CASE STUDY
Zero Density & Riot Games

Surpassing the spectacle

Those who don't believe in magic will never find them.
Roald Dahl

With its game changer product Reality Virtual Studio, Zero Density hints at the future of media!

Those who are the bravest are not the ones that kill the dragon, they are those who embed it into the reality, direct them with two tracking cameras and make the audience gasp as it jumps off in a stadium. The world's leading virtual studio solution provider, Zero Density enabled Riot Games to create memorable experiences for their fans and players that they can take home and share with their friends.

Every year at the **League of Legends World Championships**, Riot Games presents fascinating performances. The team agreed with Zero Density for 2017 games with the dream of adding a dragon to these globally known shows.

Collaborating with Riot Games, Zero Density, with its new technology Reality Virtual Studio made a quantum leap in the world of media and virtual production, and achieved a really strong emotional connection with the audience on a physical and biological level, breaking all the boundaries.

### If the sky could dream it would dream of dragons

Before the games started, Riot Games put on a massive opening ceremony including a giant trophy, a live performance of Worlds theme "Legends Never Die" and a fascinating dragon. During the ceremony, an augmented reality dragon flew in, soared around the arena and let out a good roar before taking off again.

As if presenting evidence for the above quote of Ilona Andrews, Riot Games and Zero Density created the most photorealistic dragon show. This solution includes Full HDR rendering pipeline featuring input, keying, compositing and rendering in one single software. The product enables Riot Games to deliver their viewers a true, full HDR experience.

Zero Density

The World's Most Photorealistic Virtual Studio Products

In the dragon project of Riot Games, the main products in use are Reality Keyer™, Reality Editor™ and Reality Control™ applications. Zero Density also provided installation and implementation services.

Zero Density's real time node-based compositing platform enables better performance at scale and introduces the ability to deploy an ultimate augmented reality platform, as well as greater cost-savings and operational efficiencies.
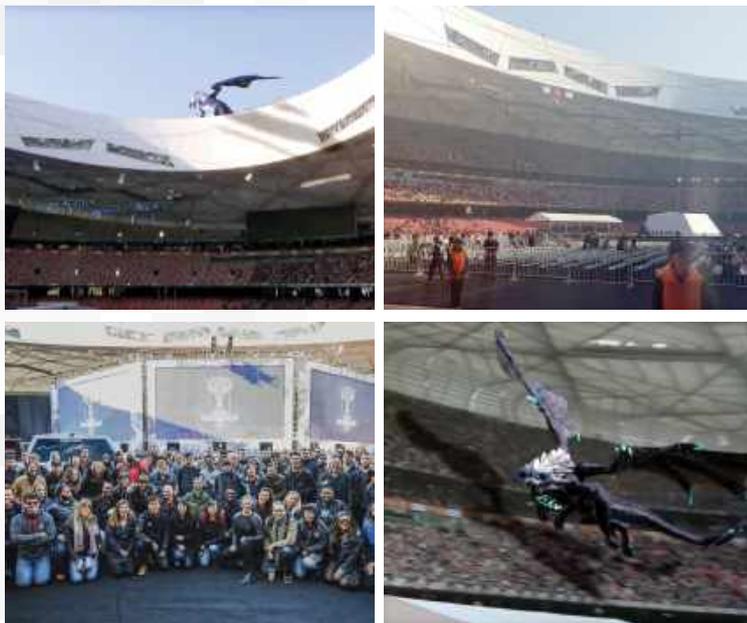
The most flexible and high-quality product: Reality

"We looked at several real-time rendering platforms for this project. At the time, ZD and their Reality system was the most flexible and high-quality solution available."

"An AR production on this level was never made before in live broadcast"

Justin Restaino, Riot Games Realtime Graphics Artist said, "The audible gasp from the audience in the stadium when the dragon jumps off of the roof sent chills down our spine. Reading and hearing the reactions from our players regarding the dragon is exactly why we do this. An AR production on this level was never made before in live TV broadcast and almost all aspects of it were new. The hope and goal is to always create memorable experiences for our fans and players that they can take home and share with their friends."

The disruptive product of Zero Density resulted from apparently simple yet an amazingly innovative concept of using a video game engine, employing a real time keyer like broadcast television and blending it with cinema/television production and taking live footage of digital cinema cameras. One of the stunning end results of this game changer product is that dragons are not just based on myths but on hard evidence.