

Harness MLOps to Improve AI Results

Standardize machine learning pipelines with a solution optimized for cnvrg.io

cnvrg.io

cnvrg.io was built by data scientists, for data scientists to streamline the machine learning (ML) process so they can focus on innovation, not infrastructure.

This Dell Validated Design for AI, built in collaboration with cnvrg.io, standardizes ML pipelines to minimize friction for data science and engineering teams from research to production.

The solution includes VMware vSphere® with Tanzu™ deployed on Dell hyperconverged infrastructure (HCI) to provide a reliable and repeatable foundation for MLOps based on cnvrg.io.

Standardize and streamline ML pipelines.

As artificial intelligence (AI) becomes strategic for a wide array of organizations, data science and engineering teams are looking to streamline and simplify the process of moving ML models into production. That's because, for many organizations, this process is complex, with teams spending more time dealing with infrastructure, feature engineering, deployment and monitoring challenges than on creating groundbreaking algorithms.

To operationalize AI, forward-thinking organizations are seeking to reduce friction wherever possible throughout the ML pipeline. MLOps addresses the challenges of moving ML models into production by reducing friction and bottlenecks that impede AI success. As the name implies, MLOps uses DevOps principles to standardize and streamline the ML lifecycle. MLOps helps data scientists and engineers focus less on technical complexity and more on delivering high-impact ML models.

The Dell Validated Design for AI — MLOps simplifies AI with a jointly developed and engineering-validated solution that help teams deploy models at speed for faster AI insights.

Key benefits

- **AI simplified:** Jointly engineered and validated solutions make it quick and easy to deploy optimized hardware and software stacks for cnvrg.io MLOps.
- **Faster AI insights:** Streamlined ML pipelines enable faster development and smoother transition to production.
- **Proven AI expertise:** Confidently deploy an engineering-tested MLOps 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.

Learn More

[Design Guide](#)

[White Paper](#)

[AI InfoHub](#)

delltechnologies.com/ai

delltechnologies.com/vmware

Technical specifications

Designs for cnvrg.io are based on [Dell VxRail HCI](#) providing the predictability and security of containers in VMware Tanzu, and centralized management from VMware vCenter®. Fast, ample storage is provided by [Dell PowerScale](#) hybrid or all-flash storage arrays.

Compute	Accelerators	Networking	Software	Storage
4x VxRail HCI V670 or PowerEdge R750xa	NVIDIA A100 or A30 GPUs (optional)	PowerSwitch 25GbE S5248F-ON or NVIDIA® Spectrum® SN3700 and out-of-band PowerSwitch S4148T-ON	<ul style="list-style-type: none">• cnvrg.io• VMware Tanzu• NVIDIA AI Enterprise (optional)	PowerScale F600 or H600

Dell Validated Design for AI — MLOps helps you adopt MLOps with confidence to simplify ML development and accelerate and improve AI results.

Solution Partner

cnvrg.io

Dell Technologies and cnvrg.io

Dell Technologies and cnvrg.io collaborate to deliver Validated Designs that accelerate AI/ML workloads with a Kubernetes®-based data set caching, version control querying and more.

