

# Unlock the power of AI in virtualized environments

## NVIDIA AI Enterprise

An end-to-end, cloud-native suite of AI and data analytics software, optimized, certified and supported by NVIDIA to run on VMware vSphere with [NVIDIA-Certified Systems™](#) such as Dell EMC VxRail Hyperconverged Infrastructure (HCI)

**Virtualize and get self-service access to AI resources with VMware, NVIDIA AI Enterprise, VxRail and PowerScale.**

With this Dell Technologies Validated Design for AI, in collaboration with VMware and NVIDIA, organizations across every industry and geography can harness the power of AI from anywhere, with continuous insights at scale, to reach their business goals.

This first, jointly engineered solution of NVIDIA AI Enterprise software on VMware vSphere with Tanzu deployed with Dell EMC infrastructure gives AI researchers, data scientists and developers the solution they need to deliver the next generation of AI-powered applications, while arming IT professionals to support AI using the tools they are most familiar with.

## Quickly and easily incorporate AI into mainstream environments.

Enterprise organizations worldwide use VMware® to maintain consistent operations and governance for their multi-cloud environments, while providing automation to modernize applications. As these organizations work to capitalize on the massive amounts of data they collect every day, artificial intelligence (AI) is emerging as an essential ingredient to becoming a data-driven enterprise.

However, incorporating AI into enterprise data centers can be complex. IT teams typically build separate systems for these workloads, with different hardware, software, accelerators and tool sets. While developers can create applications anywhere using containers, putting those applications into production lacks predictability and stability, while raising concerns about security.

Dell Technologies, NVIDIA® and VMware are working to democratize and unleash AI for every enterprise. Dell Technologies Validated Designs for AI are jointly engineered and validated to help you capitalize on the benefits of virtualization for AI workloads. With these solutions, you can more easily run emerging workloads alongside existing applications in your VMware virtualized data center with near-bare-metal performance — while optimizing hardware investments such as server GPUs.

## Enable AI anywhere

With this Dell Technologies Validated Design for AI, you can avoid silos of AI-specific systems that create management headaches and security risks, overcoming the challenges that stem from deploying individual AI applications, as well as the potential failures that can result from having to manually provision and manage different applications and infrastructure software.

## Learn more

- [See Design Guide](#)
- [AI InfoHub](#)
- [delltechnologies.com/ai](https://delltechnologies.com/ai)
- [delltechnologies.com/vmware](https://delltechnologies.com/vmware)

The result: It's easier than ever to develop, deploy and manage diverse AI workloads anywhere.

### Overcoming challenges to adopting AI.

**AI simplified:** Jointly engineered and validated solution makes it quick and easy to deploy optimized hardware and software stacks.

**Faster AI insights:** Fast access to larger data sets enables live inferencing at scale to drive real-time, actionable responses.

**Proven AI expertise:** Confidently deploy an engineering-tested AI solution backed by world-class Dell Technologies and NVIDIA services and support. Select ProSupport Plus for a single point of contact for software and hardware support.

### Technical specifications

Configurations are based on [Dell EMC VxRail HCI](#) and leverage NVIDIA AI Enterprise suite, the latest NVIDIA GPUs, vSphere virtualization, the predictability and security of containers in VMware Tanzu™, and centralized management from VMware vCenter®. Add vRealize Automation for self-service access. Fast, ample data lake storage is provided by [Dell EMC PowerScale](#) all-flash or hybrid storage arrays.

Compute	Accelerators	Networking	Software	Storage
4x VxRail HCI V670F	NVIDIA A100 or A30 GPUs	PowerSwitch 25GbE S5248F-ON or 100GbE S5232F-ON or NVIDIA Mellanox® Spectrum® SN3700 and out-of-band PowerSwitch S4148T-ON	<ul style="list-style-type: none"><li>• NVIDIA AI Enterprise</li><li>• VMware vSphere Tanzu</li><li>• vRealize Automation</li></ul>	PowerScale F600 or H600

Whether you're looking to expand your existing capabilities, or get started with your first project, Dell Technologies Validated Design for AI with VxRail and PowerScale helps you simplify and speed AI projects and AI results.

### Dell Technologies and VMware

Dell Technologies and VMware deliver truly integrated solutions that enable consistent operation, simplified lifecycle management, 30-day synchronous updates, a single source of support and so much more. We have a long history of partnership and collaboration, engineering joint solutions destined to improve your experience. VMware and Dell Technologies at your foundation are better together — and better for you.

