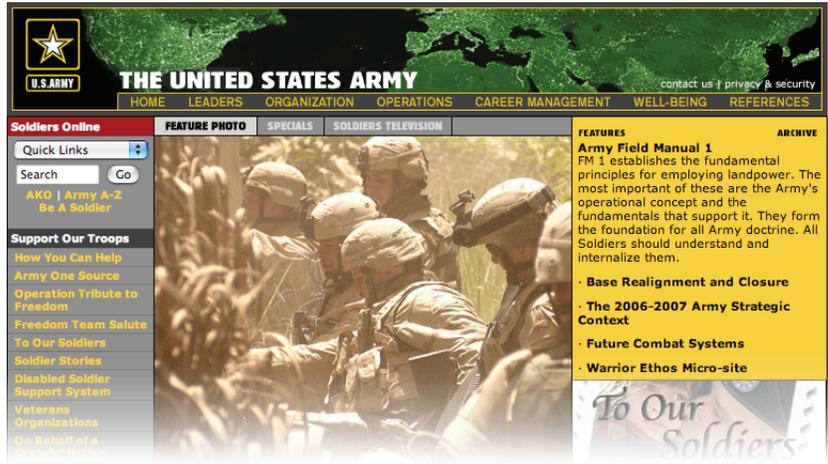
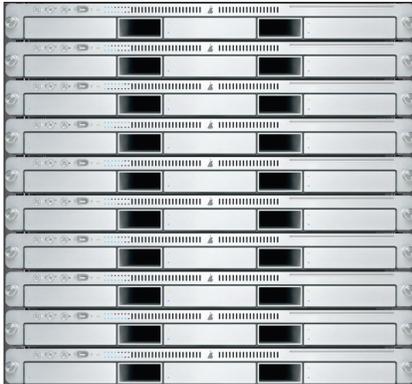




# The U.S. Army reaches out to the public with Apple.

Xserve gives the Army website crucial security, stability, and performance.



## At a Glance

**Opportunity:** After the U.S. Army's website was vandalized by a hacker in 1999, the site's IT managers sought a more secure platform.

**Result:** Apple Xserve running Mac OS X Server now keeps the Army site safe and serving millions of users every month. And the reduced time spent dealing with security issues has freed IT staff to focus on developing new solutions for the site.

As the public face of the U.S. Army on the Internet, [www.army.mil](http://www.army.mil) is a vital tool for education and public relations. It's also the target of hundreds of attacks every day. That's why the Army hosts the site on an Xserve running Mac OS X Server.

In times of peace and in times of war, the Army website provides access to news, information, and entertainment from 60 different Army sources. Currently, some six million visitors around the world view a terabyte of data every month, including the latest press releases and photos, audio and video feeds, and a bulletin board where the public can post messages of support for troops.

With so many people depending on [www.army.mil](http://www.army.mil), reliability and performance are vital concerns. But one issue is paramount. As the web presence of the U.S. Army, the site is a magnet for hackers. In fact, it's been the subject of entire hacking contests. That makes security by far the biggest priority for the site's IT staff. As technical manager Bill Cerniuk explains, "Our exposure to the possibility of embarrassment makes this a high-pressure environment. So you evaluate solutions and choose what you run with different eyes."

In June 1999, a Wisconsin teenager breached the security of the Windows NT system that hosted the site, replacing the home page with a defiant message from a hacker group. The site was moved temporarily to a Mac OS-based system while the Army and its website contractor, CherryRoad Technologies, evaluated a number of platforms to ensure that such an incident could never happen again. After analyzing the security of a variety of platforms and reviewing security advice from the World Wide Web Consortium, CherryRoad recommended that the Army remain on the Mac platform.

**“I wanted high-speed systems that could handle any application we needed, keep the site available 24 hours a day, not be vulnerable to every passing virus, and fend off hackers without my staff having to spend all their time applying security patches.”**

Mark H. Wiggins, Lt. Col., U.S. Army, Ret.  
Former director, [www.army.mil](http://www.army.mil)

Today, an Xserve server running Mac OS X Server and WebSTAR delivers the [www.army.mil](http://www.army.mil) content to millions of visitors each month. (That number has doubled almost yearly.) Despite the fact that the Army website is the target of hundreds of attacks every day, not one has succeeded since the switch to Mac systems in 1999. And uptime for the site is running at 99.995 percent.

Army IT managers have been so pleased with the Xserve running the main site that they have purchased six more Xserve systems for additional web functions. One is the backup for the main server. The others create and serve the site's streaming content, offer a FileMaker Pro database of Army press releases, supply an RSS newsfeed, run the public bulletin board, and host an unclassified internal website.

The host Xserve and its backup are tied to an Xserve RAID storage system. Although the facility where [www.army.mil](http://www.army.mil) resides already had a 200TB storage array, IT managers decided to go with Xserve RAID for the website because of its lower hardware and support costs. “The bang for the buck with Xserve RAID is fantastic,” site manager Cerniuk says. “And the performance is just outstanding.”

How many IT people does it take to run [www.army.mil](http://www.army.mil) and its associated systems? Thanks to the simplicity and reliability of Xserve and Mac OS X Server, Cerniuk's team consists of only three people including himself. As he notes proudly, “We have a small group that's managing one of the largest sites in the world.”

And the switch to Apple solutions brought another benefit. “When we moved to a Mac OS-based system, we were able to focus less of our energy on security.” Now, instead of spending their time installing patches, Cerniuk's staff is free to explore ways to make the site even more valuable to the Army community. In addition, the Mac systems are part of an overall multiplatform strategy that Cerniuk considers vitally important for any organization. “If you only have one type of system, you can be taken down by a single virus. Our diversity gives the Army better security.”

With the proven success of Mac systems at [www.army.mil](http://www.army.mil), Cerniuk often gets calls from other government webmasters considering a switch. What does he tell them? “Contact Apple, test it, and then deploy it.” And how has that advice been received? “We've converted some very staunch Windows folks.”

#### **For More Information**

For more information about Xserve and other Apple server and storage solutions, visit [www.apple.com/server](http://www.apple.com/server).