ScreenPlays Magazine
November 2011
STRATEGIC INFORMATION FOR THE BROADBAND MARKETPLACE

Cloud-Based Platform Energizes Localization Advantage for NSPs

The emergence of a cloud-based system supporting all the ingestion, channel management, transcoding and other tasks associated with delivering and monetizing locally targeted content bodes well for network operators' efforts to differentiate themselves from satellite and other competitors.

While digitization of cable networks has freed up channel space for local origination, hyperlocal sports, leased access, PEG (public, educational and government access) and long-form advertising for local markets, the operational hassles associated with exploiting these potentially valuable additions to the channel lineup have restricted their use. TelVue Corp., which last year took a major step in the direction of minimizing local content costs with its HyperCaster broadcast servers, believes it has a cloud-based solution to these issues that could finally unleash the full potential of local programming.

"TelVue Connect radically alters the cost equation for LO/LA (local origination/leased access) programming," says Jesse Lerman, president and CEO of TelVue. "By dramatically reducing costs and streamlining management, cable and telco operators can leverage community-centric programming as a valued service differentiator not offered by satellite broadcast competitors."

The TelVue Connect solution used in combination with the solid-state HyperCaster can cut labor costs by 60 to 80 percent for typical LO/LA operations as well as introduce improvements in workflow management that broaden service options and open monetization opportunities, Lerman says. Equally important, in contrast to typical baseband broadcast servers, the HyperCaster eliminates the need for an encoder for each channel, which cuts LO/LA equipment costs by 75 percent, he adds.

Traditionally, supporting LO/LA channels was generally viewed as a burdensome obligation imposed by cable franchise authorities, but, today, operators who have taken the trouble to put some effort into such channels are seeing many benefits. "With today's video equipment it's easy for non-professionals to create viable programming by covering local sports and other developments, which can be aggregated to feed people's appetite for hyperlocal TV programming that's not available on broadcast TV," notes Paul Andrews, senior vice president of sales and marketing at TelVue.

There's also a significant monetization opportunity associated with operating leased access channels and selling space for advertising, including infomercials, long-form ads and spot ads in local origination programming, Andrews adds. "Cable operators realize long-form ads are good revenue generators," he says. "People really watch this type of programming. And there are opportunities for local ads in hyperlocal programming and also for infomercial programming."

But LO/LA channels can be costly and time consuming to operate, especially when content comes from many different contributors and sources, he adds. "Operators have to designate a facility for media drop-off and real-time encoding, meaning they're consuming one hour of encoding for each hour of programming," he says. "And LO/LA scheduling demands on cable/telco personnel have been a big burden."

TelVue is in a good position to see these trends close up given that its equipment now serves eight of the top ten MSOs and Verizon for delivery of local origination and leased access, Andrews notes. He says the equipment powers over 1,000 PEG channels passing over 30 million U.S. households.

The HyperCaster has been a big factor in lowering costs of such operations, Lerman says. "Current LO/LA workflow incorporates a patchwork of legacy analog playout servers and equipment that don't fit in the modern digital headend and require per-channel real-time encoders," he explains. "The problem is compounded when multiple programming contributors are submitting different media types and video formats that make LO/LA channels a huge challenge to manage and schedule."

Jesse Lerman, president & CEO, TelVue

The HyperCaster processes up to 20 separate channel streams for delivery over IP gigabit Ethernet links in MPEG-2 Transport mode using either MPEG-2 or H.264 compression for SD and HD streams. The unit gives operators the flexibility to centralize aggregation of LO/LA channels for distribution over fiber to local headends or to deliver the payloads directly to industry standard IP-to-QAM modulators,

Lerman notes. The IP origination capability of the server enables file-based workflows and all-digital outputs at required quality levels without use of per-channel real-time encoders.

The newest addition to the product line, the B1000, is a compact single rack-unit server with dual power supplies, solid state hard drive and high-capacity SATA2 RAID storage. IP Capture enables simultaneous broadcast of live streams and IP-to-file capture for archival broadcast. The unit thus becomes ideal for supporting time-shifted local programming for VOD access. And it interoperates seamlessly with digital ad-insertion and embedded EBIF (Enhanced TV Binary Interchange Format) triggers to support interactivity in local programming, Lerman says.

Now operators can activate greater operational efficiencies with the HyperCaster by using the cloud-based TelVue Connect platform to handle large media file uploads, content management, transcoding for different destination networks or devices and scheduling, Lerman adds. This means personnel coordinating placement of content and advertising across multiple channels in accord with pre-arranged schedules only require a broadband connection and a browser to do what it once took many people handling tapes, DVDs and other materials at the local level to do.

And the same applies to contributors in their supply of content to the operator, Lerman notes. Contributors can submit content directly to the cloud using any Web browser via simple drag-and-drop, he says.

"In the cloud, content is automatically converted to the proper format and delivered to the operator's broadcast server," he explains. "The platform allows contributors to self-manage their episodes within a series, which effectively distributes the channel scheduling task among the contributors."

The TelVue system can be tightly integrated with existing traffic and billing system, simplifying the sales of infomercials and leased access options within accustomed operating domains, Lerman says. Or they can use the scheduling system that's native to the platform. Either way, he adds, "It's a very sophisticated workflow that allows trafficking and billing to be applied to multiple HyperCasters." <