



13,000 Students in Coppell, Texas Rely on Mist Wi-Fi for Digital Learning

Technology is wholly integrated into the curriculum in the Coppell, Texas schools, and the outcome is evident. Coppell ISD has a reputation for educational excellence, with multiple measures of achievement above state averages. The school district recently deployed the Mist WLAN Platform across its school sites to deliver exceptional Wi-Fi experiences and simplify network operations.

“Coppell ISD is an innovative district,” says Stephen McGilvray, executive director of technology at Coppell ISD. “We have earned a reputation for being a progressive and academically focused learning leader across the state and on a national level.”

Consistently excellent Wi-Fi is a prerequisite as Coppell ISD educators thoughtfully use technology as part of a rigorous curriculum to bring learning to life for 13,400 students, creating student-centered learning and supporting flexible classroom designs. Coppell, located in a suburb of Dallas, provides iPads to each and every student, from pre-K to Grade 12. Students also can bring their own devices. In addition to a 1:1 learning environment, many school sites also have MacBook carts.

“We were looking for a next-generation wireless solution that would meet our needs today and support our level of thinking for the future of digital learning,” says McGilvray.

Coppell ISD found that modern network solution in Mist.

AMAZING WI-FI POWERS DIGITAL LEARNING

“The wireless experience with Mist is night-and-day different,” says McGilvray.

With a modern, microservices architecture, the Mist platform is designed from the ground up to meet the challenges of smart devices and cloud applications. Mist delivers amazing user experiences and simplifies and automates network operations and end-to-end troubleshooting. With Mist Cloud, rolling out new capabilities and upgrades take minutes instead of months.

SUMMARY

COMPANY

Coppell (Texas) Independent School District

INDUSTRY

Education

CHALLENGES

Deliver a consistently excellent Wi-Fi experience to support 1:1 learning for 13,400 students across all grade levels.

SOLUTIONS DEPLOYED

Mist WLAN Platform

BUSINESS RESULTS

- Leverage 1:1 digital learning to raise educational outcomes above state averages
- Delivered consistently exceptional wireless experience for an average of 25,000 iPads and mobile devices a day
- 50% reduction in wireless support tickets with AI-driven troubleshooting
- Laid the foundation for innovative indoor location services



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Coppell Independent School District

“We chose Mist because of the visibility into the user experience,” says McGilvray.

With Mist, the IT team can set, monitor and enforce service level expectations for the wireless network, with clear visibility into throughput, capacity, roaming, and uptime. Predictive recommendations make it easier to avoid problems or fix them quickly.

Coppell ISD rolled out Mist Platform across its school sites, which span 21 locations, including 11 elementary schools, three middle schools, three high schools, and an alternative campus. On an average day, more than 25,000 mobile devices connect to the Wi-Fi, but that number can easily double to 50,000 during athletic and other community events.

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Students and teachers alike expect great Wi-Fi to be available from the classrooms to the hallways to the cafeterias. “With Mist Wi-Fi, teachers can be confident in planning lessons involving technology,” says McGilvray. Learning can be personalized and differentiated for students. Hands-on learning adds real-world relevance. Online assessments can proceed smoothly and without network disruptions.

SIMPLIFIED NETWORK OPERATIONS

“Wireless always gets the rap when things don’t work,” says McGilvray. “Regardless of whether it’s the Internet, DHCP, DNS, or something else, wireless always gets the blame.”

Mist simplifies network operations and troubleshooting for Coppell ISD. Marvis, an integrated AI engine, is built into the Mist platform to provide client-level insight, rapid troubleshooting, trending analysis, anomaly detection, and proactive problem resolution.

“Before Mist, our network engineers were always chasing ghosts in the wireless,” he says. “Now, Mist provides visibility so we can see what the issue is. Mist is tremendous for troubleshooting.”

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For example, Marvis Actions helped quickly identify and resolve a VLAN misconfiguration on the campus switches during installation. DHCP issues were also quickly identified and fixed. A problem with an access point in the cafeteria in a middle school was rapidly identified and resolved.

“The volume of Wi-Fi-related issues has gone down 50%,” says McGilvray. Spending less time troubleshooting client connectivity problems frees up more time for the IT team to focus on strategic work.

TAPPING INTO LOCATION SERVICES

Mist APs include virtual Bluetooth Low Energy (BLE) for indoor location services, making it easier for the district to roll out location services, such as wayfinding and asset tracking. Most immediately, IT can use Mist locations service to better track misplaced iPads and other devices.

“Looking ahead, we can leverage Mist’s location services to enhance campus safety,” says McGilvray.

FOR MORE INFORMATION

To find out more about Juniper Networks and Mist product solutions, please visit www.juniper.net and www.mist.com.



ABOUT JUNIPER NETWORKS

Juniper Networks brings simplicity to networking with products, solutions and services that connect the world. Through engineering innovation, we remove the constraints and complexities of networking in the cloud era to solve the toughest challenges our customers and partners face daily. At Juniper Networks, we believe that the network is a resource for sharing knowledge and human advancement that changes the world. We are committed to imagining groundbreaking ways to deliver automated, scalable and secure networks to move at the speed of business.

ABOUT MIST

Mist built the first AI-driven, microservices cloud-based Wireless LAN (WLAN), which makes Wi-Fi predictable, reliable, and measurable and enables scalable indoor location services like wayfinding, proximity messaging and asset visibility. In addition, Mist's AI technology plays a key role in bringing automation and insight across the full IT stack, delivering seamless end-to-end user experiences and substantial IT cost savings. In 2019, Mist was acquired by Juniper Networks and operates as a business unit focused on the AI-Driven Enterprise which combines Mist's next-generation wireless platform with Juniper's best-in-class switching, routing, security and SD-WAN solutions to deliver unsurpassed end-to-end user and IT experiences.