Prince William County Schools Build New Digital Broadcast Operation Around Grass Valley Solutions

CUSTOMER
PWCS-TV is the dedicated television channel for Virginia-based Prince William County Public Schools

SOLUTION
Sirius
Morpheus
Masterpiece
“We are very satisfied with our decision to build our new facility around Grass Valley routing and control solutions. The equipment was very easy to implement and the learning curve has been minimal — but most importantly, our failure rate has dropped to near zero. We’re also experiencing quality levels that are at least three times higher than with our old analog operation.”

Richard Shahan, Administrative Coordinator at PWCS-TV

**The Customer**

PWCS-TV is the dedicated television channel for Virginia-based Prince William County Public Schools. The station can be found on the Comcast Cable System and on Channel 36 in the Verizon FiOS line-up, and is streamed live from www.pwcstv.com. The station offers a wide variety of educational and entertainment programming that targets the entire community of learners in Prince William County, Virginia — students, teachers, parents, and school division staff.

Students tune in for distance learning programs such as NASA Connect and The Performing Arts Series; take part in Electronic Field Trips produced by Ball State University’s E3, the Prince William Network, and Colonial Williamsburg; or watch informational programs designed especially for students and parents including Teen/Kid News and Education News Parents Can Use. PWCS-TV is also an excellent resource for information about the Prince William County Public Schools. Produced by the school division, programs such as School Focus and Inside Education highlight initiatives, programs, and award-winning staff and students from across the county. PWCS-TV is programmed and operated by Prince William County Public Schools Office of Media Production Services.

**The Challenge**

Broadcasting 24/7, PWCS-TV targets a diverse audience of parents, students, and employees throughout Prince William County, with a variety of locally produced programming as well as live satellite feeds and other content. When the school district recently moved to a new administration building, PWCS-TV used the opportunity to build a new broadcasting facility from the ground up to facilitate its transition from analog to digital operations.

The station worked with Grass Valley reseller The Whitlock Group to evaluate solutions from a range of vendors: a primary requirement was a broadcast workflow architecture that would integrate easily with its Omneon media server and other components in the new digital infrastructure.
“PWCS-TV is a good example of the types of challenges our broadcasting customers face as they transition to digital operations. The station needed a one-stop shop that could offer a comprehensive solution set for routing and control, that would be interoperable with other critical master control elements. No other vendor is better positioned to meet these types of requirements than Grass Valley.”

Neil Maycock, chief marketing officer for Grass Valley

The Grass Valley Solution

Equipping this new facility, Grass Valley has integrated state-of-the-art routing, automation, and master control solutions. The Grass Valley equipment, including a Sirius router, the Morpheus automation system, and a Masterpiece master control switcher, provides a seamless routing, control, and playout infrastructure that has greatly improved the station’s quality levels.

At the heart of PWCS-TV’s new digital operation is a 256x256 Grass Valley Sirius router, which handles both HD and SD signals with embedded audio. The Morpheus automation system provides seamless playout of all content elements for both PWCS-TV channels. In addition, PWCS-TV has implemented a Masterpiece master control switcher and several modules from Grass Valley’s modular infrastructure range, which handle a variety of tasks such as analog-to-digital and digital-to-analog conversion, audio processing, up- and down-conversion, and video processing.

The Results

Working closely with PWCS and The Whitlock Group, Grass Valley designed, integrated and commissioned an integrated system that provides significant improvements in broadcast quality and workflow efficiency at an affordable price. Grass Valley ensured that PWCS-TV’s digital migration was straightforward and had no negative impacts on the station’s broadcast operations during the transition phase. Grass Valley’s broadcast production solution offers considerable potential for future development of PWCS-TV including a clear roadmap to HD whenever that is appropriate.

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