AT&T Business

LINCOLN TECH

Education soars in the cloud with SD-WAN

- **Business needs** - Create a powerful, reliable network to support remote learning and general operations for a national vocational training institute.

- **Networking solution** - AT&T Software-defined Wide Area Network (SD-WAN) moves network traffic management from hardware and premises equipment to next-generation software in the cloud.

- **Business value** - Dependability, enhanced ability for students and staff to work remotely

- **Industry focus** - Vocational education

- **Size** - 2,000 employees serving 12,000 students

About Lincoln Tech

Lincoln Tech is an American group of for-profit postsecondary vocational institutions located in several states. Each campus is owned and operated by Lincoln Educational Services Corporation, a leading provider of career-oriented education, based in Parsippany, New Jersey. Their mission is to graduate and place students into the workforce, and throughout their 75-year history they have accomplished this with more than 250,000 students.

The situation

Even before COVID-19 forced most schools to rely heavily on computer-based learning, Lincoln Tech used a hybrid learning model. It featured online lectures and hands-on classroom training. The institute's broadband and Multiprotocol Label Switching (MPLS) network was unreliable at some locations. In fact, it once went down in the middle of finals week. The leader in technical career training needed more from its network to deliver an A+ learning environment for its students.

Solution

AT&T Software-Defined Wide Area Network (SD-WAN) makes it easy for students to access the resources they need to succeed. The network delivers intelligent, dynamic routing, optimized cloud connectivity, and visibility into Lincoln Tech's applications and overall network performance. The strength and dependability of AT&T SD-WAN has enabled classes to proceed as scheduled during the waves of the pandemic.

> "The network is the backbone of everything we do. We must stay connected."
>
> **Val Thomas**
> Chief Information Officer, Lincoln Tech

Career-based training

The nationwide shortage of technically skilled tradespeople spans dozens of fields and every major industry in the United States. Companies need workers to build, maintain, and repair all the things individuals and businesses use daily. This includes everything from residential and commercial structures to electrical power grids and the nation's infrastructure.

Since 1946, Lincoln Tech has provided technical career training deeply rooted in Careers That Build America™. Students choose Lincoln Tech to learn the necessary skills and expertise in many fields: automotive, diesel, advanced manufacturing, culinary arts, information technology, healthcare, and many others. Its career training programs enable students to earn a diploma,

degree, or certificate fast so they can enter the workforce quickly.

Lincoln Tech has 22 campuses in 14 states, operating under four different brands: Lincoln Technical Institute, Lincoln College of Technology, Lincoln Culinary Institute, and the Euphoria Institute of Beauty Arts and Sciences.

Preparing students to succeed in high-demand careers

Val Thomas, Lincoln Tech's Chief Information Officer, said the organization is helping provide the solution to America's skills gap. "These days companies are having a hard time filling jobs," he said. "We've been providing the nation's workforce with skilled technicians since our inception in 1946."

"Lincoln Tech is providing the auto workers, diesel workers, welders, HVAC technicians, medical assistants, nurses, hairdressers, and chefs that are in such high demand," Thomas said. "These jobs will never be outsourced offshore. They're here to stay, and we're proud to help our students succeed in those careers."

He and other officials are also proud of the education Lincoln Tech provides its students, and the rate at which it helps with placement after they complete their programs of study.

A hybrid learning program

The institute comprises nearly two dozen locations, including extremely large campuses in Denver, Dallas, Indianapolis, Hartford, and Nashville. It was well prepared for the arrival of the pandemic. It was already a hybrid model, relying heavily on computer-based learning.

"Our testing, grading, and attendance systems were all online," Thomas said. "We were also gradually bringing more instruction online. Students view course lectures remotely and then come to campus for hands-on training. They really like to come in to work on cars and get their hands dirty, but first they have to learn the safety and the theory online."

By the time the first wave of COVID-19 hit, 100% of Lincoln Tech classes were online. This even included safety training for classes like welding that were traditionally hands-on. "We had to keep going to enable students to get their certificates and degrees and enter the job market," Thomas said.

The network is the backbone

Lincoln Tech relies on its network to educate. "Without a reliable network, you can't do anything," Thomas said. "If students are constantly dropping offline or having issues, they can't focus on their studies. The network is the backbone of everything we do. Students have different needs, but every single one is expecting perfect internet access. We must stay connected."

Over the years, however, the organization's combination of an MPLS network from another provider and local broadband was not as reliable as officials would have hoped. "We've had instances where a campus lost connectivity because the carrier went down right in the middle of finals week," Thomas said. "You can imagine how a student would feel to be told to come back the next day to take the test, when they thought this was their last day of finals."

In addition to the network supporting thousands of students across the U.S., Lincoln Tech also needed it to support operations. "We needed to solve that problem, big time," Thomas said. "That's where AT&T Business helped us a lot."

Building a robust wide area network

A longstanding relationship with AT&T led Thomas to ask his account team for recommendations. "AT&T Business has been a trusted vendor for many years. When we needed to build that robust wide area network, we reached out to them to help us evaluate the options out there."

The account team from AT&T Business came through. "We looked at a number of different vendors," Thomas said. "We settled on the AT&T SD-WAN with VMware, because it allows us to diversify our network paths to deliver enhanced reliability and eliminate the MPLS network, which wasn't ideal for our specific needs."

He said he appreciated the global nature of the AT&T network and the company's ability to augment his IT team. "We don't have a huge staff here, so we count on the experience and knowledge of AT&T Business."
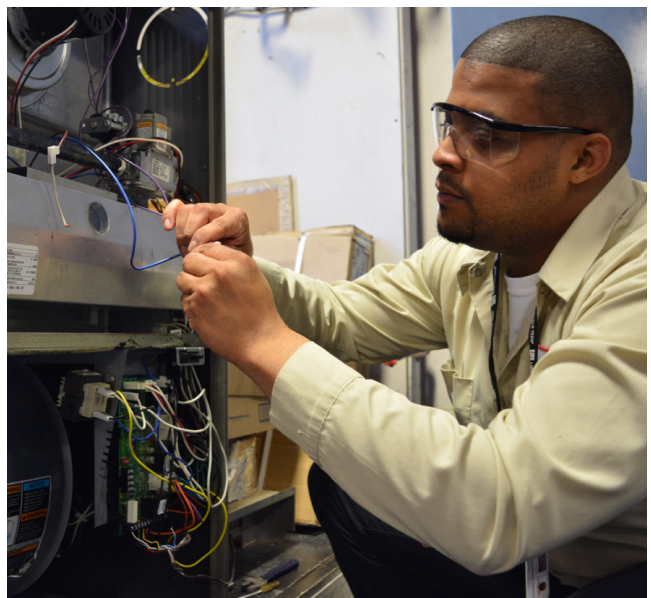
Abundant internet to meet student demand

Reliability is vital for the Lincoln Tech community. "From the student's point of view, without the connectivity to our systems, those systems might as well not exist," Thomas said. Networks must be as available as any other key part of the institute's infrastructure, such as electricity, gas, or water.

"Students expect internet access at all times as much as they expect oxygen," Thomas said. Indeed, Lincoln Tech's connectivity is oxygen to student learning. "We provision all our students with laptops these days,

since all their classroom lectures are online. This is where SD-WAN removed a huge headache for us."

AT&T SD-WAN is a software-defined networking approach that elevates network traffic management away from hardware to next-generation software in the cloud. As a result, Lincoln Tech gains enhanced agility, control, visibility, reliability, and the power to enable mission-critical applications.

Lincoln Tech also uses security monitoring services from AT&T Business. "That's huge these days because of all the things that are out there," Thomas said. "I can sleep pretty easily at night, knowing AT&T is looking out for us."

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Val Thomas
Chief Information Officer, Lincoln Tech

The right tools for the job

Thomas believes the relationship with AT&T Business positions Lincoln Tech to stay informed on new solutions that can continue enriching the student experience. "Technology changes rapidly and there is always something new," Thomas said. "I know AT&T Business can help me stay up to date."

Thomas also praises his account team from AT&T Business for always being available to assist the institute. "I know I can count on the team to support us," he said. "They pick up the phone whenever I call, and if they're not around, they get back to me immediately. The team understands Lincoln Tech's needs and works within our budget. They don't waste my time suggesting solutions I can't afford."

Lincoln Tech students learn the importance of having the right tool for each job. Thomas said the principle also applies to the institute's infrastructure. "You need to have the right tool and the right network in place," he said. "Thanks to AT&T Business, our connectivity is always going to be there, just like the power that comes from the light switch on the wall."

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