



The Cleveland Browns

Teaming Up for a Winning Network Solution

Steeped in a tradition of Hall-of-Fame performers and home to some of the game's most loyal, die-hard fans (including the colorful "Dawg Pound"), the Cleveland Browns are an NFL institution. Founded in 1946 by Arthur McBride and coached by the legendary Paul Brown, the Browns won the championship in their very first year...and have been a city's passion ever since. From Otto Graham and Jim Brown to Paul Warfield and Bernie Kosar, the Cleveland Browns are well known for their heroics on the field. Now the Browns are driving forward behind the scenes with a high-speed, video-enabled network that supports an organization always searching for a competitive, championship-caliber edge.

Industry:

Sports and Entertainment

Number of Nodes:

21 at Cleveland Stadium; 5 nodes at the Berea Training Facility

Applications:

Streaming video, e-mail, back-office apps

Challenge:

Enable the playback of bandwidth-intensive digital video files without frame loss or network degradation

Solution:

High-performance X-Pedition Routers and Matrix multilayer switches

Benefits:

- High capacity to handle demanding network traffic
- Superior wire-speed performance, uptime with application control, even under the most demanding conditions
- Guaranteed security and end-to-end QoS

The Challenge:**New Stadium, New Network**

The Browns organization is committed to supplying the resources needed to help the team win. This includes providing the coaching and office staff with the best possible working environment. To that end, the team recently opened a brand-new \$283 million stadium in downtown Cleveland. In addition, the team's training and administrative complex, located in Berea, Ohio was renovated prior to the 1999 season. Hand in hand with the construction of the beautiful new stadium, and the renovation of their training and administrative complex, the Browns also looked to upgrade their network infrastructure to support newer applications and help streamline business processes.

One technology the organization addressed that would have a particular impact on the team itself was the use of video streaming. Every week, the coaching staff, led by Head Coach Chris Palmer, prepares for upcoming games by analyzing game and practice videos. This has been a popular method of preparation for many years—but only now are teams like the Browns discovering the advantages of running videos over the network.

In the Browns case, films are recorded, digitized, and archived onto hard drives, then replayed on Macintosh video stations throughout the organization's Berea training facility. In order for game analysis to be meaningful, it is critical that the digitized playback is of the highest quality; a lost frame could mean a missed play. It was one of the organization's top priorities that the new network facilitate high-quality playback of the digitized videos.

In addition to the coaches and players, the Brown's entire front office and administrative staffs rely on the network to perform day-to-day business computer tasks, including e-mail, file retrieval, and printing. The new network needs to be robust and scalable enough to accommodate these functions as well as the emerging applications (multicast video, video conferencing) the organization requires to stay ahead of the game. And of course, downtime or delays have to be virtually eliminated.

The Solution:**A "Big Play," Video-Ready Infrastructure**

When it came to deciding which vendor would handle their network upgrade, the Browns turned to a proven winner. They already had a successful relationship with Cabletron Systems and were confident its new spin-off Enterasys Networks™ would provide a winning lineup.

According to Browns IT Director Gordon Foust, “We chose the Enterasys line for several reasons. First, we’ve always been pleased with the level of commitment from Cabletron and now Enterasys—and not just because their solutions are reliable. The service and support has been simply outstanding. The other reason was the smooth migration path they proposed that would allow us to cost-effectively improve throughput and manageability of the network now and for years to come.”

Leveraging its existing TCP/IP installation, the Browns needed to upgrade the backbone as well as the wiring closet and workgroup distribution areas to ensure quality of service end to end. An X-Pedition 8600 (formerly the SmartSwitch Router 8600)—a 16-slot, high-availability, multilayer core backbone switch router with redundant switch fabrics—was deployed at the stadium and serves as the workhorse in supporting mission-critical, video applications along with other important networked applications. Linked off of the X-Pedition are two Matrix E6 wiring closet switches (formerly the SmartSwitch 6000) and 17 Vertical Horizon stackable workgroup switches. This switched configuration delivers 100 Mbps dedicated Ethernet performance right to the desktop.

A similar configuration was implemented at the Brown’s training facility in Berea. Smaller than the 8600 but extremely efficient, a pair of X-Pedition 2000 workgroup routers forms a redundant link to the Stadium network and provides the same precise application control to serve all users at the training center. Two Matrix E6s in the wiring closet deliver dedicated 10/100 Mbps Ethernet to the desktop. This seamless network encompassing the two sites ensures that everyone in the Browns’ organization has on-demand access to the applications and services they require—including the high-quality playback of digitized game and practice videos that are so critical to the team’s preparation.

Foust notes that the video files can be accessed and uploaded quickly, and even during playback, no performance degradation to the network is apparent, enabling the rest of the organization to continue working without interruption. “The coaching staff is able to watch game and practice videos without the loss of frames during playback,” said Foust. “During video playback, the rest of the network does not notice any type of performance degradation.”

For now, Foust and the Browns are more than satisfied with their Enterasys “application-aware” infrastructure. And if the need should ever arise for greater performance and manageability, Foust is confident that the network will be ready. “With the wire-speed IP/IPX routing of the X-Pedition and its ability to control and prioritize applications, I know we have the powerful backbone to support the heaviest traffic demands. And the multi-layer capabilities of the Matrix line ensure that our video streaming performs at the highest level—even as we explore other high-priority applications and services.”

Contact Us

For more information, call Enterasys Networks toll free at **1-877-801-7082**,
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