



CENTRAL DATABASE & HIGH-RESOLUTION VIDEO ARCHIVE



America's Emergency Network (AEN) Live video connecting government and media

Organization

America's Emergency Network (AEN)

Industry

Government, emergency management and media

VBrick Products

- VBrick Online Streaming Service (VBoss)
- VBrick Windows® Media Encoders

Applications

- Satellite-based government communications for emergency management
- Media access to live Internet video feeds from within a disaster zone

After Hurricane Katrina, media reports coming out of New Orleans were only possible because news crews had lugged satellite uplink equipment into the city before the storm. With the very limited mobility of media personnel, coverage from the flooded city was sparse, scattered, and sometimes contradictory. The situation was worse in neighboring Saint Bernard and Plaquemines Parishes. Government officials there not only lost their communications infrastructure, but also lacked the national media pull of The Big Easy.

The locations may change, but the problem arises again and again: Natural disasters frequently disable land-based networks right when timely and authoritative communication from the affected area is most critical. Government agencies, emergency crews and survivors cannot effectively report on their unfolding circumstances until hours, or even days afterward.

This communications gap is exactly what America's Emergency Network (AEN) aims to bridge. Its satellite-based emergency video broadcast technology operates in the wake of disaster, when power lines, phone lines, cell phone towers and terrestrial Internet systems are all knocked out. AEN's system, in combination with VBrick's Online Streaming Service (VBoss) solution, enables government officials to broadcast real-time information and video to a global audience even as a disaster unfolds.

THE CHALLENGE: Design a low-power, easy-to-operate system able to broadcast live video streams via satellite to multiple end sites on the Internet

Thousands of state, county and city governments have prepared for natural disasters by implementing an emergency plan. For many, that plan incorporates an emergency operations center.

Yet, as strange as it may seem, most of these centers lack a standardized, dedicated and secure means to broadcast vital instructions or information in the midst of a disaster.

AEN set out to address this demand by designing a system that, with the turn of a key, could disseminate real-time information via satellite to sources within and beyond the disaster zone. In order to achieve that, AEN's system needed to be easy to operate, and able to work on battery power.

"We were looking for a durable, foolproof video technology that was always ready to go and didn't need to be booted up like a computer," said Bryan Norcross, President and CEO of AEN. "It's not really an emergency system if you need a technical person to operate it, and that person has gone to lunch when a tanker truck overturns and information needs to go out."

The obvious solution was a video encoder, and specifically an encoder able to stream feeds over the Internet to multiple end sites broadcasting in different video formats. "We had to reach people where they got their information," Norcross explained. "In general,

websites serve people outside the disaster zone. But, within the zone, there's often no Internet access so people rely on television. That meant our system needed to serve both Internet and television in a seamless stream."

"The system itself is a masterpiece of simplicity and technology."

- Bryan Norcross
President and CEO
AEN

THE SOLUTION: A VBrick encoder, coupled with VBrick's VBoss online streaming solution, able to automatically distribute live feeds to subscribing websites, and play across multiple formats

A former hurricane analyst for the CBS network, Norcross began his search by calling old contacts in television broadcasting who were familiar with encoder technology. Most had traditionally relied on encoders based on proprietary codecs that broadcast to a single source, usually a network newsroom. AEN's solution would need a technology that could stream video to multiple end sites, including the media and the general public.

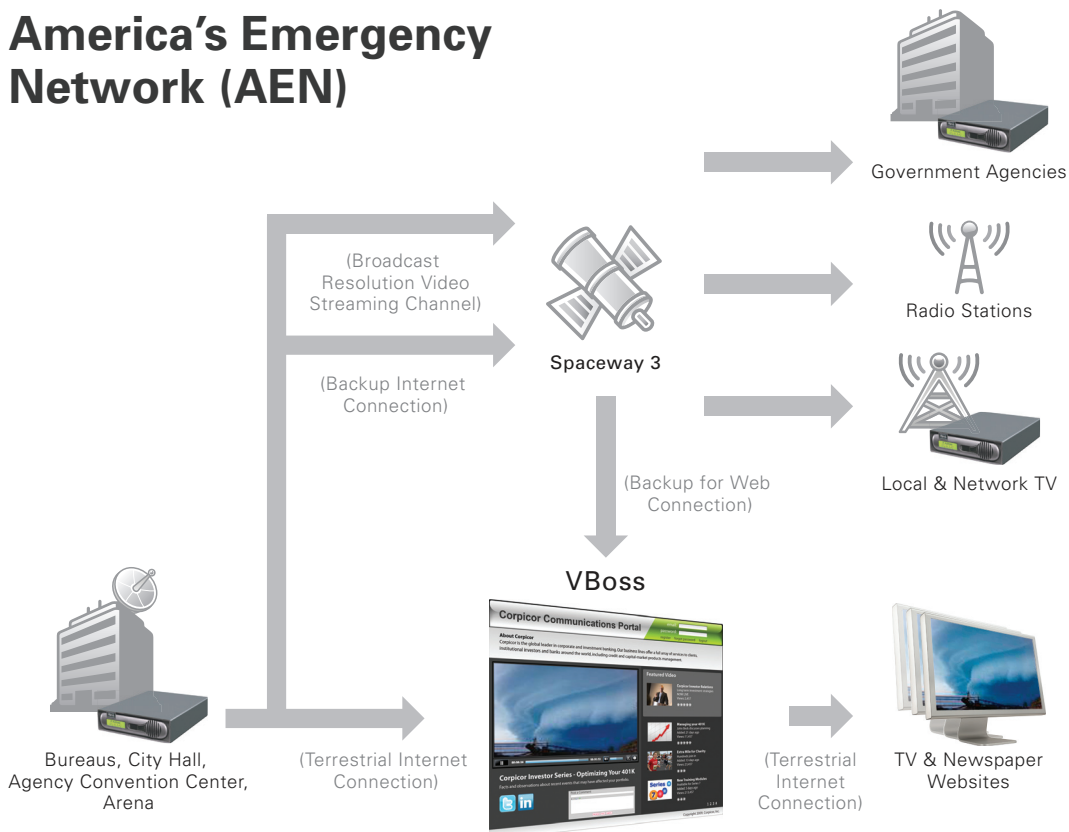
"We needed something simple that would allow people to just embed code into their website," said Norcross. "VBrick's solution was not only open-standard, it allowed us to push one stream to a Windows server, and a second stream with a higher bit rate to TV stations. That meant one news briefing could go out in multiple ways."

VBrick's low-power encoders are now a central component in state and civic emergency operations centers that sign on with AEN. With the turn of a key, they automatically distribute live feeds to any website that subscribes to a center's stream. AEN soon plans to offer live streams ready for television broadcast.



Live feeds from disaster areas to subscribing websites keeps the public informed in a crisis situation.

America's Emergency Network (AEN)



THE BENEFITS: Immediate, automatic Internet access to live video streaming directly from government sources operating from the heart of a disaster zone

AEN's system was first put to the test in 2008 during Florida's annual hurricane exercise. The three-day drill, held in conjunction with the National Hurricane Center, simulates a real hurricane by switching on and testing all emergency systems statewide.

Before the exercise started AEN installed VBrick encoders in Florida's emergency operations center, where the governor would normally sit during a disaster event. Other encoders were installed in centers in Duval and Putnam counties.

During and after the exercise, Florida officials at the state level reported it was the first time they could see live feeds of what county officials were reporting, rather than reading about it in the newspapers the next day. In a memorandum following the event, one Putnam County official reported, "The system itself is a masterpiece of simplicity and technology... The technology that it uses is at the tip of the spear. The audio and video transmission over satellite will allow us to supply needed information to other stakeholders in or outside the EM community at a moments notice."

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“Government understands that unity of communications is important,” said Norcross. “There is no substitute in a crisis to seeing a live public briefing.”

Application of AEN’s technology extends beyond natural disasters to include government communications concerning pandemics, missing children and so on. It also has potential value for educational institutions, health care facilities, and any other entity that needs an immediate channel to broadcast messages on media websites.

Next, AEN aims to expand its services beyond government clients and add the ability to archive video as well as stream it. “This is not a trivial technology we’re building,” said Norcross. “Having good partnerships is key to success, and we plan to expand our relationship with VBrick beyond hardware components.”



Government and emergency agencies can see live feeds of what county officials are reporting, keeping everyone apprised and ready for action on a moment’s notice.

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