



National Guard Bureau

Reducing Cable and Satellite Communications
Spending by 85%

Organization

National Guard Bureau

Industry

Government

VBrick Products

- VBrick EtherneTV
- VBrick Encoders
- VBrick Video On-Demand Servers

Applications

TV Broadcast Distribution
Regional Training

The National Guard is the organized militia reserved to the states under Article 1, Section 8, of the Constitution of the United States, and is the oldest component of the United States Armed Forces. Headquartered in Arlington, VA, the National Guard Bureau (NGB) oversees the administrative control of the US Air and Army National Guard.

THE CHALLENGE: Save millions of dollars a year in TV access charges

The NGB was evaluating solutions to reduce their yearly cable and satellite video communications spending at a variety of locations throughout the US. They also foresaw the need to provide scalable video broadcast capabilities to individual personal computers and televisions within various NGB buildings throughout each state. A solution to provide on-demand video for personnel training and dissemination of key information to large groups was also desired.

THE SOLUTION: A network of video appliances integrated to provide the most efficient video distribution available

The VBrick solution provided a wide dispersion of both user-recorded and leased broadcast video at significantly decreased cost over an extended period. The IP-network multicast solution utilizes Portal and VoD (Video on Demand) servers in conjunction with VBrick Encoders, set top boxes and proprietary VBrick multicast software. The basic design begins with the reception of video from the local bases' video headend. The VBrick system receives standard NTSC video from a number of sources for various application requirements.

The initial VBrick solution included a minimum of 4 channels of encoded content for 12 bases. Each video channel interfaces with a Windows® Media encoder for conversion to a Windows Media video stream.

Examples of video sources are a satellite video headend, local cable television provider headend, DVD, VCR, video camera, or any other item producing an NTSC video output. The encoded video stream is presented to a GFE-provided multicast enabled switch for transport on the base network.

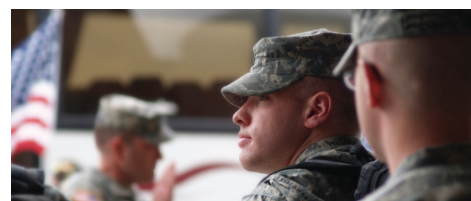
The system is designed to support up to 1500 simultaneous users at each base and is upgradable to any number of users. The Windows Media encoders provide the best viewing with the combination of overall quality and bandwidth usage. The bandwidth required to stream each channel ranges from 56Kbps to 2Mbps per channel. All appliances are integrated into the Portal Server management platform for full administrative control. The management platform also ensures all users have the required access and appliances are kept up to date with SMS push upgrades and push viewer software. Users can be provided with specialized access privileges and/or assigned to viewing groups so each is afforded the appropriate viewing experience.

VBrick technology provides several key system elements:

- **Ubiquitous Access** – Captures and delivers video from any source to any client
- **Reliability** – Uninterrupted access 7 x 24 x 365
- **Network Citizenship** – Optimized, non-intrusive performance across multiple network topologies.
- **Real Time Performance** – High quality, full motion, full screen video
- **Live and Stored Video** – Provides a simplified and unified user and network administration environment to access and manage both live and stored video.
- **Operational Control** – Real-time and pre-scheduling administrative tools to manage video operations and events.
- **Secured Access** – Protects live and stored video assets and manages access privileges across a growing population of users.
- **User Simplicity** – Intuitive, browser-tools to simplify the search, selection, and viewing of live and stored video assets by a wide-range of users.

THE BENEFITS: 85% drop in cable signal access costs annually

Once the VBrick solution was installed and fully operational, the NGB realized multiple benefits. Most significant was the return on investment within 6 months after installation. This was directly due to the reduction of the number of drops needed to provide service to all locations. Video functionality was greatly increased and the additional features are currently being used for training, TV for set-top boxes as well as to the desktop, base event broadcasts, and other user generated content that's stored and distributed through the video on-demand server. Overall, the VBrick system provided an efficient, communication distribution with additional value-added features, for a fraction of the previous system's cost.



Applications in the Department of Defense and Federal Civilian Agencies

VBrick offers the ability to capture, record, manage, distribute, and access all video content across an organization's network infrastructure. With thousands of Federal customers, many Agencies have made VBrick the standard for video streaming within their Enterprise. Applications include Mission-Critical or "In Theater" or "First Responder" applications supporting the men and women at the front lines, and Non-Mission Critical applications supporting operations and internal communications. VBrick's scalable and reliable video communications solutions are installed using existing IP networks to deliver live or on-demand information to U.S. Federal employees.

About VBrick Systems, Inc.

VBrick is the leader in Enterprise IP Video solutions, with over 6,000 corporate, education and government customers and 60,000 installations worldwide. VBrick solutions work over standard IP networks and the Internet to deliver rich media communications that connect people everywhere -- from employees and customers, to partners and shareholders. Our comprehensive product suite and end-to-end solutions are used in a wide range of live and on-demand applications including meeting and event broadcasts, distance learning, digital signage, TV distribution, video surveillance, and Web-based marketing campaigns. Headquartered in Wallingford, CT, VBrick's products and services are available through industry-leading value-added resellers.

For more information, visit www.vbrick.com