

NVIDIA Launches Omniverse Design Collaboration and Simulation Platform for Enterprises

Leading Computer Makers Launch Workstations and NVIDIA-Certified Systems for Omniverse; BMW Group, Ericsson, Foster + Partners, WPP Among Early Adopters

GTC -- NVIDIA today announced the coming general availability of [NVIDIA Omniverse™ Enterprise](#), the world's first technology platform that enables global 3D design teams working across multiple software suites to collaborate in real time in a shared virtual space.

NVIDIA Omniverse Enterprise makes it possible for 3D production teams — which are often large, diverse in skills and geographically dispersed — to work seamlessly together on complex projects. Rather than requiring in-person meetings or exchanging and iterating on massive files, designers, artists and reviewers can work simultaneously in a virtual world from anywhere, on any device.

NVIDIA Omniverse Enterprise has been in early evaluations with some of the world's most sophisticated design teams at companies like BMW Group, Foster + Partners and WPP. It follows the launch three months ago of an open beta for individuals, which has been downloaded by nearly 17,000 users.

“Every few decades, technologies converge to enable a whole new thing – Omniverse is such an invention,” said Jensen Huang, founder and CEO of NVIDIA. “Building on NVIDIA's entire body of work, Omniverse lets us create and simulate shared virtual 3D worlds that obey the laws of physics. The immediate applications of Omniverse are incredible, from connecting design teams for remote collaboration to simulating digital twins of factories and robots. The science-fiction metaverse is near.”

Omniverse Enterprise is a new platform that includes the NVIDIA Omniverse Nucleus server, which manages the database shared among clients, and [NVIDIA Omniverse Connectors](#), which are plugins to industry-leading design applications.

It also includes two end-user applications: NVIDIA [Omniverse Create](#) — which accelerates scene composition and allows users in real time to interactively assemble, light, simulate and render scenes — and NVIDIA [Omniverse View](#), which powers seamless collaborative design and visualization of architectural and engineering projects with photorealistic rendering. NVIDIA RTX™ Virtual Workstation (vWS) software, also part of the platform, gives collaborators the freedom to run their graphics-intensive 3D applications from anywhere.

Omniverse Enterprise is tested and optimized for professionals to run on NVIDIA RTX laptops and desktops as well as NVIDIA-Certified Systems™ on the NVIDIA EGX™ platform. This makes it possible to deploy the tool across organizations of any scale, from small workgroups using local desktops and laptops, to globally distributed teams accessing the data center using various devices.

Global Leaders Adopt Omniverse

Among the more than 400 companies that have been evaluating Omniverse over the past two years are:

The [BMW Group](#) is the first car manufacturer to use NVIDIA Omniverse to design an end-to-end digital twin of an entire factory. Thousands of planners, product engineers, facility managers and lean experts within the global production network are able to collaborate in a single virtual environment to design, plan, engineer, simulate and optimize extremely complex manufacturing systems before a factory is actually built or a new product is integrated.

“NVIDIA Omniverse and NVIDIA AI give us the chance to simulate all 31 factories in our production network. All elements of the complete factory model — including the associates, the robots, the buildings and the assembly parts — can be simulated to support a wide range of AI-enabled use cases such as virtual factory planning, autonomous robots, predictive maintenance and big data analytics,” said Milan Nedeljkovic, member of the board of management of BMW AG, responsible for production. “These new innovations will reduce the planning times, improve flexibility and precision, and at the end produce 30 percent more efficient planning processes. Omniverse is a game-changer that is setting the standard for collaboration platforms for our industry.”

Industrial Light & Magic has been evaluating Omniverse for a broad range of possible workflows, but particularly for bringing together content created across multiple traditional applications, and facilitating simultaneous collaboration across teams that are distributed all over the world. Omniverse has the potential to remove the technical barriers that used to get in the way of the creative process, facilitating real-time decision-making across all disciplines.

[Foster + Partners](#), the U.K. architectural design and engineering firm, is implementing Omniverse to enable seamless collaborative design to visualization capabilities to teams spread across 14 countries.

“Omniverse is a revolutionary platform that has allowed our designers to collaborate and visualize multiple design changes to a scene simultaneously while working on their software of choice,” said Martha Tsigkari, partner with the Applied Research and Development Group at Foster + Partners. “As we can review design options in parallel, we have much more time for creative design and visualization. Integration of futuristic technologies such as machine learning will bring more opportunities to assist the creative process in the future.”

WPP, the world’s largest marketing services organization, is using the NVIDIA Omniverse platform to reinvent the way advertising content is made by replacing traditional on-location production methods with entirely virtual production. When COVID-19 restrictions were put in place, the WPP team faced limitations shooting commercials for clients on location. They used the NVIDIA Omniverse platform to collaboratively design, build and simulate a photoreal virtual forest without having to shoot it in person.

“WPP’s global content production specialist Hogarth is the largest of its kind in the world. We manage over 1,500 shoots per year for our clients,” said Richard Glasson, Global CEO of Hogarth. “Omniverse has improved the way we work by enabling multiple artists at different touchpoints in the pipeline to collaborate on a single scene virtually at the same time and from any place in the world. It dramatically reduces our carbon footprint and brings sustainable production to life.”

Ericsson, a leading telecommunications company, is using the Omniverse platform to simulate and visualize future 5G networks.

“The NVIDIA Omniverse platform lets our teams virtually explore any city’s unique geography — whether it is San Francisco’s hills or Frankfurt’s high-rises — and its impact on radio network performance,” said Joakim Sorelius, head of Development Unit Networks at Ericsson. “By combining our extensive simulation expertise with the stunning visualizations of Omniverse, we bring radio network analysis to a new level, creating insights that ensure our customers get the best possible 5G experience. We see Omniverse as the future of collaboration and planning.”

Activision Publishing, Inc., is exploring NVIDIA Omniverse’s AI-search capabilities for its award-winning, blockbuster video game experiences to allow artists, game developers and designers to search intuitively through massive databases of untagged 3D assets using text or images.

Building the Metaverse — Open Standards and Interoperability

The world’s 3D industries are making great strides toward building the metaverse — a massive shared virtual world — by adopting open file frameworks like Pixar’s Universal Scene Description, and encouraging interoperability between software applications. The NVIDIA Omniverse ecosystem continues to grow, connecting industry-leading applications from software companies such as Bentley Systems, Adobe, Autodesk, Epic Games, ESRI, Graphisoft, Trimble, McNeel & Associates, Blender, Marvelous Designer, Reallusion and wrnch Inc.

[Bentley Systems](#), the infrastructure engineering software company, announced it is bringing infrastructure digital twins to NVIDIA Omniverse. Bentley is the first to harness real-time rendering, AI and simulation capabilities of NVIDIA Omniverse.

A complete list of software partners is available at nvidia.com/omniverse.

Availability

NVIDIA Omniverse Enterprise software is available on a subscription basis and includes NVIDIA’s enterprise support services. NVIDIA’s partner network of leading computer makers — including ASUS, BOXX Technologies, Cisco, Dell Technologies, HP, Lenovo and Supermicro — are supporting NVIDIA Omniverse Enterprise.

About NVIDIA

NVIDIA’s invention of the GPU in 1999 sparked the growth of the PC gaming market and has redefined modern computer graphics, high performance computing and artificial intelligence. The company’s pioneering work in accelerated computing and AI is reshaping trillion-dollar industries, such as transportation, healthcare and manufacturing, and fueling the growth of many others. More information at <https://nvidianews.nvidia.com/>.

Certain statements in this press release including, but not limited to, statements as to: the features, performance, benefits, impact and availability of NVIDIA Omniverse Enterprise, including the NVIDIA Omniverse Create and NVIDIA Omniverse View applications; the design of buildings, factories, cars and products increasingly involving broad teams spread over multiple locations; integration of futuristic technologies bringing more opportunities to assist the creative process; and the world’s 3D industries making great strides toward building the metaverse are forward-looking statements that are subject to risks and uncertainties that could cause results to be materially different than expectations. Important factors that could cause actual results to differ materially include: global economic conditions; our reliance on third parties to manufacture, assemble, package and test our products; the impact of technological development and competition; development of new products and technologies or enhancements to our existing product and technologies; market acceptance of our products or our partners’ products; design, manufacturing or software defects; changes in consumer preferences or demands; changes in industry standards and interfaces; unexpected loss of performance of our products or technologies when integrated into systems; as well as other factors detailed from time to time in the most recent reports NVIDIA files with the Securities and Exchange Commission, or SEC, including, but not limited to, its annual report on Form 10-K and quarterly reports on Form 10-Q. Copies of reports filed with the SEC are posted on the company’s website and are available from NVIDIA without charge. These

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