CASE STUDY:

Gadsden State Community College Achieves Secure Connectivity and Strengthens Disaster Recovery and Anti-Ransomware Capabilities

Gadsden State is a public, open-door, comprehensive community college that is comprised of five campuses or educational centers in Calhoun, Cherokee, and Etowah counties. Gadsden State has a rich and illustrious history within the communities it serves. Administrators, faculty, and staff work together to prepare students for direct entry into the workplace or for transfer to a four-year university.

THE BUSINESS CHALLENGE

During the pandemic, when Gadsden State Community College (GSCC) transitioned to remote learning, it became obvious that the community college's wireless network and network security needed to be upgraded and expanded. Alan Wallace, CIO and Dean of IT Services at Gadsden, arrived at his new job to find a decade-old SAN network and an inadequate VPN that needed to be replaced.

Wireless connectivity was inconsistent, and the network was made up of multiple solutions from different vendors, creating management difficulties. Public safety systems were also inadequate. The location of 9-1-1 callers could not be pinpointed on campus.

A network architecture needed to be configured and implemented across multiple campuses with consistent network security policies. A Mainline security assessment uncovered over 20 pages of recommendations for improving network security at Gadsden.

THE SOLUTION

Cisco Emergency Responder
Cisco Emergency Responder enhances emergency 9-1-1 functionality offered by Cisco Unified Communications Manager. Emergency Responder meets campus safety and security needs by sending emergency calls to the appropriate Public Safety Answering Point (PSAP) based on the caller's location, and allows the PSAP to return the call if necessary. In essence, Emergency Responder improves campus security by facilitating the location of the emergency caller.

Cisco Wireless Network and Firewalls
Cisco 1540 Series with Cisco Catalyst 9300 switches and Cisco DNA Center controllers provides a unified and secure network across all five campuses.

Firewalls
2 Fortinet FortiGate 600E firewalls were installed. 4 Cisco Firepower firewalls were installed.

Veeam Backup and Disaster Recovery
Veeam Backup and Replication, a backup, recovery, and data management solution, was implemented for the community college's disaster recovery and anti-ransomware capabilities.

Security Assessment
Mainline assessed 18 security components in 2021, delivering more than 20 pages of recommendations. Once identified, the improvements were quickly completed by Mainline and GSCC IT staff.

Customer: Gadsden State Community College

Headquarters: Gadsden, Alabama

Industry: Higher Education

THE BUSINESS CHALLENGE
- Lacked the consistent connectivity needed for remote learning
- Needed an improved firewall to meet best practices
- Wireless networks from multiple vendors created management problems
- Legacy VPN didn't allow access for everyone
- Lack of data encryption
- Phone system did not protect privacy when forwarding office calls
- Phone system did not provide needed 9-1-1 location functionality
- Insufficient network bandwidth between campus locations

THE SOLUTION
- Mainline Security Assessment
- Cisco Emergency Responder
- Cisco Switches
- Cisco Wireless Network
- Cisco Firewalls
- Fortinet FortiGate Firewalls
- Veeam Backup and Disaster Recovery
- IBM FS7200 Storage with encryption
- IBM FS5030 Storage with encryption
- Lenovo Servers

THE RESULT
- Data encrypted while at rest
- Disaster recovery and business continuity capabilities added
- Faculty privacy when office calls are forwarded
- 9-1-1 emergency callers can be located
- Moving from PRI to SIP Trunking provided 70% savings
- Hardware and software upgrades provided significant maintenance cost savings
- Expanded and unified wireless network
- Improved accessibility and availability

IBM FlashSystem Storage with Encryption

IBM FS7200 storage protecting data at rest using encryption was implemented by Mainline services, replacing outdated Dell storage.

IBM FS5030 storage was implemented at the college's backup and disaster recovery locations.

Implementation Services

The Mainline services team implemented the Cisco, IBM, and Lenovo solutions, including configuration services to the Cisco Communications Manager to protect faculty members' privacy on forwarded calls. Mainline also performed the security assessment, which included training for the GSCC IT staff.

THE RESULT

Mainline has been working with Alan Wallace for 20 years, initially upgrading a mainframe operating system at another university. In his new role as CIO and Dean of IT Services at Gadsden State Community College, Wallace continued to engage Mainline to secure the college's connectivity and enhance disaster recovery and anti-ransomware capabilities.

Wallace says, "It's good to have an opportunity to work with a company like Mainline and have access to new technology and such talented people. They are a quality group of people. They've always been willing to answer the phone if I have a system issue, even if we're not currently engaged." By conducting a security assessment, Mainline took the time to get to know and understand Gadsden's system. With helpful recommendations, Gadsden can absorb and implement changes. The initial assessment created a baseline that the community college can revisit periodically to make improvements in security.

The Cisco Emergency Responder phone system enhances campus security by facilitating 9-1-1 emergency caller location. The Cisco Communications Manager protects faculty members' privacy while they are working remotely by displaying their office numbers when calls are forwarded to a cell phone.

Adding Veeam as part of the initial install gave Gadsden disaster recovery and anti-ransomware capabilities, including backup and replication for all its campuses. Wallace emphasizes that "In today's environment with ransomware, you do as much as you can to protect your network."

Mainline replaced the community college's decade-old storage and SAN switches with IBM storage and SAN switches. This change produced a significant savings on hardware maintenance. The addition of IBM storage with native encryption provides another layer of protection for data at rest.

By changing from a PRI to SIP Trunking and eliminating multiple vendors, Gadsden will reduce its yearly costs by 70%.

New firewalls from Cisco and Fortinet provide a unified and secure network across all five campuses.

Wallace said that he and Mainline have had a good relationship over the past 20 years and that Mainline has been very reliable. "I never doubt a project will be successfully completed." Wallace added, "In 20 years, I've dealt with three account executives. That lets you know that Mainline is a stable organization." This long-term relationship sets Mainline apart. Mainline's employee tenure is 10+ years versus the IT industry average of around three years.

Wallace went on to say, "Working with Mainline is like having an extension of my staff. It allows me to quickly access specialized skill sets and adopt new technology faster. My staff is able to work with well-trained folks, and there's good knowledge transfer that occurs. They are very professional and do exactly what they say they will do, which in today's world is harder and harder to find."

For more information, call your Mainline account representative or call Mainline directly at 866.490.MAIN(6246).