

Murrieta Unified School District

Streaming and recorded video to every desktop in the district



Organization

Murrieta Unified School District

Industry

Education

VBrick Products

- VBrick Dual-Channel Media Encoders
- VBrick EtherneTV

Applications

**Streaming and On-Demand
Video Distribution**

VBrick Technology Partner

HP ProCurve Networking

More people watched President Barack Obama take office via live streaming video than any other President before him – and many media, government and corporate networks were showing signs of the strain. Reports of servers approaching capacity and networks slowing down coincided with millions of online viewers signing on to watch unicast video streams of President Obama's historic transfer of power.

The Challenge

Store, distribute and access streaming and on-demand video from any computer on your school district's network

Those problems were notably absent from the network of California's Murrieta Valley Unified School District, located midway between LA and San Diego, where another inaugural event was underway as the new President was being sworn in.

One of Riverside County's highest performing school districts, Murrieta had been doing its homework in streaming video technology while the presidential primaries were still underway. The previous summer, the district had completed installation of a new HP ProCurve fiber network that would enable multicast delivery of streaming and on-demand video to every classroom in its 18 schools and several administrative offices.

Even before installation of its fiber network, however, the challenge was to make streaming and on-demand video accessible from any desktop in Murrieta's network. A further challenge was how to enable every classroom to stream video simultaneously without overloading the network.

The Solution

A secure, reliable open-standards networking platform integrating an intuitive web-based video portal for quick, easy access to streaming and on-demand video

Ken Balliger, Murrieta's director of technology, had become familiar with the multicasting capability of VBrick video encoders through an earlier job at another California school district. Use of the technology in a video production class at Murrieta's newest elementary school had also proven it to be simple to use.

Balliger brought eleven VBrick dual-channel encoders online at several school facilities, as well as the central administration office.

The technology was also readily compatible with the HP ProCurve network – with whom VBrick is a member of the ONE partnership – used to distribute video to dozens of classrooms across the district.

"We thought the ProCurve network would need to be set up to enable it to efficiently distribute the encoded signal from the VBrick devices," said Balliger, "but we found we could take the encoders out of the box, give them a network address and have them plug right into the network."

Overall, it took Balliger about a week to distribute all eleven encoders around the District, connect them and assign them network settings for operation.

Over 21,000 students across Murrieta Valley USD viewed the live multicast streaming of President Obama taking the oath of office via a VBrick encoder and C-SPAN.

The Benefits

Quick, easy access to streaming and on-demand video content anywhere on the network, without compromising bandwidth

Live streaming video of the Presidential Inauguration served, appropriately, as the district's inaugural broadcast. Over 21,000 students across Murrieta Valley USD viewed the live multicast streaming of President Obama taking the oath of office via a VBrick encoder and C-SPAN. The technology's multicast capability not only enabled all locations to share a live video signal from a single source in Murrieta's network, it minimized the impact on the district's network services, which also carry phone, email, Internet traffic, critical EMS and security video data.

Since then, the technology has been used to broadcast content from the Science and History channels, as well as C-SPAN and CNN. Four more VBrick encoders are due to come online once the district adds a new high school to its roster.

But the next phase will be to use the platform's video-on-demand capability to record training video for teachers and personnel off site. The district has already begun encoding existing videos into digital content accessible through VBrick's EtherneTV portal software.

"For example," said Balliger, "Crossing guards who once had to travel to the district office to view a training video could soon be watching it at their school's site."

"We chose to go with VBrick because its technology is simple to use and requires little set up," Balliger said. "Plus, not many companies do multicast technology well. You need to have a pretty robust network for processing of the video stream."

The district is currently connected by a robust fiber network between all campuses that runs at over one gigabyte in speed.

System Integration

