



// OTT PLAYBOOK

# First 24/7 UHD HDR OTT Service Delivered to Roku Devices

An end-to-end solution for NASA content.

## WHAT VIEWERS CRAVE



LIVE  
STREAMING



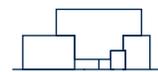
HIGH  
RESOLUTIONS



THEMED  
CHANNELS



VIDEO  
EVERYWHERE



MULTI-SCREEN  
VIEWING

## THE GAME PLAN

A few years ago, NASA and Harmonic brought the first consumer UHD channel to life. Footage of space and the Earth streamed to millions of viewers around the world with stellar clarity.

It was a major feat. The next step was to showcase the breathtaking beauty and grandeur of space live, in UHD HDR, 24/7.

The goal was to provide a linear experience with an OTT service. It required a solution that reduces the costs and complexities of launching premium OTT services.

Another crucial objective was to provide the service at scale and deliver high-bandwidth content to a global audience. Worldwide delivery demands content for all types of devices, including legacy devices that are currently unable to display UHD HDR in 4K.

## THE PLAY-BY-PLAY

Harmonic reached out to industry partners Accedo and CenturyLink. Together, the technology partners designed a solution to launch the service and developed an app for mobile and Roku TV™.

Harmonic's VOS®360 Live Streaming Platform simplifies the entire media processing and delivery chain for UHD content provided by NASA.

Harmonic and technology partners built a dynamic user experience management platform for customized brand experiences. Accedo worked closely with Harmonic to ensure the app satisfied all requirements, from the design vision to Roku® platform certification.

Delivery at scale was a massive achievement. There were more than 140,000 Roku channel downloads in the first three months. CenturyLink's CDN distributed the NASA UHD content to millions of viewers on every continent, and handled fluctuating bandwidth demands with ease.

Images were delivered via the cloud at the lowest required bit rates without making any exception to visible video quality. The solution successfully delivered UHD HDR at less than 15 Mbps.

## THE WIN

The UHD HDR craze is just getting started and viewers are demanding more UHD HDR to enhance the viewing experience. The sky is no longer the limit and we continue to reach beyond. The solution created to bring NASA content to viewers around the world is the most advanced in the OTT market for live streaming in UHD HDR. The future of UHD HDR streaming has begun.

## THE POWER OF VOS360 PLATFORM

140,000

Roku channel downloads since the launch



Interoperability



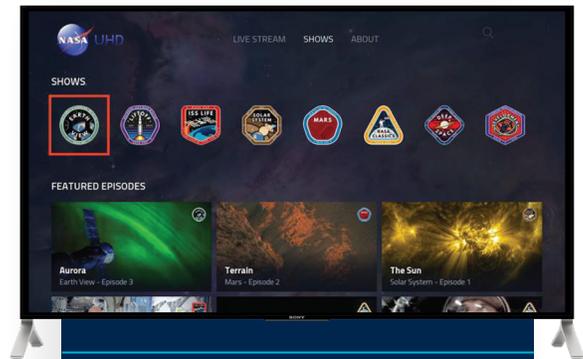
Unified workflows



Fast deployment



Fully managed services



The new service delivers a range of stunning NASA imagery directly to millions of viewers in beautiful UHD with the clarity and depth of HDR. For many, it will be the first UHD HDR content they'll experience in their homes.

