

The Organization

Birmingham-Southern College
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The Challenge

- Secure a growing academic network without choking throughput
- Provide high-speed connectivity to support distributed server redundancy
- Reduce administration overhead of e-mail security
- Establish secure remote access for staff, faculty and authorized third-parties

The SonicWALL Solution

- SonicWALL E-Class NSA E7500 network security appliance
- SonicWALL SSL-VPN 2000 secure remote access appliance
- SonicWALL E-Class ES 6000 anti-spam/e-mail security appliance

The Results

- High-performance enterprise-class network security
- Fiber-optic connectivity
- Seamless e-mail security integration with Active Directory
- Clean VPN secure remote access environment

Founded in 1856, Birmingham-Southern College is a four-year, private liberal arts institution affiliated with the United Methodist Church. The campus network includes approximately 1,000 college-owned Windows-based systems and 200 network laser printers, serving faculty, administration and multiple academic labs. A fractional DS3 line provides Internet access to all members of the college community. Connectivity for student-owned machines in all residence halls, sororities and fraternities, is separately managed by a third-party service provider.

The challenge: securing a growing academic network without choking throughput

In higher education environments like Birmingham-Southern, IT has to be all things to all people. In order to provide all the tools needed for the educational side, while also helping administration to run the business side, IT needs to maintain a unique level of security and responsiveness.

“There is no way I could accomplish what I do with a firewall solution that causes me grief,” said Jesse McKneely, Director of Infrastructure and Project Management. “It has to be easy and it has to work all the time.”

To accomplish this, McKneely has relied upon SonicWALL® solutions. However, when, over time, his SonicWALL PRO 5060 network security appliance began running over 40% of its intended capacity, McKneely saw the need to upgrade to a higher-performance solution.

The solution: SonicWALL E-Class NSA E7500

McKneely looked to SonicWALL’s E-Class line of multi-core network security appliances, and selected the SonicWALL E-Class Network Security Appliance (NSA) E7500. The NSA E7500 is designed to be the most scalable, reliable, and highly performing multifunction threat appliance in its class. The NSA E7500 protects against a vast spectrum of network attacks using a Reassembly-free Deep Packet Inspection™ engine in combination with parallel performance 16-core architecture for unprecedented ultra-high-speed threat protection, reliability and scalability. The NSA E7500 empowers administrators with a set of customizable Application Firewall tools for precise control and inspection of enterprise network traffic.

The result: cost-effective, high-performance Unified Threat Management

McKneely now passes third-party-managed student residence network traffic through the NSA E7500 at wire speed, making sure it doesn’t bring in any threats or malware, but still providing residential students the same performance and functionality as being directly on the campus network.

The NSA E7500 fiber-optic ports allowed McKneely to easily and affordably relocate the firewall to support his server redundancy initiative. “We could have never done that without having the fiber-optic option. It saved us at least \$10,000, not to mention a whole lot of my time. The beauty of it was that I was able to take the money I saved and apply it to a new core switch for my servers.”

Birmingham-Southern College Case Study

"I've looked into other solutions with similar functionality such as Cisco, and they are all far more expensive. SonicWALL gives me the performance I need and more money left in my budget."

—Jesse McKneely, Director of Infrastructure and Project Management

SonicWALL Benefits

- Dramatic increases in network performance
- Comprehensive Unified Threat Management
- Reduced complexity and cost

Application Firewall lets McKneely easily tailor rules for specific situations. "It gives me the tools I need to set up very specific rules for, say, blocking access to troublesome URLs from student labs. I would have trouble doing that with other firewalls."

Perhaps the greatest benefit McKneely has received from the NSA E7500 is its breakthrough performance. "To this day I don't think I've activated half the available processors. That's fantastic, because we will inevitably be hit with the next big hack or virus, but I don't have any doubts that we have the security and throughput to handle it."

With SonicWALL, McKneely has been able to deploy high-performance security within the limits of an academic budget. "I've looked into other solutions with similar functionality such as Cisco®, and they are all far more expensive. SonicWALL gives me the performance I need and more money left in my budget."

The future: an integrated suite of Enterprise-Class security solutions

McKneely compliments his NSA E7500 with SonicWALL Email Security (ES) and Secure Remote Access (SRA) solutions. McKneely's previous e-mail security solution from another vendor did not integrate with Active Directory, which meant IT staff had to manually maintain text files for 2,700 Exchange Mailboxes. The SonicWALL ES 6000 integrates seamlessly with Active Directory, making anti-spam easier for both IT and users. As a result 90-95% of junk mail is blocked and false positives have decreased.

The SonicWALL SSL-VPN 2000 integrated to use normal Active Directory login allows Birmingham-Southern faculty and staff to remotely access their desktops with no learning curve. "A lot of people have been clicking the same icon for ten years to do their job. I can't throw them something new," said McKneely. "It literally takes me 5 seconds to go in and set their account up to where they have the proper bookmark. It's one of those few things where I really don't get upset when people ask me to do it."

McKneely also uses the SSL-VPN 2000 to provide secure access to remote third-party vendors. "We work with many outside vendors and they all have their own way of connecting into our servers. We decided to funnel them through our SSL VPN and now many of those vendors recommend this solution to other clients."

McKneely is running inbound and outbound SSL VPN traffic through the NSA E7500, implementing a SonicWALL Clean VPN environment.

As even more staff and faculty start to work from home, and more recruiters work remotely to recruit more students, McKneely is considering the SonicWALL Aventail E-Class Secure Remote Access appliances.

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