RDC21

ROBLOX DEVELOPERS CONFERENCE

RDC 2021: Updates on Roblox's Vision and the Path Forward

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PRODUCT & TECH | EVENTS

At Roblox, we are transforming how people come together to connect, create, and express themselves through shared experiences. Our platform has seen tremendous growth with over 43 million daily active users across 180 countries. This is possible thanks to the immersive experiences built by our developer community, who we bring together annually at the Roblox Developers Conference (RDC). RDC is a multi-day event where programmers, builders, and 3D artists alike gather together to hear directly from product and engineering leaders and connect with each other.

In our keynotes, founder and CEO Dave Baszucki, VP of Developer Relations Matt Curtis, and myself had the distinct pleasure of revisiting many of the advancements we've made throughout the year and highlighting several exciting platform updates all while immersing ourselves in the Roblox developer community.

Rendering Fidelity

In 2020, we made material enhancements in bringing the virtual world to life with rendering fidelity improvements. We released Future is Bright, Dynamic Skies, and PBR Textures—critical steps forward in our vision to create immersive rendering and simulation technology. This allows developers to use greater fidelity as they customize the look and feel of their experiences. Next, we turn our focus to advancements in simulation features like aerodynamics and real-time in-experience CSG, enabling photorealistic visuals that can be modified to bring your vision to reality. These improvements will enable you to build helicopters, airplanes, or fast-moving cars using real shapes, including curves, and having our physics engine do the rest.

Identity

Our vision for Roblox Avatars is a digital you, and it can be whoever you want to be, from the way you move, talk, and dress. The latest updates include the upcoming Layered Clothing Studio beta launch and Dynamic Heads beta, which is the first step in enabling users to express the breadth and depth of their emotions and identities. Layered Clothing allows a combinatorial explosion of possibilities in customizing your avatar, as any body can be outfitted with arbitrary layered clothing items. Meanwhile, Dynamic Heads will bring facial expressions and emotes to life. These releases represent important stepping stones in a long line of innovations to improve the expressiveness and combinatorics in the metaverse.

Building a Robust Economy

In addition to creating tools and systems that maximize developer productivity, we are creating more opportunities to build a virtual economy. We have 1.3 million developers and creators earning Robux, and this year, they are on track to earn $500 million from their creations. Last year, we introduced engagement-based payouts (called Premium Payouts) as a way to reward developers for creating engaging experiences (in addition to earning Robux through in-experience purchases). Today, 50% of our top 10,000 developers make more from these engagement-based payouts than in-experience purchases. We are also giving developers more ways to earn on the Roblox platform through improvements in sponsored content and the ability for some developers to create and sell their own avatar items.

Roblox Open Cloud

The future for developers on Roblox is the freedom to do everything on the Roblox Open Cloud. Studio has been an incredible tool for our developers. But as our community gets broader and more diverse, we felt that we needed them to have more ability to drive the ecosystem of tools at their disposal. So, we created our Open Cloud program with the idea that third-party components could simply plug in directly to all our backend services without having to go through Studio. This will create an ecosystem where developers can build and discover custom toolchains that maximize their productivity.

Opening up these interfaces will allow a new class of creators to emerge—building new development tools to enable workflows (and potentially offering them to other developers via a marketplace). The Roblox Open Cloud enables developers to take their businesses to a new level, which means support for large teams; support for specific domains, such as artists or coders; and integrations with other tools that add richness to the environment. Not only that, but it also provides users with a secure and flexible platform, allowing them to access their Roblox resources seamlessly. These improvements will allow Roblox to become an incredibly fast and reliable engine, enabling developers to build better, more dynamic, and higher performing experiences.

Storage is an essential part of the scalability of the platform. To give developers even more flexibility as data gets increasingly complex, our Data Store now supports 16x larger values since last RDC, and our new high throughput, low latency Memory Store data service gives developers the ability to quickly access non-persistent data shared across all servers in an experience. The latter is a great way for developers to store and update rankings on a global leaderboard or optimally matchmake users in their experiences based on skill level. This is just the beginning, and we have so much more coming!

Shared Fabric: Communication and Civility

As we consider ways to enable deeper immersion, we've added a whole new dimension to interaction on Roblox through our Spatial Voice beta launch. Voice and gestures are critical to human expression. We raise our voice to reach someone far away, we whisper when we want to be discreet, and we alter our communication style depending on if we are alone or with others. In the future, we will be able to add nuance and emotion to our words—not only through emotes, but also through facial expressions captured on our webcams. This supports the scalability of meaningful experiences and interactions in the metaverse.

Finally, safety and civility are foundational to our vision of creating an inclusive community where everyone feels welcome. We are improving our moderation support. We've reduced bot exposure by over 75% this year and are building tools to allow developers to manage their own communities. Forthcoming Experience Guidelines and the recently launched Age Verification service help enable dynamic levels of safe and civil interactions across a wide range of experiences. This gives developers the freedom to build great and unique experiences while ensuring consistency across the Roblox platform. As we continuously improve safety and civility practices, users and creators will spend less time waiting for moderation and dealing with bad actors and more time turning their imaginations into reality.

Looking towards the future, we envision that the metaverse will continue to transform how you connect, create, and express yourself through shared experiences. You can learn about ancient Rome by walking through its streets with your classmates, rock out at concerts with friends who live thousands of miles away, and host a virtual team-building activity with your colleagues across the globe. Just about anything you can do in real life you can experience on Roblox. We'll save you a front-row seat.

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