Immediate Release

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NTCA RTIME Booth 519


San Diego, California -- DVEO®, a well respected supplier to leading telco TV/OTT and cable operators around the world, will demonstrate their latest Telco oriented video streaming solutions in booth 519 of the Rural Telecom Industry Meeting & EXPO (RTIME). RTIME, the trademark event of NTCA -- the Rural Broadband Association, takes place February 5-8, at the Manchester Grand Hyatt San Diego in San Diego, California. The exhibit hall is open February 6-7.

"We are looking forward to meeting our customers at RTIME," said Laszlo Zoltan, Vice President of DVEO. "Our affordable Telco solutions include encoders, decoders, transcoders, ad insertion solutions, playout servers, and packet recovery technology. A number of rural telcos use our unique products to capture over-the-air television signals and deliver them over IP."
DVEO products at RTIME will include:

1. Live/VOD Servers with Catch-up TV and Live Time Shift over HLS -- ATLAS Packaging Servers
2. UDP Packet Recovery Technology for Public or Private Internet -- DOZER™ ARQ
3. Telco Oriented High Availability Transcoders -- Brutus™ VI IP/IP: TELCO, and more
4. Multichannel Transcoders with Built-in 8VSB Tuners -- Gearbox™ II
5. Compact Low Latency H.264 Encoder/Archiver -- Spark-E™ II: Live + Record

1. Live/VOD Servers with Catch-up TV and Live Time Shift over HLS -- ATLAS Packaging Servers

The DVEO ATLAS Packaging Server Family is a cost-efficient way for smaller telcos and cable operators to deliver live and on-demand multi-bitrate IPTV and OTT services. The multichannel systems convert live or stored transport streams into adaptive bitrate (ABR) protocols such as HLS or DASH, for multiscreen delivery to set-top boxes, smart TVs, iPads, iPhones, and Android based devices. DVEO customers use ATLAS servers to deliver thousands of simultaneous HLS streams directly to Roku® players and iOS and Android devices.

All ATLAS systems feature server side ad insertion with HLS. The servers insert pre-encoded ads based on a schedule or with SCTE markers, and dynamically target ads to specific users based on their location. The systems also include Catch-up TV and live timeshift functionality (rewind/fast forward) over HLS.

ATLAS Packaging Servers are available in four different configurations.

1. **ATLAS III Packaging Server**: TELCO streams live or VOD to up to 42,000 simultaneous users at 1 mbps.
2. **ATLAS II Packaging Server**: TELCO streams live or VOD to up to 7,000 simultaneous users at 1 mbps. It is used for OTT television in a number of cities.
3. **ATLAS 1.5 Packaging Server** is a 1 RU system that streams live or VOD to up to 700 simultaneous users at 1 mbps.
4. **ATLAS I Packaging Server** streams live or VOD to up to 700 simultaneous users at 1 mbps. Only 7.5 inches wide, it is suitable for streaming special events.
2. UDP Packet Recovery Technology for Public or Private Internet -- DOZER ARQ
DVEO's DOZER ARQ (Automatic Repeat Request) Automated Packet Recovery technology ensures packet loss free real time video delivery over IP networks including wireless and the Internet. It automatically fixes UDP packet loss and achieves extremely high quality, low-latency, and error-free real-time video transport over IP. The patented algorithm alleviates video freezes, jitter, and noise over long distance IP transmissions. The DOZER technology is available as a software license -- the DOZER™ ARQ: LIC, a compact stand-alone product -- DOZERbox™ IP/IP + AES128, or a one RU system -- DOZER™ Racks IP/IP.

3. Telco Oriented High Availability Transcoders -- Brutus VI IP/IP: TELCO, and more
The DVEO Brutus product portfolio features Linux® based telco quality transcoders that deliver outstanding video quality and performance. The systems are ideal for simple transcoding or grooming at headends for OTT, mobile, and Telco TV multiscreen services.

The Brutus VI IP/IP: TELCO is an adaptive optimized transcoder. Typical real time H.264 transcodes benchmarks include 200 SD streams, or 75 each 720p60 streams, or 50 each 1080p/i streams. Other systems in the Brutus transcoder family serve anywhere from 20 to 160 SD streams out. Optional H.265/HEVC transcoding is available. With the optional ATLAS add-on, the systems support 1,000 RTMP, DASH, and/or HLS users natively.

4. Multichannel Transcoders with Built-in 8VSB Tuners -- Gearbox II
The Gearbox II 8VSB 16 Tuners/IP 80ch is a real time multichannel streamer, integrated RF receiver, and transcoder designed to receive up to sixteen 8VSB signals and transform them into IP streams that are optimized for streaming. Typical dedicated transcodes are up to 80 SD streams, or 20 1080i/p streams, or 30 720p60 streams. When combined with ATLAS server applications, the system creates an all-in-one video delivery system that creates DASH or HLS streams and sends them to viewers' OTT devices like Roku®. Gearbox II systems are available for all major video formats -- QAM, DVB-S-S2, etc. Optional H.265/HEVC transcoding is available.

5. Compact Low Latency H.264 Encoder/Archiver -- Spark-E II: Live + Record
A compact (5.9 inches) encoder and live streamer, the Spark-E II: Live + Record features a low latency of less than half a second. While most streaming devices accept just one video
format, the Spark-E II encodes incoming 3G SDI HD-SDI, HDMI, VGA, or SD Analog (YPbPr or CVBS) video and audio (one input channel at a time) to one H.264 standard stream, records it, and outputs it to an IP network. The resulting stream can be viewed with standard transport stream compatible set-top boxes or software clients such as VideoLAN VLC or JW Player. Operators can stream video content to YouTube®, or Facebook®, or to CDNs and websites like Ustream®, Akamai®, Octoshape™, Verizon®, etc. The IP video stream can also be simultaneously recorded onto a USB stick for archives or later playback.

Supplemental Information for Press Release

Suggested Retail Prices:
ATLAS I Packaging Server: TELCO: $2,195 U.S.
ATLAS 1.5 Packaging Server: TELCO: $3,995 U.S.
ATLAS II Packaging Server: TELCO: $6,795 U.S.
ATLAS III Packaging Server: TELCO: $17,995 U.S.
Brutus VI IP/IP TELCO: $36,995 U.S.
DOZER APR: LIC: $100 to $200 U.S. each
DOZER Racks IP/IP: $2,995 U.S. each, typically sold in pairs
DOZERbox IP/IP: $1,895 U.S. each, typically sold in pairs
Gearbox II 8VSB 16 Tuners/IP 80ch: $18,995 U.S.
Spark-E II: Live + Record: $995 U.S.

DVEO, ATLAS, Brutus, DOZER, DOZERbox, Gearbox, and Spark-E are trademarks of Computer Modules, Inc. All other trademarks and registered trademarks are the properties of their respective owners.

About DVEO®
DVEO is a well established, privately held entity headquartered in San Diego, California, since 2001. DVEO develops and sells broadcast quality video encoding and streaming products, media servers and ad insertion solutions to leading Telco TV/OTT and cable operators around the world. The DVEO solutions enable multi-screen service delivery to any device, anytime, anywhere in the world. Deployment models include turnkey installations and cloud-based service delivery. All solutions are built on Linux OS and Intel Xeon-based platforms to ensure 24x7 reliability, and feature DVEO-developed software for maximum flexibility and upgradability, ensuring long term investment protection. These ultra-reliable products are matched by valuable pre-sales consultancy, outstanding post-sales service and support, and -- not least -- unusual affordability.

For more information on DVEO, please contact Rebecca Gray at +1 (858) 613-1818 or rebecca@dveo.com. To download the DVEO press releases and product images, visit the news section at www.dveo.com.