NVIDIA Launches Omniverse Cloud Services for Building and Operating Industrial Metaverse Applications

Company's First SaaS Offering Includes Omniverse Cloud Nucleus, DRIVE Sim, Isaac Sim, Replicator for Synthetic Data Generation; Initial Customers Include RIMAC Group, Siemens, WPP

GTC -- NVIDIA today announced its first software- and infrastructure-as-a-service offering — NVIDIA Omniverse™ Cloud — a comprehensive suite of cloud services for artists, developers and enterprise teams to design, publish, operate and experience metaverse applications anywhere.

Using Omniverse Cloud, individuals and teams can experience in one click the ability to design and collaborate on 3D workflows without the need for any local compute power. Roboticists can train, simulate, test and deploy AI-enabled intelligent machines with increased scalability and accessibility. Autonomous vehicle engineers can generate physically based sensor data and simulate traffic scenarios to test a variety of road and weather conditions for safe self-driving deployment.

Early supporters of Omniverse Cloud include RIMAC Group, WPP and Siemens.

"The metaverse, the 3D internet, connects virtual 3D worlds described in USD and viewed through a simulation engine," said Jensen Huang, founder and CEO of NVIDIA. "With Omniverse in the cloud, we can connect teams worldwide to design, build, and operate virtual worlds and digital twins."

Global Leaders Support Omniverse Cloud
WPP, the world's largest marketing services organization, is the first to launch automotive marketing services on Omniverse Cloud to deliver custom, advanced 3D content and experiences to leading automotive brands.

"The industry expectation for what great automotive content looks like, in any channel, has increased dramatically in the past few years," said Stephan Pretorius, chief technology officer at WPP. "With Omniverse Cloud, we are changing the way we build, share and consume automotive content – bringing sustainable, low-emission production to our customers."

Building on the partnership announced earlier this year, Siemens, a leader in industrial automation hardware and software, is working closely with NVIDIA to leverage Omniverse Cloud and NVIDIA OVX™ infrastructure together to deliver solutions from the Siemens Xcelerator business platform.

"An open ecosystem is a central design principle for the Siemens Xcelerator digital business platform," said Tony Hemmelgarn, president and CEO of Siemens Digital Industries Software. "We are excited to expand our partnership with NVIDIA, develop integrations between Siemens Xcelerator and Omniverse Cloud, and enable an industrial metaverse where companies can remotely connect their organizations and operate in real time across the complete product and production lifecycle."

RIMAC, a pioneer in electric vehicle technologies, is using Omniverse Cloud to provide an end-to-end automotive pipeline — from design to marketing.

"Electric motors are efficient and can adjust in an instant. Their flexibility allows engineers to create a car that can handle in a way a combustion engine car never could," said Mate Rimac, founder and CEO of RIMAC. "Omniverse Cloud will provide similar efficiency and flexibility, enabling our engineering teams to focus on the design of the car model itself, and spend less time on the intricacies of complex 3D design pipelines. And with this 3D car configurator experience, it unlocks endless possibilities for customization without having to manually render each layer, which saves time and money."

In the GTC keynote, Huang showcased an Omniverse Cloud demo featuring an advanced, real-time 3D car configurator of the RIMAC Nevera, the recently launched electric hypercar from BUGATTI RIMAC, part of the RIMAC Group.

Omniverse Cloud services run on the Omniverse Cloud Computer, a computing system comprised of NVIDIA OVX™ for graphics and physics simulation, NVIDIA HGX™ for advanced AI workloads and the NVIDIA Graphics Delivery Network (GDN), a global-scale distributed data center network for delivering high-performance, low-latency metaverse graphics at the edge.

Omniverse Cloud services include:

- **Omniverse Nucleus Cloud** — provides 3D designers and teams the freedom to collaborate and access a shared Universal Scene Description (USD)-based 3D scene and data. Nucleus Cloud enables any designer, creator or developer to save changes, share, make live edits and view changes in a scene from nearly anywhere.

- **Omniverse App Streaming** — enables users without [NVIDIA RTX](#)™ GPUs to stream Omniverse reference applications like [Omniverse Create](#), an app for designers and creators to build USD-based virtual worlds, [Omniverse View](#), an app for reviews and approvals, and [NVIDIA Isaac Sim](#), for training and testing robots.
- **Omniverse Replicator** — enables [researchers, developers](#) and enterprises to [generate physically accurate 3D synthetic data](#), and easily build custom synthetic-data generation tools to accelerate the training and accuracy of perception networks and easily integrate with [NVIDIA AI cloud services](#).
- **Omniverse Farm** — enables users and enterprises to harness multiple cloud compute instances to scale out Omniverse tasks such as rendering and synthetic data generation.
- **NVIDIA Isaac Sim** — a scalable [robotics simulation application](#) and synthetic-data generation tool that powers photorealistic, physically accurate virtual environments to develop, test and manage AI-based robots.
- **NVIDIA DRIVE Sim™** — an [end-to-end simulation platform](#) to run large-scale, physically accurate multisensor simulations to support autonomous vehicle development and validation from concept to deployment, improving developer productivity and accelerating time to market.

Availability

Omniverse Farm, Replicator and Isaac Sim containers are available today on [NVIDIA NGC](#)™ for self-service deployment on AWS using Amazon EC2 G5 instances featuring NVIDIA A10G Tensor Core GPUs. In addition, Omniverse Cloud will be available as NVIDIA managed services via [early access by application](#).

To learn more about [NVIDIA Omniverse Cloud](#), watch Huang's [GTC keynote](#). [Register free for GTC](#) to attend sessions with NVIDIA and industry leaders.

About NVIDIA

Since its founding in 1993, NVIDIA (NASDAQ: NVDA) has been a pioneer in accelerated computing. The company's invention of the GPU in 1999 sparked the growth of the PC gaming market, redefined computer graphics and ignited the era of modern AI. NVIDIA is now a full-stack computing company with data-center-scale offerings that are reshaping industry. More information at https://nvidianews.nvidia.com/.

Certain statements in this press release including, but not limited to, statements as to: the benefits, impact, performance, and features of NVIDIA Omniverse Cloud services, the Omniverse Cloud Computer, NVIDIA OVX, NVIDIA HGX and the NVIDIA Graphics Delivery Network; the company connecting teams worldwide to design, build, and operate virtual worlds and digital twins with Omniverse in the cloud; and the availability of Omniverse Cloud services 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 forward-looking statements are not guarantees of future performance and speak only as of the date hereof, and, except as required by law, NVIDIA disclaims any obligation to update these forward-looking statements to reflect future events or circumstances.

Kasia Johnston
+1-415-813-8859
kasiaj@nvidia.com