NVIDIA | **ARROW**

LEADERSHIP-CLASS AI INFRASTRUCTURE THAT WILL SHAPE THE FUTURE

Breaking New Ground in AI

Artificial intelligence (AI) has changed the way we work, how we make decisions, and what we know about the world. Many top enterprises are gaining more intelligence from their data and driving progress across industries—including healthcare, manufacturing, aerospace, academic research, telco, and energy. To stay ahead of the competition, today's enterprises need an AI innovation strategy to solve bigger data science problems faster.

Leadership-class AI infrastructure from NVIDIA is a proven solution that will shape the future. With the right balance of technologies, enterprises can capitalize on these AI trends in 2023 and beyond.

Trend 1: Deploying Infrastructure that Evolves with You

The demands of AI have raised the bar for compute performance. Organizations everywhere are racing to overcome IT roadblocks, such as limited data access, low processing capacity, and tight budgets. They need an infrastructure that is quick to deploy and can grow with them to power their AI initiatives and change the world.

AI projects at the forefront of innovation are built on NVIDIA AI infrastructure. NVIDIA DGX™ A100 systems are engineered to meet the demands of enterprise AI and data science, delivering the fastest start in AI development. A blend of NVIDIA® A100 Tensor Core GPUs and AMD EPYC™ CPUs delivers a tremendous leap in performance to streamline the flow of data from collection at the edge, to training and inference at the core, to analysis using the world's biggest clouds. Each component is carefully integrated to enable AI across the enterprise. By taking a prescriptive approach to AI, any component can be easily updated or replaced, making legacy infrastructure a problem of the past.

NVIDIA is preparing enterprises to take full advantage of the latest AI trends:

DEPLOYING INFRASTRUCTURE THAT EVOLVES WITH YOU

> Overcome the limitations of legacy IT with infrastructure that is easily deployed and upgraded.
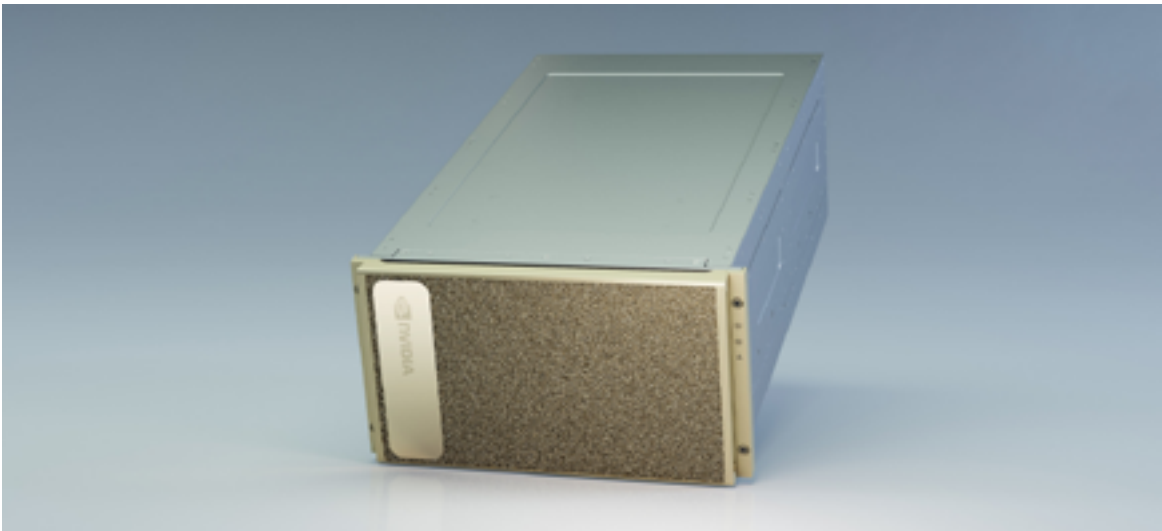
ENSURING BREAKNECK DATA PERFORMANCE

> Bring unlimited scalability to AI datasets with high performance storage solutions.

ACCELERATING TIME TO INSIGHT

> Close the gap between data and results with high-speed networking technologies.

SIMPLIFYING AI DEVELOPMENT, ANYWHERE

> Accelerate AI deployments and keep them running smoothly with purpose-built management tools and services.

Trend 2: Ensuring Breakneck Data Performance

AI systems require extremely high-speed storage to run at peak capacity. As the complexity of AI projects continues to rise, enterprises need storage solutions that can scale easily and expand at the rate of data growth. Lightning-fast storage is critical to keep data flowing, enabling systems to improve workflow execution and feed data to hungry GPUs. To carry out these operations against massive datasets, storage must be highly efficient, able to deliver the necessary throughput and I/O rates from ingest through archive.

NVIDIA offers a broad range of partner storage options as part of our high performance infrastructure, for easy plug and play solutions. Certified storage for DGX A100 systems is carefully selected and tested for the demands of diverse AI workloads and then optimized for each environment to ensure success. NVIDIA storage options handle a variety of data types and can be continuously refined to maximize performance in the most cost-efficient way. The result is a right-sized, tightly integrated storage solution capable of unlimited scaling with little to no downtime, so enterprises can gain real time insights and keep moving forward.

Trend 3: Accelerating Time to Insight

Networking is a critical factor for AI success. As enterprises leverage larger, more complex models and run workloads across multiple nodes and systems, operating on a consistent high-speed network can mean the difference between uncovering key insights or missing the next great breakthrough. New advances in networking capabilities will drive AI infrastructure for years to come.

DGX A100 systems feature the latest NVIDIA Quantum InfiniBand architecture, which powers AI workloads with the fastest networking solutions available on the market. Tremendous 400 GB/s performance provides 2X data throughput compared to the previous generation—and it doesn't stop there. The architecture supports in-network computing for cloud-native supercomputing at any scale, supercharging large jobs with 32X more AI acceleration.

Trend 4: Simplifying AI Development, Anywhere

A majority of enterprises select a mix of on-prem and cloud infrastructure to support their AI jobs, and true hybrid organizations are now running these workloads in multiple different locations. By adopting technologies that are optimized for AI and GPU compute, enterprises can accelerate AI development, wherever the data lives.

NVIDIA enables any organization to get started quickly with a broad range of AI, data analytics, and management solutions. NVIDIA AI Enterprise helps enterprises answer important questions about their AI applications, infrastructure, and data to ease complexity as they extend to on-prem, hybrid cloud, and edge. The suite includes enterprise-grade MLOps software which improves utilization and accelerates AI workflows, even as IT requirements change. For more assistance, our customers have access to 20,000+ NVIDIA DGXperts who can help launch new applications and keep them running smoothly. DGXperts can even manage infrastructure for you, freeing up enterprise resources to focus on getting the right results.

Transforming Your Enterprise

The AI landscape is changing rapidly. Enterprises know that operationalizing AI is critical for their continued growth and the ability to disrupt and lead their markets. Whether enhancing customer experiences, delivering better patient outcomes, or honing the supply chain, enterprises need infrastructure that can deliver AI-powered insights.

As we look to the future, NVIDIA is committed to expanding the use of AI and delivering technology innovations that will unlock greater intelligence. Talk with our experts to explore how our AI strategies can transform your enterprise.

About Arrow ECS

Since 1935, Arrow Electronics has developed technology solutions that improve business and daily life. Arrow's enterprise computing solutions business is a leading IT distributor that helps IT providers and vendors thrive. With a global line card of 500+ vendors, we enable our community of over 3,000 channel partners to deliver modern IT solutions. We provide deep technology expertise and an unmatched ability to solve the complexities of today's IT and business landscape. We work as an extension of your team so you can accelerate your business growth and create better outcomes.

Learn More

Click here to contact Arrow's dedicated NVIDIA team | Arrow ECS NA

Learn how to accelerate AI on NVIDIA DGX systems, powered by NVIDIA A100 Tensor Core GPUs and AMD EPYC™ CPUs at: **nvidia.com/en-us/data-center/dgx-systems/**