Almost like being there

Operation MySpace reaches millions of viewers around the globe with exceptional quality and reliability using Adobe® Flash Media® Server and Adobe Flash Player software

Things get tough and lonely on the battlefield, which is why Bob Hope's USO Shows, which entertained U.S. troops wherever soldiers were stationed, became so popular during the 1940s, '50s, and '60s. The variety shows included everything from singing to comedy, providing a welcome respite for the U.S. forces. Today, MySpace is carrying on this tradition—with several new twists.

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**Aber Whitcomb,
CTO,
MySpace**

In March 2008, the company streamed a live video broadcast of operation MySpace, a free music and comedy event for U.S. troops stationed in Kuwait and broadcast around the world. Using the powerful streaming capabilities of Adobe Flash Media Server coupled with the award-winning Adobe Flash Player runtime, U.S. troops, families, and friends experienced the webcast live over the Internet in full-screen HD. The show also subsequently aired on FX.

"More than 7,000 troops were there to experience the live show that was shown to millions of MySpace users around the globe," says Aber Whitcomb, CTO of MySpace. "Adobe Flash technologies helped ensure that each viewer could reliably experience the event in real-time on multiple platforms and enjoy exceptional quality."

Live, high-quality video experience

Operation MySpace featured artists such as Jessica Simpson, Disturbed, Filter, and Carlos Mencia, streamed live at *www.myspace.com/ operationmyspace*. New features in Adobe Flash Media Server enabled content delivery network Akamai and Adobe Flash encoding company Kulabyte to stream the HD webcast live. Video streaming through Adobe Flash Media Server began playing instantly when troops, or family and friends watching the live event from around the world loaded the MySpace page to watch the event. Explains Whitcomb, "The market penetration of the Adobe Flash Player and the streaming capabilities of Flash Media Server are second to none—they were the logical choice for this event."

According to Whitcomb, Operation MySpace was the first concert event overseas to be globally webcast live in HD from a military base. The live broadcast allowed MySpace's global community of more than 110 million users to experience the show first-hand together with the troops. MySpace also encouraged people to interact via instant messaging as well as by posting videos, participating in discussion forums, and posting comments to show their support. Says Whitcomb, "What made Operation MySpace truly unique was its interactivity and the fact that it was a real-time experience made possible by Flash technologies."

Broadcast using Adobe Flash technologies, Operation MySpace was the first concert event overseas to be globally webcast live in HD from a military base.

Challenge
• Reliably stream a live HD show in real-time over the web

• Reach millions of viewers worldwide

• Deliver exceptional quality

• Engage viewers with interactivity

• Provide content in new, exciting ways

Solution
• Use the powerful streaming capabilities of Adobe Flash Media Server coupled with the award-winning Adobe Flash Player runtime

• Work with Kulabyte to encode the broadcast and Akamai to stream it

• Pair video experience with interactive capabilities like instant messaging, discussion forums, and live commenting

Benefits
• New features in Adobe Flash Media Server enabled live streaming in HD

• Quality exceeded any previous webcast from MySpace

• Reliably reached millions of MySpace users around the globe

• Received a flood of positive feedback

• Provided a highly engaging, interactive experience

• Discovered new ways to deliver content

Toolkit
• Adobe Flash Media Server

• Adobe Flash Player

• PCs running Microsoft® Windows® 2003 Professional

• Macs running Mac OS X

No ordinary broadcast

Behind the scenes, teams in different parts of the world worked to pull the event together. The first team was a MySpace and outsourced event production staff in Kuwait. The second was comprised of MySpace and Kulabyte personnel, alongside a satellite production crew from Coastal Satellite in El Segundo, California. Team Kuwait produced and up-linked the show live via satellite to Team El Segundo. Meanwhile in El Segundo, Coastal Satellite sent the satellite feed to Kulabyte as an HD-SDI feed at 1080i 29.97, the native format in which the show was shot.

Next, the team put six Kulabyte encoding systems to work, one each for large, medium, and small streams, plus a corresponding backup stream for each. Once the video was encoded and compressed, Kulabyte sent the three primary streams to a local Flash Media Server, which, in turn, rebroadcast the streams to Akamai for distribution over the web. The three backups connected directly to Akamai for redundancy.

"This was the highest bit-rate ever streamed through Akamai for a live event," says Kulabyte Co-founder and CTO Chris Gottschalk.

"Video-on-demand streaming at up to 8 megabits (MB) per second is common, but as far as we know, live streaming at over 1 MB per second had never really been done before this. The level of quality that Kulabyte provides teamed with the versatility of Adobe Flash technologies makes a compelling argument for traditional broadcasters to run parallel web channels alongside their traditional broadcasts."

Outstanding quality

According to Whitcomb, the quality of the event was exceptional and MySpace received substantial positive input from viewers. As a social networking site, MySpace relies heavily on its users to voice what they like and don't like. "The feedback from the HD broadcast has been hugely positive and the quality was better than any webcast we've ever done," he says. "It's incredibly important to us that we continue to be innovative and cutting-edge with the content we produce for our community and the way in which we provide content to our users."

Word of the exceptional quality of the event also flooded in to Kulabyte. "We received overwhelmingly positive comments on the picture quality," says Gottschalk. "The event was such a success that we are swamped with requests."

Adobe Flash technologies helped ensure that millions of viewers around the globe could reliably experience the Operation MySpace event in real-time on multiple platforms.

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More to come

Based on the success of Operation MySpace, Whitcomb says MySpace will continue to produce and host live events and provide engaging video experiences, especially via MySpaceTV, MySpace's Internet video platform. "Today, audiences want the experience of watching video over the Internet to equal or surpass the convenience and quality of watching television," says Whitcomb. "By delivering content using Adobe Flash Media Server and Adobe Flash Player, we are providing audiences with reliable, high-quality viewing experiences and opening exciting new ways for our users to engage and interact with video content."