



## CUSTOMER

- University of Maryland Eastern Shore

## INDUSTRY

- Higher education

## CHALLENGES

- Total cost of ownership (TCO)
- Deteriorating copper plant—expensive to upgrade
- Delayed service delivery due to “message tag”
- Poor moves, adds and changes (MACS) service

## SOLUTION

- IP telephony server: UNIVERGE® SV8500 and UNIVERGE NEAX® 2400 IPX
- Centralized management: UNIVERGE MA4000
- Provisioning: MA4000 provisioning system
- Connectivity: NEC Fusion Call Control Signaling (FCCS)

## RESULTS

- Reduced TCO by enabling fifty percent more MACS with same staff
- Improved service delivery during peak call-traffic times
- Help desk empowered to make line appearance changes in real time
- On-the-spot changes with MA4000’s browser-based interface
- World-class platform for advanced productivity-enhancing applications

## University of Maryland Eastern Shore

Ask any college student or faculty member today, and they will agree: The state of technology on their campus is important, not only for the learning environment and career success, but as an indication of the competitive posture of the institution overall. When [The University of Maryland Eastern Shore](#) (UMES), a land-grant historically black college founded in 1886, migrated from its legacy TDM telephone system to an advanced enterprise IP telephony solution—the UNIVERGE SV8500—it positioned the university as a first-rate educational institution among stakeholders, including students, faculty, alumni and staff, as well as Maryland state officials with oversight responsibility.

## CHALLENGES

Phil Taylor, director of Information Technology, arrived at UMES in 2002. At that time, an NEC NEAX 2400 IMX provided telephony for the campus. Taylor’s first major project was upgrading the IMX, located in the main administrative building, to a UNIVERGE NEAX 2400 IPX, and adding a second stack in the University Terrace dorm across campus. “We connected the two with NEC Fusion Call Control Signaling (FCCS), thereby solving our capacity issues and providing continuity in case of an outage. However, we still had both feet in the TDM world, maintaining separate copper and fiber infrastructures.”

As a result, the Registrar and other key departments experienced service delays and decision latency during peak-traffic call times, causing wide-spread campus communications inefficiencies.

In addition, the university faced significant system management challenges:

- A deteriorating copper plant that “was pushing 30 years,” says Taylor. “In some closets, we couldn’t find 10 good pairs.”
- A slow, expensive labor-intensive provisioning and management process via the MATS interface
- Delayed service on moves, adds and changes (MACs)
- Call overflows resulting in callbacks and service delays during peak call times

## SOLUTION

In 2007, Jennifer Zerbe, account manager of NEC associate Clear Connection located in Beltsville, Maryland, began calling on the university. "Jennifer is very knowledgeable and service oriented," says Taylor. "She made us aware of advances in NEC technology and helped us upgrade our IPX to the latest software version. Starting in 2008, she began suggesting we could become an early site for the UNIVERGE SV8500 Communication Server. When we did a cost analysis, migrating to IP became an easy decision. We already had a budget in place for that so we jumped at the opportunity!"

In August 2008, the university upgraded the IPX in its main administrative building to an SV8500. "Overnight, we migrated from TDM to proven NEC IP telephony. The SV8500 includes blade-server chassis design, hot standby redundancy, failover, green technology and extensive networking capability," says Taylor. "I also like the SV8500's E911 location capability, end-to-end encryption, and high reliability. There is no better communications server in the world."

Taylor says his immediate objective was to install the SV8500 platform and enjoy the benefits of IP. "We are planning to add powerful productivity applications going forward. We also installed the MA4000 Management System last August, and I am very glad we did."

## RESULTS

College Registrar Cheryl Holden-Duffy says that before the start of each semester, the volume of calls can be "horrendous;" 300 inbound calls a day is not atypical. "Before we got the SV8500, during those times, our receptionist could only take messages," she says. "Sometimes we could not return calls for days. Now, with the SV8500, when our receptionist is on the phone, line appearances on the phones enable anyone in the department to answer incoming calls when they see the receptionist is busy. As a result, we give callers service on the spot rather than taking messages. Our SV8500 has helped us improve service delivery quite a bit!"

Currently only 40 administrators have IP terminals, but Taylor says, "Eventually, we will give the entire faculty and staff XML-enabled IP terminals. We plan to use the color screens for important campus information which may include notifications in case of bad weather or other emergencies."

Taylor reports, "Thanks to the MA4000, we are now able to handle 50 percent more MACS with the same staff," he says. "Now our help desk agents can change line appearances over the phone in real time without involving our technician. Our tech was glad to give up the unfriendly MAT interface. The MA4000's intuitive interface enables him to accomplish more in less time. And thanks to the MA4000's Web-browser-based interface, he and I can do MACS on our laptops in real-time right at the user's office," says Taylor.

"I was so impressed!" says Holden-Duffy. "Mr. Taylor sat down at one of our desks with his laptop and made a bunch of line-appearance changes for us. They took effect immediately, and he was done in less than five minutes! Before the MA4000, we would have had to wait weeks for the same service! I can't tell you how much I appreciate our new MA4000."

"I think we will add NEC Conferencing first for improved collaboration," adds Taylor. "After that, we want to upgrade our voicemail application to the UNIVERGE UM8500 which will give us one-step provisioning for both telephones and mail boxes. That will save us more time." Taylor also plans to add:

- NEC's Rich Presence application which he expects will streamline decision-making and reduce telephone tag frustrations for everyone
- NEC's Hospitality vertical application for use in the on-campus hotel and restaurant run by the Hotel & Restaurant Management program (part of the Business School)

"At UMES, we are very excited about our excellent partnership with Clear Connection and about our NEC SV8500 Communication Server and its ability to help our fine university fulfill its destiny," concludes Taylor.

[Read more about the UNIVERGE SV8500.](#)

[Read more about the MA4000 Management System.](#)

[Contact NEC to find out more.](#)