SOLUTION SHOWCASE

NVIDIA Omniverse Enterprise

Enabling real-time collaboration and true-to-reality simulation for organizations of any scale.

Key Technologies

> NVIDIA Omniverse Enterprise
> NVIDIA RTX™ GPU
> Omniverse Nucleus collaboration engine
> Omniverse Connectors to independent software vendor (ISV) applications
> Omniverse Create, Omniverse View end-user applications
> IT deployment tools

Proof Points

> BMW Group gained 30% more efficiency in resource utilization by using Omniverse's real-time collaborative design capabilities.
> MoonShine Animation achieved 50% time savings thanks to Omniverse's collaborative and AI-enabled review methods.

Subscription Includes

> Omniverse Nucleus Workstation and Enterprise Nucleus Server (license per user)
> Use of Omniverse Connectors
> Omniverse Create (license per user)
> Omniverse View (license per user)
> Full NVIDIA Enterprise Support services

REVOLUTIONIZE DESIGN COLLABORATION AND SIMULATION

Addressing the Challenges in Modern Workflows

Organizations in visual industries are facing unique challenges with the rise in remote workforces and increasingly complex 3D workloads. Enabling teams to collaborate on these 3D assets with various machines scattered across geographic locations is a task that enterprise IT needs a solution for.

Efficiency is a critical factor in a remote workforce's success - this is a difficult balancing act for power-hungry workloads and a dispersed team. The demand for photorealistic, physically-accurate simulation begs higher compute power accessible from anywhere.

NVIDIA Omniverse Enterprise

NVIDIA Omniverse™ Enterprise is an end-to-end collaboration and simulation platform that fundamentally transforms complex design workflows. It is designed, tested, and optimized to run on NVIDIA RTX™ laptops and desktops for professionals, and NVIDIA-Certified Systems™ on NVIDIA EGX™ in the data center.
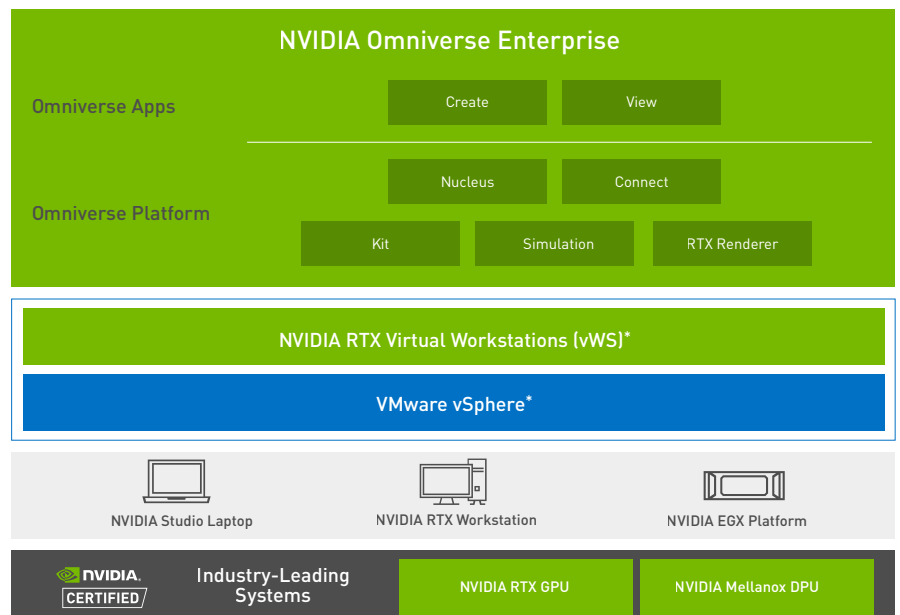
*VMware vSphere and NVIDIA RTX vWS only required for virtualized deployment

Benefits of Omniverse Enterprise

Omniverse simplifies workflows for both individual users and globally dispersed teams of any scale.

Easily Connect Your Workforce

Give employees the freedom to collaborate from anywhere and access fully 3D-capable virtual workstations.

Achieve Faster Time for Production

Maximum iterations at no opportunity cost mean shortened design cycles and superior output.

Access Secure IP from Anywhere

Keep assets secure with infrastructure that removes the need to distribute sensitive files — either locally or around the world.

Full-Service Global Enterprise Support

Ensure your projects stay on schedule — minimize system downtime and maximize system utilization and user productivity.

Platform Components

Nucleus

Lets you store, share, and collaborate on project data and provides the unique ability to collaborate live across multiple applications. Nucleus can be deployed on a workstation, on-premise, or in the cloud

Connect

Opens the portals for content-creation tools to connect to the Omniverse platform and save USD and MDL content. With Omniverse, users continue to work in their favorite industry software applications.

Kit

A powerful toolkit for developers to create new Omniverse Apps and extensions. Kit extensions are plug-ins for Omniverse Kit that extend its capabilities for developers to enhance their workflows and UI.
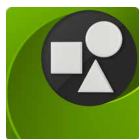
Simulation

Powered by core NVIDIA technologies that simulate real-world physics including PhysX®, Flow, Blast, and Rigid Body Dynamics.

RTX Renderer

An advanced, multi-GPU renderer based on NVIDIA RTX that supports both real-time ray tracing and ultra-fast path tracing.

Omniverse Apps

NVIDIA OMNIVERSE™ CREATE

For technical artists, designers, and engineers, Omniverse Create accelerates advanced scene composition and allows users to interactively assemble, light, simulate, and render scenes in Pixar USD in real time.

NVIDIA OMNIVERSE™ VIEW

For reviewers, clients, and project managers, Omniverse View powers seamless collaborative design and immersive visualization of design and simulation projects.

Deploy Across Any Organization

Omniverse Enterprise is designed, tested, and optimized to run on NVIDIA RTX™ mobile workstations and desktops, and NVIDIA-Certified Systems™ on NVIDIA EGX™ in the data center. This makes it possible to deploy Omniverse Enterprise across organizations of any scale, from small workgroups using local desktops and laptops to globally distributed teams accessing the data center using various devices. Unite your teams, tools, and systems while maintaining flexibility in how your teams prefer to work.

Small Workgroups

Deploy Omniverse across a small workgroup on a local network with NVIDIA RTX professional mobile workstations and desktops.

EXAMPLE TOPOLOGY COMPONENTS	
Local Clients	Mobile Workstation Desktop Workstation
Collaboration Server	Nucleus Workstation
GPU	Recommended NVIDIA RTX GPU for Professional Visualization
Omniverse Applications	Omniverse Create Omniverse View
Connected Applications	Omniverse Connector Supported Applications
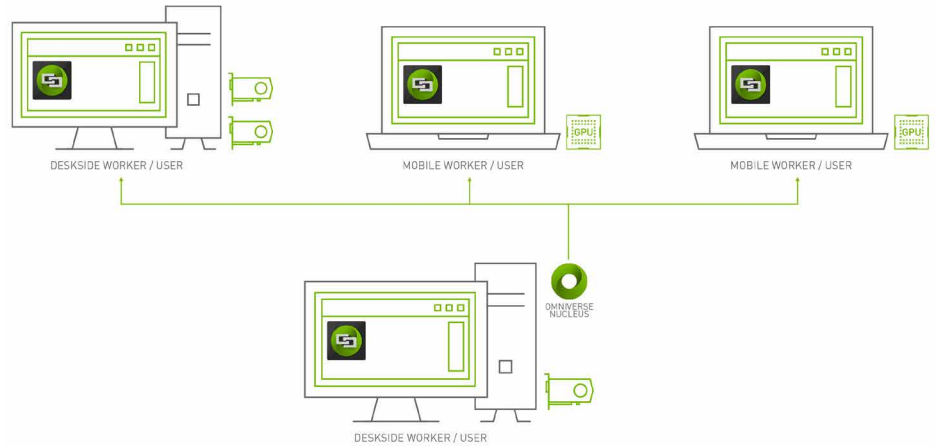
Large Enterprise

Connect teams to the same Omniverse environment whether they're working virtualized from the data center with NVIDIA RTX Virtual Workstations (vWS), or using local NVIDIA RTX professional mobile workstations and laptops.

EXAMPLE TOPOLOGY COMPONENTS		
Remote Clients	Mobile Workstation Desktop Workstation	Tablet Phone
Collaboration Server	Enterprise Nucleus Server	
Virtualization Host Software	VMware vSphere NVIDIA RTX Virtual Workstation (vWS) Teradici Cloud Access Software	
Virtualization Client Software	VMware Horizon Teradici PCoIP Client	
GPU	Recommended NVIDIA RTX GPU for Professional Visualization	
Omniverse Applications	Omniverse Create Omniverse View	
Connected Applications	Omniverse Connector Supported Applications	
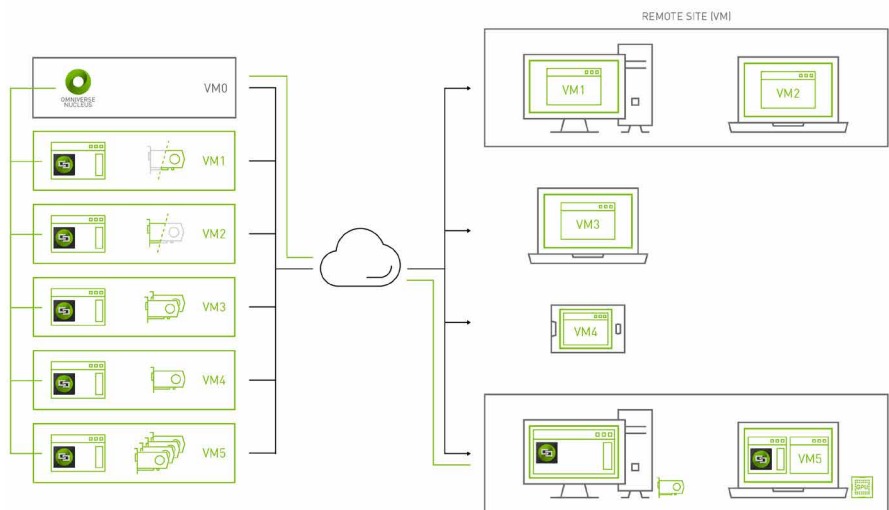
Omniverse Connectors

Omniverse Connectors are plug-ins to top industry software applications and microservices. NVIDIA is partnering with various ISVs to connect the tools you use today, with the platform of tomorrow.

3	**M**	**R**	(Rhino)	(SketchUp)	(Unreal)
Autodesk 3ds Max	Autodesk Maya	Autodesk Revit	McNeel & Associates Rhino including Grasshopper	Trimble SketchUp	Epic Games Unreal Engine 4
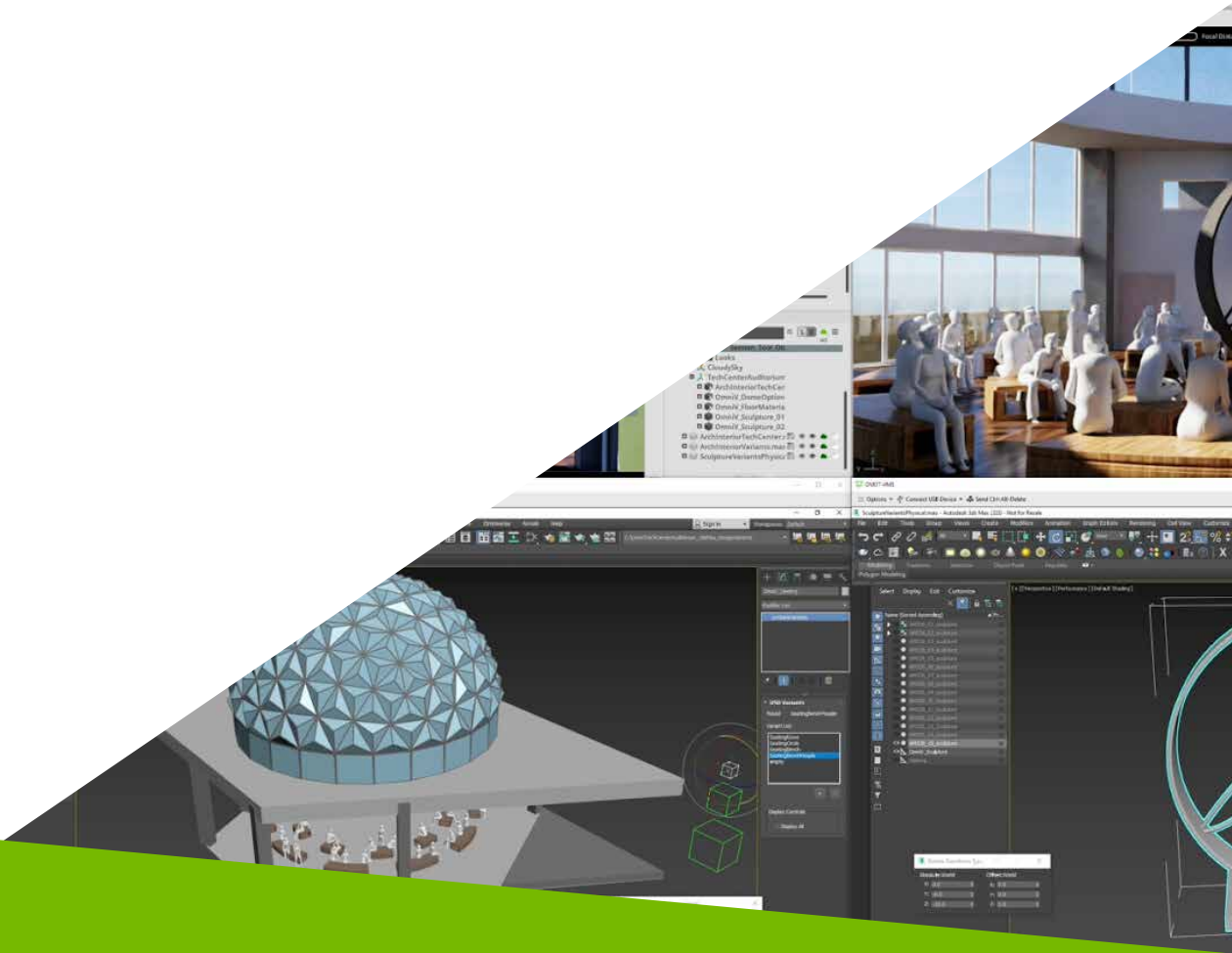
LEARN MORE ABOUT OMNIVERSE ENTERPRISE

NVIDIA.