

CASE STUDY

Bryson Tiller's "Trapsoul World Series" immersive livestream

Singer/songwriter Bryson Tiller's "Trapsoul World Series," an immersive, otherworldly live streamed PPV concert experience, accentuated the artist's unique musical vibe for fans around the world watching at home.



At a glance

In this case study you will learn how <u>Xite Labs</u> utilised the Disguise xR workflow powered by a GX 2C media server and RX real-time rendering platform, to bring to life a myriad of virtual worlds in Unreal Engine and Notch that immersed Tiller's performance in 3D graphics and transported the audience.

The concert presented Tiller in a series of six different worlds linked by a narrative flowing through the songs. Xite Labs were responsible for the stunning xR content for 14 different songs performed in four virtual 'worlds' with distinct appearances and themes.

These included a virtual lounge that fell away to reveal a fractal world of galaxies, nebulas and spaceships, a time theme with a mountain desert landscape and a flight through a moonlit sky, guerrilla warfare transforming into a neon jungle as well as stark hallways with bold, flat lighting, colour-changing walls and silhouettes. Throughout, Tiller appeared to perform on a moving platform, which served as the anchor point transporting him from one otherworldly environment to another.

"Bryson was really interested in Unreal Engine and was studying game design while continuing his music career," explains Creative Director for Xite Labs, Vello Virkhaus. "Since he knew the technology, he was eager to create a concert experience like this, seamlessly taking him from one complex world to another.



Challenge

A technical balancing act

"The main challenges were how to deliver the content to a level of acceptability for the client, while maintaining a solid 30 fps frame rate with precise, matching colours," explains Virkhaus. "This technical balancing act was made easier by Unreal Engine's ability to rapidly change lighting and shading looks."

"Meeting our own internal and client-facing external quality levels for such extended play and such complex visuals, were essential," Virkhaus says.

A shift in workflows

Further challenges included moving collaborators from film and music video-based workflows they're accustomed to, into the Disguise xR workflow and operating within the new medium. More time was ultimately made available for the project due to the sheer complexity of building the virtual worlds and executing timecode and animations.

"It's important to set expectations with clients and people who are new to the xR workflow. But as long as we do our jobs, educate clients and producers and don't push things under the rug for the sake of the job, everything will go well," Creative Director Greg Russell adds.



Solution

A proven in-house workflow

Xite used its proven in-house workflow featuring a Disguise GX 2C as the primary xR controller and running Unreal Engine scenes on Disguise RX via RenderStream. Front-plate elements were created in Notch to further link Tiller into each of the unique worlds.

"Extensive integration of the Notch front-plate was required to get atmosphere and particles on the front-plate to feel like they were seamlessly integrated with all the Unreal back-plate work. We created four virtual worlds, but the volume of front-plate elements we created was much bigger - especially in the forested scenes with AR plants rendered in Notch and backgrounds rendered in Unreal - where lighting and textures had to be linked together."

According to Virkhaus, an unforeseen benefit was their ability to film Tiller wearing a shiny, black reflective jacket for the interlude performances. "This would have been incredibly challenging on a green screen and required a great deal of time technically for lighting and ensuring the separation of light fields. But xR made this possible, and it looked amazing."



XITE LABS

"I have not seen anything done in xR that was quite as diverse and complicated as this. And the fact that it was shot on our smaller volume in such a short timeframe still blows my mind!"

Greg Russell Creative Director

Results

The longest and most complex real-time project ever completed by Xite was a resounding hit.

"The worlds successfully layered physical lighting with front and back-plate digital elements in a seamless fashion, creating a truly immersive effect and making Bryson appear as if he was actually there in the otherworldly environments", Virkhaus says.

"The fans absolutely loved the worlds and transitions and raved about them in the portal chat thread while the PPV show aired."



Success

"From the top-down the livestream concert went exceedingly well and got great feedback," says Russell. "Bryson understood the technology and intuitively knew where to be on the stage and how to be in and out of the lighting."

"On the production level, it was the first time Director Mike Carson and DP Russ Fraser had done xR. With film and music video people coming into our world, it was a very challenging job from a production standpoint because we were basically teaching them the xR workflow on the job. But once they started putting the pieces together they realised its value."

60

hours recording additional cinematic outputs post-filming

week of DMX timecode lighting programming

1

400+ 200+

hours x9 Unreal

Engine artists

across 10 weeks

hours for 2 Notch artists



Disguise equipment used



DESIGNER

Designer is the ultimate software to visualise, design, and sequence projects at every stage, from concept all the way through to showtime.



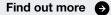


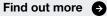
RX

RX is our dedicated system for hosting content render engines, enabling new possibilities for scale out rendering.

GX 2C

The GX 2C media server delivered dynamic Notch video content across the show's innovative visual canvas.





In Partnership with

The 92 Group (Creative Studio) Show & Content Creative Director: Mike Carson Content Art Director: Sam Ashcraft Content Consultant: Randy Cano Producers: Chanel Urban, Amish Dani

HPLA (Production Company) Executive Producers: Ryan Hahn, Neil Dominique, **Bryson Tiller** Director of Photography: Russ Fraser Editor: Chaz Smedley

Post Production Post Producer: Vince Tran **VFX:** Foreign Exchange Colour Producer: Jessica Amburgey Colour Assistant: Zack Hetlage Colourist: Derek Hansen Title Design: Marvin Lau



In Partnership with

Xite Labs (xR Studio) Creative / xR Directors: Vello Virkhaus, Greg Russell Technical Directors: Jeremy Vannix, Simon Anaya Production Partners: Evolve Media Group, Lightswitch, Robe Media Server Operator: Simon Anaya Unreal CG Artists: Diego Castro, Brian Egam, Kevin Aguirre, Ofer Zmora, Rodel Aragon, Brandon Rosado, Darrion Grannieri, Jussi Tolvanen, Rayworks Producer: Anders Rahm Notch Artists: Travis Poe, Simon Anaya Lighting Director: HPLA Unreal Technical Support: Jussi Tolvanen DIT / Technical Assistant / Photographer: Billy Woods Camera/Jib Operator: Pierce Cook Sequence Technician: Bobbie Bunn Covid Compliance Officer: Lourie Koenig

DISGUISE

Get in touch

Curious to know more about us? Want to master our production toolkit? Need support on your project?

Our team will be happy to speak to you, whatever your query.



