




Washoe County Regional Public Safety Training Center

Streaming & On-Demand Video for Personnel Training



Organization

Washoe County, Nevada

Industry

Government

VBrick Products

- VBrick Dual-Channel MPEG-2 Appliances
- VBrick Dual-Channel Windows® Media Appliances
- VBrick MPEG-2 VOD servers
- VBrick Windows® Media VOD servers
- VBrick Media Control Server

Applications

On-demand video for on and off-site personnel training, plus streaming video for live organizational broadcasting

Opened in 2002, Washoe County's Regional Public Safety Training Center (RPSTC) has a simply stated, but challenging mission: to provide the highest quality training and educational programs for its stakeholders in the most cost effective way.

The challenge was two-fold and something of a paradox. First, with a list of stakeholders encompassing six local Public Safety Agencies (as well as Truckee Meadows Community College), the RPSTC needed to schedule classes around some long and inconsistent work schedules. Yet, in spite of this, it also found its eighteen classrooms were quickly filling to capacity.

The Challenge

Deliver live broadcasts and on-demand video training to RPSTC trainees on and off campus

Located on 120 acres just north of Reno, Nevada, the Washoe County RPSTC is a one of a kind training facility. Rather than provide training for a single agency or discipline, the Center serves seven entities, including the police and fire departments in nearby Reno and Sparks, the Washoe County Sheriff's Office, Sierra Fire Protection District, and Truckee Meadows Community College.

While its unique approach translated into significant cost savings for county taxpayers, it also imposed monumental administrative challenges – namely scheduling classes around such a large and diverse range of stakeholders.

"We have seventeen classrooms in the main facility," said a member of RPTSC's technical staff. "But we began to see how quickly we were filling those classrooms, and realized the county wasn't going to expand the Center anytime soon," he added.

The Center quickly determined that live and on-demand video offered the clearest pathway to increasing the RPSTC's effective training hours for little additional cost or the need to expand.

Fortunately, the Center already had both an internal network as well as an external fiber optic Internet platform to provide outside agencies access to content. But questions remained, such as whether or not the network infrastructure would support multicast traffic.

"If the network couldn't handle multicast traffic to our various public safety agency locations, there was concern that it would crash," a spokesperson said. "So we met with Information Technology personnel early on and got them involved."

There was also the question of who could provide the simplest, most effective video-over-IP technology at a price the RPSTC could afford.

The Solution

A seamless, easily implemented technology platform built from a comprehensive suite of video encoders, servers and software

Several suppliers offered either video encoders or servers. But Befort found that VBrick Systems' network video appliances offered a complete solution. VBrick also provided an intuitive suite of software tools for scheduling, navigating and even presenting online

The Solution, continued

training content. Lastly, its scalable, multicast solution came at an attractive price point.

Most of the difficult work toward implementing VBrick's technology came before it left the box. The Center first needed to make some infrastructure adjustments to address its multicast and firewall issues.

Once those were resolved, however, it took less than two days to connect and configure VBrick's devices. Within a matter of weeks, the RPSTC was streaming live and on-demand video content over its internal and external portals to its eighteen classrooms, as well as desktops at the sheriff's office and remote sub-stations.

"As you start getting into it, you have a general idea of what these products will do for you," Befort said. "But it's not until you actually get into the nuts and bolts of it that you start appreciating all it can do."

In addition to its classrooms, the RPTSC also features state-of-the-art training facilities, including a shooting range, burn tower, rescue props, hazardous material props, an emergency vehicle operations course, and more. Capturing training video at those sites required several subsequent steps to record, edit, and format the material before broadcast.

The Training Center added three VBrick VBStar Windows® Media Encoders to its arsenal. Each incorporated a dedicated hard drive, making them excellent tools for portable applications. The RPSTC received one via a grant, the Emergency Operations Center obtained the second encoder, and the Sheriff's Office purchased and housed the third.

The Benefits

Expanded and more efficient access to the RPSTC's training programs via on-demand video

As expected, on-demand video enabled the RPSTC to expand its training services without needing to expand its classroom space. But its stakeholders also benefited: by accessing on-demand video from remote locations, they could minimize the hidden costs of travel time and overtime pay for attendees.

Befort added that the user-friendly interface used to log in and access content was particularly appealing.

The three VBrick encoders have expanded and improved the RPTSC's ability to provide high-quality training content. Each allows digital recording of outdoor training exercises to be saved directly to the onboard hard drive for quick editing and uploading after an event. Or time-sensitive content can be immediately uploaded and pushed to the Center's on-demand servers.

The potential benefits of VBrick's technology continue to emerge today.

The RPSTC is contemplating the use of VBrick's technology to distribute public service announcements and recruiting videos over its external portal. The encoders may also make Emergency Preparedness procedures available over the internal portal, as well as live feeds from the Center's security cameras.

Lastly, Befort is also considering ways to offer the RPTSC's online training programs to a state-wide, if not nation-wide audience. VBrick's video-over-IP technology makes distributing content over the Internet possible via the Center's fiber-optic connection hosted by Charter Communications.

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- A member of RPSTC's Technical Staff

