Starz Entertainment

Starz Entertainment, one of the pioneers of highly automated multichannel playout, has experienced rapid growth over the last five years. At the beginning of 2008, Starz processed around 26,000 assets, rising to more than 80,000 in 2009, with a projection of 200,000 in 2010. Faced with this intensive expansion, Starz needed not only to upgrade its existing equipment infrastructure, but also to find a way of doing so that would create a sound platform for further growth.

As a longtime user of OmniBus Systems' Colossus, Starz had been an early adopter of the automation manufacturer's software-based iTX system. In 2009, the broadcaster decided to migrate its entire operation to the iTX platform.Several factors contributed to this decision: the need to create extra space for expansion; the expense and complication of operating and maintaining the existing equipment for 44 linear channels, each with its own backup; and the huge extra investment that would have been required to create a new equipment room. With iTX, Starz has been able to reduce its infrastructure from 44 racks to just 16, freeing up a considerable amount of space for growth without needing to extend the existing equipment room. The iTX platform, running on commodity IT servers and storage, also meets a key requirement of the design brief for the new infrastructure: By combining all the functions required for the sophisticated branded channels Starz broadcasts, iTX reduces the complexity of maintenance and potential for equipment failure, eliminating most of the recurring capital and maintenance costs.

To meet Starz's requirements for originating fully-crafted channels, the design team pressed OmniBus to accelerate development of some features already on the iTX roadmap. These features included extended graphic and effects capabilities to support Starz's style of branding, in-built Dolby digital surround-sound processing and Nielsen ratings code generation. OmniBus developers also extended iTX's closed-caption functionality to support both 608 and 708 formats. With iTX including the capability to meet all these requirements in software, Starz was able to further reduce its requirement for external equipment.

Using the iTX developer kit and working with OmniBus, Starz's own technical staff integrated iTX with the in-house developed asset management, content preparation and distribution systems to achieve a tight fit for efficient workflow. Hitachi storage and HP servers were chosen as the hardware. And although Starz configured iTX primarily as a platform for its linear channels, the all-software architecture fits well with the broadcaster's own media workflows for nonlinear services, helping to deliver further efficiencies in asset distribution.

The equipment cost of running 44 HD and SD channels with full redundancy has been significantly reduced at Starz by deploying this next-generation technology. Energy costs are also substantially lower, and by providing a single IT-based storage repository that can be leveraged across multiple channels and products, iTX enables Starz to dynamically map video, multiple audio tracks, captioning, and ratings data, providing greater flexibility and reducing storage requirements.

Network automation
Submitted by OmniBus Systems

Design team

OmniBus Systems: Stan Kingett, project exec.; Andy Cooper, chief eng.; Eric Hicks, project mgr.; Zach Flower, eng.; Lorie Callahan, reg. sales mgr.

Starz: Amy Epstein, sr. proj. mgr.; Lonnie Scheele, exec. dir., broadcast eng.; Jim Porter, VP media sys. & IT dev.; Stephen Smith, dir., media sys. integration; Judy Batenburg, exec. dir., IT infrastructure & ops.; Colin McGuire, sr. mgr. IT svc. & delivery; Kirk Trost, sr. software dev.; John Ferguson – sr. mgr., broadcast op. center; Cody Waggoner, media sys. adm.; Tim Rasmussen, mgr., broadcast eng.; Doug Reither, mgr., broadcast eng.; Michael Price, sr. designer; Mark Sweeney, sr. broadcast eng.; Greg Luedke, sr. broadcast eng.

Technology at work

BlueArc: Storage
Hewlett-Packard: DL360 G6 servers, DL380 G6 NAS servers
Hitachi: Storage
OmniBus Systems: iTX automation
Wohler: 16x1 Touch-It monitors