Emory University, located in Decatur, Georgia, is home to nine major academic divisions, numerous centers for advanced study, and a host of prestigious affiliated institutions. The University is affiliated with the world-renowned Emory University School of Medicine and Emory University Hospital, a healthcare system that encompasses the Emory Clinic, Wesley Woods Center, Emory Hospitals, Emory Medical Research Facilities, and Emory Flight.

This dynamic campus of more than 20,000 employees and 11,400 students is served by a 700-device infrastructure consisting primarily of Foundry and Cisco equipment, which is supported by a centralized network communications team known as NetCom.

In 2002, growth within the University and Hospital systems began to rapidly escalate and the NetCom team was faced with an increasing number of challenges. The University and Hospital networks were entirely separate, and a lack of end-to-end visibility across each network was making management and regulatory compliance more difficult and time-consuming. NetCom’s limited staff was also burdened by data overload and was struggling to deal with thousands of alarms, alerts, traps, and tickets from numerous sources. In addition, the NetCom team wanted a more effective way to use IT resources to provide better service to the University and Hospital communities and support such things as new security measures and e-health programs.

EMC Smarts helps consolidate infrastructure management

Emory University and Hospital System
“The business need was clear—we needed centralized control of the network and the ability to view the entire infrastructure through a single pane of glass,” says David Westin, operating systems administrator analyst. “In addition, because we wanted to protect our investment in existing tools, we needed a ‘manager of managers’ (MoM) that could collect and consolidate information from point solutions already in place.”

**EMC Smarts satisfies key criteria**

“We have a widely dispersed network with equipment ranging from old bridges and hubs to the latest technology. Smarts can handle any device and any problem. We’ve realized value from day one, seen maps of things we didn’t know existed, and can now share that information with the key engineers who can solve the problems. It has been very positive for us to have a single manager of managers that everybody can look to for answers.”

David Westin
Operating Systems Administrator Analyst

After researching the network management market, Emory decided to explore solutions from three top vendors. Each contender then presented its solution to a group of 20 engineers based on a “wish list” of objectives and criteria for the new system. This list included the ability to: increase performance and availability to meet service-level agreements, isolate root-cause problems in real time, enable single-console management, automate key functions to stretch limited staff resources, provide adaptive and scalable support for a rapidly changing infrastructure, integrate with legacy systems, and provide low total cost of ownership and significant ROI.

It was determined that EMC® Smarts® technology would be evaluated first because it came closest to meeting NetCom’s requirements. The team ran EMC Smarts solutions through different scenarios and found them to be highly effective.

In addition to providing a robust platform to integrate management of the two large and very different University and Hospital systems, EMC Smarts automation and intelligence promised to increase productivity and streamline operations. With EMC Smarts built-in intelligence and automation, script writing would be limited, and the team estimated that network availability could be increased by 20 percent.

“From the first day, we were able to get information that we didn’t know about before,” states Westin.

**Automation improves network availability and staff productivity**

An easy decision to make, Emory chose EMC Smarts solutions for the job. These solutions include: EMC Smarts IP Availability and Performance Managers which feed events and topology into the EMC Smarts Service Assurance Manager for integration, correlation, and end-to-end display; EMC Smarts Global Console; Adapters for syslogs, traps, and e-mail; and the EMC Smarts Business Dashboard for Web-based access to information and views have also been implemented.

“Deployment was fast and easy,” says Westin. “Within 20 days, comprehensive auto-discovery and implementation was complete. We had customized our Global Consoles to meet the needs of multiple users, with everyone sharing information while we presented different information depending on user levels. Smarts delivered everything we expected.”
While EMC Smarts IP Availability Manager automates root-cause analysis, Emory relies on EMC Smarts Service Assurance Manager to correlate traps, syslogs, and alarms from multiple sources and to automate escalations—all from a single console.

“We have two separate and distinct networks, but the need for service assurance is the same across both,” explains Westin. “Root-cause analysis is key for us because our network operations center (NOC) is only staffed from 8 a.m. to 5 p.m., with engineers on call outside of those hours. The ability to send root-cause information to their pagers is crucial to solving problems quickly—particularly in high-profile areas like the operating room where you need to ensure the highest levels of network availability.”

**Impressive business results**

Since deployment, the number of trouble tickets has been reduced by about 50 percent because the NetCom team now has the information it needs to be proactive and initiate action before customers call with problems. Mean-time-to-repair also has decreased significantly.

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Impressed with EMC Smarts technology, Emory plans to extend its solution to include Application Services Manager to manage mission-critical applications such as PeopleSoft and GE Medical PACS, as well as Business Impact Manager to determine how infrastructure problems impact services and users.

“EMC Smarts delivered what it promised,” says Westin. “Implementation was flawless, we have been able to easily customize the system to meet our needs, and technical support has been excellent. We expect to do a lot more business with EMC Smarts in the future.”