Dell and Nexenta Software-Defined Storage Solutions

Manage data efficiently and cost-effectively with Dell and Nexenta software-defined storage solutions

High-performance, highly flexible storage solutions

Dell™ and Nexenta™ software-defined storage solutions offer a comprehensive suite of storage management services that run on Dell servers and disk enclosures. Delivering highly flexible software-defined storage, Dell and Nexenta solutions provide benefits such as SAN and native NAS protocol support, unlimited snapshots and cloning, block and file replication, inline deduplication, and comprehensive management capabilities.

Optimize performance and capacity

Dell's partnership with Nexenta gives customers more choices, including performance and capacity-optimized configurations to handle large-scale virtualization and file-based workload requirements. Dell has established a close relationship with Nexenta to develop validated and certified reference architectures (RAs). Currently, the Dell Storage MD1280, MD3060e, MD1400 and MD1420 are supported in Dell and Nexenta RAs. In addition, Dell and Nexenta are offering an RA for the R730xd in standalone (non HA) configuration to deploy cost-effective software-defined storage solutions for your environment.

Easily expand as needed

Expand your environment with a software-defined storage architecture that readily adapts to business growth. You can adapt to the latest server and disk technologies to handle ever-increasing workload requirements without incurring additional software licensing costs. Dell and Nexenta solutions are pre-configured, pre-sized and validated. They are also available in build-to-order configurations with Dell PowerEdge™ 13th generation servers and Dell 6G and 12G SAS storage enclosures (JBODs) to meet your exact performance requirements. You can also upgrade to the latest hardware technology and non-disruptively add capacity as your business grows.

Dell and Nexenta solutions features:

- Complete hardware and software stack for virtualized and file workloads

- Choice of CPU, RAM, read/write cache, and drive options to meet capacity and performance requirements

- 44TB to 3.6PB raw storage capacity

- Flexibility to easily expand capacity as needed by adding Dell storage enclosures

- Inline deduplication and native compression to help eliminate redundant data and reduce capacity

- Unlimited snapshots to optimize recovery time and recovery point objectives

Dell and Nexenta storage-defined software solutions reference configurations are built to order. You may specify:

- Any rotating disk drive supported by the MD JBOD
- Any type and amount of memory and processors supported by the R730 server

Storage reference configurations

	Entry Level (MD1420)	Midrange (MD1400)	Midrange Expanded (MD1400)	Large (MD3060e)	Large Expanded (MD3060e)
Data drive #	44	44	88	114	228
Memory (total system)	96GB (12 x 8GB DIMMs)	96GB (12 x 8GB DIMMs)	96GB (12 x 8GB DIMMs)	256GB (16 x 16GB DIMMs)	256GB (16 x 16GB DIMMs)
SAS HBA	4 x Dell 12G SAS HBA	4 x Dell 12G SAS HBA	8 x Dell 12G SAS HBA	4 x LSI 9207-8e (6G SAS)	8 x LSI 9207-8e (6G SAS)
Storage enclosure	2 x MD1420 (24-bay)	4 x MD1400 (12-bay)	8 x MD1400 (12-bay)	2 x MD3060e (60-bay)	4 x MD3060e (60-bay)
Data HDD (max capacity)	2TB	8TB	8TB	8TB	8TB
Data HDD (type)	NL-SAS 7.2K 2.5"	NL-SAS 7.2K 3.5"	NL-SAS 7.2K 3.5"	NL-SAS 7.2K 3.5"	NL-SAS 7.2K 3.5"
L2ARC	Up to 800GB	Up to 800GB	Up to 1.6TB	Up to 1.6TB	Up to 1.6TB
ZIL/SLOG	2 x Toshiba 400GB SSD	2 x Hitachi 400GB SSD	4 x Hitachi 400GB SSD	4 x Hitachi 400GB SSD	8 x Hitachi 400GB SSD
10GbE port	2				
Software	NexentaStor 4.0				
Protocol	NFS v3, NFS v4, CIFS, SMB 2.1, Fibre Channel, iSCSI				
Client OS	Red Hat® Linux Enterprise®, Microsoft® Windows®, Microsoft Hyper-V®, VMware®, OpenStack®, CloudStack®				
Server	2 x 2U PowerEdge R730 rack servers				
Boot drive	2 x 1TB 7.2K RPM NL-SAS 3.5" HDD				
NIC	1x Intel X520 10GbE DA/SPF+				

Backup/Archive reference configurations   Dense storage reference configurations

	Backup and Archive 1 (MD3060e)	Backup and Archive 2 (MD3060e)	Backup and Archive 3 (MD3060e)	Performance Dense (MD1280)	Backup and Archive Dense (MD1280)
Data drive #	120	240	480	168	168
Memory (total system)	256GB (16 x 16GB DIMMs)	256GB (16 x 16GB DIMMs)	256GB (16 x 16GB DIMMs)	512GB (32 x 16GB DIMMs)	256GB (16 x 16GB DIMMs)
SAS HBA	4 x LSI 9207-8e (6G SAS)	8 x LSI 9207-8e (6G SAS)	8 x LSI 9207-8e (6G SAS)	4 x LSI 9207-8e (6G SAS)	4 x LSI 9207-8e (6G SAS)
Storage enclosure	2 x MD3060e (60-bay)	4 x MD3060e (60-bay)	8 x MD3060e (60-bay)	2 x MD1280 (84-bay)	2 x MD1280 (84-bay)
Data HDD (max capacity)	8TB	8TB	8TB	8TB	8TB
Data HDD (type)	NL-SAS 7.2K 3.5"	NL-SAS 7.2K 3.5"	NL-SAS 7.2K 3.5"	NL-SAS 7.2K 3.5"	NL-SAS 7.2K 3.5"
L2ARC	N/A			Up to 800GB	N/A
ZIL/SLOG	N/A			4 x Hitachi 400GB SSD	N/A
10GbE port	2				
Software	NexentaStor 4.0				
Protocol	NFS v3, NFS v4, CIFS, SMB 2.1, Fibre Channel, iSCSI				
Client OS	Red Hat® Linux Enterprise®, Microsoft® Windows®, Microsoft Hyper-V®, VMware®, OpenStack®, CloudStack®				
Server	2 x 2U PowerEdge R730 rack servers				
Boot drive	2 x 1TB 7.2K RPM NL-SAS 3.5" HDD				
NIC	1x Intel X520 10GbE DA/SPF+				

End-to-end technology solutions

Dell provides global warranty and support for the complete solution. Reduce IT complexity, lower costs and eliminate inefficiencies by making IT and business solutions work harder for you. You can count on Dell for end-to-end solutions to maximize your performance and uptime. A proven leader in Servers, Storage and Networking, Dell Enterprise Solutions and Services deliver innovation at any scale. And if you're looking to preserve cash or increase operational efficiency, Dell Financial Services™ has a wide range of options to make technology acquisition easy and affordable. Contact your Dell Sales Representative for more information.**

Simplify Your Storage at Dell.com/Nexenta