



Morehead State University

Enterasys Solutions Move Morehead to the Head of the Class

Serving Kentucky and Appalachia, Morehead State University has a curriculum that embraces nearly 120 academic programs on the associate, baccalaureate and graduate levels for approximately 8,300 men and women enrolled there. The university consists of more than 50 buildings on and off its main campus and provides a commonwealth environment for more than 42,000 MSU alumni worldwide.

Industry:

Education

Number of Students:

8,300

Challenge:

Find a cost-effective, easy-to-implement solution to meet the needs of new bandwidth-intensive applications

Solution:

Enterasys flexibility and scalability enable network upgrade—without a forklift

Benefits:

- Cost-effective, easy-to-implement solution
- High-capacity and superior traffic and congestion management meet demanding backbone requirements
- Increased bandwidth delivers faster data flow and enhanced performance
- University can take advantage of bandwidth-intensive technology and the latest applications including video conferencing and distance learning
- Manageability and flexibility allow increased capacity
- Supports ATM Forum standards to ensure interoperability with multi-vendor devices

Committed to embracing technology for the enrichment of its students, Morehead celebrated its 75th year as a state institution of higher education by migrating its information network to future-oriented technologies with the help of Enterasys solutions. The university's administration is confident that it has chosen not only "best-of-breed" products, but a "best-of-breed" vendor strategy as well.

The Challenge:**Finding a Cost-Effective, Easy-to-Implement Solution to Meet the Needs of New, Bandwidth-Intensive Applications**

As students, faculty and the administration began using on-line resources like video conferencing or distance-learning classrooms on a daily basis, the Morehead network soon reached a critical juncture. According to Mike Eldridge, one of the university's network managers, usage projections sent up a flurry of red flags. "It was clear that in our case, it wasn't only the need for speed, but the speed of our need. Unless we did something soon, the network was going to crash and burn," Eldridge said.

Morehead's network administrators recognized that today's most popular applications, especially those that are web based, are becoming increasingly bandwidth-intensive, and it became evident that a backbone migration was in order. The new solution had to be cost-effective and easily implemented, and it had to be manageable and flexible enough to accept increased capacity and the implementation of new technologies.

Assembling a team of technology managers, the university evaluated FDDI against ATM and made the choice to implement ATM as the university's backbone technology. The next step was

to evaluate a variety of vendors' products and strategies."

The Solution:**Enterasys Flexibility and Scalability Enable Upgrade—Without a Forklift**

With so many different vendors offering ATM solutions, the team decided to step back and reassess what was really needed. "Anytime we brought in a new vendor they wanted to forklift our infrastructure," said Eldridge.

After hearing from some of the best the networking industry had to offer, the university's technology team determined that no single vendor provided enough compelling reasons for them to stray from Enterasys solutions.

"We've been a Cabletron customer since 1988. In fact, our first MMAC hub is still in use today. So we had Enterasys come in and talk to us," Eldridge said. What Enterasys proposed for the Morehead network was a migration from a

connectionless, router-based infrastructure to a connection-oriented LAN and WAN with SmartSwitch ATM solutions at the core.

The university had existing SmartSwitch technology in place, so the move to ATM made the most of SmartSwitch flexibility and scalability—the ability to easily combine a mix of technologies. For Morehead, this meant that ATM could integrate with the network’s traditional switching environment while supporting all relevant ATM Forum standards to ensure interoperability with multi-vendor devices. In the data center, Morehead implemented two SmartSwitch 6500 ATM switches for high capacity and redundancy. The SmartSwitch 6500s incorporate high port capacity, standards-based routing, and superior traffic and congestion management to meet the demanding requirements of the university’s backbone.

To augment the SmartSwitch 6500 solution, Morehead installed the SmartSwitch 2500, an ATM switch with dedicated high-performance connectivity to power users and applications. “We tested the SmartSwitch 2500s in our network and they worked great,” said Eldridge. “They offer the best value for our investment, allowing us to selective install large amounts of bandwidth when and where we need it. It’s that kind of scalability that will carry us forward for years to come.”

From the data center, OC-3 155 Mb links extend to Matrix E6s (formerly SmartSwitch 6000s) and Vertical Horizon switches (formerly SmartSwitch 2000s) to increase capacity and performance in the network’s wiring closets and workgroup environments. “It was a ‘no brainer,’” said Eldridge. “We did our entire ATM migration in one day.”

During the summer, the university will be deploying Matrix E6s and Vertical Horizon 2000s with switched 10 Mbps Ethernet to campus dormitories and linking them back to the data center via OC-3 155 Mb ATM. They’ll also start customizing features to implement policies to control network access for students in the dorms. Solutions from Enterasys will continue to play a vital role in the university’s development, well into the future.

Contact Us

For more information, call Enterasys Networks toll free at [1-877-801-7082](tel:1-877-801-7082), or +1-978-684-1000 and visit us on the Web at enterasys.com