Dell PowerScale is the world's first Ethernet-based storage solution certified on NVIDIA DGX SuperPOD

Essentials

- **Better together:** PowerScale is the world's first Ethernet storage solution certified on NVIDIA DGX SuperPOD

- **High-performance:** Dell PowerScale exceeds performance benchmark requirements for DGX SuperPOD

- **Fully capable:** Power AI with a fully validated and tested reference architecture from Dell and NVIDIA

- **AI performance delivered:** Simpler and faster to design, deploy and manage

- **Support your AI data surge:** Effortlessly expand storage with PowerScale's seamless scaling for NVIDIA's DGX SuperPOD

- **Accelerate time to value:** Run AI workloads on SuperPOD with the world's most flexible, secure, and efficient scale-out file storage from Dell Technologies

- **Security for AI:** Protect data, the most critical ingredient to take advantage of AI, with PowerScale's comprehensive cybersecurity

Innovate faster with GenAI

Lead GenAI advancements with Dell's PowerScale, the world's first Ethernet certified storage provider for NVIDIA DGX SuperPOD. In today's competitive landscape, harnessing the potential of GenAI technology is imperative for businesses aiming for impactful results. To maximize return on investment and create value, IT departments must capitalize on available technologies. Strategically expanding existing storage footprints incrementally can help organizations gradually yet seamlessly integrate transformational GenAI solutions into their operations. Leveraging ubiquitous networking technologies is also key. AI fabrics are increasingly adopting Ethernet, and a robust roadmap of future high-speed Ethernet technology, including NVIDIA Spectrum Ethernet, exists to meet rising data communication demands. With PowerScale, companies can confidently achieve the highest performance thresholds for DGX SuperPOD while also driving innovation and efficiency in their AI initiatives.

Dell + NVIDIA

Refine GenAI models with NVIDIA DGX SuperPOD and Dell PowerScale, the world's most flexible[1], secure[2] and efficient[3] scale-out file storage. By leveraging the existing data within PowerScale storage, organizations can unlock insights and fine-tune AI models utilizing the capabilities of NVIDIA DGX compute modules. With PowerScale's scalable architecture, IT departments can effortlessly enhance performance by seamlessly integrating additional nodes as needed. Organizations can build robust solutions, knowing that PowerScale surpasses all performance thresholds required by DGX SuperPOD. Deploy PowerScale file storage with confidence and build GenAI reference architectures with Dell and NVIDIA.

Deliver Outcomes with GenAI

- **Modernize** solutions online without data migrations

- **Start** small and grow up to 256 PBe as AI needs grow

- **Reduce** TCO and power needs with data-reduction ratios

- **Greater density** in 1U platform, with introduction of F710

- **Manage** infrastructure with industry-standard tools

- **Satisfy** training and inferencing needs simultaneously

Dell PowerScale, the world's first Ethernet certified storage for NVIDIA DGX SuperPOD

Accelerate Ethernet-based storage for DGX SuperPOD

Effortlessly supply data, stored on Dell PowerScale storage, to DGX nodes. Dell PowerScale supports NVIDIA GPUDirect, a technology that enables GPUs to directly access data from each other, bypassing the CPU and dramatically reducing latency and data transfer times. In addition, PowerScale supports NFS over RDMA, a protocol that allows for direct data transfer from storage to server memory, further enhancing speed and efficiency. Both of these technologies allow for high-speed data access to the GPUs. Furthermore, there is a new smart scaleout capability to improve single compute node performance for enhanced GPU utilization, leading to faster storage throughput for AI training, checkpointing and inferencing.

Up to
2x
faster streaming writes and reads performance[4]

Up to
90%
higher performance-per-watt[5]

Up to
2.6x
improvement in high concurrency workloads[6]

PowerScale Advantages for DGX SuperPOD

Dell PowerScale is the world's most flexible[1], secure[2] and efficient[3] scale-out file storage and is now certified for DGX SuperPOD reference architectures. PowerScale is a robust scale-out file storage foundation that offers exceptional:

Scalability: PowerScale delivers scalability and flexibility with an optimized AI foundation that scales with data.

Security: The PowerScale OneFS operating system comes with comprehensive security features.

Efficiency: PowerScale automates cluster operations to maximize performance per watt and keep your AI workloads running at peak levels.

Performance: PowerScale handles massive amounts of unstructured data with exceptional performance to meet the high concurrency needs of AI workloads.

Better together

The integration of Dell PowerScale and NVIDIA DGX SuperPOD optimizes performance, making it an ideal choice for organizations seeking efficient AI reference architectures. This cutting-edge solution combines NVIDIA's powerful GPUs with Dell's class-leading storage infrastructure. The solution accelerates AI model training, inference, and data processing. Dell PowerScale offers robust, Ethernet-certified storage capabilities and ensures efficient data management, enabling seamless access to diverse, valuable data.

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