

# Groundbreaking Updates to NVIDIA Studio Power the 3D Virtual Worlds of Tomorrow, Today

Major advancements for creators announced during CES special address include Studio Laptops with new GeForce RTX 3080 Ti GPUs, NVIDIA Omniverse general availability and NVIDIA Canvas update.

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We're at the dawn of the next digital frontier. Creativity is fueling new developments in design, innovation and virtual worlds.

For the creators driving this future, we've built NVIDIA Studio , a fully accelerated platform with high-performance GPUs as the heartbeat for laptops and desktops.

This hardware is paired with exclusive NVIDIA RTX-accelerated software optimizations in top creative apps and a suite of tools like NVIDIA Omniverse, Canvas and Broadcast, which help creators enhance their workflows.

And it's all supported by specialized drivers that are updated monthly for performance and reliability — like the January Studio Driver, available starting today.

The interconnected 3D virtual worlds of tomorrow are being built today. NVIDIA Omniverse , designed to be the foundation that connects these virtual worlds, is now available to millions of NVIDIA Studio creators using GeForce RTX and NVIDIA RTX GPUs.

We've also introduced GeForce RTX 3080 Ti and 3070 Ti-based Studio laptops, groundbreaking hardware with heightened levels of performance — especially on battery.

Updated with a major increase in fidelity, new materials and an upgraded AI model, NVIDIA Canvas enables artists to turn simple brushstrokes into realistic landscape images by using AI.

Expanding the NVIDIA Studio ecosystem, NVIDIA Omniverse is now available at no cost to millions of individual creators with GeForce RTX and NVIDIA RTX GPUs.

Bolstered by new features and tools, NVIDIA's real-time design collaboration and simulation platform empowers artists, designers and creators to connect and collaborate in leading 3D design applications from their RTX-powered laptop, desktop or workstation.

Multi-app workflows can grind to a halt with near-constant exporting and importing. With Omniverse, creators can connect their favorite 3D design tools to a single scene and simultaneously create and edit between the apps.

We've also announced platform developments for Omniverse Machinima with new free game characters, objects and environments from Mechwarrior 5 , Shadow Warrior 3 , Squad and Mount & Blade II: Bannerlord ; and Omniverse Audio2Face with new blendshape support and direct export to Epic's MetaHuman ; plus early access to new platform features like Omniverse Nucleus Cloud — enabling simple "one-click-to-collaborate" sharing of large Omniverse 3D scenes.

Learn more about Omniverse, the latest enhancements and its general availability, and download the latest version at [nvidia.com/omniverse](https://nvidia.com/omniverse) .

NVIDIA Studio laptops provide the best mobile performance for 3D creation. The new GeForce RTX 3080 Ti Laptop GPU features 16GB of the fastest GDDR6 memory ever shipped in a laptop and higher performance than the desktop TITAN RTX.

The new GeForce RTX 3070 Ti also delivers fantastic performance — it's up to 70 percent faster than RTX 2070 SUPER laptops.

Next-generation laptop technologies are amping up performance. We've worked with CPU vendors on CPU Optimizer. It's a new, low-level framework enabling the GPU to further optimize performance, temperature and power of next-gen CPUs. As a result, CPU efficiency is improved and power is transferred to the GPU for more performance in creative applications.

In compute-heavy apps like Adobe Premiere, Blender and Matlab, we've developed Rapid Core Scaling. It enables the GPU to sense the real-time demands of applications and use only the cores it needs rather than all of them. This frees up power that can be used to run the active cores at higher frequencies, delivering up to 3x more performance for intensive creative work on the go.

ASUS, MSI and Razer are launching new laptops with a wide range of designs — and up to GeForce RTX 3080 Ti GPUs — starting in February.

Bolstered by work from the NVIDIA Research team developing GauGAN2 , NVIDIA Canvas is now available with 4 times higher resolution and five new materials.

The GauGAN2 AI model incorporated in the latest update helps deliver more realistic images with greater definition and fewer artifacts.

Five new materials — straw, flowers, mud, dirt and bush — liven up and create richer landscape environments.

Read more about the latest NVIDIA Canvas update .

Creators can download the January Studio Driver , available now with improved performance and reliability for the Omniverse and Canvas updates.

With monthly updates, NVIDIA Studio Drivers deliver smooth performance on creative applications and the best possible experience when using NVIDIA GPUs. Extensive multi-app workflow testing ensures the latest apps run smoothly.

Finally, the GeForce RTX 3050 GPU brings even more choice for creators. Our new entry-level GPU provides the most accessible way of getting great RTX benefits — real-time ray tracing, AI, a top-notch video encoder and video acceleration. Starting at just \$279, it's a great way to start creating with RTX. Look for availability from partners worldwide on Jan. 27.

One more thing: Keep an eye out for more information on GeForce RTX 3090 Ti later this month. It'll have a huge 24GB of lightning-fast video memory, making it perfect for conquering nearly any creative task.

Subscribe to the Studio YouTube channel for tutorials, tips and tricks by industry-leading artists, and stay up to date on all things Studio by signing up for the NVIDIA Studio newsletter .

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