WRGB New York

World's Oldest TV Station Speeds into Digital Future With Harris® NewsForce™

Customer Profile

WRGB and WCWN are Freedom Broadcasting stations serving the Schenectady/Albany/Troy, New York, market, which is ranked the nation's 56th Designated Market Area (DMA).

Known as CBS-6, WRGB began as an experimental station broadcasting from the General Electric facility in 1928 under the call letters W2XB. Today, WRGB is recognized as the oldest television station in the world, as well as the market's top-ranking news station.

Sharing a facility in Schenectady with sister station WCWN, a CW affiliate, WRGB produces a high volume of live news for both stations from a single newsroom equipment pipeline. Despite the heavy workload, WRGB has won numerous Emmy® awards, Associated Press awards and National Broadcasters awards — all for excellence in broadcast journalism in various categories including breaking news, sports and children's programming.

CASE STUDY SNAPSHOT

Customer

- Freedom Broadcasting TV Stations WRGB and WCWN serving Schenectady/Albany/Troy, New York

Industry

- Local Television Broadcast

Business Challenge

- Produce heavy volume of live HD/SD newscasts for two stations from shared newsroom infrastructure
- Implement news production solution that integrates with existing third-party automation, graphics and newsroom computer systems
- Present first-rate news product from multiformat, multi-resolution environment

Technology Solution

- Harris® NewsForce™ digital newsroom
- 7.8-Terabyte NEXIO® SAN (storage area network) with two NEXIO AMP™ HD/SD servers

Business Value

- Significantly faster time to air for breaking news
- Improved cost and operational efficiency
- More visually appealing, competitive on-air news product

"Based upon our positive experience with NEXIO servers for playout, we decided to build out our news pipeline with the same server, because it handles both news and on-air tasks very well. By standardizing on a single platform, we also simplified our configuration, reduced the learning curve, and maximized parts, software and support."

Fred Lass
Director of Engineering
WRGB and WCWN

CBS 6 ALBANY

CAPITAL REGION'S THE CW
cwalbany.com

Business Challenge

The goal at WRGB/WCWN was to reinforce the stations' standing in the market by first upgrading their on-air news product from 4:3 SD to 16:9 SD, and then later transitioning to full 16:9 HDTV. The stations were looking to gain greater cost and operational efficiency, while also implementing a process for moving breaking news stories to air faster. In addition, they wanted to increase viewership and advertising revenues by offering a more visually appealing, competitive news product.

WRGB and WCWN were relying on a legacy Avid EditStar™ editing system to produce a heavy volume of live daily newscasts from a shared newsroom infrastructure. To meet their business objectives, they decided to upgrade to a state-of-the art, digital solution capable of promoting an extremely efficient, flexible workflow that would maximize their resources from ingest to delivery.

While the stations' longer-term goal is to produce all newscasts in native high definition, the newscasts currently mix HD and SD elements, and the finished SD product is upconverted to 1080i HD. This hybrid environment would require a solution that could manage and convert different formats, resolutions and aspect ratios quickly.

WRGB/WCWN also needed a solution that could interface with existing third-party systems, such as a Ross OverDrive® newsroom automation system and Avid iNews® newsroom computer system, as well as Vizrt graphics and other control room gear. The new solution would have to support MOS protocols and other industry standards to enable seamless integration of disparate systems.

NewsForce HD/SD news platform

Technology Solution

Since WRGB/WCWN had been using a Harris NEXIO® SAN with NEXIO AMP™ HD/SD servers to play out programming since 2007, they were predisposed to choose the Harris NewsForce™ HD/SD news platform. The NewsForce solution was selected because it interfaces seamlessly with all of WRGB's existing third-party systems, and because it offers a comprehensive set of tools that address every aspect of the end-to-end, digital file-based newsroom workflow.

"Based upon our positive experience with NEXIO servers for playout, we decided to build out our news pipeline with the same server, because it handles both news and on-air tasks very well," said Fred Lass, director of engineering for WRGB and WCWN. "By standardizing on a single platform, we also simplified our configuration, reduced the learning curve, and maximized parts, software and support."

The NewsForce platform installed at the WRGB/WCWN Schenectady facility is configured with five Velocity ESX™ HD/SD editing systems, which offer multilayering and effects capabilities for polished on-SAN editing; NEXIO Ingest Control Manager, which is used to acquire real-time footage and add metadata to the video; and NEXIO Browse suite, which enables desktop, H.264 proxy viewing and editing.

The NEXIO Browse system is configured with 12 Velocity PRX™ news editors, which integrate with newsroom computer systems and allow for rundowns and scripts to be viewed directly from the proxy editing interface. These editors offer two video and eight audio tracks that allow users to browse and edit clips even during ingest. A NEXIO InstantOnline III™ conforming engine enables low-res clips from Velocity PRX to be conformed to high resolution for immediate play-to-air.

Two NEXIO PRX Transcoder™ servers perform automatic, on-the-fly format conversion of high-resolution content from the NEXIO SAN into low-resolution files. And a NEXIO Browse Server™ storage array provides high-performance, frame-accurate proxy file storage.

The NEXIO Browse solution allows scores of users to view and edit content simultaneously, with significantly reduced storage and bandwidth requirements when compared to a high-resolution SAN. Using Velocity PRX, WRGB reporters can review their raw tape as soon as they return to the station, pick their sound bites and perform a rough cut with no need for a news photographer or an editor to get involved — thereby streamlining the creative composition. And the ability to move, browse and edit low-resolution files gives WRGB a critical speed advantage in the competitive market.

Because WRGB is running a hybrid newsroom environment that mixes HD, 16:9 SD and 4:3 SD elements, the station benefits from the ability of NewsForce and NEXIO Browse to mix video of different formats, resolutions and aspect ratios on the same timeline. For example, when dropping a 4:3 or 16:9 SD video clip or live feed into the live newscast, these tools automatically insert graphical side pillars around 4:3 SD video, while allowing 16:9 video to fill the screen. This increases WRGB's control over the on-air look, while saving the editors considerable time and moving news stories to air much more quickly.

"Because the Harris solution interfaces with the newsroom automation system we employ throughout our workflow, Harris products provide us greater creative freedom and efficiency, which helps move quality news stories to air faster."

Fred Lass

NEXIO AMP HD/SD server platform

Business Value

An enterprise-class solution, the NewsForce HD/SD news platform offers tremendous operational efficiency that has already saved WRGB and WCWN's shared newsroom significant capital and operating costs. In addition, by standardizing on the NEXIO SAN for both its newsroom and on-air operations, WRGB has been able to simplify its system configuration, reduce operator learning curve and lower the cost of parts, maintenance and training for both systems. These ongoing savings promote a rapid return on investment and positively impact the stations' bottom lines.

The NewsForce system also has enabled WRGB and WCWN to accelerate the newsgathering and production process to get breaking news to air faster for a more competitive edge. Considering the heavy volume of news stories that must be produced daily, the increased productivity enabled by this technology is allowing the stations to meet their financial and operating goals without sacrificing the quality of the on-air product.

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Both stations also benefit from the proven track record and dependable, outstanding customer service that Harris demonstrates, and recognize that having this major technology provider squarely behind them is indispensable to succeeding in today's demanding, fast-paced broadcast news business.

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