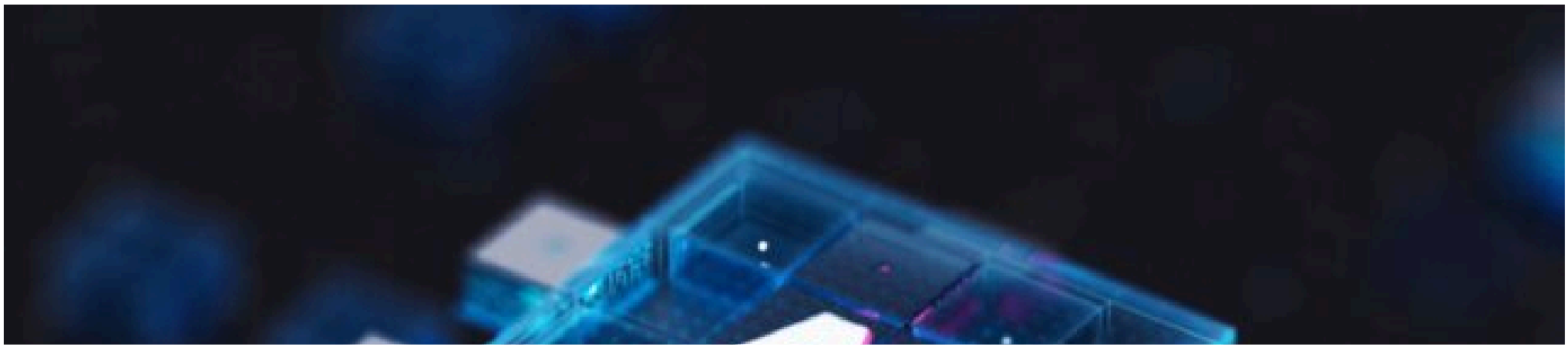

POWERSCALE

Dell PowerScale: AI Success Starts With AI-Ready Storage

The latest addition to our next-gen all-flash lineup: the F910, purpose-built storage to address the demands of AI innovation.

By Tom Wilson | May 20, 2024

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Storage for the AI Era

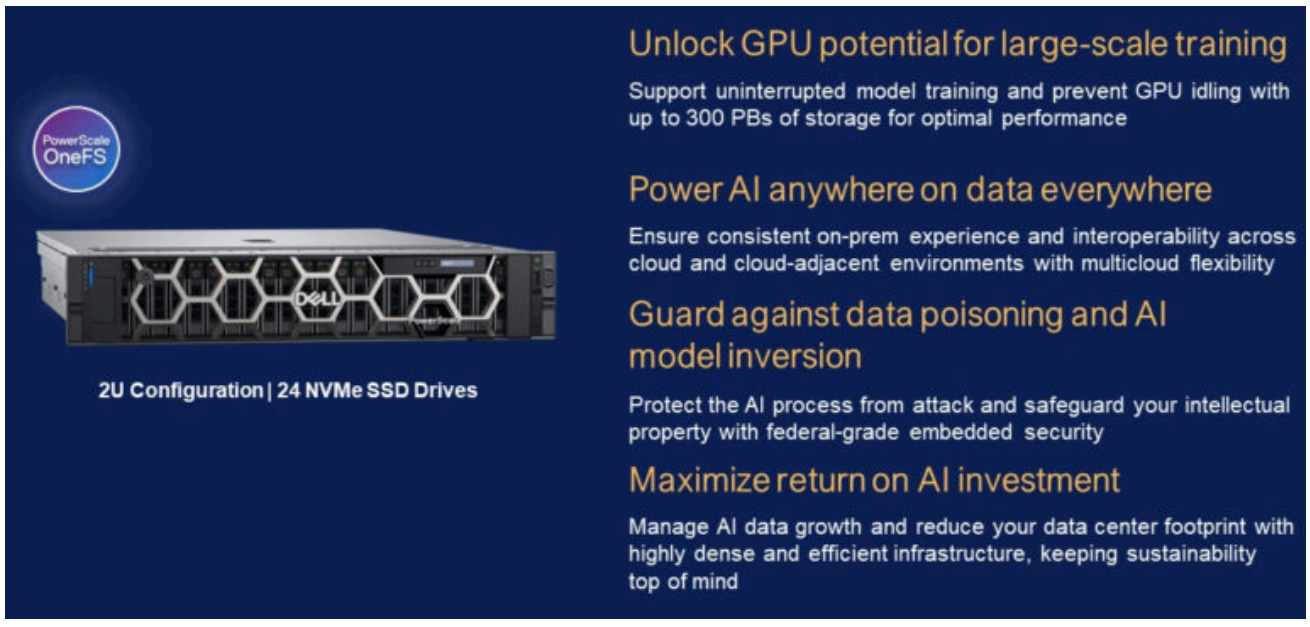
In the realm of generative AI (GenAI), data serves as the fuel, compute functions as the engine and storage acts as the fuel tank that enables the entire process. Therefore, getting your storage strategy right is the essential first step to implementing a viable GenAI solution. Organizations are racing to adopt AI technologies that can transform their operations, enhance decision-making and unlock new possibilities. Dell Technologies recognizes this critical requirement and provides customers with the purpose-built infrastructure they need to meet specific demands of AI.

Dell PowerScale—the world's most flexible[1], efficient[2] and secure[3] scale-out NAS—is no stranger to AI-optimized infrastructure, offering features such as GPUDirect support with NVIDIA (being one of the first storage vendors to do so), low latency storage access with NFSoRDMA and multi-tenant capabilities, simultaneous multi-protocol support, as well as 6x9s availability and resiliency to ensure uninterrupted uptime during model inferencing.

Building on that foundation, earlier this year, we launched the next-generation PowerScale all-flash nodes purpose-built for AI—**the PowerScale F210 and the PowerScale F710**. And today at Dell Technologies World, as part of the Dell AI Factory infrastructure offers, we announced the latest addition to our next-gen lineup, the PowerScale F910.

PowerScale F910 – Massive AI Performance with the Ultimate Density

PowerScale is the world's first ethernet-based NVIDIA DGX SuperPOD **certified storage** vendor, and we're taking AI-optimized storage to the next level with the introduction of the F910. John Lochausen, Technical Solutions Architect at World Wide Technology (WWT), a Beta user for the F910 says, "PowerScale F910 supercharges an already great platform. As our customers delve into the world of AI, they're looking for a single platform that can handle whatever they throw at it. The immense performance gains in the F910 handle things from AI to general purpose workloads with ease."



AI-ready performance. Leveraging continuous innovation of the OneFS software and the latest technology (i.e., Intel Xeon CPUs, the latest DRAM, Gen 5 PCIe), the F910 delivers faster time to AI insights with up to 127% improved streaming performance.[4] It accelerates the model checkpointing and training phases of the AI pipeline and keeps GPUs utilized with up to 300 PBs of storage per cluster. PowerScale also recently introduced greater flexibility and option to access data in the cloud with the launch of Dell APEX File Storage for Azure, delivering 6x greater cluster performance compared to Azure NetApp Files.[5]

Enhanced storage efficiency. Efficiency matters, both in terms of performance and costs for enterprise customers. The F910 strikes a balance by packing performance and density into a 2U node to minimize data center footprint and manage AI data growth with sustainability top of mind, offering 20% more density per RU compared to the earlier released F710.[6] The F910 further controls storage costs and optimizes storage utilization by delivering up to 2x performance per watt[7] over the previous generation and leveraging the world's best scale-out NAS data reduction guarantee[8] that PowerScale offers, to effectively enable customers to do more with less.

"We're hyper-focused on AI innovation in our AI Proving Ground, and the all-flash PowerScale F910 has exceeded our expectations. It doubles performance, reducing the power and energy costs required for the same workload, further advancing our customers' sustainability goals."

– John Lochausen, Technical Solutions Architect – WWT

Dell's Commitment to GenAI Readiness

We're committed to addressing the demands for AI and are proud to have delivered these performance and efficiency gains over the last year through a combination of both software and hardware innovations.

Relentless in our pursuit of innovative solutions, we will be announcing further enhancements coming up in the second half of this year:

- 61TB QLC drives that will double storage capacity and data center density to accommodate large data sets required for training complex AI models.
- Included options for 200GbE Ethernet and HDR 200G InfiniBand options for greater connectivity, faster data access and even more seamless cluster scaling; NVIDIA Spectrum-4 and Quantum QM8790 switches.

Full Stack Portfolio – Dell's AI-Ready Data Platform

Our next-generation PowerScale lineup is a key component of **Dell's AI-ready data platform** that offers AI-optimized infrastructure covering every aspect of your AI data journey. To help organizations along that journey, Dell offers access to a full team of trained AI and industry experts through our **Professional Services for GenAI**. From AI strategy development to data preparation and use case deployment, we're your partner in making AI a reality.

The PowerScale F910 will be available globally starting tomorrow, May 21, 2024. You can find more information on our AI-optimized PowerScale nodes on the spec sheet **here** and on our PowerScale **website**.

[1] Based on internal analysis of publicly available information sources, February 2023.

[2] Based on Dell analysis comparing efficiency-related features: data reduction, storage capacity, data protection, hardware, space, lifecycle management efficiency, and ENERGY STAR certified configurations, June 2023.

[3] Based on Dell analysis comparing cyber-security software capabilities offered for Dell PowerScale vs. competitive products, October 2023.

[4] Based on internal testing, comparing streaming write of F910 on OneFS 9.8 to streaming write of F900 on OneFS 9.5. Actual results may vary. April 2024.

[5] Based on Dell analysis of software capabilities, March 2024.

[6] Based on drive bay availability per U, comparing F910 to F710. April 2024.

[7] Based on internal testing of streaming write figures to obtain percentage increase of performance per watt of F910 on OneFS 9.8 and F900 on OneFS 9.5. Actual results may vary. April 2024.

[8] Based on Dell analysis of public information on data reduction guarantees. Apr. 2024. See terms and conditions for details. Actual data reduction rates will vary.