



'Fortnite' Is RTX On! Real-Time Ray Tracing Comes to One of Most Popular Games on the Planet

NVIDIA and Epic Games Bring Amazing Visuals, NVIDIA DLSS and New NVIDIA Reflex Technology to Millions of Fortnitters

NVIDIA and Epic Games today announced that *Fortnite* — the epitome of battle royale gaming and a cultural phenomenon with more than 350 million players worldwide — is adding real-time ray tracing, AI-powered [NVIDIA DLSS](#) and other groundbreaking technologies, making the game more beautiful and even more responsive.

The game was featured today as part of a GeForce® special event where NVIDIA founder and CEO Jensen Huang unveiled the new [GeForce RTX™ 30 Series GPUs](#).

"Epic Games is turning *Fortnite*, which is already a pop culture sensation, into a showcase for how competitive gaming will improve with technology," said Matt Wuebbeling, vice president of Global GeForce Marketing at NVIDIA. "*Fortnite* players are about to experience the stunning visuals of next-level ray tracing, AI-accelerated frame rates powered by NVIDIA DLSS, and our new low-latency esports technology suite, NVIDIA Reflex."

NVIDIA RTX™ GPUs are the only ones on the market with hardware support for ray tracing and AI. Gamers will experience these features in all *Fortnite* modes, as well as in a special new Creative mode map, called RTX Treasure Run, which has been specifically designed to highlight ray tracing.

"The GeForce RTX 30 Series is a testament to NVIDIA's dedication to ray tracing and artificial intelligence," said Marcus Wassmer, engineering director of Graphics at Epic Games. "Second-generation ray tracing, innovative use of AI with DLSS, and a large raw performance boost make the GeForce RTX 30 Series a truly impressive powerhouse for graphics technology in gaming."

Ray Tracing Comes to *Fortnite*

Fortnite will add four [ray-traced features](#), for a more immersive gaming experience. These include:

- Ray-traced reflections – Recreates the way light reflects on glossy and metal surfaces, including smooth natural mirrors like window glass and rougher surfaces like brushed metal.
- Ray-traced shadows – Accurately models shadowing on many surfaces while enhancing surface and contact detail, and fixes problems associated with traditional shadow techniques.
- Ray-traced global illumination – Calculates world lighting with massively increased precision, illuminating *Fortnite*'s environments, players and characters with unprecedented detail, fidelity and clarity.
- Ray-traced ambient occlusion – Where objects or surfaces meet, light is occluded, creating subtle shadows that can highlight the slightest of surface details.

All told, ray tracing will bring a new level of detail and realism to *Fortnite*'s Battle Royale, Creative and Save the World modes.

Using AI to Boost Performance and Image Quality in *Fortnite*

[NVIDIA DLSS](#), which uses AI and is powered by RTX Tensor Cores, is a deep learning neural network that boosts frame rates and generates beautiful, sharp images for games. It provides gamers the performance headroom to maximize quality settings and increase output resolution.

NVIDIA Reflex Comes to *Fortnite*

Fortnite is one of the first games to support [NVIDIA Reflex](#), which measures and reduces system latency. Reflex allows gamers to improve responsiveness, increase aiming precision and tune their system for battle.

"NVIDIA Reflex technology arms developers with new features to minimize latency in their games. We're seeing excellent responsiveness and player control with *Fortnite* running on the GeForce RTX 30 Series," said Nick Penwarden, vice president of Engineering at Epic Games.

System latency is the time it takes for a player's actions to appear as pixels on the monitor and quantifies how the game feels. In games like *Fortnite*, NVIDIA Reflex low-latency mode dynamically reduces system latency by up to 42 percent in GPU-bound scenarios.

New *Fortnite* RTX Treasure Run Map Spotlights Ray Tracing

NVIDIA and Epic collaborated with top *Fortnite* creators on the new RTX Treasure Run map, which highlights the new technologies *Fortnite* is adding. The map drops players at the entrance to a museum where they are challenged to a

scavenger hunt that highlights different ray-traced effects.

Along the way, players can explore a hall of mirrors, medieval castle and jungle, climb a giant statue and explore a shrunken science lab to uncover the most treasures in the least amount of time. RTX Treasure Run is coming soon.

The new features are coming soon to *Fortnite Chapter 2 - Season 4* for PC players and make *Fortnite* a flagship title for next-generation gaming technologies.

Screenshots, game trailers and in-game footage are available on NVIDIA's press site at www.nvidia-press.com.

About *Fortnite*

Fortnite is the completely free online game where you and your friends fight to be the last one standing in Battle Royale, join forces to make your own Creative games, or catch a live show at Party Royale. Download now and jump into the action on PlayStation 4, Xbox One, Switch, Android, PC and Mac. Learn more at www.fortnite.com.

About Epic Games

Founded in 1991, Epic Games is an American company founded by CEO Tim Sweeney. The company is headquartered in Cary, North Carolina, and has more than 40 offices worldwide. Today Epic is a leading interactive entertainment company and provider of 3D engine technology. Epic operates *Fortnite*, one of the world's largest games with over 350 million accounts and 2.5 billion friend connections. Epic also develops Unreal Engine, which powers the world's leading games and is also adopted across industries such as film and television, architecture, automotive, manufacturing and simulation. Through Unreal Engine, Epic Games Store and Epic Online Services, Epic provides an end-to-end digital ecosystem for developers and creators to build, distribute and operate games and other content.

About NVIDIA

[NVIDIA](http://www.nvidia.com)'s (NASDAQ: NVDA) invention of the GPU in 1999 sparked the growth of the PC gaming market, redefined modern computer graphics and revolutionized parallel computing. More recently, GPU deep learning ignited modern AI — the next era of computing — with the GPU acting as the brain of computers, robots and self-driving cars that can perceive and understand the world. More information at <http://nvidianews.nvidia.com/>.

Certain statements in this press release including, but not limited to, statements as to: NVIDIA and Epic Games bringing amazing visuals, NVIDIA DLSS and NVIDIA Reflex technology to millions of Fortnites; the benefits and performance of *Fortnite* adding NVIDIA technologies, including real-time ray tracing and NVIDIA DLSS; Epic Games showing how competitive gaming will improve with technology; what *Fortnite* players will experience with NVIDIA's technologies; NVIDIA RTX GPUs being the only ones with hardware support for ray tracing and AI; the modes of *Fortnite* that will highlight NVIDIA features; the benefits, performance and impact of the GeForce RTX 30 Series, ray tracing, NVIDIA DLSS, NVIDIA Reflex and NVIDIA and Epic Games working together; *Fortnite* adding four ray-traced features and their benefits and performance; NVIDIA Reflex arming developers with features to minimize latency; RTX Treasure Run map highlighting the new technologies *Fortnite* is adding and what gamers will experience; RTX Treasure Run coming soon; and when the new features of *Fortnite* will be made available 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.

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