



Technology Partner



Software-defined Storage on Dell PowerEdge Servers: Virtualize and Pool any Storage

The DataCore and Dell integrated Software-defined Storage solution enables customers to maximize the value from their storage investments, current and future.

- Optimize performance of existing storage assets
- Automate and centralize storage management
- Enable “zero touch” continuous availability of data

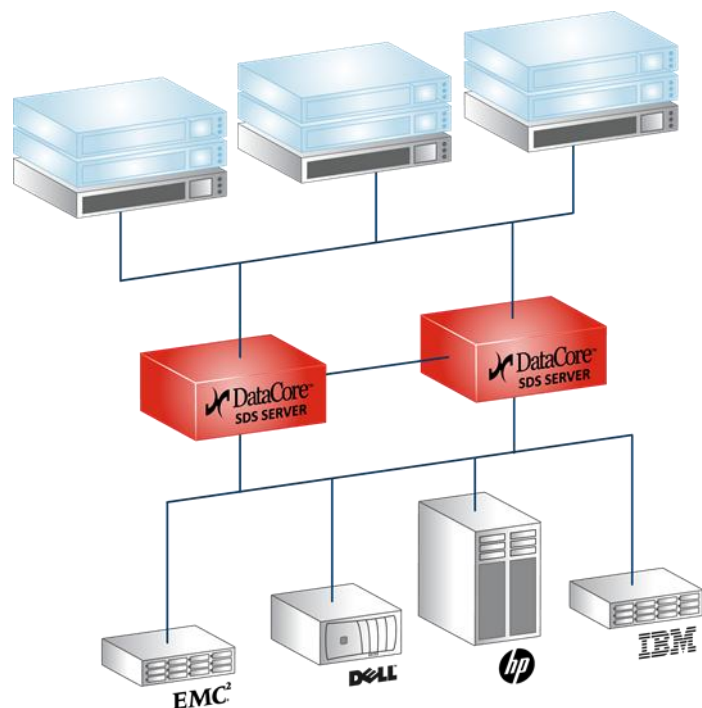
Customers of the solution report up to*:

- 100% reduction in storage-related downtime
- 10x faster performance from existing storage
- 75% reduction in storage costs
- 4x better capacity utilization
- 90% less time spent on routine storage tasks

Walk into any data center and you're sure to find different types of storage systems, each purpose-built to satisfy different projects and criteria. The high-performance equipment was justified for latency sensitive applications, while lower cost, high-capacity storage made better sense for less critical applications. Unfortunately, each class of storage brought a different set of capabilities, and with it, different administrative interfaces. The variations can be very pronounced across manufacturers, but also occur between different models from the same supplier. Such diversity complicates how storage resources are allocated and managed. It also leads to poor capacity allocation, frequent human errors, premature obsolescence and unmet service level agreements.

Harness Disparate Storage Systems with Automated Data Services

Dell has teamed with DataCore to merge these storage systems with a common set of data services, helping you drive the most value from your storage investments, current and future. Using DataCore's powerful Software-defined Storage (SDS) platform, Dell's storage lineup of PowerVault, SC Series, Compellent and EqualLogic products can be easily integrated with existing storage from a variety of vendors, including EMC, Hitachi, HP, IBM and NetApp. These resources are combined into tiers of capacity and managed as a single set of storage.



Features:

- High-speed RAM caching accelerates read and write I/O performance by up to 10x
- Auto-tiering across different classes of storage systems for fastest performance and up to 4x better utilization of resources
- Synchronous mirroring between separate storage systems at distances up to 100 kilometers for continuous availability
- Extensive automation results in up to 90% decrease in routine storage tasks

Technical Architecture

This solution consists of an integrated software-hardware package. Typically, two DataCore SDS Servers in a fully redundant configuration are inserted between hosts and external storage systems, effectively placing all storage capacity under centralized control. The hosts connect to the DataCore SDS Server as if they were connecting to a central SAN. In turn, the storage systems connect to the DataCore SDS Server just as they would connect to a host. Once-isolated storage systems become part of a virtual pool, classified into tiers according to their unique characteristics.

The system administrator provisions capacity through intuitive, high-level policies and the software dynamically selects the most appropriate storage tier and paths to achieve the desired levels of performance and availability. Each DataCore SDS Server is built using the latest generation of Dell PowerEdge servers and DataCore SANsymphony™-V software. The powerful combination provides the predictable performance, continuous availability and “plug and play” simplicity that organizations require today. Attractive price points, including 3-year maintenance and 24x7 technical support, ensure lower TCO. The DataCore SDS Servers are fully tested, integrated and configured as complete systems including all necessary hardware and software tuning to provide a simple to deploy, high-performance environment on day one.

DataCore SANsymphony-V Software

SANsymphony™-V software is a comprehensive and scalable storage services platform designed to maximize the performance, availability and utilization of your IT assets, no matter how diverse they may be, or what topology you've chosen. The software runs in the data path and has visibility to all the read and write traffic generated by applications. It uses high-speed RAM caching and the DataCore SDS server's powerful x86-64 processors to turn around requests quickly, while automatically moving data between spinning disks and flash to optimize performance. Data is mirrored in real-time between separate storage systems to maintain continuous availability despite equipment and site outages.

Extensive automation frees system administrators to care for other parts of their infrastructure. DataCore supports all of the popular storage devices from flash and disks inside servers to central SAN arrays and public cloud storage.

Delivering Compelling Business Advantages

Dramatically improves the performance of all applications:
High performance caching algorithms intelligently anticipate reads, evaluate usage patterns and transform random writes into sequential writes. In addition, auto-tiering software dynamically matches data to the most appropriate class of storage from the virtual pool.

Instantly reduces storage costs by increasing storage utilization and reducing management complexity:

Eliminates wasted storage capacity by pooling all of your storage, regardless of make/manufacturer. Centralized management using a common set of commands across disparate systems, together with extensive automation reduces administrative time.

Prevents storage outages from affecting applications:

Synchronous mirroring with automatic failover and failback between any type of storage ensures that applications are not disrupted by storage or site outages. Easily migrate data between unlike systems, during production, with zero impact to applications.

About DataCore Software

DataCore is a leader in software-defined storage. The company's storage virtualization and virtual SAN solutions empower organizations to seamlessly manage and scale their data storage architectures, delivering massive performance gains at a fraction of the cost of alternatives. Backed by 10,000 customer sites around the world, DataCore's adaptive and self-learning and healing technology takes the pain out of manual processes and helps deliver on the promise of the new software-defined data center through its hardware-agnostic architecture.

The Dell Technology Partner Program

DataCore Software is a Dell Technology Partner and the SANsymphony-V solution 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 help 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.

