SOLUTION BRIEF

AR & VR360 as a Carrier Edge Service

Be There From Anywhere

AR / VR Delivery Platform

- Complete lens to glass system eliminates stitching
- 400ms total latency using edge platform delivery
- 25M pixel broadcast quality camera improves quality and experience
- MEC platform enables multiple service offerings without platform changes
- Virtualized sea of cores with highest per RU density

GRAND PRIZE WINNER 2016

VERIZON & INTEL® NETWORK BUILDERS INNOVATION CHALLENGE

Online and mobile video growth continues to explode with both fixed line and mobile carriers investing in network infrastructure to support consumers demands, while OTT and content owners continue to reap the profits of video. However, a new generation of users who have grown up with video have increased expectations of the video experience. These new users of Snapchat and Instagram expect to interact with and provide video as a day-to-day experience. The base experience for these customers may be streaming video today, but the next generation of video will be immersive video.

Immersive video enables customers to control aspects of the video experience. From changing the camera view to zoom to augmented content, immersive video offers consumers new ways to interact with content and offers operators many new ways to monetize content.

Many challenges exist when delivering real-time immersive video even before the identification of the next killer app. Total system latency is the major challenge for live video delivery as it enables the combination of real-time and augmented content. The Artesyn-Vantrix platform enables the lowest total system latency while offering pre-configured interfaces for augmented content running on an open standard platform capable of hosting multiple applications.

The real metric of success for next generation video will be how carriers and providers can monetize new services. Augmented reality offers natural and immersive brand ad placement. For a user in an AR experience, company logos and offers can be displayed in ways not possible in traditional video. AR viewing offers virtual seats to an event and unlimited tickets to the best seat in the house. This capability paves the way for increased Pay-Per-View and event subscriptions. Sponsorships and logo placement within the VR footage for event sponsors is another way that AR can bring in revenue.

The actual video experience now can be a way to increase brand value to a new generation through association with innovation. And, according to a recent Nielson survey, users are 28 times more likely to recall a brand mentioned in a VR video than in traditional advertising. Artesyn and Vantrix recently won the Intel-Verizon Innovation Contest in the Low Latency category for this system. Let us show you how to enable a next generation service offering in your network.

vantrix

ARTESYN™ EMBEDDED TECHNOLOGIES

The Vantrix Pro Camera System

Vantrix PRO25

Designed for the ultimate capture quality with up to 5000 x 5000 pixels, 12-bit and 240fps

Vantrix PRO25-Aqua

Designed for operation underwater up to 60m depth.

Vantrix PRO4-DUAL

Designed for fixed and mobile operation, with resolutions up to 2000 x 2000 and two lenses for full sphere 360x360° video.

The Vantrix PRO series is a purpose-built broadcast-quality capture system for live events such as sports, news, concerts, as well as studio and post production. Vantrix PRO cameras complement the Vantrix 360 turnkey system for an optimized glass-to-glass solution. The system avoids stitching with a single, high quality panamorphic lens with 5000 x 5000 pixel resolution, 8x the resolution of 4K video. The single lens enhances quality of experience by avoiding picture overlap often associated with stiching.

Using apps on receiving devices insures direct connections without the limitations of general web browsers and enables service providers to tailor offerings to customers. The result is a system capable of 400ms latency when using an edge delivery platform.

Multiple lens types are available and can be tailored to specific applications. Most recently a prototype wearable lens suitable for body-cam applications was shown and will be available in Q2 of 2017.

The VR/AR application is portable and can be hosted in Cloud or Edge environments, depending on network infrastructure, and used on standard servers or open standard platforms such as the highly dense Artesyn MaxCore™ platform.

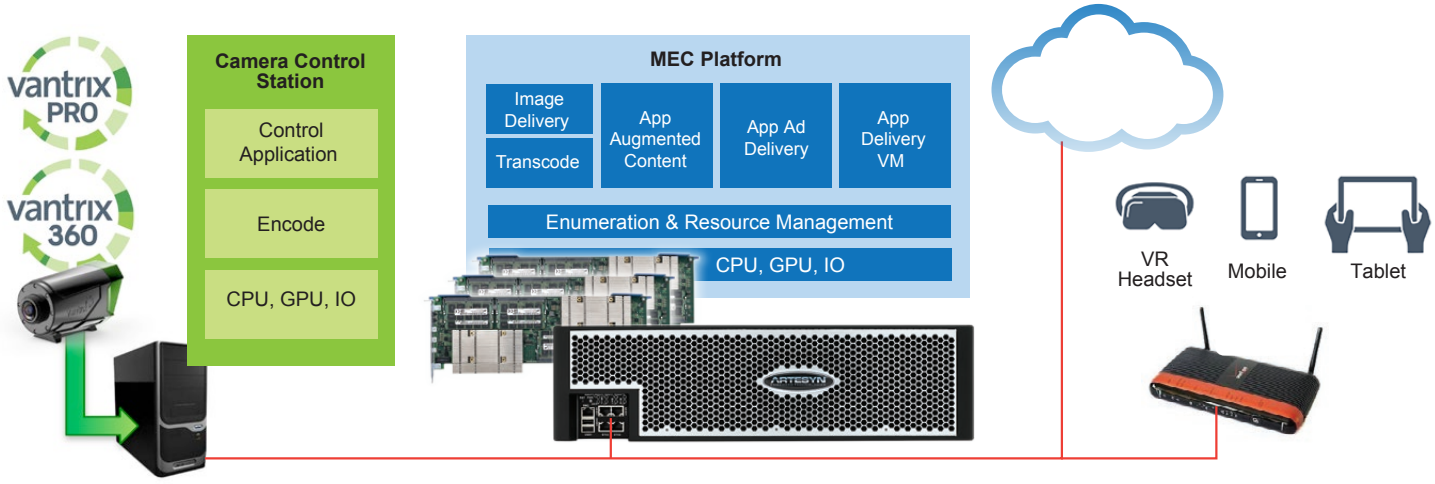
The Artesyn MaxCore™ Platform

Artesyn brings the densest and highest performance platforms in the industry. Built on the open PCIE standard, the MaxCore platform enables flexibility, cost-effective scaling, and multi-party sourcing.

For video applications, the MaxCore platform offers the highest density of Intel and 3rd party GPUs in the industry, making it ideal for video encode, transcode and delivery applications. Scalability is achieved through add-in cards or by combining additional chassis.

The high bandwidth and x86 core density create a cloud at the Edge, optimizing cost per stream and network bandwidth. The use of low power processors results in significant OpEx savings for operators when compared to pure software encoding on standard RMS.

- Highest Intel® Xeon® core density – *Up to 360 Xeon cores in 3U chassis!*
- Highest flexibility – *15 slots for dual Intel Xeon D, dual Intel E3, I/O or any PCIe cards*
- Up to 400Gbps I/O shared by all processors
- Switching and load balancing in platform
- Open Stack integration
- Edge 3U and Cloud CG OpenRack 19 and Hyperscale form factors available



www.artesyn.com

+1 888 412 7832 or +1 602 438 5720

VR360-SB March 2017

ARTESYN™ EMBEDDED TECHNOLOGIES