News Release



WSBE adds OTT Origin Server to Existing ATSC Encoding System

SOUTHWICK, MA, December 14, 2020 – Hitachi Kokusai Electric Comark LLC (hereinafter "COMARK"), a manufacturer and supplier of DTV transmitters, encoding systems, and associated field services for more than 45 years, has announced that WSBE Rhode Island PBS has upgraded its ATSC encoding system with an OTT origin server solution from Comark Digital Services (CDS).

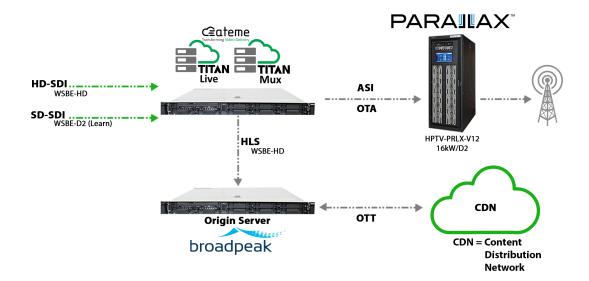
In 2019, CDS delivered a new software-based ATSC encoding system that delivers the highest possible video quality to WSBE's OTA viewers. This software-based encoding solution is extremely flexible, capable of providing simultaneous MPEG-2, H.264, HEVC, as well as HLS output formats. The HLS output format is used for streaming OTT services.

Recently, WSBE added an origin server from CDS for their OTT streaming requirements of their main HD program to a CDN. The origin server plays a key role in OTT as it holds a video collection, temporarily storing this content on the disk and responds to requests from the CDNs. CDS provided factory integration, configuration, and test of the origin server in the Southwick, MA lab facility. The server was then shipped to the station for installation and final configuration / commissioning.

The Origin Packer provided by Hitachi/Comark is an addressable, just-in time packager that encrypts the video content in most popular ABR formats. Utilizing its cache mechanism, the Origin Packager reduces encoding and storage requirements and provides high throughput to deliver content to any CDN.

"WSBE Engineering gives the highest rating to the Hitachi-Comark Sales Team and Technical Staff" States Richard Dunn, Rhode Island PBS Director of Engineering. "Their planning and support resulted in a smooth, hassle free, integration."

"We have positioned CDS to integrate cutting edge DTV encoding solutions that support both ATSC 1.0 today as well as ATSC 3.0 tomorrow," states Joe Turbolski, VP of Sales and Marketing of COMARK. "Our team worked closely with the staff at WSBE on many aspects of their encoding needs and we are tremendously pleased to be part of this essential project."



About Hitachi Kokusai Electric Comark LLC:

For over 45 years COMARK has been synonymous with broadcast expertise and innovation. A trusted partner to the world's leading broadcasters, COMARK has pioneered many developments that have shaped the industry, leading innovation in IOT & MSDC-IOT technology, transistorized solid-state technology, Digital Adaptive Pre-correction (DAP), and also winning multiple Emmy® Awards; and gaining numerous patents in technologies that have become fundamental to broadcasting. COMARK is now building on this great heritage with the release of an entirely new range of transmission products for terrestrial television broadcasting, and state-of-the-art products for scientific/industrial RF applications. With thousands of active COMARK transmission systems deployed worldwide and a global support presence, COMARK plans to continue to develop technologies for the future, with efficient performance initiatives that improve coverage and save power.

Emmy® is a registered trademark or trademark of The National Academy of Television Arts and Sciences, Inc. and Academy of Television Arts and Sciences Corporation.

Information about products from Hitachi-Comark is available at www.comarktv.com.

Contact: Joseph Turbolski VP of Sales & Marketing

Tel: +1 413 998 1100

Email: <u>iturbolski@comarktv.com</u>