



Technology Partner



# Dell and Nexenta: Deliver the Software Defined Data Center for Cloud & Big Data

NexentaStor is the most widely deployed Software-Defined Storage platform, allowing thousands of customers all around the world to transform their storage infrastructure to realize:

- Increased Flexibility and Agility
- Simplified Management
- Reduced Costs without Compromise

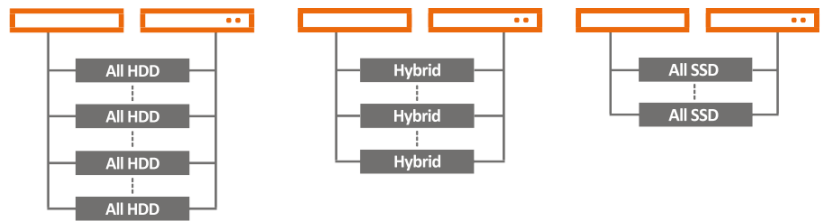
Example: Cloud and Big Data Running on Dell hardware, NexentaStor is a workhorse for scalable cloud backend and cloud hosting environments.

- Cost Effective – Most efficient data footprint and optimized I/O on Dell Servers creates the lowest TCO
- High Performance - Inline data reduction, I/O pooling and large memory caching improve performance
- Scalability – Massively scalable unified storage services for an OpenStack-powered cloud infrastructure
- Cloud Ready - Comprehensive integration behind a production ready OpenStack storage deployment for performance sensitive applications.

The Software-Defined Data Center is not just hype, but a critical ingredient enabling organizations to deal with the latest trends in Social Media, Mobility, the Internet of Things, Big Data, Analytics or Cloud Computing/Delivery. To fully achieve it, you need a “software-defined” vision, from the server to the end-user and everything in between. NexentaStor software-defined storage on Dell PowerEdge is the first step.

## The Solution

There are three main building blocks for the Dell-Nexenta Reference Architectures: Storage Controller (R730), Storage Enclosures (MD1200, MD1220 and MD3060e) and NexentaStor 4.0 software.



Nexenta is the superior cloud-ready, software-defined storage solution providing shared file and block services that is hypervisor agnostic, protocol agnostic and application agnostic with complete flexibility for all-Flash or Hybrid acceleration.



## Achieve High Value IT Benefits with a Dell-Nexenta Solution:

- *CapEx Reduction* – Eliminate the high cost of legacy hardware and create higher utilization rates for storage hardware with market leading inline data reduction.
- *Opex Reduction* – Streamline and unify management of all storage resources.
- *Improved Security-to-Effort Ratio* – Provide high level of end-to-end data integrity with triple parity RAID and 256-bit checksums.
- *HA and Resilient Infrastructure* – Configure with single controller or active/active controllers in HA pairs.
- *IT Service Delivery* – Eliminate forklift adds/upgrades/migrations and receive comprehensive management/control with unlimited snapshots/clones and async replication.

Key Solution Features	
Management Software	NexentaStor 4.x
Storage Protocols	10GbE NFS v3, NFSv4 10GbE SMB 3 10GbE iSCSI 12Gbps SAS 16Gbps FC
Supported Configurations	Controllers on R730: <ul style="list-style-type: none"> <li>– Single controller</li> <li>– Active/Active in HA pairs</li> </ul> Storage Enclosures: <ul style="list-style-type: none"> <li>– Single path with single controller in HA pair</li> <li>– Dual path with single controller</li> <li>– Multi path with HA controller pair (best practice)</li> </ul>
Data Availability and Integrity	ZFS 256-bit block level checksums RAID 10 and multi-parity software RAID Asynchronous replication
Data Services and Optimization	Flash and HDD hybrid protocols ZFS Copy On Write Unlimited writable snapshots Thin Provisioning Inline data reduction (compression, dedup)
Scalability and Management	CLI and Web UI SNMP and REST API RA Configurations up to 1PB raw
Integrations	VMware VAAI vCenter Plugin OpenStack Cinder

### Customer Spotlight: Cloud/Hosting Provider

**Who:** Wipro, Seattle, Washington

US division of one of the largest global IT service providers for consulting, integration and managed/hosting services.

**Use Case:** Needed a storage backend for two new product offerings, Live Workplace (LW) and Open Source Services (OSS). LW is a desktop-as-a-service using Citrix XenDesktop and XenMobile being offered to businesses, initially in North America. It started with 14,000 VDI seats hosted across four sites with 20% Disaster Recovery using 2PB of storage. OSS offers integration and managed services for migrating customers to open source platforms.

**Solution:** Dell R720 fronting Dell MS3060e

**Why Dell-Nexenta:** This joint solution offered the lowest cost/seat and the best scalability along with highly valued Dell support for this joint solution.

### About Nexenta

Nexenta is the global leader in Software-Defined Storage, delivering easy-to-use, secure and ultra-low cost storage software solutions. Nexenta solutions are hardware, protocol and app-agnostic, providing innovation freedom and speed for organizations to realize "true" benefits of Software-Defined Infrastructure-centric Cloud Computing. Nexenta enables workloads from rich media-driven Social Living to Mobility; from the Internet of Things to Big Data; from OpenStack and CloudStack to Do-It-Yourself Cloud deployments. Founded around an "open source" platform and industry-disruptive vision, Nexenta delivers its award and patent-winning software-only unified storage management solutions with a global partner network. Nexenta develops, integrates and tests its software solutions with Dell and the leading storage drive vendors in the industry. For more information about Nexenta and its other products, please visit [www.nexenta.com](http://www.nexenta.com) or email [sales@nexenta.com](mailto:sales@nexenta.com).

### The Dell Technology Partner Program

Nexenta is a Dell Technology Partner and NexentaStor is certified by Dell to run on the Dell platforms specified in the technical architecture section.

The [Dell Technology Partner](#) program is a multi-tier program that includes ISVs, IHVs and Solution Providers. This global program helps partners build innovative and competitive business solutions using Dell platforms. Program resources keep customer costs low and helps to sustain competitiveness.

The program has a structured and streamlined process that combines technology and business strategies with Dell Solution Center expertise to onboard and test partner products on Dell platforms. This testing process helps ensure that products have met the technical requirements to perform well on Dell platforms.

