



### Proven Solutions for AI, Easy-to-Deploy, Production-Ready and Cost-Effective at Any Scale

# Accelerate AI Adoption with DDN A<sup>3</sup>I Solutions and NVIDIA DGX A100 Systems

- DDN and NVIDIA: Optimized end-to-end AI systems from the leaders in AI performance
- Accelerate AI workflows and learning with a single, scalable data management platform
- Maximize the return and efficiency of your AI Center of Excellence
- Deeper learning and faster time-to-discovery to accelerate business innovation
- Intelligent, agile workflows to automate data movement between file, object, cloud and tape platforms
- DDN is rated #1 overall for atscale and high-performance storage solutions
- DDN is the only storage platform qualified at any scale with NVIDIA DGX™ A100

### UNLEASH THE POWER OF YOUR DATA

Data-centric enterprises need to realize newer, faster insights and make better decisions by applying the power of artificial intelligence for true competitive advantage.

However, we need a new approach to at-scale platforms for AI and analytics to completely exploit this potential.

Platforms must be agile and flexible enough to accelerate innovation and achieve extreme scale to handle huge volumes of dynamic data.

DDN, the data storage company that powers NVIDIA's fastest AI Supercomputer introduces A<sup>3</sup>I: Accelerated, Any-Scale AI Storage Solutions.

DDN A<sup>3</sup>I is the fastest and most highly optimized solution for the data-centric enterprise, helping to accelerate the pace of innovation.

While enterprise file storage architectures and protocols like NFS starve AI computing of data, DDN A<sup>3</sup>I speeds up your AI applications by driving the highest levels of GPU efficiency for unparalleled ROI at scale.

DDN and NVIDIA are collaborating to take AI integration to the next level, combining unmatched performance and scale with complete end-to-end visibility and control across all your AI workflows.

Build your AI Center of Excellence with DDN A<sup>3</sup>I, consolidating all your AI workflows for training, inference, and analytics into a unified, easy-to-deploy, easy-to-scale platform, with unparalleled performance and ROI at scale.









## End-To-End Acceleration for NVIDIA DGX Systems with DDN A<sup>3</sup>I

DDN A<sup>3</sup>I solutions are architected to achieve the most from at-scale AI, analytics and HPC applications running on DGX systems. Through a tight integration between DDN and NVIDIA systems, every layer of hardware and software that is engaged in delivering and storing data is optimized for fast, responsive, and reliable access. The result: extreme and predictable performance, capacity and capability.

DDN A<sup>3</sup>I solutions are deployed globally at all scale, from a single DGX A100 system all the way to the largest NVIDIA DGX SuperPOD™ in operation today.

### ANY SCALE AI INTEGRATION MADE EASY

DDN's A'I solutions are packaged for easy deployment with NVIDIA DGX systems. DDN and NVIDIA have worked closely to validate scalable reference architectures for all DGX Systems, including SuperPOD and DGX A100 systems.

#### PROVEN SUPERIOR PERFORMANCE AND SCALABILITY

With DDN's genuine end-to-end parallelism, data is delivered with high-throughput, low latency, and massive concurrency in transactions, ensuring applications achieve the most from DGX systems, with maximum utilization and efficiency from your GPU investments. Optimized parallel data delivery directly translates to increased application performance and faster completion times.

#### UNSURPASSED RELIABILITY AND DATA AVAILABILITY

The DDN A<sup>3</sup>I shared parallel architecture facilitates unique redundancy and automatic fail over capability to ensure high reliability, resiliency, and data availability in case a network connection or server becomes unavailable.

#### ACCELERATED END-TO-END DATA PIPELINES

DDN A<sup>3</sup>I solutions accelerate end-to-end data pipelines for deep learning workflows of all scales running on DGX systems. The DDN shared parallel architecture enables concurrent and continuous execution of all phases of your AI pipeline across multiple DGX systems to accelerate data transfer between storage locations.

#### STREAMLINE AI INFRASTRUCTURE DEPLOYMENT

DDN A<sup>3</sup>I greatly simplifies and optimizes DGX system networking for fast, secure, and resilient connectivity. This makes designing, deploying, and managing high performance networks very simple, and is proven to deliver complete connectivity for at-scale AI infrastructure including on the DGX SuperPOD.

#### OPTIMIZE APPLICATION PERFORMANCE

DDN enables direct high-performance connection between multiple DGX system application containers and the DDN parallel filesystem, enabling low latency, high-throughput parallel data access directly from a container, providing 10x or more throughput than traditional NFS-based storage systems.









#### SECURE MULTI-TENANT ENVIRONMENTS AT-SCALE

Native container client and a comprehensive digital security framework make it simple to share DGX systems across a large pool of users and still maintain secure data segregation. Extensive controls to prevent unauthorized data access or modification from a malicious user, even if a node or container is compromised.

#### SEAMLESS WORKFLOW FLEXIBILITY AND END-TO-END INTEGRATION

Data-intensive workflows often require multi-protocol access to storage using object or file interfaces. A³I's data services allow data to be captured directly to storage via an object protocol and accessed immediately by containerized applications on DGX system through a file interface. Providing hybrid file and object data access to the shared namespace simplifies workflow flexibility and integration as well as collaboration with multisite and multi-cloud deployments.

## TURNKEY AI STORAGE SOLUTIONS WITH UNMATCHED PERFORMANCE AND SCALE

Transform your business with NVIDIA and DDN A³I, the leaders in high-performance AI solutions. DDN's expertise powers the world's largest AI supercomputers and AI systems, bringing unmatched performance to your AI Center of Excellence. Start today with an agile AI architecture, powered by DDN A³I storage solutions pre-configured and optimized for NVIDIA DGX systems, ready to scale out quickly to accelerate your business to the next level.

#### ABOUT DDN

DataDirect Networks (DDN) is the world's leading big data storage supplier to data-intensive, global organizations.

DDN has designed, developed, deployed, and optimized systems, software, and solutions that enable enterprises, service providers, research facilities, and government agencies to generate more value and to accelerate time to insight from their data and information, on premise and in the cloud.





