Grand Ledge Public Schools Modernizes Network Infrastructure

With Sehi and HPE Aruba Networking

THE CHALLENGE

AIMING FOR NET ZERO NETWORK OUTAGES

Grand Ledge Public Schools is a Central Michigan school district that serves 5,300 K-12 students in 10 facilities—supporting both in-person and virtual learning environments. The district's IT team grappled with aging network technology that needed replacing as more and more hardware started to fail.

Grand Ledge was using HP ProCurve switches and older Aruba WiFi access points in addition to other HPE Aruba Networking hardware that were out of date, out of support, and causing performance challenges. These issues ranged from smaller speed problems and technical hiccups to uninterruptible power supply (UPS) challenges that resulted in school cancellations.

Grand Ledge decided to do a complete refresh of the district's wireless and wired network infrastructure as well as add network resiliency with a dual-core system. To complete these projects for all schools, the district office, and a server farm of 55 virtual servers, they turned to Sehi Computer Products.

WHY GRAND LEDGE CHOSE SEHI AND HPE ARUBA NETWORKING

Grand Ledge chose Sehi as the district's integrator and equipment vendor based on a longstanding, strong professional relationship. "I've had a relationship with Sehi Computers for 28 years," said Director of Technology Mark Deschaine. "As my work has taken me

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around Michigan, we've maintained a fantastic relationship built on trust. I call them, tell them what I need, they tell me what to do, and we proceed quickly."

HPE Aruba Networking emerged as the top choice for network technology replacements not just because the district was already using their solutions—they also fit the ideal budget. Grand Ledge is a long-term Aruba fan for many reasons including the technology's total cost of ownership. "I've moved both districts I've worked with away from Cisco to HPE Aruba Networking, and those transitions have been extremely smooth. It goes back to that trust—they know what our needs are, and they make it happen," he said.

THE SOLUTION

A SMOOTH, QUICK INSTALLATION AND CUT OVER

Grand Ledge replaced its wireless network in the summer of 2023, taking a flash-cut approach. In each building, the IT team turned off the wireless, installed the new hardware, turned it on, and performed a little configuration to achieve immediate working order. The wired networks went just as smoothly.

"We just walk into a closet, disconnect everything, pull it all out, and then put in the new hardware for an easy, fast, successful transition," said Deschaine. The district's highly organized racks contribute to a quick and easy replacement. "We get through two or three schools in just one day," he added.

In total, the district has leveraged HPE Aruba Networking hardware for core switches, distribution switches, wireless access points, ClearPass Management System, and AirWave.

The district is adding as much resiliency to the network as possible with a dual-core infrastructure to prevent outages. The two cores tie into each school so an outage in one place doesn't cause the whole district to go down. They've also eliminated their outdated RADIUS and TACACS+ authentication servers which were upgraded to ClearPass.

Grand Ledge has been able to achieve these smooth cut overs with a staff of just three IT personnel. Grand Ledge's IT team's no-stone-unturned planning phase set the team up for success, and he conducted post-implementation follow-up as well.

KEYS TO SUCCESS

Grand Ledge enjoyed a rapid, disruption-free network refresh for two main reasons:

QUALITY PARTNERS AND TECHNOLOGY

Sehi and HPE Aruba Networking worked together to deliver superior technology that fit the district's needs within budget. Their collaboration with Grand Ledge resulted in an effortless work schedule during installation and little to no disruption to school operations.

HPE Aruba Networking solutions continue to impress Grand Ledge, and their modern capabilities support an efficient IT operation. "We have profiles set on the switches to auto-detect our security cameras, phones, and APs," Deschaine noted, explaining that the technology automatically configured those ports for his team. He was able to conduct post-implementation follow-up in as little as 15 minutes.

DETAIL-ORIENTED PLANNING PHASE

Grand Ledge takes a clinical, proactive approach to technology implementation and requires their team to preconfigure and stage all equipment. "I'm pretty proactive about physical implementation planning, so we were able to be up and running in two hours," Deschaine said. Meticulous, advanced planning is critical for implementation success, and Sehi provided support for all pre-installation phases.

THE RESULT

A RELIABLE, HIGH-FUNCTIONING NETWORK FOR MODERN LEARNING

Grand Ledge is one of few Michigan school districts that has returned to pre-COVID student numbers. In fact, the district is serving more students than it was before the pandemic. With its completely refreshed network technology, Grand Ledge is now able to maintain uptime for a growing student base—both in-person and online. The wired and wireless networks serve the district's needs and can scale with future growth.

On this new network, students in kindergarten through second grade use iPads, third graders through twelfth graders use Chromebooks, and high school students use both Chromebooks and their personal computers. The district supports a distance learning program, virtual college courses, and a student academy that is completely virtual. Staff and students now access a seamless network connection on a daily basis and enjoy a highly improved learning environment.