9264CB-VS80
HP SureStore 1/9 Autoloader (C71451) DLT, Ultrium	LTO / DLT	9/1	SCSI	HP******C7145-8000
HP StorageWorks 1/8 Autoloader (ThinStor) DLT, Ultrium	LTO / SDLT	8 / 1	SCSI	HP*****ThinStor*AutoLdr
HP StorageWorks 1/8 G2 Tape Autoloader	LTO	8 / 1	SCSI, <b>SAS</b>	HP*****1x8*G2*AutoLdr

**HP Tape Library Systems**<sup>8</sup>

Model	Format	Interface	Inquiry String	OBDR Support
HP StorageWorks MSL2024	LTO	SCSI, SAS	HP MSL G3	No
HP StorageWorks MSL2024	LTO	Fibre Channel <sup>9</sup>	HP MSL G3	No
HP StorageWorks MSL4048	LTO	SCSI, SAS	HP MSL G3	No
HP StorageWorks MSL4048	LTO	Fibre Channel <sup>9</sup>	HP MSL G3	No

<sup>&</sup>lt;sup>7</sup> The "\*" character denotes a space in the inquiry string

<sup>&</sup>lt;sup>8</sup> Please see Customer Advisory C00743086 for more details - HP Data Protector Express Version 3.1 may generate a tape mount request when using two drive versions of HP StorageWorks MSL 2024

<sup>9</sup> Peer to peer connection supported (no device sharing). Currently no BMDR support of the host system.

## **HP Virtual Tape Library Systems**

Model	Format Emulation	Interface	Inquiry String	Support versions
HP StorageWorks VLS 1000 Series	LTO	iSCSI	HP VLS 1000	
HP StorageWorks D2D 110 Backup System	LTO	iSCSI	HP D2DBS (loader) HP ThinStor AutoLdr (loader) HP Ultrium 2-SCSI	1.0, 1.1
HP StorageWorks D2D 110 Backup System	LTO	iSCSI	HP D2DBS (loader) HP ThinStor Autoldr (loader) <sup>10</sup> HP Ultrium 2-SCSI HP******1x8*G2*Autoldr	1.2
HP StorageWorks D2D 120 Backup System	LTO	iSCSI	HP D2DBS (loader) HP ThinStor AutoLdr (loader) HP Ultrium 2-SCSI	1.0, 1.1
HP StorageWorks D2D 120 Backup System	LTO	iSCSI	HP D2DBS (loader) HP ThinStor Autoldr (loader) <sup>10</sup> HP Ultrium 2-SCSI HP******1x8*G2*Autoldr	1.2

 $<sup>^{10}</sup>$  'HP ThinStor AutoLdr (loader)' will only be visible if the firmware was upgraded from D2D Backup System 1.0/1.1 to D2D Backup System 1.2 with a ThinStor device already configured.

#### **HP CD & DVD Writers**

Model	Inquiry String <sup>11</sup>	Interface	Supported media (write)	Operating System(s)
HP DVD Movie Writer DC4000	HP DC4000	USB	CD-R, CD-RW, DVD+R, DVD-R, DVD+RW, DVD-RW	Windows, Linux, Novell
HP 24X Combo Drive (DC364B)	hl-dt-st rw dvd GCC-4241N	USB <sup>12</sup>	CD-R, CD-RW, DVD-ROM	Windows, Linux, Novell
HP DVD+R/RW 8X Slim (383975-B21)	TEAC DVD-W28EW	IDE	CD-R, CD-RW, DVD+R, DVD-R, DVD+RW, DVD-RW	Windows, Linux, Novell
HP CD-RW/DVD-ROM 48X Combo Drive Option Kit (331346-B21)	HL-DT-ST RW DVD GCC-4482B	IDE	CD-R, CD-RW	Windows, Linux, Novell
HP 16X Half Height DVD+RW Drive (383974-B21)	HL-DT-ST DVDRRW GWA-4166B	IDE	CD-R, CD-RW, DVD-R, DVD+R, DVD+RW, DVD- RW	Windows, Linux, Novell
HL-DT-ST	HL-DT-ST GCC-4480B	IDE	CD-R, CD-RW	Windows, Linux, Novell
HP / TEAC	TEAC DW-224E	IDE	CD-R, CD-RW	Windows, Linux, Novell
HP UltraSpeed +	GCE-8487B	IDE	CD-R, CD-RW	Windows, Linux, Novell
HL-DT-ST DVDRVV	GWA-4166B	IDE	CD-R, CD-RW, DVD-R, DVD+R, DVD-RW	Windows, Linux, Novell
LITE-ON COMBO SOHC-4836K	LITE-ON COMBO SOHC-4836K	IDE	CD-R, CR-RW	Windows, Linux, Novell

<sup>&</sup>lt;sup>11</sup> With Data Protector Express running the Inquiry String is seen by selecting the device (Favorites/Devices) then opening the diagnostics window (Commands/Diagnostics) and looking at the Device Inquiry Information.

<sup>&</sup>lt;sup>12</sup> Requires USB cradle DC373B.