Video Innovations

Client Situation

Feature Story News (FSN) is the world’s leading independent broadcast news agency. FSN produces global news stories and customized live reports from more than 20 bureaus and studios across Europe, Africa and the Americas, providing its clients with a steady stream of timely and compelling news features without its clients incurring the high cost of opening and maintaining their own overseas bureaus. The agency’s clients are located all over the world and include Channel News Asia, CCTV News, SABC and ENCA of South Africa, Televisa of Mexico, France 24, PBS NewsHour, Al Jazeera, Fox News, Radio New Zealand, Vatican Radio, LBC Radio, and Classic FM. Utilizing the bandwidth efficiencies of streaming technology, the agency can deliver comprehensive coverage of breaking news and events worldwide, including, most recently, live streaming footage of President Barack Obama’s monumental visit to Cuba.

The Challenge

Following the launch of a successful studio-based IP live shot enterprise—FSN LIVE—in an environment with plentiful bandwidth, Feature Story News required a new solution that would deliver a robust HD broadcast signal from locations with extremely limited bandwidth. The agency needed a point-to-point video streaming system that would reduce the bandwidth requirements of existing H.264 solutions, while continuing to reliably deliver its renowned broadcast-quality content. With such a significant historical event taking place in Havana as President Obama’s visit, the system also had to be simple for its news team to access, operate, and manage. It also required portability in the field, allowing for seamless and error-free newsgathering and transmission of the groundbreaking footage to the FSN headquarters in Washington, D.C. for worldwide distribution to its clients.

The Solution

After evaluating the market for solutions that would offer the HD broadcast resolution but with less bandwidth and minimal latency, FSN determined VITEC’S MGW Ace hardware encoder and MGW D265 decoder offered the best-in-class features for its global news team. The MGW Ace — the world’s first portable HEVC (H.265) hardware encoder — takes the benefits of HEVC encoding out of the server...
room and into the field by integrating a high-quality, low-delay hardware codec into a professional appliance, reducing operating expenses and extending the reach of video services to remote destinations with bandwidth constraints. With built-in Pro-MPEG forward error correction and Zixi error correction technologies, the solution enabled the news agency to deliver secure, error-free video on dedicated and public networks while dramatically reducing bandwidth requirements compared to its legacy H.264 system.

Ideal for live news broadcasting from the field, point-to-point contribution of HD video, live streaming from sports venues, or disseminating mission-critical military imagery, the MGW Ace is specifically engineered to satisfy today’s demand for pristine real-time video — anywhere, anytime. It boasts a real-time H.265 4:2:0 and 4:2:2 hardware compression chip for streaming broadcast-quality video up to 1080p. Input interfaces include 3G, HD/SD-SDI, HDMI, DVI, and composite. A secondary MPEG-4 H.264 chip provides support for legacy decoders and proxy streaming.

Complementing the MGW Ace is the MGW D265, a high-performance IP decoding appliance with a compact footprint, best-in-class connectivity options, and low-delay processing. MGW D265 uses advanced hardware to deliver a real-time, broadcast-quality picture with the highest quality of service and resilience required in complex IPTV and full-motion-video environments, such as the President’s visit to Cuba. MGW D265 offers all typical video output interfaces, including HD-SDI, SD-SDI, and HDMI. With integrated Zixi receiver technology, it is the ideal decoding mate for the MGW Ace encoder.

The Result

With the VITEC MGW Ace and MGW D265 solution, FSN’s news team was able to make history from Cuba, transmitting the first ever HD broadcast signals from the island over the public internet. Two flawless live paths from Havana fed material to FSN’s MCR in Washington DC, and to the MCRs of its clients worldwide. With Ace’s field-proven H.265 compression and streaming technology the news agency has a reliable and simple-to-use platform to report and transmit breaking news in the field. The solution furthers FSN’s service offerings by reducing its operational costs and by delivering error-free, low-latency high-quality broadcast footage any where in the world.

VITEC’s IP Streaming Solution for FSN

- HEVC delivers bandwidth savings
- Small form factor eases deployment in the field
- Zixi error correction provides reliable streams
- Low-latency transmission
- MGW Ace encoder supports HEVC and H.264 from the same source for streaming flexibility