Manufacturers require a foundational platform that supports a range of core services with infrastructure that can encompass today’s critical applications and be ready for artificial intelligence (AI) in the future.

The AI-Ready Platform unlocks the power of AI by providing a jointly developed, end-to-end enterprise platform that is optimized for AI workloads. The integrated platform includes NVIDIA® AI Enterprise suite, optimized and certified for VMware® vSphere® running on NVIDIA-Certified Systems™ from Dell Technologies.

Build the next generation of manufacturing.

AI is transforming manufacturing from design and supply chain to servicing of mission-critical assets and is expected to add 4.8 trillion dollars’ worth of economic value. While evolving needs require that manufacturers invest in and explore new AI services for digital manufacturing, limited budgets, lack of familiarity with data science tools, and siloed organizational infrastructures lead to struggles with identifying solutions that can enable success and deliver a rapid return on investment. In addition, AI solutions need to provide robust security features to address the pervasive, expansive security threats that can put IT systems at risk for data leaks.

The AI-Ready Enterprise Platform from Dell Technologies, NVIDIA and VMware offers end-to-end hardware and software solutions that manufacturers need to modernize and accelerate IT. This integrated platform delivers best-in-class AI software, the NVIDIA AI Enterprise suite, optimized and certified for the industry’s leading virtualization platform, VMware vSphere. The solution is built on NVIDIA-Certified and accelerated Dell PowerEdge servers to help developers build AI and high-performance analytics faster and scale modern workloads on the same VMware vSphere infrastructure they’ve already invested in, while delivering enterprise-class manageability, availability and security.

### Enabling technologies

**NVIDIA AI Enterprise Suite**

NVIDIA AI Enterprise is an end-to-end, cloud-native suite of AI and data science tools and frameworks optimized and exclusively certified by NVIDIA to run on VMware vSphere with NVIDIA-Certified Systems. It includes key enabling technologies and software from NVIDIA for the rapid deployment, management and scaling of AI workloads in the modern hybrid cloud.

**GPU-accelerated Dell PowerEdge servers**

NVIDIA-Certified PowerEdge Systems bring together NVIDIA GPUs, NVIDIA ConnectX® smart network interface cards (SmartNICs), and the NVIDIA BlueField® data processing units (DPUs) in optimized configurations. These servers are validated for performance, manageability, security and scalability and are backed by enterprise-grade support from NVIDIA and Dell Technologies.

**VMware vSphere with Tanzu**

VMware vSphere with VMware Tanzu™ runs more than 70 million workloads across hundreds of thousands of organizations worldwide. VMware vSphere transforms bare-metal servers into centrally managed AI and machine learning infrastructure pools that can quickly provision virtual machines and containers on demand. VMware vSphere optimizes performance, increases availability, tightens security, streamlines maintenance and reduces costs to create an agile, efficient, resilient and secure infrastructure platform that supports existing workloads and next-generation applications, such as AI.

With the AI-Ready Enterprise Platform from Dell Technologies, NVIDIA and VMware, developers, data scientists and researchers can access the resources they need to build and deploy AI applications efficiently, and IT administrators can confidently deliver uncompromised security and support with tools and infrastructure they know well. This comprehensive solution advances manufacturers’ ability to better serve customers and improve mission-critical outcomes.

### Key Benefits

- **Deploy with confidence:** Leverage a joint solution to deploy and manage AI workloads with optimized software for manufacturing.
- **Boost AI performance:** Achieve near bare-metal performance for AI training and inference.
- **Scale without compromise:** Enable larger, more complex AI training and analytics with new scale-out capabilities.

### Learn More

- [delltechnologies.com/ai](delltechnologies.com/ai)
- [NVIDIA Launchpad](https://www.nvidia.com/en-us/data-center/networking/)

### Solution Partner


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