Executive Summary

Industry
• Education: K-12

Environment
• 7 schools
• 1,800 students
  • 1,400 onsite
  • 400 virtual
• 850 Chromebooks
• 170 Wi-Fi access points

Technology Needs
• Future-proofing to allow for growth
• Simple, single pane of glass for network monitoring
• Ease of management from an equipment perspective
• Robust, reliable network infrastructure for continuous connectivity

Extreme Solution Components
• ExtremeMobility™
• ExtremeSwitching™
• Extreme Management Center™
• ExtremeAnalytics™
• ExtremeControl™

Results
• Disparate network equipment consolidated into Extreme exclusively
• Five 9s uptime established
• Full visibility into network health and operations
• Robust network built for future technology investments

Conecuh County School District Goes from Persistent Downtime to Nonstop Connectivity

Conecuh County School District is a school district halfway between Montgomery and Mobile, Alabama. Striving for excellence in education, the school system is highly focused on engaging every learner on a daily basis. Their mission is to inspire all students to be lifelong learners, as well as responsible citizens of society, by immersing them in a meaningful curriculum that allows every individual to realize their full potential.

Conecuh County had been progressively integrating more educational technology into the classroom, however, their previous network, fitted with disparate equipment, offered poor connectivity and often made it difficult to effectively use technology throughout the schools. “We had Cisco, Brocade, HP, and a couple of Juniper switches. I don’t know how all of those got mixed in there, but the network was horrible. We couldn’t even get the HoverCam Pilots on the wireless,” said Scott Luthardt, technology director at Conecuh County School District.

To keep students, teachers, and staff connected and engaged, a major network upgrade was necessary.

District Held Back by Legacy Network

Though Conecuh had been struggling with an unreliable network, they remained dedicated to operating as a technology-forward school district. With seven schools and 1,800 students, the demand for access to the right technology tools and quality connectivity is high. Each school is fitted with many learning technologies that depend on the network infrastructure. Yet, with disparate network equipment and limited IT staff, moving technology initiatives forward had proven difficult.
Conecuh’s commitment to using tech to enrich the learning experience is evident by their innovative equipment choices. In fact, they’re the only school district in the country with both HoverCam Pilots and HoverCam CenterStages in every classroom, plus, 850 Chromebooks are connected to the network. HoverCam Pilots are the world’s first fully-integrated teaching stations. HoverCam CenterStages are interactive flat panels which work seamlessly with Pilots. Pilots enable recording, display, 4K video, and remarkably, allow for absent students to watch lessons from home using a Chromebook.

However, without high-quality network infrastructure, running these technologies consistently was a major challenge. “We had to wire the Pilots. They were supposed to be mobile carts so that the teachers can move them around or adjust the height up or down. The only cord that’s on them is the power cord. They’re not supposed to have network cords everywhere,” Luthardt explained.

Conecuh is also one of three districts in Alabama that operates a virtual school for remote students, though it’s considered separate from the school system. “We have about 400 students enrolled in remote school,” he said.

To augment the STEM curriculum, the district runs Acellus STEM Robotics Labs. Students have the opportunity to interact with robots and program them with tablets. Unfortunately, the school was unable to use them under the limitations of the legacy network. “We had the Acellus Labs for a year and couldn’t use them because nothing was connecting properly,” Luthardt recalled.

The buildings themselves are equipped with both virtual doorbells and locks to enhance security.

In order to make the most of the educational technology investments that the district had made, spotty connectivity and a mix of network equipment wasn’t going to cut it. It was time for a major refresh to give teachers, students, and faculty the technology experience they needed to excel.

Preparing for EdTech of the Future

With a hodgepodge of network devices and daily complaints from end users, it was time to decide on a vendor who could fix the problem cost-effectively and set the school district up to continue integrating technology into the curriculum. Knowing Extreme’s longstanding history with providing network solutions designed to meet the needs of K-12 customers, Conecuh began the process of making the necessary upgrades.

The Extreme engineering team quickly got to work on deploying state-of-the-art routers and switches. Completing the solution, ExtremeAnalytics, ExtremeControl, and Extreme Management Center were installed to ensure Conecuh’s small IT team of three could monitor and manage the network with complete confidence.

A Network Transformed

Post-implementation, the network went from a source of daily inconvenience to a total enabler of education. The Pilots are no longer wired, and Acellus Labs usage is in full swing. “When we got ExtremeWireless, the students were finally able to use the Acellus Labs, and they love it. I’ve seen the students in the class, and they’re so happy with the way the technology works,” Luthardt said.

With an IT team of three, a single pane of glass for visualizing the entire network makes management a breeze. Thanks to Extreme Management Center, it only takes a glance of the monitor to confirm the status of the network. Further, Extreme’s GTAC has been a constant ally. Conecuh has been able to lean on them for basic troubleshooting, and also innovative solutions. Since our initial need for assistance with Google authentication, GTAC has always solved the issue or come up with a better solution,” notes Luthardt.

The district was especially impressed with Extreme’s follow-up. Rather than closing out the project and all but disappearing as some vendors do, they found it noteworthy that the engineers made the effort to ensure Conecuh was totally satisfied with their solution.

“GTAC was really helpful and great with follow-up. They called me after the implementation was done to make sure everything was okay. I thought that was really nice, because most of the time when a work order is closed, you don’t hear from your vendor again. But the engineer actually got in touch with me to make sure I was happy.”

Scott Luthardt, Technology Director, Conecuh County School District

Plus, in terms of bandwidth, they’re set up for plenty of growth. Presently, usage is at 300 Mb/s, but capacity extends to 700 Mb/s.“It was really a challenge for our schools until we got Extreme. But after the implementation, we didn’t have any problems anywhere. I went from having complaints every day on the network to having zero. To this day, I have zero complaints,” Luthardt concluded.