



Dell storage

Efficiency, flexibility and reliability
with a Fluid Data architecture



More innovation. Less frustration.

It's time for a new approach to dealing with IT. One that moves your business forward without sacrificing your flexibility. Dell storage and the Dell Fluid Data architecture keep your data as dynamic as your organization by putting the right data in the right place at the right time—for the right cost.

Storage powered by choice, not consequence

The volume, velocity and value of data continues to accelerate at an ever-increasing pace. If you're like most companies, your team likely spends 70% or more of your time, money and mindshare just keeping your IT infrastructure up and running. And lately, storage is probably an increasingly frustrating part of the equation. Excessive costs, disruptive upgrades and complex management of islands of resources have limited what your team can do to move forward.

At Dell, we've taken a fresh approach to storage. One that enables you to optimize data from client to cloud. We've built a modern storage architecture based on best-of-breed technologies to deliver the new level of efficiency and flexibility your business demands. Our Fluid Data architecture offers you a path away from legacy storage toward the dynamic data center of tomorrow.

Dell storage solutions—Giving you the power to do more



Efficient

Save as much as 87% on software costs through our innovative licensing.



Reliable

Deploy next-generation data protection solutions designed to be cost-effective and reliable.



Flexible

Eliminate complex management with award-winning ease of use.

"Our relationship with Dell is more vital than ever as we continue to grow our business."

— **Geoff Aldred**
Information Services Manager
Nufarm

What makes Fluid Data different?

The unifying Fluid Data architecture is designed to automatically and intelligently optimize data everywhere, helping to transform IT operation into innovation and enabling your organization to better adapt to change.

The result? You can:

Maximize efficiency by slashing storage costs up to 80% now and in the future

- Achieve the best storage TCO in the industry
- Lower the cost of storage by up to 80% through automated tiering
- Only pay for software once with innovative licensing models that can save you up to 87%

Boost reliability by ensuring applications and information are protected and available

- Enable the absolute fastest recovery possible—minutes, not hours or days, with a near-zero RPO
- Trust storage designed to provide complete DR at a fraction of the cost
- Provide immediate, available information with storage solutions designed to be the industry's most reliable
- Rely on the industry's best proactive support

Increase agility with a flexible infrastructure designed to scale alongside your business

- Automate time-consuming tasks with intelligent hands-off management
 - Non-disruptively grow storage with your business—not before—with modular scalability
 - Virtualize effectively with the #1 storage for virtual environments
 - Deploy and migrate quickly with Dell services
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Manage your business. We'll manage your data.

Cloud. Convergence. Security. Big data. The dynamics of the data center are changing, forcing you to rethink how to best build your IT infrastructure to move your business forward. The Fluid Data architecture is designed to help you anticipate and evolve to changing—even competing—IT delivery models. Dell continues to advance the Fluid Data architecture from end to end.

Accessing and optimizing active data

- Optimize your environment with built-in intelligent tiering for drives, RAID levels and load-balancing across arrays without downtime.
- Refresh, scale and anticipate capacity and performance needs without setting yourself up for a costly forklift upgrade.
- Simplify administration and reporting with real-time access to critical information like performance, utilization and growth trends.
- Unify block and file infrastructures without the typical volume limits of NAS.

Archiving and protecting data for continuity

- Unite data protection and backup operations with thin snapshots, replication and recovery, ensuring high availability of your critical data.
- Deploy content-aware data reduction technologies to maximize disk resources and deliver better compression.

Solutions designed with your needs in mind:

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|  <p>Storage consolidation
Seamlessly scale your infrastructure while reducing acquisition and operational costs.</p> |  <p>Disaster recovery
Ensure continuity of your business simply and cost-effectively.</p> |
|  <p>Virtualized infrastructure
Fully optimize your virtualized infrastructure while managing more data with fewer resources.</p> |  <p>Data retention & governance
Preserve your critical information for long-term retention and recovery.</p> |
|  <p>Application integration & optimization
Optimally provision storage for performance, availability, and protection of your applications.</p> |  <p>Cloud integration
Enable secure, reliable data access to cloud-based resources by mobile and remote workers.</p> |
|  <p>Data protection
Protect your assets for rapid recovery while improving systems and staff efficiency.</p> | |

Compellent Storage Center

Multi-protocol enterprise storage

Performance and protection to power business-critical workloads

Compellent Storage Center is a reliable, self-optimized storage array designed to power the enterprise. Built-in intelligence boosts performance of business-critical applications while maximizing efficiency to help lower TCO. Intuitive software unifies block and file management and delivers real-time intelligence on data usage. Non-disruptive hardware scalability and perpetual software licensing make this array one of the best investments of any enterprise-class array on the market.

Key benefits:

- Save up to 87% in software costs with perpetual licensing
- Easily scale up and out across block and file without disruption or rip-and-replace
- Maximize your VMware®, Linux and Microsoft® environments without wasting time, money or disk space
- Continually optimize performance and slash costs up to 80% with features like thin provisioning and automated tiered storage
- Keep critical systems at the ready with design that delivers 99.999% availability across 26M+ hours of uptime
- Double bandwidth with the first storage array on the market to deliver 16Gb Fibre Channel end-to-end
- Count on the industry's best-Copilot Support boasts a 96.77% customer satisfaction rating



Did you know? Up to 95% of all Compellent systems ever sold are still in active use.

"Compellent boosted our SAP performance as much as 400%."

— **Kai Sookwongse**
Department Manager, Infrastructure Services
Mazda North American Operations

EqualLogic

Easy to use, virtualized IP storage

Uncomplicated and versatile, designed for growing environments

EqualLogic unified storage is ideal for fast-growing companies and organizations. EqualLogic's frameless peer storage architecture enables live, non-disruptive firmware upgrades and maintenance, as well as linear scaling of capacity and performance with each array added to a storage pool. Continuous integration with leading operating system, hypervisor and application platforms helps streamline operations, optimize resources and protect data in Microsoft®, Linux and VMware® environments. A groundbreaking, all-inclusive software model allows around-the-clock access to the latest product features and enables multiple generations of EqualLogic arrays to work in a single, virtualized pool.

Key benefits:

- Reduce costs with the array that delivers the industry's leading total cost of ownership*
- Grow your infrastructure alongside your business with peer-scale model that supports multiple generations of hardware
- Get enterprise functionality in an all-inclusive licensing package that includes data protection, load balancing, comprehensive SAN monitoring and analysis software
- Deploy the #1 storage for virtual servers and experience best-in-class integration with Microsoft®, VMware®, Linux and more



Did you know? 97% of our customers would recommend the EqualLogic PS Series.*

"Because of the all-inclusive software licensing on EqualLogic arrays, we've avoided as much as seven figures in software costs, and we've been able to act much more quickly to respond to the dynamic needs of the firm."

— **Alan Hunt**
Operations Manager
Dickinson Wright, PLLC

*Over a five-year period as compared to similar SAN arrays on the market.

PowerVault MD and NX series

Affordable entry-level storage

Value and performance, designed for consolidation without complexity

Designed for consolidation without complexity, Dell PowerVault MD3 storage arrays help customers cost-effectively address the challenges of relentless data growth with versatile solutions that are optimized for smaller-scale storage consolidation, flexible virtualization projects and high business continuity. The Dell PowerVault NX family of Network Attached Storage (NAS) systems delivers scalability and versatility for managing unstructured/file data in Windows and Linux environments.

"What we like about PowerVault is how much SAN you get for such a low cost. It's pretty amazing that you can get so much storage and redundancy so affordably."

— **Timothy P. Carroll**
Senior Network Engineer
XS, Inc.

Key benefits:

- Adapt and upgrade with ease using the modular, flexible design
- Simplify management and reduce complexity with comprehensive software and automation
- Deploy highly scalable NAS and unified storage systems to support structured application data and unstructured file data with equal ease
- Maximize performance, minimize price



PowerVault MD series offers versatile, modular disk storage to deliver storage consolidation to departmental, remote office and small business environments.

DL and TL series

D2D and D2T backup appliances

Simple protection and recovery, designed to reduce complexity for organizations of all sizes

PowerVault disk libraries and backup systems can offer native disk-to-disk alternatives to virtual tape libraries (VTLs) and eliminate the need for manual setup and management. Designed for low-touch operation, Dell PowerVault disk systems offer modular flexibility and rugged construction. With features such as proactive monitoring, alerts, reporting, and optional deduplication, PowerVault disk systems can help reduce costs, reduce complexity, streamline maintenance, and maximize system uptime.

"We're able to back up to disk quickly and offload to tape only when necessary. We like PowerVault DL because the package is all-in-one, including support. Setup was very easy."

— **Mike Leather**
Director of IT Operations
Safeway Insurance



The **PowerVault DL Backup to Disk Appliance** powered by CommVault® or AppAssure offers integrated, automated, dynamic disk provisioning. Organizations can architect backup-to-disk solutions based on the PowerVault DL to simplify operations, accelerate time to deployment and reduce costs over homegrown solutions.



The **PowerVault TL Tape Library** offers expandable and affordable tape automation for organizations that have outgrown autoloader technology or capacity. The PowerVault TL provides affordable, versatile, easy-to-use, automated, mid-range tape backup solutions for organizations of every size.

Dell PowerVault modular tape libraries and LTO drives offer versatility to help protect long-term digital investments. Modular and extremely scalable, Dell PowerVault tape libraries are designed to automate the storage, retrieval and management of tape cartridges. PowerVault delivers reliable, cost-effective business continuity and enables disaster recovery for organizations of all sizes.

DR4000

Advanced disk backup appliance

Industry-leading deduplication and compression technology to optimize data protection

The DR4000 deduplication and compression target backup appliance helps customers alleviate growing capacity and data availability issues. Removing redundant data from the backup work stream, the DR4000 is a fast, disk-based backup, data protection and recovery solution that securely stores critical data while reducing storage footprint.

Key benefits:

- Minimize cost and inefficiencies associated with distributed backup environments by eliminating redundant data
- Enable core backup to remain online, provide faster and more reliable restores and reduce the complexity around tape management
- Simplify IT operations with reduced complexity and streamlined backups



The **DR4000** deduplication appliance is a turnkey solution designed to drop into an existing backup environment, supporting many major backup applications.

DX Object Storage Platform

Archival/cloud storage

Massive scale and content-aware, designed to seamlessly grow from terabytes to petabytes

The DX Object Storage Platform is redefining cloud and archive storage through intelligent object technology to support your long-term storage needs at a massive scale. Increase data value while reducing data costs with the self-healing, self-managing and metadata-aware DX Object Storage Platform that offers a powerful combination of data and storage management features.



Did you know? The DX can start as small as 2TB and scale to billions of objects and multiple petabytes of data.

Key benefits:

- Comply with regulations for retaining media-rich data simply and cost-effectively
- Automate and secure policy-based retention, replication, distribution and deletion
- Avoid human error, maintain data integrity and reduce risk through self-healing functionality
- Affordable peer-scaling object storage architecture based on industry-standard hardware
- Provide access control, multi-tenancy and selectable data immutability for compliance and cloud

Moving your business forward

In addition to Dell's storage solutions, our portfolio of clients, servers, networking, and software products can help you approach your IT initiatives comprehensively and flexibly. And Dell storage solutions incorporate a global team of more than 30,000 trained and experienced storage and IT professionals to help put you on the path to success.

In any storage environment, Dell brings the capability, experience and know-how to further ensure success by offering professional services at any stage of a storage solution lifecycle, starting with assessment through design, implementation, operation and maintenance. Employing a flexible, modular approach, Dell professional services deliver focused, high-impact engagements to maximize return. Clear phases and decision points, coupled with validated, repeatable processes, help ensure your project's success.

Engaging Dell's professional services can help your organization enhance efficiency, focus on greater innovation and gain competitive advantage.

A man and a woman are standing in a server room, looking at a Dell laptop. The man is wearing a light blue shirt and khaki pants, and the woman is wearing a purple cardigan over a white top. They are both looking at the laptop screen. The background shows server racks with Dell logos and glowing lights.

"Dell Compellent Copilot Support is just head and shoulders above. Best in the industry. Unbelievable how great these people are."

— **Greg Folsom**
Senior Vice President of IT
Arnold Worldwide



"We knew that Dell could offer end-to-end solutions for our IT requirements, but we didn't expect such great insight into storage."

— **Robert Sailer**
Head of IT
Museum of Natural History, Vienna

Dell storage solutions give you the power to do more.

You have an unprecedented opportunity to rethink the way you approach storage—one that actually drives business outcomes. Specifically with an eye toward solutions to overcome the challenges of spiraling data growth.

With its broad product and services portfolio, Dell offers unparalleled strengths as an IT solution partner. Let Dell collaborate with you to architect a storage solution that can scale seamlessly, adapt automatically to new—even over-the-horizon—hardware and software capabilities, all while helping to reduce capital and operating costs.

As a solution partner, Dell offers the technology, know-how and experience to help you simplify operations, ensure success and maximize data availability and business uptime.

And with efficiency, scalability and innovative licensing as core design tenets, Dell storage solutions can play a vital role in shifting your resources from maintenance to innovation.

Available in over 150 countries, Dell storage solutions are providing customers greater efficiency, flexibility and reliability through automation and simplicity.

Why Dell storage solutions?

- Efficient enterprise storage solutions built on a Fluid Data architecture
- Award-winning, intelligent storage platforms
- Modular portfolio of customer-centric services
- Open, pragmatic, proven solutions
- Complete, end-to-end solution development, delivery and support
- Worldwide presence and expertise
- Industry's broadest partner ecosystem

To explore the broad portfolio of Dell storage solutions, visit www.DellStorage.com

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