

Dell™ PowerVault™ Backup to Disk Appliance

Interoperability Guide

This document provides information about the supported hardware and software versions for the Dell PowerVault™ Backup to Disk Appliance system.



NOTE: The versions specified in this document use the same format as found on <http://support.dell.com/support/downloads/> and may differ from the version information displayed in the Windows® Device Manager or Dell™ OpenManage™ Server Administrator.

Supported Hardware

This section lists the hardware supported by PowerVault Backup to Disk Appliance systems. Where applicable, firmware and driver versions are also listed.

BIOS Versions

System	BIOS Version
DL2000	2.4.3 or later
DL2100 (with Microsoft Windows Server 2008 x64 Standard Edition, SP2)	2.1.15 or later
DL2100 (with Microsoft Windows Server 2008 R2 Standard Edition, SP1)	3.0.0 or later
DL2200 (with Microsoft Windows Server 2008 x64 Standard Edition, SP2)	1.4.0 or later
DL2200 (with Microsoft Windows Server 2008 R2)	1.5.1 or later
DL2300	1.1.2 or later

Hard Drives (Internal)

System	Internal RAID Controller	Slots	Drive Type	RAID Level	
DL2000	SAS 6/iR	0,1	Two (2) hot-swappable 3.5-inch SATA drives	1	
DL2100	SAS 6/iR	0,1	Two (2) hot-swappable 3.5-inch SATA drives	1	
		PERC 6/i	0,1	Two (2) hot-swappable 3.5-inch SATA drives	1
	2-5	Four (4) hot-swappable 3.5-inch SATA drives	6		
DL2200	PERC H700	0	Hot-swappable 3.5-inch Nearline SAS drive (hot spare)	N/A	
		1-5, 6-11	Eleven (11) hot-swappable 3.5-inch Nearline SAS drives	5	
		0-5,6-11	Twelve (12) hot-swappable 3.5-inch Nearline SAS drives	6 ²	
		0-11	Twelve (12) hot-swappable 3.5-inch Nearline SAS drives	6 ²	
		12-13 ¹	Two (2) 2.5-inch Nearline SAS drives	1	
DL2300	PERC H710	0-5	Six (6) hot-swappable 3.5-inch SAS drives	10	
		Value Configuration	6-11	Six (6) hot-swappable 3.5-inch Nearline SAS drives	6
		12-13 ¹	Two (2) 2.5-inch Nearline SAS drives	1	

DL2300	PERC H710	0-5	Six (6) hot-swappable 3.5-inch SAS drives	10
Enterprise Configuration		6-11	Six (6) hot-swappable 3.5-inch SAS drives	10
		12-13 ¹	Two (2) 2.5-inch Nearline SAS drives	1

¹ Slots 12 and 13 are located within the DL2200 chassis. For information on locating these drives, see the *Dell PowerVault DL2200/ DL2300 Hardware Owner's Manual*.

² Auto-provisioning of RAID6 Configurations are only supported with Windows Server 2008 R2 SP1

Storage Enclosures

Storage Enclosure	Firmware Revision	Number of Enclosures Supported
PowerVault MD1000	A04 or later	Six (6) per PERC 6/E with a single SAS cable. Three (3) per PERC 6/E with dual SAS cables.
PowerVault MD1200	1.0.1 or later	Eight (8) per PERC H800 with a single SAS cable. Four (4) per PERC H800 with dual SAS cables.



NOTE: To connect or disconnect the redundant SAS cable(s), the DL2xxx system must be powered off.

Hard Drives (External)

Storage Enclosure	RAID Controller	Drive Type	Drive Capacity
PowerVault MD1000	PERC 6/E	SATA	250GB, 500GB, 750GB, 1TB, 2TB
PowerVault MD1200	PERC H800	Nearline SAS	500GB, 1TB, 2TB, 3TB

Network Interface Controllers (NIC)

System	NIC	Driver Revision
DL2000	Broadcom NetXtreme	12.4.0 or later
	Broadcom NetXtreme II	12.4.0 or later
	Intel PRO PCI-E Gigabit (2007)	10.5 or later
	Intel PCI-E 10 Gigabit server adapters	10.5 or later
DL2100 (with Microsoft Windows Server 2008 x64 Standard Edition, SP2)	Broadcom NetXtreme II	14.1.5, or later
	Intel 10GBase-T Copper Single-Port NIC	11.6 or later
	Intel Gigabit ET Quad Port Server Adapter	11.6 or later
DL2100 (with Microsoft Windows Server 2008 R2 Standard Edition, SP1)	Broadcom NetXtreme II	16.2.1, or later
	Intel 10GBase-T Copper Single-Port NIC	11.6 or later
	Intel Gigabit ET Quad Port Server Adapter	11.6 or later
DL2200	Broadcom NetXtreme II	14.2.3 or later

(with Microsoft Windows Server 2008 x64 Standard Edition, SP2)	Intel 10Gig and 1Gig Family of Server Adapters	12.0 or later
DL2200	Broadcom NetXtreme II	16.0 or later
(with Microsoft Windows Server 2008 R2)	Intel 10Gig and 1Gig Family of Server Adapters	12.5 or later
DL2300	Broadcom 57800S Quad-Port SFP+ NDC	17.4.0 or later
	Broadcom 5720 Dual-Port 1GbE NIC	17.4.0 or later

RAID Controllers



NOTE: Dell does not support upgrading internal RAID controllers. The internal controller shipped with the system is the only supported configuration.

System	RAID Controller	Max Number of Controllers	Firmware Revision	Driver Revision
DL2000	SAS 6/iR (internal)	1	00.25.47.00.06.22.03.0 or later	1.28.03.01 (64-bit) or later
	PERC 6/E (external)	2	6.1.1-0045 or later	2.23.0.64 (64-Bit) or later
DL2100 (with Microsoft Windows Server 2008 x64 Standard Edition, SP2)	SAS 6/iR (internal)	1	00.25.47.00.06.22.03.00 or later	1.28.03.01 (64-bit) or later
	PERC 6/i (internal)	1	6.2.0-0013 or later	2.24.0.64 (64-Bit) or later
	PERC 6/E (external)	2	6.2.0-0013 or later	2.24.0.64 (64-Bit) or later
DL2100 (with Microsoft Windows Server 2008 R2 Standard Edition, SP1)	SAS 6/iR (internal)	1	00.25.47.00.06.22.03.00 or later	1.28.03.01 (64-bit) or later
	PERC 6/i (internal)	1	6.3.0-0001 or later	2.24.0.64 (64-Bit) or later
	PERC 6/E (external)	2	6.3.0-0001 or later	2.24.0.64 (64-Bit) or later
DL2200 (with Microsoft Windows Server 2008 Standard x64 Edition, SP2)	PERC H700	1	12.10.1-0001 or later	4.23.0.64 or later
	PERC H800	2	12.10.1-0001 or later	4.23.0.64 or later
DL2200 (with Microsoft Windows Server 2008 R2)	PERC H700	1	12.10.1-0001 or later	4.31.1.64 or later
	PERC H800	2	12.10.1-0001 or later	4.31.1.64 or later
DL2200	PERC H710	1	21.0.1-0132 or later	5.1.112.64 or later
DL2300	PERC H810	Value – 1 Enterprise - 2	21.0.1-0132 or later	5.1.112.64 or later

Display Resolution

The minimum display resolution is 1024 by 768.

Tape Devices

For a list of supported tape devices, firmware and driver versions, see the *Dell™ PowerVault™ Compatibility Matrix* at www.dell.com/pvmatrix.



NOTE: Symantec Backup Exec™ uses a device driver that is installed with the software. CommVault Simpana® software uses the OEM-supported drivers listed in the Dell PowerVault Compatibility Matrix.



NOTE: If a tape library attached to the DL Backup to Disk Appliance Powered by Symantec contains more than one tape drive, a Library Expansion Option must be purchased. If you have the Symantec Backup Exec™ Comprehensive Management or Application Edition, the Library Expansion Option is included.

Tape Host Bus Adapters (HBA)

System	HBA	Max Number of HBAs	Firmware Revision	Driver Revision
DL2000	SAS 5/E	1	00.10.51.00.06.12.05.00 or later	1.28.03.01 or later
DL2100 (with Microsoft Windows Server 2008 x64 Standard Edition, SP2)	SAS 5/E	1	00.10.51.00.06.12.05.00 or later	1.28.03.01 or later
	6Gbps SAS	1	07.02.42.00 or later	2.0.12.10 or later
DL2100 (with Microsoft Windows Server 2008 R2 Standard Edition, SP1)	SAS 5/E	1	00.10.51.00.06.12.05.00 or later	1.28.03.01 or later
	6Gbps SAS	1	07.02.42.00 or later	2.0.35.10 or later
DL2200 (with Microsoft Windows Server 2008 Standard x64 Edition, SP2)	6Gbps SAS	1	07.02.42.00 or later	2.0.12.10 or later
DL2200 (with Microsoft Windows Server 2008 R2 Standard)	6Gbps SAS	1	07.02.42.00 or later	2.0.12.20 or later
DL2200 (with Microsoft Windows Server 2008 R2 Standard)	6Gbps SAS	1	07.03.05.00 or later	2.0.35.10 or later

Supported Backend Targets

These platforms have been validated as backup targets for the DL Backup to Disk Appliance. For more information, see <http://support.dell.com/support/edocs/stor-sys/pvdl2200/comvault/en/index.htm> and <http://support.dell.com/support/edocs/stor-sys/pvdl2200/symantec/en/index.htm>

- Dell EqualLogic PS Series Arrays
- Dell PowerVault MD3000i Array
- Dell AX4-5 FiberChannel Array

Supported Software

This section lists the supported operating systems and applications on the PowerVault DL Backup to Disk Appliance.



NOTE: To determine if a third-party software application on a protected server is supported, contact the independent software vendor (ISV) distributing the application. Running applications other than those listed in this document on the PowerVault DL Backup to Disk Appliance is not supported.

Operating System



NOTE: Clustering is not supported on the PowerVault DL Backup to Disk Appliance.

System	Operating System
DL2000	Microsoft® Windows® Server 2008 x64 Standard Edition
	Microsoft® Windows® Server 2008 R2 Standard Edition, SP1
DL2100	Microsoft Windows Server 2008 x64 Standard Edition, SP2
	Microsoft Windows Server 2008 R2 Standard Edition, SP1
DL2200	Microsoft Windows Server 2008 Standard x64 Edition, SP2
	Microsoft Windows Server 2008 R2 Standard Edition
	Microsoft Windows Server 2008 R2 Enterprise Edition, SP1
DL2300	Microsoft Windows Server 2008 R2 Standard Edition, SP1
	Microsoft Windows Server 2008 R2 Enterprise Edition, SP1

Applications

PowerVault System	Application	Application Type	Version
DL2000	Dell™ OpenManage™ Server Administrator	Systems Management	6.5 or later
DL2100	Dell™ OpenManage™ Server Administrator	Systems Management	6.5 or later
DL2200	Dell™ OpenManage™ Server Administrator	Systems Management	6.5 or later
DL2300	Dell™ OpenManage™ Server Administrator	Systems Management	7.1.0 or later

Backup Software

See the following tables for information about the supported versions of backup software. The required version is determined by the system and installed RAID controller(s).

CommVault® Simpana® Backup and Recovery



NOTE: To configure this appliance as a Media Agent in a CommCell™, the CommServe® system must be at the same software version as the DL2xxx appliance.

System	RAID Controller	7.4	8.0 SP1	8.0 SP4	8.0 SP4 with May2010 Update Pack	8.0 SP6 or later	9.0	9.0 SP2 or later	9.0 SP7 or later
DL2000 (with Microsoft Windows Server 2008 x64 Standard Edition, SP2)	SAS 6/iR	✓	✓	✓	✓	✓	✓	✓	✓
	PERC 6/E	✓	✓	✓	✓	✓	✓	✓	✓
DL2000 (with Microsoft Windows Server 2008 R2 Standard Edition, SP1)	SAS 6/iR					✓		✓	✓
	PERC 6/E					✓		✓	✓
DL2100 (with Microsoft Windows Server 2008 x64 Standard Edition, SP2)	SAS 6/iR		✓	✓	✓	✓	✓	✓	✓
	PERC 6/i			✓	✓	✓	✓	✓	✓
	PERC 6/E		✓	✓	✓	✓	✓	✓	✓
DL2100 (with Microsoft Windows Server 2008 R2 Standard Edition, SP1)	SAS 6/iR					✓		✓	✓
	PERC 6/i					✓		✓	✓
	PERC 6/E					✓		✓	✓
DL2200 (with Microsoft Windows Server 2008 Standard x64 Edition, SP2)	PERC H700				✓	✓	✓	✓	✓
	PERC H800				✓	✓	✓	✓	✓
DL2200 (with Microsoft Windows Server 2008 R2)	PERC H700						✓	✓	✓
	PERC H800						✓	✓	✓
DL2300	PERC H710, PERC H810								✓

Symantec Backup Exec



NOTE: To configure this appliance as a Managed Media Server (MMS) in a CASO environment Central, the Central Administration Server (CAS) must be the same version as the DL2xxx appliance

System	RAID Controller	12.5	2010	2010 R2	2010 R3 or later
DL2000 (with Microsoft Windows Server 2008 x64 Standard Edition, SP2)	SAS 6/iR	✓	✓	✓	✓
	PERC 6/E	✓	✓	✓	✓
DL2000 (with Microsoft Windows Server 2008 R2 Standard Edition, SP1)	SAS 6/iR				✓
	PERC 6/E				✓
DL2100 (with Microsoft Windows Server 2008 x64 Standard Edition, SP2)	SAS 6/iR	✓	✓	✓	✓
	PERC 6/i		✓	✓	✓
	PERC 6/E	✓	✓	✓	✓
DL2100 (with Microsoft Windows Server 2008 R2 Standard Edition, SP1)	SAS 6/iR				✓
	PERC 6/i				✓
	PERC 6/E				✓
DL2200 (with Microsoft Windows Server 2008 Standard x64 Edition, SP2)	PERC H700		✓	✓	✓
	PERC H800		✓	✓	✓
DL2200 (with Microsoft Windows Server 2008 R2 Standard)	PERC H700			✓	✓
	PERC H800			✓	✓

Appliance Software Stack Release

See the following table for information about the supported versions of the appliance software stack. The required version is determined by the system, the installed RAID controller, and (if applicable) HBA.



NOTE: You can locate the software stack version in the **Appliance Information** section on the **Home** tab of the PowerVault DL Backup to Disk Appliance console.

System	RAID Controller	1.x	2.0	2.1	3.x	4.x
DL2000	SAS 6/iR	✓	✓	✓	✓	
	PERC 6/E	✓	✓	✓	✓	
DL2100	SAS 6/iR		✓	✓	✓	
	PERC6/i			✓	✓	
	PERC 6/E		✓	✓	✓	
DL2200	PERC H700				✓	
	PERC H800				✓	
DL2300	PERC H710, PERC H810					✓

System	Tape HBA	1.x	2.0	2.1	3.x	4.x
DL2000	SAS 5/E	✓				
DL2100	SAS 5/E	✓	✓	✓	✓	
	6 GBps SAS			✓	✓	
DL2200	6 GBps SAS				✓	
DL2300	6 GBps SAS					✓

Supported Backup Software Agents

Software	Version	Supported Agent Requirements
Symantec™ Backup Exec™	12.5	Supported Agent requirements can be located at http://dell.symantec.com/files/3/dl2000%20agent%20and%20option%20requirements.pdf
Symantec™ Backup Exec™	2010 or later	Supported Agent requirements can be located at http://dell.symantec.com/files/3/DL%20Agent%20and%20Option%20Requirements.pdf
CommVault® Simpana® Backup and Recovery	7.4 or later	Supported Agent requirements can be located at http://documentation.commvault.com/dell . Under Release (version number) Books Online, click Simpana→System Requirements→Backup and Recovery Agents

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