**DELL**

**nexenta**®

# Nexenta on Dell for Archiving and Backup Solutions

## Cost-Effectively Protect Data Availability and Integrity

NexentaStor and Dell let you replace multiple data protection products with single-console management of the entire storage life cycle.

## Protect your business-critical data — and your business — with NexentaStor on Dell

Data is a critical asset for your organization. You need to make sure users can always access that data, and protect it so that it retains integrity and can be restored in the event of a system problem. But too many organizations aren't fully protecting data availability and integrity. Here are some disturbing facts:

- 30% of computer users say they spend the equivalent of one week per year reconstructing lost data.
- 40% of small- and medium-sized businesses don't back up data at all.
- Growth in file-based storage requirements is making it hard to meet recovery point objectives (RPO) and recovery time objectives (RTO) with tape-based back-up systems — but the alternative, disk-to-disk back-up, often won't work with legacy storage.

## The Nexenta-on-Dell Solution:

Deploy NexentaStor™ software-defined storage (SDS) on Dell hardware to help meet compliance requirements and protect your primary storage from data corruption or accidental deletion by leveraging snapshot technologies to rapidly provide point-in-time copies of data. In the event of a system problem or to support your compliance requirements, NexentaStor RAID can provide additional protection, even if multiple drives fail.

NexentaStor offers an accessible online data store that facilitates and safeguards your critical information for extended periods of time. It leverages open-source ZFS to deliver unified file and block storage services and includes extensive data management functionality: accelerated write performance, greater data integrity assurance, inline data reduction, fast snapshots, cloning, and more.

With NexentaStor running on Dell as your backup and archiving target, you'll get the capabilities you need in order to meet your RPOs and RTOs — all while lowering costs, easing storage management, and incorporating common software across platforms.

This joint offering simplifies adoption and time-to-value, because Dell has certified multiple Reference Architectures which scale to multi-PB configurations. Dell also provides installation guides to simplify deployment and delivers support for the full end-to-end solution.

### Benefits of the Nexenta-on-Dell Solution

- Simplify administration with single-console management for the entire storage life cycle
- Ensure data reliability and availability with built-in software RAID protection
- Increase data integrity with ZFS copy on write and checksum of all data
- Protect data better with snapshot-based replication
- Cut administrative overhead with NDMP integration
- Scale up to multiple PBs of storage raw capacity on Nexenta-on-Dell certified configurations
- Enterprise support from Dell

❝ *Nexenta's existing relationship with Dell makes purchasing and support very simple... [In terms of] performance, reliability and lower TCO, I'm very happy with how well it's gone.* ❞

**Duane Booher,**
Senior Software Systems Engineer,
Northern Arizona University

## Visit us online at nexenta.com

# Reliable, Robust, and Secure Data Center Deployments

## Overview

NexentaStor running on Dell is ideal for supporting demanding enterprise applications in physical or virtual infrastructure. It delivers disk-to-disk backup that enables you to more fully protect vital business data in primary storage systems — without the limitations of legacy storage technologies.

NexentaStor transparently supports industry-leading applications. Its unlimited file system size means you can copy, replicate, and back up all data as needed. Its software-based archiving and backup provides RAID, snapshot-based replication, HA (licensed feature), multi-protocol support, deduplication, and mirroring. Running on the Dell-NexentaStor Reference Architectures, it also delivers a hybrid Flash system that balances cost and performance.

NexentaStor is built on open-source ZFS technology, which eliminates the need to take systems off line for backups and protects data from degradation over time — bit rot — because it automatically repairs corrupted data in any configuration with mirrored or RAID-Z storage pools.

## Key Features

### RAID

ZFS offers software RAID through its RAID-Z and mirroring organization schemes. RAID-Z is invulnerable to the write hole error which other types of RAID suffer from. RAID-Z1 allows one disk to fail without impact on the delivery of file and block services, RAID-Z2 allows two disks to fail, and RAID-Z3 allows up to three disks to fail, reducing the risk involved with disk replacement.

### Hybrid Flash

Dell-NexentaStor Reference Architectures are Flash-ready, with a hybrid Flash system that balances cost and performance, using write-intensive SSDs to reduce write latency and read-intensive SSDs as a cache to reduce read latency and improve performance.

### Asynchronous Replication

Nexenta Auto-Tier and Auto-Sync (part of NexentaStor Enterprise) support remote and multi-destination replication over an IP network. Administrators can schedule this fault-managed, fully configurable data replication service to run as frequently as necessary.

### Snapshots

The Auto-Tier integrated feature snapshots local data on a scheduled or ad-hoc basis. Auto-Sync replicates the Auto-Tier created snapshots to a remote location for disaster recovery.

### Change Block Tracking

Auto-Sync and Auto-Tier support incremental intelligent replication. After initial replication is complete, Auto-Sync and Auto-Tier transfer only the accumulated differences between source and destination, minimizing network traffic across physical and virtual environments.

## Benefits

In thousands of deployments, NexentaStor runs on Dell to protect businesses' vital data assets through state-of-the-art archiving, backup, and recovery — while also dramatically cutting storage costs, reducing risk, simplifying management, and enhancing performance.

**Cut costs:** Nexenta makes it easy for you to scale storage and IOPS up or down to meet your needs. Dell hardware supports storage systems in a range of sizes.

**Reduce risk:** High performance combined with data integrity virtually eliminate everyday software risk, while industry-leading Dell hardware delivers dependability.

**Simplify management:** Create and manage storage volumes with ease: Nexenta's single-console management supports an unlimited number of snapshots, granular data recovery, mirroring to alternative installations, plus a wealth of other features.

**Enhance performance:** Ease of administration and reliability mean that NexentaStor can increase your staff productivity, reduce errors , and make the system as a whole run much faster.

## Summary

NexentaStor on Dell delivers data security with reliable archiving and backup for today's fast-growing data stores. With Dell-NexentaStor Reference Architectures, you can ensure your data is available and protected — all at a price your organization can afford.

For more information, visit www.nexenta.com/dell or www.dell.com/nexenta

www.nexenta.com/dell
www.dell.com/nexenta

**nexenta** ®
Global Leader in Software-Defined Storage.

20150212