



Giving SD-WAN the old college try: How one college greatly improved resiliency and bandwidth for their students and faculty

For this particular college's IT team, the number one priority has always been to serve their students and faculty with seamless connectivity for all their devices from the classroom, on campus or wherever they chose to stay connected and virtually learning. When legacy data and voice networks weren't providing the resiliency and high-speed performance needed to meet the expectations of their users, this institution turned to Windstream Enterprise for modern-day IP solutions, like high availability SD-WAN, that would pass the test with flying colors.

At a glance



Industry

Higher Education

Customer

Multiple locations across 6 states and virtual
6,000+ students and 1,000 employees

Challenges

Lack of resiliency
Frequent network outages
Significant downtime
Limited bandwidth

Solutions

SD-WAN Concierge™
Managed Network Security
Dynamic IP
WE Connect SD-WAN Portal

Results

Increased resiliency and bandwidth
Eliminated network outages
Decreased complexity
Lowered costs
Reduced help desk tickets

Suspending the use of legacy network services

Founded in the 1880s this Tennessee college is dedicated to serving students who desire a hands-on, career-driven education that will have a meaningful impact on their lives. The regionally accredited, private academic institution offers more than 60 degrees and certificate programs at all levels—including professional certificates and associate, bachelor's, master's and doctoral degrees. They provide this over five campuses as well as through their advanced online offering. They are rapidly expanding, with two new campuses on deck.

Embracing the core values of excellence, responsibility and integrity has served as the foundation for accessing the highly quality of institutional and departmental performance expected from staff and students. The IT team at the college is as equally devoted to the cause—they go out of their way to ensure that any student who has a problem with connectivity and functionality of their computers, phones or any other device gets immediate, hands-on assistance.

The college's head of IT has spent years establishing a standard of greatness within their network, servers and IT systems. "The network is the heartbeat of this institution. Without it, it wouldn't exist," he said.

"The WE experience has been great. They are always available and highly responsive to my needs."

Head of IT

Yet their antiquated MPLS network wasn't receiving a passing grade. Managing the MPLS network and its multiple routers was proving to be a very complex and time-consuming process. It lacked the bandwidth to support the expanding number of students and faculty, along with the multitude of IP devices owned by each user.

In all, the MPLS network was failing to meet the needs of students and this often resulted in a high level of trouble tickets. Resiliency was another ongoing issue. This college was experiencing four major network outages a year, some of which lasted for up to 24 hours. They estimated revenue loss to be one million dollars per hour of downtime.

An additional challenge was that the legacy voice connections were gruesome to manage as they were constantly going down, making it difficult to reroute voice traffic.

All of these MPLS shortcomings were wrapped around a larger issue at hand—the global pandemic had disrupted the entire higher education industry. This institution was left with no choice but to pivot rapidly from in-person teaching models to virtual classrooms.

After studying up on the best solution to replace their deteriorating legacy network and voice services, the college turned to Windstream Enterprise for the answers.

Graduating to SD-WAN

With a lot on the agenda, Windstream Enterprise jumped right in by deploying a high availability SD-WAN solution at each campus with dual access in an active/active configuration. Doing so would increase the resiliency with redundant, diverse connections and SD-WAN devices at each location for seamless failover and business continuity.

Next up, Windstream Enterprise implemented cloud-based Managed Network Security (MNS) to provide a much-needed layer of protection to the network. During a time where learning has become increasingly virtual, academic institutions must take extra precaution of malicious cyberattacks or heightened network or application

interruptions. MNS provided this college with a complete, fully managed solution that ensured their valuable bandwidth wouldn't fall victim to bad apples.

The institution also made the decision to replace the legacy voice with Dynamic IP, a SIP service would run over their new SD-WAN solution. Dynamic IP offers a frictionless user experience by having the ability to evolve levels of bandwidth and call paths to flexibly meet the demands across all campuses. This means highly resilient voice services with automated failover.

Easy as A, B, C

Since implementing a highly resilient solution, no SD-WAN outages have occurred at the college over the past three years. The new solution has been very easy for the IT team to manage and it has given them the flexibility to move servers and make other IT changes on the fly.

The dual access has given the college the bandwidth required to meet the growing demands of students who needed high-speed access to the institution's systems and applications from anywhere and any device. "Help desk tickets have been reduced by 95%," said the Head of IT.

The institution also utilizes the WE Connect SD-WAN portal, which has proven to be indispensable for providing access to real-time information about the college's network—all in one centralized location. The Head of IT always has the portal open to run statistics and to monitor performance. When he receives an alert, he can quickly troubleshoot issues and take corrective action.

"Windstream Enterprise SD-WAN and Managed Network Security delivered the bandwidth and secure VPN access to support our students and staff when we moved to virtual classrooms."

Head of IT

MNS enabled students and faculty to connect from anywhere and from any device. When the number of VPN users increased seven-fold in March of 2020 to accommodate for the 100% shift toward online learning, MNS helped the college stay up and running. "We never missed a dollar," The Head of IT said. "This wouldn't have been possible with MPLS."

Perhaps most importantly—in tandem with the high-functioning network and voice solutions—this academic institution found a true partner in Windstream Enterprise. "The WE team understands my challenges, listens to my requests and delivers value," said the Head of IT.

Cloud-enabled connectivity, communications and security—guaranteed.

To learn more, visit windstreamenterprise.com

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