



NVIDIA Omniverse[™] Enterprise is a groundbreaking virtual platform built for collaboration and real-time true-to-reality simulation. Studios can now maximize productivity, enhance communication, and boost creativity while collaborating on the same 3D scenes from anywhere.

Built For

- > Concept Artists
- > Modelers
- > Animators
- > Texture Artists
- Lighting or Look
 Development Artists
- > VFX Artists
- > Motion Designers
- > Rendering Specialists

Platform Features

- Compatible with top industry design and visualization software
- Scalable and works on all NVIDIA RTX solutions, from the laptop to the data center
- > Multi-GPU enabled
- Open standards, built on Pixar's Universal Scene Description (USD)
- > Options for Individuals and Enterprise

Subscription Inclusions

- Omniverse Nucleus Workstation and Enterprise Nucleus Server
- > Use of Omniverse Connectors
- > Omniverse Create
- > Omniverse View
- > Full NVIDIA Enterprise Support services

POWERING A NEW ERA OF COLLABORATION AND SIMULATION IN MEDIA & ENTERTAINMENT

NVIDIA continues to advance state-of-the-art graphics hardware, and Omniverse showcases what is possible with real-time ray tracing. The potential to improve the creative process through all stages of VFX and animation pipelines will be transformative.

- Francois Chardavoine, VP of Technology, Lucasfilm & Industrial Light & Magic

Challenges in the Media and Entertainment Industry

The film, television, and broadcast industries are undergoing rapid change as new production pipelines emerge to address the growing demand for high-quality content from a globally distributed workforce. Additionally, new streaming services are creating the need for constant releases and refreshes to satisfy a growing subscriber base.

NVIDIA Omniverse gives design teams the ability to create, iterate, and collaborate on assets using a variety of creative applications to deliver real-time results. Artists can focus on maximizing iterations with no opportunity cost or having to endure long render times to achieve high-quality results.

M&E Use Cases for Omniverse

- > Initial Concept Design Artists can quickly develop and refine conceptual ideas to bring the director's vision to life.
- > Gaining a Competitive Edge Visual art departments can produce innovative ideas swiftly, with infinite iterations at no opportunity cost, to meet bid deadlines, win new projects, and maximize profitability.
- > Real-Time Dailies Remote teams and supervisors can review beautiful, photorealistic shots from almost any device. This lets them convey ideas effectively, reduce the number of review cycles, keep projects on track, and accelerate the path to approvals.
- > Global Collaboration Globally dispersed content teams with a broad range of disciplines can now collaborate and communicate easier than ever, increasing creative flow across departments.
- > Virtual Production With the move to shoot visual effects in-camera on virtual production stages, visual art departments can collaborate directly with the set and make directorial edits in real-time.



*VMware vSphere and NVIDIA RTX vWS only required for virtualized deployment

An Open Platform Built for Speed and Collaboration

NVIDIA OmniverseTM Enterprise is a simple to deploy, end-to-end collaboration and true-to-reality simulation platform that fundamentally transforms complex artist workflows for studios of any scale.

Omniverse Enterprise unites teams, their assets, and software tools in a shared virtual space, enabling diverse workgroups to collaborate on a single project file simultaneously. With real-time interoperability across applications, infinite iterations come at no opportunity cost. Art Departments can maximize creative risks to achieve new heights of quality and innovation with faster time-to-market.

The platform is optimized and certified to run on NVIDIA RTX™ professional mobile workstations and NVIDIA-Certified Systems™ including desktop workstations and servers on the NVIDIA EGX™ platform.

Platform Components

The Omniverse platform consists of five key 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, onpremise, 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 to Omniverse Kit that extend its capabilities for developers to enhance their workflows and UI

SIMULATION

Powered by core NVIDIA technologies that simulate the world including <u>PhysX®</u>, <u>Flow</u>, <u>Blast</u>, 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.

Accelerating Workflows at Any Scale



Efficient, Optimized Workflows

Enable seamless, real-time collaboration across locations, teams, and top industry software applications simultaneously, and achieve a maximum number of creative iterations with faster time-to-market.



Real-Time, Multi-GPU Ray-Traced Viewport

Power feature-film quality, multi-GPU real-time ray tracing, and path tracing on USD content with NVIDIA RTX.



Physically Accurate Simulation

Achieve high-performance simulation of complex, physically accurate 3D worlds with minimal effort using the latest in NVIDIA simulation and AI technologies.

Omniverse Platform Apps for Media and Entertainment



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.



View

For reviewers, clients, and supervisors, Omniverse View powers seamless collaboration with immersive visualization and simulation of 3D assets and environments.

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.

Autodesk

Maya







Epic Games Unreal Engine 4

Deploy Across Any Organization

Omniverse Enterprise is designed, tested, and optimized to run on NVIDIA RTX™ laptops and desktops, and NVIDIA-Certified Systems™ on NVIDIA EGX™ in the data center. This makes it possible to deploy NVIDIA Omniverse Enterprise across studios 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 workstations and laptops and connected applications.

Large Enterprise

Connect teams and applications 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 workstations or laptops.



LEARN MORE ABOUT OMNIVERSE ENTERPRISE FOR M&E

Learn more: www.nvidia.com/ov-me

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Image Courtesy of Lucasfilm