Make the metaverse real with collaboration in virtual worlds

Enhance 3D graphics performance for remote users with a VDI solution built on NVIDIA Omniverse

NVIDIA Omniverse

Discover an open platform built for virtual collaboration and real-time simulation. NVIDIA Omniverse simplifies and accelerates complex 3D workflows, enabling distributed workers to collaborate using multiple applications simultaneously.

This Dell Validated Design for VDI with NVIDIA Omniverse empowers distributed design teams with a real-time collaborative workspace that increases efficiency and productivity without compromising on security. NVIDIA® GPU-accelerated virtual desktop infrastructure (VDI) helps you streamline how you deliver, protect and manage 3D collaboration applications for remote workers, and NVIDIA Omniverse™ software on Dell hyperconverged infrastructure provides a reliable and repeatable foundation for remote 3D graphics.

Enable immersive visualization and accurate simulation

In today's fluid digital workplaces, creative professionals need to be able to collaborate with teammates from anywhere, using a variety of applications. But enabling real-time 3D simulation for remote workers in industries that rely on breathtaking, physically accurate, ray-traced rendering can be difficult.

NVIDIA Omniverse connects creators, designers, researchers and engineers in a shared virtual space where they can connect with major design tools, assets and projects to collaborate and iterate — no matter where they choose to work. From early-stage ideation to smart factory automation and robotics, NVIDIA Omniverse transforms workflows to seamlessly connect designers, engineers, third-party contractors and suppliers throughout the design process.

Running NVIDIA Omniverse on Dell infrastructure, including a VxRail-based virtual workstation environment, enables designers, artists and reviewers to work simultaneously from anywhere, on any device, instead of relying on in-person meetings or exchanging and iterating on massive files.

The Dell Validated Designs for VDI with NVIDIA Omniverse empowers a remote and distributed workforce with a jointly developed and engineering-validated solution that speeds time to production while enabling increase product quality with more iterations. It also scales easily to meet growing demands while providing secure access from anywhere.

Learn More

Key benefits

- **Speed time to production:** Enhance 3D interactive real-time collaboration and productivity for remote and distributed teams.
- **Surge productivity at scale:** Enable more iterations for greater product quality while providing teams the resources they need.
- **Secure your environment:** Protect data against cyberthreats from the data center to the endpoint with built-in security features while providing access from anywhere.

Technical specifications

Designs for NVIDIA Omniverse are based on Dell-NVIDIA Certified Systems™, including PowerEdge servers, accelerated with virtualized NVIDIA GPUs. Workload virtualization can be provided by a choice of VMware® Horizon® or Citrix® Virtual Apps and Desktops™. Designs were validated with Autodesk® Maya® 3D animation and visual effects software.

Configuration options

Compute	Accelerators	Networking	Hypervisor	Software
• Dell PowerEdge R750 • Dell VxRail V670F	NVIDIA A40 GPUs as NVIDIA vGPUs	Dell PowerSwitch 25GbE S5248F-ON	VMware Horizon or Citrix Virtual Apps and Desktops	Autodesk Maya

With Dell Technologies Validated Designs for VDI with NVIDIA Omniverse, teams can finally connect major design tools, assets, and projects to collaborate and iterate in a shared virtual space, speeding time to market. WIth GPU-charged virtual workstations, creators, designers, researchers, and engineers can tap into flexible and easily scalable resources to meet their needs now and as demand grows. With security built in at every level of the solution, teams can enjoy secure access from anywhere and any device.

Solution Partner

Dell Technologies and NVIDIA

Dell Technologies and NVIDIA work together to deliver some of the most powerful GPU-accelerated VDI solutions so you can quickly integrate immersive 3D into collaborative design workflows.