NVIDIA.

Accelerate AI in production with Dell/NVIDIA Enterprise Architecture for AI at Any Scale

Solution Highlights

Flexible

- Power the entire lifecycle of AI, from data preparation to training to optimization to production, all on one infrastructure

- Service multiple users and teams at the same time, even those at different points in the AI lifecycle

Modular

- Swap out individual components for products with equivalent functionality whenever desired

- Start small and scale the environment at your own pace

Enterprise-ready

- Incorporate best of breed, "off the rack" technologies— including Dell PowerScale scale-out NAS, NVIDIA DGX and Dell PowerEdge servers

- Reduce time to production with a validated proof-of-concept architecture

- Enjoy peace of mind with full enterprise support and take advantage of professional and educational services

Simplify enterprise AI design, deployment and management

Technology is evolving quickly, so your team may not have the resources to design, deploy and manage solution stacks optimized for artificial intelligence (AI). Dell Technologies and our long-time partner NVIDIA are at the forefront of analytics and AI, providing the technology that makes tomorrow possible, today, and simplifying IT infrastructure to provide faster, deeper insights at enterprise scale.
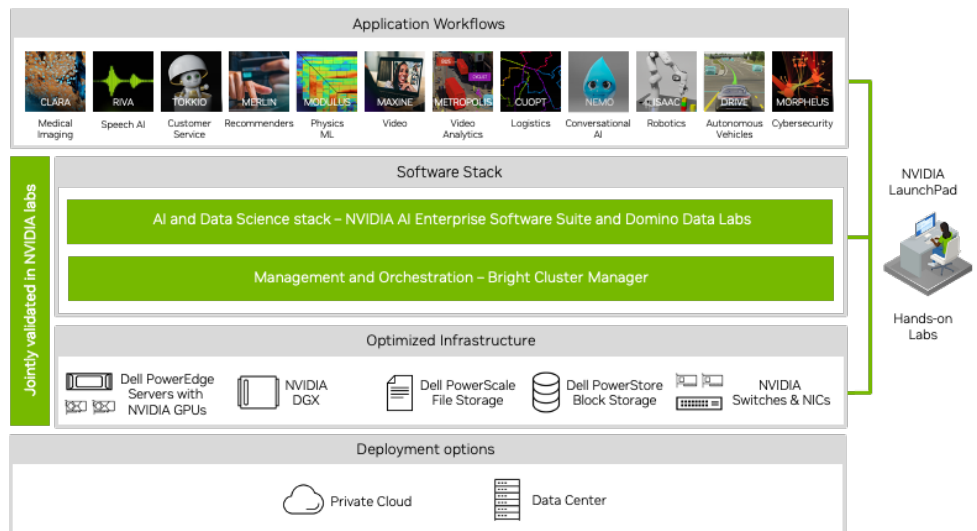
Together, Dell and NVIDIA have integrated the best of our technologies into a new enterprise architecture that enables data science organizations to train and deploy the world's most demanding AI models at any scale. It helps you move to enterprise AI to production faster and simplify support by reducing the "unknowns" associated with large-scale technology implementations.

Power the entire lifecycle of AI

This flexible architecture creates the foundation of an analytics ecosystem that unifies the best technology, people and processes. Establish an AI Center of Excellence where data scientists can deploy all the tools they need to deliver maximum value and collaborate among disparate teams. Keep compute, graphics processing unit (GPU) and storage resources performing optimally while running simultaneous workloads in the same infrastructure and providing seamless, multi-protocol access to larger datasets.

Key features of this full-stack yet modular design include:

- Infrastructure that can start small and scale concurrently with data growth
- Massively scalable storage, hardware-accelerated compute and high-speed network with self-service access for your global teams
- The powerful and diverse NVIDIA AI Enterprise software stack, along with Domino Data Labs MLOps platform

Full-stack yet modular design built for the rigors of data science

Incorporate a choice of best-of-breed hardware and software

Flexible, scalable multi-protocol storage

To help you access and profit from file and block data with storage that can start small and scale concurrently with data growth:

- Dell PowerScale — PowerScale All-Flash scale-out NAS storage for file data, supporting up to up to 30PB per cluster and up to 100GbE connectivity
- Dell PowerStore – PowerStore systems for block data storage

Hardware-accelerated compute

Enables demanding AI workloads to be completed much more quickly than CPU-only infrastructure, and with lower TCO and power consumption:

- NVIDIA DGX – DGX A100 system, for training of AI models
- Dell PowerEdge – NVIDIA-Certified PowerEdge servers with NVIDIA GPUs providing Inferencing compute and for application hosting

High-performance networking

For the massive bandwidth required to support today's most demanding, large-scale AI initiatives:

- NVIDIA ConnectX SmartNICs – for high-speed Ethernet and InfiniBand networking
- NVIDIA Spectrum Ethernet and Quantum InfiniBand switches – provide high-speed connectivity from storage to compute, as well between compute nodes

Software platform

Fully supported, enterprise-grade software provides all the capabilities necessary to support a full production AI platform:

- NVIDIA Bright Cluster Manager – for fast deployment and end-to-end management of AI server clusters
- NVIDIA AI Enterprise – for full lifecycle development and deployment of AI
- Domino Data AI platform – for unified collaboration and MLOps

Take the next step

Please contact your Dell or NVIDIA sales representative or authorized reseller to learn more. Also, check out the Dell Technologies and NVIDIA websites for more information on how we help our customers unlock the value of AI at any scale.

Learn more about
Storage for AI solutions

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