

## Defense Visual Information Distribution Service (DVIDS)

Using VITEC Solutions, DVIDS enables bandwidth-efficient worldwide HD video feed contribution for Military and Government

Defense Visual Information Distribution Service (DVIDS) is a 24/7 operation that provides a timely, accurate, and reliable connection between the media around the world and the military personnel serving at home and abroad. Through a network of tactical, portable Ku-band satellite transmitters located in-theater, robust IP connections, and a state-of-the-art distribution hub, DVIDS makes available real-time broadcast-quality video, still images, and print products, as well as immediate interview opportunities with service members, commanders, and subject matter experts.



Thanks to MGW Ace Encoder solution and its high performance HEVC GEN2+ codec, we managed to drastically reduce the bandwidth required to transport more broadcast quality HD video for the DVIDS workflow. On top of video quality, we delivered a high level of Quality of Service thanks to the stream transport protection technology included in our solution.

Richard Bernard  
VITEC Senior Product Manager



## The Challenge

The DMA/DVIDS mission is to provide an accurate, reliable source for media organizations to access U.S. service members and commanders deployed in support of military operations worldwide. The organization works with the Department of Defense serving as its hub that accepts live video and audio content from all over the world for distribution to the internal and external media outlets.

DVIDS and its clients work in many areas of the world often with extremely limited access to bandwidth. To better ensure that all of its content contributors can successfully deliver high-quality audio and video content from any location, in spite of poor network connections, DMA/DVIDS needed a higher-performance encoding solution for field use and, within its satellite hub facilities, a more efficient means of decoding and managing the streams arriving from around the globe.

## The Solution

Following extensive market research and live tests of the latest video contribution solutions, DMA/DVIDS has selected VITEC's HEVC Video Multi-Site Contribution Solution powered by MGW Ace Encoders, MGW Ace Decoders, and VITEC's Playout Server to improve its ability to deliver broadcast-quality video and audio content from anywhere in the world. Designed for bandwidth-efficient, network resilient video contribution applications, the MGW Ace Encoder features the world's most advanced real-time HEVC video codec, VITEC's HEVC GEN2, capable of 4:2:2, 10 bit encoding.

In addition to VITEC's high performance HEVC / H.265 codec, VITEC's Solution uses Zixi™ technology to provide best-in-class content protection ensuring error-free delivery of video on any network including the Internet. Using VITEC's solution - DMA/DVIDS was able to dramatically reduce the bandwidth allocation for its HD services from 3Mbps to 1Mbps while maintaining same video quality generated by the previous system.

DMA/DVIDS customers around the world use the VITEC encoder, often housed in the DVIDS HD Encoder kit, to enable transport of video signals via satellite or internet to its satellite hub. Encoder operation in the field is highly simplified thanks to preset

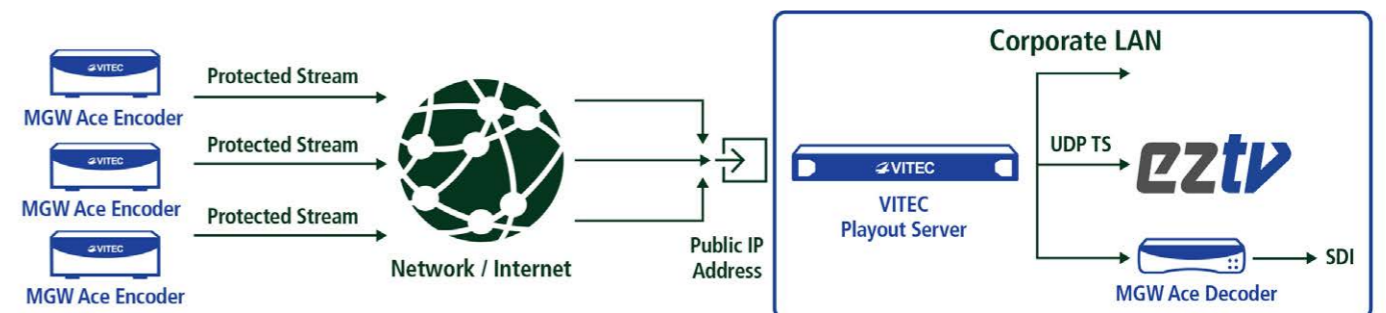
configurations that save all encoder parameters and statuses. The MGW Ace Encoder can be preconfigured so when deployed in the field, it is ready to deliver live video content back to the DMA/DVIDS facility without any manual configuration or human interaction.

When a signal reaches the DMA/DVIDS facility, it hits the VITEC Playout Server. An unlimited number of encoders spread across the globe can be set to target the single IP address associated with this server.

Tailored to streamline IP video contribution for broadcasters, the VITEC Playout Server gives staff a straightforward interface for visually managing all incoming feeds in from around the world. When a feed comes in, it is automatically detected and appears on the intuitive web-based management interface. Actionable information and statistics such as quality of the network link, packet loss rate and other metadata creates a one-stop-shop for aggregating content and monitoring incoming feeds. Control room staff can drag and drop that input to the appropriate MGW Ace Decoder on the output side, which in turn distributes the content to its target destination; either for rebroadcast, video-on-demand, recording or other applications.

## The Result

The solution provided by VITEC enables DMA/DVIDS and its customers to squeeze a high definition video signal into a fraction of what other systems are capable of. At the DVIDS Technical Operations Center, the VITEC Playout Server serves as a customized management solution that simplifies handling of video streams. Moving forward, the DVIDS HD Encoder kits will feature the VITEC MGW Ace Encoder to deliver bandwidth efficient video and audio feeds with best-in-class quality of service.



## Industry Leading Video Innovation

VITEC is a market-leading provider of IPTV, Video Streaming and Digital Signage Solutions that help organisations harness the power of video to engage, empower and evolve. VITEC is a pioneer in the design and manufacture of hardware and software for video encoding, decoding, transcoding, archiving and streaming over IP. Our end-to-end video streaming solutions enable customers to capture TV and video content directly from any source and manage its delivery, as channels or within digital signage screens, to any connected device via an existing network.

From corporate, broadcast and venues, to accommodation, government and military, VITEC has global expertise in delivering complex, proAV solutions.

VITEC's award-winning IPTV platform is a powerful suite of services for content management, digital signage, video archiving, and video wall processing. Our encode/decode solutions are 100% hardware based, including PCIe cards with SDK for custom design or OEM for high-performance video systems.

Headquartered in Paris, France, we have a global reach through our offices across the Americas, Europe, Middle East, Africa and Asia Pacific.

Making a difference with green initiatives, VITEC is the first Zero Carbon MPEG company and encourages customers to 'buy GreenPEG' for continued environmental efforts to reduce greenhouse gases.