

# Dell PowerStore

Smart choice for all-flash storage

## PowerStore is #1 in ease of use<sup>1</sup>



PowerStore is the only storage system with a certified MyCX<sup>SM</sup> scoring methodology by Bain & Company (the inventors of the Net Promoter System®).<sup>2</sup> [Read the white paper.](#)

## Future-Proof

- Lifecycle Extension with ProSupport –** Industry's most flexible [upgrade program](#) simplifies every phase of storage ownership
- Built for performance –** End-to-end NVMe, active/active design delivers high IOPS, sub-millisecond latency.
- Scale up and scale out –** Easy, plug-and-play expansion to over 23 PBe per cluster.<sup>3</sup>
- Cyber resiliency –** Built for 6 9s availability<sup>4</sup> and [Zero Trust cybersecurity](#). Native metro replication with witness, multicloud backup.

## Efficient

- [Lower-cost QLC options](#), 5:1 Data Reduction Guarantee,<sup>5</sup> 28% improved density,<sup>6</sup> multiple ENERGY STAR® certs
- Self-optimizing** – Built-in machine learning optimizes environment without manual effort.
- Non-disruptive hardware updates** – Protect investments and ensure your workloads are always running on the latest technology.

## Easy to Use

- Any workload** – Single unified platform supports across block, enterprise file, and containers.
- Programmable infrastructure** – Streamline DevOps, automate end-to-end workflows, innovate with multicloud.
- All-inclusive software subscription** – No license fees, non-stop PowerStore innovation.
- AIOPs** – Simplify planning, reduce risk with predictive analytics and GenAI assistant.

## New in PowerStore 4.2

- ✓ High-performance capacity solution (5200Q)
- ✓ Replication over Fibre Channel, anomaly detection, single sign-on, *and more...*
- ✓ Smart support self-healing enhancements fixes issues up to 90% faster!<sup>7</sup>



## Welcome to the best value in enterprise storage

The current period of unprecedented change across the global business and technology landscapes has been particularly impactful for storage, where IT managers are dealing with an explosion in both the amount and the distribution of data. No longer confined to a centralized location, today's applications are powered by data that is now captured and stored *everywhere*, residing in diverse formats both inside and outside the core data center.

To keep pace with rapid transformation in an AI-accelerated world, companies are adopting new distributed IT strategies such as multicloud and edge computing. Many of these deployments are well underway – and businesses that have not transitioned to a modern approach are realizing they need to catch up fast! But as solution scope and diversity increases, companies also know they can't afford to add complexity. Today's infrastructure must be future-proof *and* simple. As plans change (and change again), IT managers want storage that will adapt seamlessly. Storage that just works.

PowerStore's software-driven architecture is designed to give you a permanent agility advantage while eliminating management complexity. It can [simplify your operations](#) for the long term, helping you achieve both today's goals – and the ones you have yet to set.

## Adaptable architecture

The PowerStore advantage begins with a comprehensive lineup of enterprise capabilities that provide maximum headroom and flexibility for change.

### Any workload

PowerStore's unified design consolidates block and enterprise file storage formats in a single high-density footprint, providing a convenient, easy-to-manage platform for broad innovation. Ideal for both general purpose and specialized workloads, PowerStore supports applications as diverse as large-scale databases, cloud native apps, edge-based IoT analytics, and file-based content repositories.

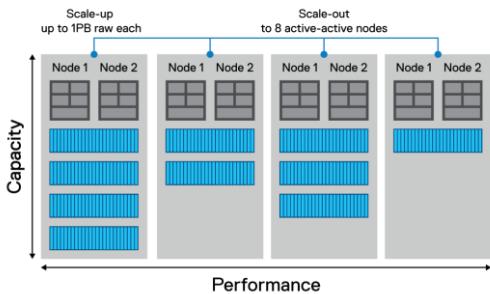
The platform fits seamlessly into existing infrastructures, with multi-protocol physical network support (including 32Gb FC and 100Gb Ethernet) and options to meet specialized industry requirements, such as DC/low-line-power, NEBS-ready solutions or government compliance. No matter where your business strategy takes you, PowerStore's full-featured, adaptable design can help you build your unique breakthrough.

### Built for performance

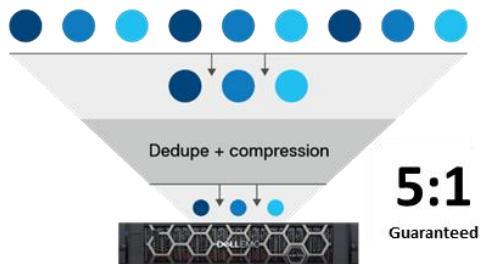
Consistent, predictable performance has long been a baseline for workload success – but the new key requirement for distributed IT is performance that can expand and grow with your needs.

Built from the ground up for NVMe technology, PowerStore provides the choice of either NVMe TLC or QLC SSDs within the appliance base chassis and expansion enclosures plus NVMe/TCP and NVMe/FC in the external network. This end-to-end NVMe ecosystem delivers extremely high IOPS and sub-millisecond latency, ensuring long-lasting value through multiple solution lifecycles.

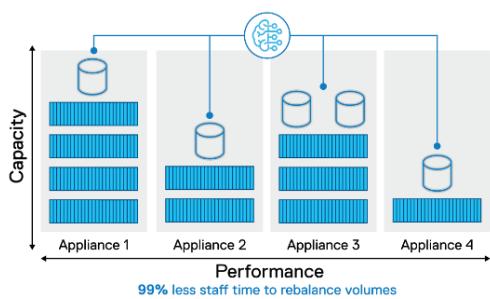
## Next-gen performance, advanced clustering



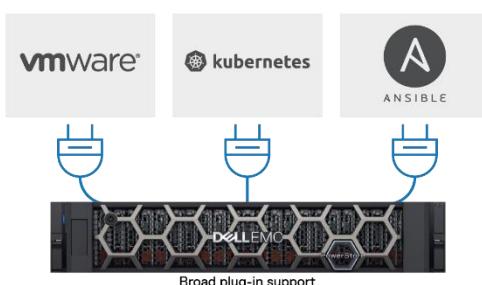
## Intelligent, “always on” data reduction



## Machine learning engine



## Automated, end-to-end workflows



## Scale up and scale out

Expanding the capabilities of your initial PowerStore configuration is simple and efficient, as performance and capacity may be scaled independently. Each PowerStore appliance features dual active-active nodes, and can grow with single-drive granularity to over 6.1 PBe NVMe capacity.<sup>8</sup> Any combination of appliances can be clustered in a federated configuration for increased processing power and capacities exceeding 23 PBe NVMe capacity.<sup>3</sup>

## Enterprise availability

No matter how you grow, PowerStore’s patented Dynamic Resiliency Engine (DRE) safeguards business-critical data, leveraging advanced virtualization methods to protect against simultaneous drive failures while maintaining high levels of efficiency and cost savings.

In multi-appliance environments, native file, block and vVols replication provides data mobility and policy-based secure and immutable snapshot [protection for any workload](#). Across shorter distances (up to 60 miles), [native metro synchronous replication](#) gives you a software-only, zero RTO/RPO high availability solution, configurable in as few as six clicks<sup>9</sup> – for no extra cost!

PowerStore’s [PowerProtect DD integration](#) even lets you set up and manage remote or multicloud backups directly from PowerStore Manager UI, using the included Instant Access feature for easy, granular restores.

## Cybersecurity

PowerStore keeps you ahead of evolving cybersecurity threats with capabilities like Secure Snapshots, Data-at-Rest Encryption, Multi-Factor Authentication, File Level Retention (FLR), Hardware Root of Trust, security analytics and new STIG mode for US Federal/DoD environments.<sup>10</sup> Data security is fundamental to PowerStore’s DNA, and the platform’s NIST-aligned development helps organizations of all kinds accelerate Zero Trust adoption to protect, prevent and recover from attacks more quickly and easily than ever.

## Built-in intelligence makes change EASY

But just having the *capability* to respond to change isn’t enough – you need change to be simple and non-disruptive.

## Self-optimizing appliance

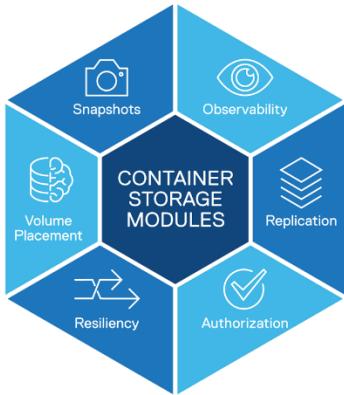
PowerStore’s integrated intelligence auto-tunes efficiency, performance, and availability without manual intervention on your part, even when you make rapid strategy shifts. All storage services are configured automatically as soon as you insert a new drive. As the solution evolves, [intelligent data reduction](#), backed by Dell’s industry leading [5:1 DRR guarantee](#),<sup>5</sup> keeps capacity and power costs consistently low, minimizing your data footprint in the background *without* compromising performance.

AI/ML processes eliminate dozens of labor-intensive tasks and decision points, for both individual and clustered appliances. From volume placement to migrations, resource balancing and issue resolution, PowerStore enables faster delivery of applications and services with up to 99% less management interaction.<sup>11</sup> Additional intelligence handles metadata tiering and [QoS](#), and the included [SmartFabric Storage Software](#) even eliminates manual effort in the network with the industry’s first automated end-to-end NVMe deployment.<sup>12</sup>

## Proactive health analytics

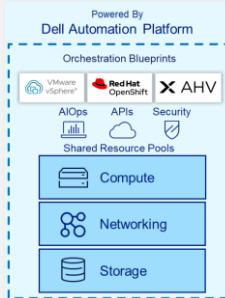
When you do need to make decisions, PowerStore lets you move forward quickly with intelligent analysis and connected insights across multiple infrastructure categories – including servers, storage, networking and cloud. PowerStore’s AIOps application, [Dell AIOPs](#), speeds time to resolution with a new GenAI assistant, reduces cybersecurity risk, improves staff productivity and forecasts future needs – with convenient cloud-based access from any mobile device.

## Enterprise storage functions for Kubernetes



## Dell Private Cloud

### Build private clouds faster and easier



[Dell Private Cloud](#) (DPC) solutions leverage Dell Automation Platform (DAP) orchestration software to help you onboard, provision and manage private clouds. Built on best-of-breed Dell PowerEdge and Dell PowerStore solutions with AI-driven automation for full-stack composability, organizations can deploy an enterprise-class on-prem cloud with 90% fewer manual steps and no vendor lock-in. Integrated with your preferred 3rd-party OS, DPC delivers appliance-like simplicity with the flexibility, efficiency and independent scalability of disaggregated infrastructure.

## Flexible consumption models

### You choose how to deploy and purchase

Deploy PowerStore as a standalone appliance or as the storage foundation within your Dell Private Cloud turnkey deployment. Either way, Dell offers flexible purchase options to simplify storage acquisition to match the needs of your organization.

From traditional CAPEX to APEX Subscriptions offerings that align spending with usage, PowerStore optimizes both technological and financial outcomes. Whether you're adding storage only, or launching an end-to-end solution involving multiple product categories, we'll make sure you get the best possible return on your IT spend – both at the start and as you expand your environment.

## Programmable infrastructure

PowerStore intelligence simplifies your overall ecosystem, streamlining application development and automating storage workflows via a powerful REST API and integrations with leading orchestration frameworks. DevOps users can shorten deployments from days to seconds,<sup>13</sup> provisioning PowerStore directly from Kubernetes using the platform's Ansible, Terraform and Container Storage Interface (CSI) plug-in integrations. [Dell Container Storage Modules](#) (CSMs) bring additional enterprise storage functions to Kubernetes, facilitating cloud native workloads, and [Amazon EKS](#) support lets you run container orchestration across public and on-premises clouds.

## Two-way VMware integrations

PowerStore offers both end-to-end VMware visibility within the PowerStore Manager interface and the ability to provision VM-level PowerStore services directly from vSphere. No matter which management perspective you prefer, these integrations help you analyze and control how PowerStore resources are consumed in a VMware environment, minimizing effort and risk, and providing quicker time to solution.

Additional integrations include vRO, VAAI and VASA support with the VSI plugins, native block, vVols, and file datastores, vVols-over-NVMe networks and native vVols replication. These capabilities make PowerStore well-suited for both standalone VMware storage deployments as well as a complement to HCI solutions such as Dell VxRail nodes.

## Hybrid and Multicloud

PowerStore's software-driven architecture offers additional flexibility with support for a range of hybrid cloud and multicloud services. From VMware Cloud Foundation (VCF) solutions that extend on-prem vSphere management to the cloud, to hyper-efficient encrypted backup with [PowerProtect Data Domain Virtual Edition](#) Cloud Tier or two-way migration between [Dell APEX Block Storage for Public Cloud](#), PowerStore helps you leverage the strengths of individual cloud providers while reducing overall cost and maintaining complete control of your data.

## Continuously modern

If the advantages stopped here, this powerful lineup of enterprise features would already offer incredible future-proofing value. But the platform is also designed to simplify transitions when PowerStore technology *itself* evolves.

## Non-stop innovation

PowerStore's container-based software architecture, known as PowerStoreOS, improves performance, fault tolerance and security by isolating individual OS components as microservices. This unique flexibility also allows the PowerStore engineering team to deliver new features and enhancements at an unprecedented pace, passing innovations quickly to customers in the form of non-disruptive upgrades.

## All-inclusive software subscription

All array software is included with the hardware purchase – both the initial OS version and the ongoing performance and feature upgrades. There are no licenses to buy and maintain, and all software enhancements are provided without cost, for the life of the product.<sup>14</sup>

## Seamless hardware upgrades

PowerStore's modular hardware platform is also designed to remain continuously modern. For example, Gen 1 customers can [upgrade the performance](#) of their current appliance to a Gen 2 equivalent (or higher model) via a simple node/controller swap – keeping their existing drives, base chassis and any expansion enclosures. These [data-in-place upgrades](#) are accomplished without downtime or application impact.

## Moving to PowerStore

### Migrate from any array

PowerStore makes it easier than ever to upgrade with [built-in tools and workflows](#). Discover and import data from any Dell or third-party platform in as few as seven clicks<sup>15</sup> using PowerStore Manager's built-in wizard. Simplify your upgrade to a modern, future-proof platform with agentless array-to-array transfers that automatically remap hosts while keeping workload performance high throughout the process.

### File migration options

Import file data to PowerStore from legacy Dell arrays with built-in tools or use advanced DataDobi DobiMigrate file migration software for third party arrays. DobiMigrate simplifies large, complex migration projects and is trusted by IT teams around the world.

## Dell Technologies Services

### Choice and flexibility throughout the life of your appliance

End-to-end ProSupport and ProDeploy services help you configure, support and optimize PowerStore, making your new infrastructure solution easy to adopt and manage.



## FUTURE-PROOF PROGRAM



**PowerStore is OEM-Ready.** If you would like to OEM PowerStore and make it part of your solution, with Dell branding or un-branded, we can support you.

## Lifecycle Extension with ProSupport

PowerStore's non-disruptive hardware upgrades are very cost-effective when purchased as add-on options – but Dell takes the benefit one step farther by combining world-class support and flexible technology upgrades within the new [Lifecycle Extension with ProSupport](#) program.

Simplify your ownership experience and unleash the full potential of your PowerStore investment with premier benefits including:

- **World-class support services:** Receive 24/7 access to live experts and access to insightful dashboards
- **Flexible technology upgrades:** Choose from higher model upgrades, capacity refreshes, scale-outs, and next generation platform upgrades
- **Appointed technical advisor:** Simplify your PowerStore upgrade and efficiency planning with expert recommendations.

Get enterprise-class support aligned to the criticality of your systems and engage with appointed technical advisors for expert guidance on maximizing the ongoing value of your PowerStore appliance. Use the flexible upgrades that best fit your business needs with included professional deployment services, allowing you to modernize your entire solution effortlessly. It's the closest thing you can get to a cloud-like experience with on-prem storage, ensuring your workloads are always running on the latest technology.

## Trust your flexible future to Dell

And of course, we're talking about a leading storage offer from Dell Technologies, which means you get all the advantages of working with a trusted world-class infrastructure provider. You'll never be limited to a single solution or deployment template. Dell has the broad business experience and deep workload knowledge to help you keep your options open in a rapidly changing world.

From portfolio scope, supply chain excellence, and top-tier ProSupport and ProDeploy services, to financial flexibility through a range of consumption and subscription options, and robust FutureProof program guarantees and assurances, the broader Dell Technologies advantage is yet another fundamental strength of the overall [PowerStore experience](#).

Get ready for a no-limits future. As PowerStore helps you build your next breakthrough – and the one after that – you can trust this continuously modern platform will be a long-term enabler of your business success.

See [PowerStore Spec Sheet](#) for additional details.

1 – Based on Dell Technologies analysis using double-blinded, competitive benchmark Net Promoter Score (NPS) data gathered by third-party commissioned by Dell for 2H FY25

2 – Based on Dell analysis comparing midrange storage providers as of June 2025. Dell Technologies was accredited with 2-star MyCX rating by Bain & Company for the period of June 2024 to June 2025. Note: MyCX Accreditation is a proprietary rating of Bain & Company, Inc. ("Bain"). Bain does not certify or endorse any Dell product or service.

3 – Assumes 5:1 average data reduction. Single appliance max for PowerStore 500 is 6.1PB. Max for other PowerStore models is 5.9PB. Actual results may vary, depending on data types.

4 – 99.9999% system availability in customer environments, running target code levels, as measured April 2022. Actual results vary.

5 – Based on Dell analysis of data reduction and effective capacity guarantees offered by primary storage competitors compared with Dell's All-Flash Data Reduction Guarantee program – April 2024. See terms and conditions for details at: [AllFlash Data Reduction Guarantee Terms and Conditions](#) – May 20, 2024. Actual data reduction rates will vary.

6 – Based on maximum effective PowerStore capacities of 4:1 versus average 5:1 data reduction. Actual results vary, refer to Power Sizer for capacity data in your environment.

7 – Based on internal testing comparing call support resolution and Smart Support auto healing time to resolution.

8 – Assumes 5:1 average data reduction. Single appliance max for PowerStore 500 is 6.1PB. Max for other PowerStore models is 5.9PB. Actual results vary, refer to Power Sizer for capacity data in your environment.

9 – Based on minimum steps and timeframe required to configure synchronous replication between two previously installed PowerStore appliances across a metro area distance. Actual steps vary by solution.

10 – With PowerStore OS 3.5, PowerStore is hardened to meet the security requirements of the US Federal Government and is on the DoDIN Approved Product List (APL).

11 – Based on Dell analysis of staff time required to maintain balanced PowerStore cluster vs. traditional multi-array deployment, March 2020. Factors in effort required to monitor, plan, define and execute volume migrations. Actual results will vary.

12 – Based on Dell analysis of time required to complete CP discovery and registration with PowerMax/PowerStore using SmartFabric Storage Software vs competitive storage solutions, March 2022.

13 – Based on Dell analysis of effort required to migrate workloads with and without Ansible and vRO orchestration integrations, March 2020. Factors in effort required to monitor, plan, define and execute volume migrations. Actual results will vary.

14 – See Future-Proof program terms and conditions for details.

15 – Based on Dell analysis of minimum effort required to execute non-disruptive migration of volume group using PowerStore's built-in migration tools for Unity, SC Series, PS Series and VNX arrays, March 2020. Actual results will vary.



[Learn More](#) about PowerStore



Contact a Dell Technologies Expert