



Florida A&M University

Campus-Wide Connectivity through Enterasys Solutions

Founded in 1887, Florida Agricultural and Mechanical University is one of the three oldest institutions of higher education in the state of Florida. Today, Florida A&M is a comprehensive, co-educational university offering a broad range of

Industry:

Education

Challenge:

Finding a robust, reliable solution to support emerging applications

Solution:

Enterasys provides advanced functionality to enhance education

Benefits:

- Robust network supports bandwidth-intensive applications, including distance learning and video conferencing
- Extended connectivity meets the demands of technology-savvy students—and parents
- Port-per-pillow connectivity provides 24x7 access to computing resources
- Reliable, high-speed connectivity opens the door for university researchers

instruction, research and service programs to over 10,000 students at the undergraduate, graduate and professional levels. The university's 12 schools and colleges are committed to excellence in instruction, learning and research, and cover a wide array of academic disciplines.

Located in Tallahassee, Florida A&M has achieved a national reputation for attracting some of the country's best students and was the 1997 recipient of the *TIME Magazine/Princeton Review* "College of the Year" award. The university is continually furthering its efforts to provide attractive and stimulating student activities to complement formal classroom instruction and academic performance.

While the university seeks students from all racial, ethnic, religious and national groups, Florida A&M remains a leader in racial desegregation, equal access, affirmative action and cultural diversity. Florida A&M University is dedicated to developing a truly multicultural, international society that is based on respect and individual dignity.

The Challenge:**Finding a Robust, Reliable Solution to Support Emerging Applications**

Florida A&M needed a robust, reliable network to deliver ATM to the desktop and support converging voice, video and data resources throughout its campus. And with its strong emphasis on research,

the university also required a robust network to support a variety of bandwidth-intensive research applications, including a 3D modeling and visualization system.

The university also planned to implement distance learning, to enable the school's professors to reach an increased number of students on and off campus. For example, with the proper network in place, a professor could simultaneously address three sections of the same course, located in three different classrooms. With real-time interactive video conferencing, classroom size would no longer be a limiting factor.

After about two years of evaluating six vendors' networking solutions, A&M selected a network from Enterasys. "We selected Enterasys based on their technology and superior service," said Sterlin Adams, chief information officer and director of university planning and analysis. "Enterasys was best prepared to meet our goals and objectives, in terms of our overall mission, values and technology needs."

The Solution:**Enterasys Provides Advanced Functionality to Enhance Education**

The university used Enterasys solutions to network 17 campus buildings, installing two SmartSwitch 9000s in each building, with Ethernet and Fast Ethernet fiber ports as well as ATM uplinks. Redundant OC-3 connections link each building's SmartSwitch 9000s to a SmartSwitch 2500 ATM workgroup switch, and may be easily upgraded to OC-12 when

the added capacity becomes necessary. Each building is also connected to two central redundant SmartSwitch 9000s via OC-3.

Many dormitories are being wired with per-pillow connections, meaning that each student will have his own connection in his room. The dorms will also be connected directly to the network backbone. Per-student network connections are being installed in the university's classrooms as well, further enabling the use of networked and web-based resources in the classroom.

Students aren't the only ones to benefit from the Florida A&M's advanced network and the enhanced educational opportunities that it provides. The university's Faculty Development Lab, located within the Instructional Media Center, provides faculty and staff with comprehensive training on how to implement technology in the classroom. Training in all aspects of computer technology and equipment enables faculty to enhance the quality of education through the use of multimedia, interactive presentations, distance learning, and other tools. "The demand for technology is increasing, and we're working rapidly to meet the students' and the faculty's growing needs," says Wayne Dunwoody, senior coordinator of computing systems control.

ATM OC-3 to the desktop in each of the university's five research facilities provides the reliable, high-speed connectivity that the university's researchers demanded. A future upgrade to OC-12 is also planned. In facilities where ATM is not required, switched full duplex Fast Ethernet to the desktop is provided. A&M's advanced network and the technologies in place ensure that Florida A&M will remain a research pioneer.

The university's IT staff also uses Enterasys' NetSight™ Element Manager for comprehensive remote management of networked devices. "It's marvelous," said Adams. "Its RMON capabilities enable us to easily monitor what is happening on the network, and respond accordingly."

The Future: The X-Pedition Switch Router Expands Connectivity

Attracted by its multilayer functionality, high speed and tremendous cost savings, Florida A&M University is preparing to install an Enterasys' X-Pedition 8000 to replace its current backbone router. "The annual maintenance alone of our former router is greater than the purchase price of the X-Pedition," remarked Adams. "We project that over the next five years, the X-Pedition will save the university \$50,000. Maintenance of the X-Pedition switch router is a mere one-fifth of what we've been paying."

Florida A&M also plans to implement WAN modules for the X-Pedition, delivering remote access to the many university students who reside off-campus.

The scalable nature of Enterasys' solutions ensures that these products will grow along with Florida A&M's network requirements, continuing to deliver the performance and manageability that the university demands.

Contact Us

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