

Dell Technologies Rewrites the Rules of Storage Modernization and Performance with Dell PowerStore Elite

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Software and hardware innovations deliver breakthrough performance today and architectural flexibility to evolve as IT needs change

- Dell PowerStore Elite is engineered for continuous modernization with non-disruptive upgrades across the entire system
- Boost performance up to 3x with software-driven improvements and 3x network throughput
- Store more data for less with new industry-best 6:1 data reduction guarantee
- Accelerate workload consolidation with up to 5.8 petabytes of effective capacity in a single 3U system
- Reduce manual effort by up to 95% with AI-driven automation and Dell Cyber Detect that discovers ransomware with 99.99% confidence

LAS VEGAS--(BUSINESS WIRE)--May 19, 2026-- **Dell Technologies World** —Dell Technologies (NYSE: DELL) introduces [Dell PowerStore Elite](#), a new class of modern storage platform that delivers breakthrough performance and efficiency through software-driven innovation and a fully refreshed hardware platform. PowerStore Elite supports block, file, virtual machines and container workloads with mixed-generation clustering that lets existing customers adopt the latest PowerStore without disruption.

This press release features multimedia. View the full release here: <https://www.businesswire.com/news/home/20260519462037/en/>



Why it matters

Enterprise storage decisions have never been more important. Data is exploding. AI workloads are expanding. Cyber threats

Dell PowerStore Elite

are intensifying. Flash supply dynamics are putting new pressure on infrastructure planning. And IT teams are expected to modernize through all of it, without adding complexity, risk or operational overhead.

PowerStore Elite is built for this moment. It's an intelligent, open storage platform combining AI-driven software, next generation hardware and non-disruptive modernization so customers can keep storage infrastructure modern as future requirements change.

Software-driven innovation at the core

PowerStore Elite's software advancements deliver up to 3x more performance¹ and 3x more throughput² than previous generation systems on a unified platform built to adapt as workloads evolve:

- **Eliminate performance tradeoffs:** PowerStore Elite delivers enterprise-class performance on either TLC or QLC media, so customers choose based on capacity and cost, rather than tier. New Autonomous Data Path intelligence applies per-I/O machine learning to optimize for QLC and future SSDs, and log-structured metadata extends usable capacity and endurance on high-capacity drives.
- **Higher efficiency, lower overhead:** Unaligned deduplication for unstructured data and enhanced compression offloads increases usable capacity with zero performance or workload impact.
- **I/O-level telemetry:** Delivers deep visibility into every read and write operation, speeding root cause analysis and laying the groundwork for forthcoming inline ransomware detection capabilities.
- **Software-driven performance gains:** Metadata Acceleration serves reads up to 70% faster for all PowerStore customers³ accelerating the lookups behind file searches and everyday operations that slow down as your data grows.

Next-generation hardware, standards-based by design

PowerStore Elite's refreshed hardware, based on Intel Xeon Scalable processors with up to 50% more Intel CPU cores⁴, DDR5 memory, PCIe Gen 5 support and a new 200Gb RDMA node interconnect improves internal load balancing and failover.

Available in three new models, Dell PowerStore 1500, 5500 and 9500, PowerStore Elite packs up to 40 drives and 5.8 petabytes of effective capacity into a single 3U chassis.⁵ It delivers up to 3x the density of prior generations⁶ on low-profile E3 NVMe flash. Because that flash is industry-standard rather than proprietary, customers benefit from broader supply, competitive pricing and freedom from vendor lock-in, a meaningful advantage in today's constrained supply environment. Up to 40 network ports per appliance, with 64Gb FC (128Gb-ready) and 200/400Gb Ethernet-ready connectivity, provide the flexibility to consolidate workloads at scale.

Industry-best 6:1 data reduction guarantee

Dell's data reduction guarantee has long been a competitive advantage. With advancements in data path efficiency and hardware-assisted compression, PowerStore Elite raises the bar from 5:1 to a new industry-best 6:1 guarantee⁷ that helps customers offset costs with predictable, long-term storage economics, even in supply constrained environments.

Stay modern without starting over

PowerStore Elite integrates into existing environments without forcing customers to rethink how they operate. New systems cluster with earlier PowerStore deployments, data and workloads move without downtime, and capacity or performance can be added incrementally where it delivers the most value.

Lifecycle Extension (LCE) reinforces this model by turning modernization into an ongoing benefit. Existing customers can transition to PowerStore Elite more cost-effectively, while new deployments get a predictable path to stay current. Customers receive data-in-place upgrades with deployment included, a dedicated technical advisor and buy-three-get-one-free capacity expansions, all backed by 24/7 Dell ProSupport or ProSupport Plus.

AI-powered simplicity

From individual arrays to fleet-wide operations, PowerStore Elite puts AI to work where it matters most. Built-in intelligence reduces manual effort by up to 95%,⁸ continuously balancing workloads, tuning performance and improving efficiency in real time.

At the fleet level, [Dell AIOps](#) capabilities extend that intelligence across the entire environment with predictive insight and automation, allowing administrators to offload manual reporting, performance trending and capacity planning. With AIOps, customers can resolve issues up to 10x faster than traditional approaches⁹. [Dell Cyber Detect](#) is a new integrated offering that extends AI-powered ransomware detection directly into Dell PowerStore. Trained on thousands of ransomware variants and inspecting data at the byte level with 99.99% accuracy,¹⁰ it pinpoints the last known clean copy so organizations can recover fast.

Built to evolve with customer needs

Beyond raw performance, PowerStore is built to adapt as enterprise workloads evolve, extending its capabilities across private cloud, containers and modern application environments.

- **Private cloud foundation:** PowerStore is a proven foundation for private clouds, with a wide range of supported cloud stack software from vendors like Broadcom, Microsoft, Nutanix and Red Hat, so customers can run their existing stack without rearchitecting. Customers can deploy PowerStore through Dell Private Cloud on open, disaggregated infrastructure that scales compute and storage independently on infrastructure that delivers up to 65% cost savings versus HCI.¹¹ Read more about the latest Dell Private Cloud updates [here](#).
- **Modern app support:** PowerStore delivers unified scale-up and scale-out architecture supporting block, file, virtual machines and container workloads across a four-appliance cluster. Dynamic core allocation instantly adjusts CPU resources as workloads fluctuate, while NAS server mobility simplifies consolidation and load balancing.
- **Seamless cloud mobility:** Organizations can meet any RTO/RPO with complete replication flexibility across Ethernet and Fibre Channel, allowing for fluid data mobility between on-premises infrastructure and multicloud environments.

Perspectives

Arthur Lewis, president, Infrastructure Solutions Group, Dell Technologies:

"Private clouds are only as powerful as the storage underneath them. Nearly 20,000 customers trust PowerStore to run their business and with PowerStore Elite, customers get a generational leap in performance and density on a container-based architecture built to evolve with their workloads. That's what future-proofed infrastructure actually looks like. PowerStore Elite isn't just the next generation, it's the new gold standard."

Scott Sinclair, Practice Director, Omdia:

"The storage market is being reshaped by AI growth, ransomware pressure and a tightening flash supply, and enterprises can't afford infrastructure decisions that lock them into a single path. PowerStore Elite's standards-based E3 NVMe, combined with a 6:1 data reduction guarantee and mixed-generation clustering, gives customers real flexibility on cost, capacity, and timing. That's the kind of optionality buyers should be demanding right now."

Kevin Weissman, Global Solutions Architect, WWT:

"Our customers are looking for infrastructure that won't limit their growth a few years down the road. PowerStore Elite delivers that future -proof foundation with extreme performance, intelligent software, and the 6:1 guarantee to protect their business as requirements evolve."

Availability

- Dell PowerStore Elite will be globally available in July 2026.
- Dell Cyber Detect for PowerStore will be available in Q3 2026.

Additional resources

- [Dell Technologies World 2026 Press Kit](#)
- Blog: [Introducing PowerStore Elite: Built to Lead in an Unpredictable World](#)
- Connect with Dell on [X](#) and [LinkedIn](#)

About Dell Technologies

Dell Technologies (NYSE: DELL) helps organizations and individuals build their digital future and transform how they work, live and play. The company provides customers with the industry's broadest and most innovative technology and services portfolio for the AI era.

1. Based on preliminary internal analysis comparing PowerStore 1500 and 1200T models using peak IOPs running 70/30 read/write mix, 8k block size over FC. Actual results will vary.
2. Based on preliminary internal analysis comparing a PowerStore 9500 and 9200T models using and 70/30 read/write

workload with 1 MB block sizes. Actual results will vary.

3. Based on Dell internal testing comparing PowerStore 500T systems running PowerStoreOS 4.3 versus PowerStoreOS 5.0 using a 100% read workload with 8KB block sizes. Actual results will vary.
4. Based on a comparison of CPU total core count specifications between PowerStore 3200T and PowerStore 5500 models
5. Based on maximum configuration of PowerStore 9500 base chassis. Effective capacity assumes average 6:1 data reduction. Actual results vary.
6. Based on a comparison of fully populated base chassis: PowerStore 9500 assuming a 6:1 data reduction rate (DRR) versus PowerStore 9200T assuming a 5:1 DRR. Actual results may vary.
7. Based on Dell analysis comparing primary storage data reduction guarantees vs Dell's Storage Data Reduction program – May 2026. For PowerStore Gen 3, applies to new arrays initially installed with PowerStoreOS 5.0. For details see: All-Flash Data Reduction Guarantee Terms and Conditions. Actual data reduction rates will vary.
8. Based on internal Dell analysis of PowerStore Manager intelligent automation features versus traditional array management. Actual results may vary.
9. Dell AIOps user survey, Dell Technologies, January 2026. Actual results may vary.
10. Based on an Omdia/ESG report commissioned by Index Engines, "Index Engines' Cyber Detect Validated 99.99% Effective in Detecting Ransomware Corruption". June 2024. Actual results may vary.
11. Cost savings - Based on internal Dell testing comparing the three-year cost of a five-node HCI cluster (92 TB storage, 163 TB capacity) to Dell Private Cloud with BYOS. Results assume data compression, DDR ratios, VMware RAID 5 erasure coding, and 1.5x compression. Actual results may vary. March 2026.

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