

Top Reasons

Why Customers Choose Dell Cyber Resilience for Dell PowerMax Storage

Dell PowerProtect Data Manager and PowerProtect Data Domain take cyber resiliency for PowerMax to another level.

1 | Be confident that you can recover from the unexpected.

It's hard to go wrong with innovation and proven technology from market leaders. Both [PowerMax](#) mission-critical storage and [Dell cyber resilience](#) deliver products that are consistently chosen by customers around the globe.

PowerMax is the leader in high-end storage delivering the industry's most secure¹ and energy-efficient² mission-critical storage. [PowerProtect Data Domain](#) appliances are trusted by more customers than any other solution—consistently ranked as the #1 Purpose-Built Backup Appliance³. And, [PowerProtect Data Manager](#), the next-generation cyber resilience software for modern multicloud workloads, is the preferred choice of IT decision makers for its innovation, scalability, and operational simplicity over competitors such as Rubrik, Cohesity, Veeam, Commvault, and Veritas⁴.

2 | Gain a performance and efficiency edge.

PowerProtect Data Domain appliances are purpose-built for cyber resilience—giving you performance, efficiency and security advantages that simplify your data protection operations, reduce risk and your lower costs for PowerMax storage environments.

The latest generation of Data Domain delivers up to 38% faster backups⁷, up to 44% faster restores⁷ and up to 58% faster replication⁷ than previous models. It's also more efficient, typically delivering up to 65:1 data reduction⁸ and requiring up to 11% less power⁹ and 50% less floor space¹⁰. All this equals a lower cost-to-protect.

At the same time, PowerMax delivers breakthrough efficiency, versus previous models, with up to 2.8x more IOPS/watt¹¹ and up to an 82% reduction in greenhouse gases¹². It is performance optimized to be 2x faster¹³ and to deliver 50% better response times¹⁴.

3 | Take cyber resilience to the next level with Storage Direct Protection.

Native integration of PowerProtect Data Domain and PowerProtect Data Manager with PowerMax storage can greatly simplify your backup and recovery workflows and operations.

Cyber resilience operations are faster and more efficient, with little to no impact on applications or databases. With PowerProtect Data Manager, application owners gain centralized management and orchestration of backups and restores for multiple PowerMax arrays. And, data integrity is protected through immutability and cyber vault integration. Plus, multicloud support is available for PowerProtect Data Domain replication and cloud tiering.

Storage Direct Protection also delivers an enhanced level of backup and restore performance. With PowerProtect Data Domain, you can shorten backup windows and speed recoveries beyond what is available with PowerMax—with speeds of up to 46 TB/hour for a single backup⁵ and 21 TB/hour for a single restore⁶ to the original or alternate PowerMax, and no performance impact on host applications.

This powerful combination of performance, efficiency and security innovations in PowerProtect Data Domain and PowerMax enables you to more easily meet Service Level Agreements (SLAs), while minimizing impact to production and reducing costs.

4 | Achieve comprehensive cyber resiliency wherever your data lives.

Protecting your PowerMax storage environment with the Dell PowerProtect portfolio helps advance your cyber resilience maturity with multiple layers of Zero Trust security. Data Invulnerability Architecture (DIA), Hardware Root of Trust, Secure boot, encryption, retention lock, role-based access control, and multi-factor authentication help ensure the integrity and recoverability of your data.

And, PowerProtect Data Domain can be deployed in an isolated cyber recovery vault with independent management controls for tighter security. Over 2100 PowerProtect Cyber Recovery customers (and counting) use PowerProtect appliances in their cyber recovery vault¹⁵. Intelligence through AI-based machine learning and analytics with CyberSense helps ensure recoverability.

Plus, we're so confident in the ability of our cyber resilience solutions to help protect your data against ransomware and cyber events that we [guarantee](#)¹⁶ it!

5 | Gain peace of mind that your data is secure across multicloud environments.

Protect, manage and recover your data at scale with on-premises or software-defined protection storage, with PowerProtect Data Domain, or across multicloud with [Dell Data Domain Virtual Edition](#). Retain data across multiple clouds for a versatile and resilient recovery strategy across diverse locations. Choose to retain backups on-premises for quick access, establish remote site backups for added redundancy, or leverage the agility of public cloud storage for cost-effective and scalable solutions. PowerProtect Data Domain can tier deduplicated data to any supported object storage provider for long-term retention using Cloud Tier. And, in the event of a disruption, your cloud data can be rapidly recovered in just three clicks for failover and two clicks for failback¹⁷, offering direct in-cloud access for swift and efficient data retrieval.

¹Based on Dell's internal analysis of cybersecurity capabilities of Dell PowerMax versus cybersecurity capabilities of competitive mainstream arrays supporting open systems and mainframe storage, April 2024.

²Based on Dell's analysis of published product specs and features impacting power usage of Dell PowerMax versus competitive mainstream arrays supporting open systems and mainframe storage operating at 8PB, June 2024.

³Based on revenue from the IDC 4Q23 Purpose-Built Backup Appliance (PBBA) Tracker.

⁴Based on Dell Technologies analysis in January 2024 comparing among Top 5 data protection software providers globally using double-blinded, competitive benchmark Net Promoter Score (NPS) data gathered by third-party commissioned by Dell for 2H FY24.

⁵Based on Dell internal testing for PowerMax 2500 and PowerProtect DD9900 using the Epic GeneratorIO for a single storage group backup, March 2024. Actual performance may vary.

⁶Based on Dell internal testing for PowerMax 2500 and PowerProtect DD9900 using the Epic GeneratorIO for a single storage group restore, March 2024. Actual performance may vary.

⁷Based on Dell internal testing comparing a Dell PowerProtect DD9910 appliance vs. a PowerProtect DD9900 appliance, February 2024. Actual results may vary.

⁸Based on Dell internal testing and field telemetry data, February 2024. Actual results may vary.

⁹Based on Dell analysis comparing a Dell PowerProtect DD9910 appliance vs. a PowerProtect DD9900 appliance both configured at maximum capacity (1.5PBu). Savings in US dollars calculated using power consumption and thermal rating for appliances with expansion shelves and an average electricity price of \$.168 per KWH. For estimation purposes only. Actual costs will vary.

¹⁰Based on Dell internal testing comparing a Dell PowerProtect DD9910 appliance using an optional deep rack vs. a PowerProtect DD9900 appliance, March 2024.

¹¹Based on Dell's internal testing comparing IOPS per watt for PowerMax 2500 vs. PowerMax 2000 using the 8K random writes workload, August 2023.

¹²Based on Dell's internal analysis of total CO2 emissions over 5 years for PowerMax 2500 at 8PB (5kW) vs. 6 PowerMax 2000s at 8PB (27.5kW), July 2023.

¹³Based on Dell's internal testing using the Sequential Read Hits (128K) GB per second benchmark and IOPS per FC port benchmarks (within a single array) comparing PowerMax 8500 to PowerMax. April 2023.

¹⁴Based on Dell's internal testing using the OLTP benchmark comparing the PowerMax 2500 against the PowerMax 2000, 4/2023. Actual response times will vary.

¹⁵Based on Dell Technologies analysis, February 2024.

¹⁶Dell Future-Proof Program, Cyber Recovery Guarantee

¹⁷According to Dell Internal Testing, March 2024.



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