# AI-driven network troubleshooting earns top marks at Dalton Public Schools

Dalton, Georgia, long known as the carpet capital of the world, has rebranded itself Soccer Town U.S.A. Immigration and soccer have transformed this city in the Appalachian foothills, which still produces most of the industrial carpeting in the U.S. The children of this largely Hispanic community have access to the latest educational technologies at Dalton Public Schools to help them succeed.

Dalton Public Schools' commitment to excellence that extends to IT. An AI-driven network from Juniper enables a lean IT team to reliably meet the digital expectations of 9000 students, teachers, and staff.

## OVERVIEW

| | |
|---|---|
| Company | Dalton Public Schools (Georgia) |
| Industry | Education |
| Products Used | AP41, AP43, AP45, AP61, AP63, Wi-Fi Assurance, Wired Assurance, Marvis VNA, EX3400, EX4300, EX4600, QFX5120 |
| Region | Americas |

## CUSTOMER SUCCESS AT-A-GLANCE

**11,000**

Devices used by 9000 students, teachers, and staff connect to fast, reliable Wi-Fi

**35%**

Reduction in time spent troubleshooting the network

**AIOps**

Speeds troubleshooting to deliver a better user experience

**AI-driven**

Network streamlines IT operations and lowers costs

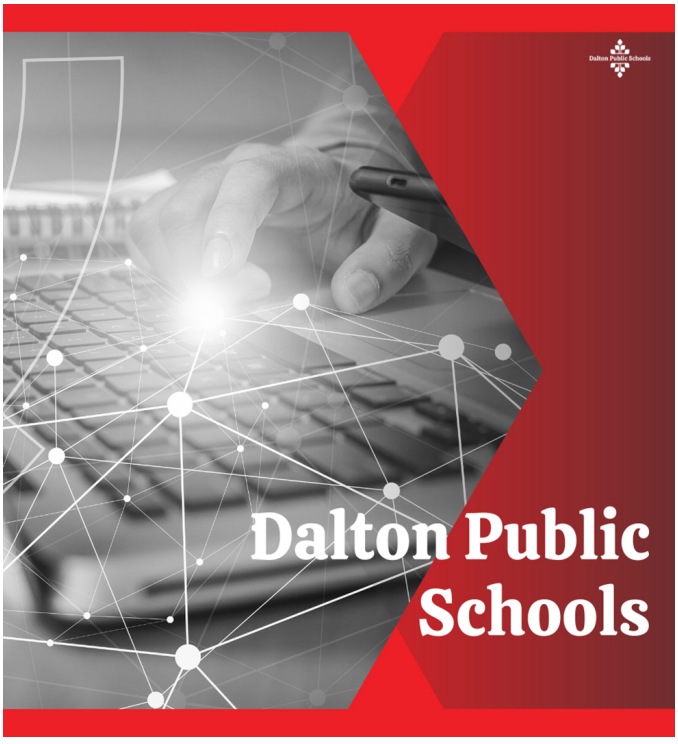
## CHALLENGE

# Reliable connectivity is a prerequisite to learning

Dalton Public Schools was an early adopter of 1:1 learning, long before the pandemic pivot, and when students and teachers returned to the classroom in 2021, digital expectations were higher than ever.

"Teachers had fully integrated technology into learning," says Stuart Davis, director of IT at Dalton Public Schools. "Our network needs to be available and reliable, both inside and outside the classroom."

Fortunately, Dalton Public Schools had done its homework. Before the start of the pandemic, the IT team had investigated cloud-managed wireless, including Juniper's solution, for its next refresh.



SOLUTION

# Marvis earns extra credit

"When we saw Marvis and Mist AI, we knew that Juniper would give us the efficiency we needed," says Davis.

An AI-driven network from Juniper delivers a hat trick of better user experience, streamlined IT operations, and lower costs. Juniper wireless access points deliver fast, reliable connectivity to students and teachers at Dalton's 10 schools. The district uses the Juniper QFX5120 Switch for its data center top-of-rack, EX4600 for the campus core, EX4300 for distribution, EX3400 for access switching.

"We wanted to have a symbiotic relationship between the wired and wireless network," says Jorge Miranda, network administrator at Dalton Public Schools. "As the only network admin, I wear a lot of hats and need to be as effective as possible."

Juniper cloud services, including Juniper Mist Wi-Fi Assurance, Juniper Mist Wired Assurance, and Juniper Marvis Virtual Network Assistant, provide clear visibility into the user experience and can speed troubleshooting when issues arise. Miranda can pinpoint hard-to-identify problems not only with the network, but also with cabling, VLANs, or network services like DNS and DHCP.

For example, as Miranda was deploying the new Wi-Fi 6 access points at one school, the kiosks and some student laptops lost connectivity. Marvis quickly spotted the issue: the older devices didn't support the newest wireless technology. "Without Marvis, I would have thought it was a configuration issue," says Miranda. A device upgrade fixed the problem.

OUTCOME

# A quick study in the value of AI-driven operations

Miranda starts his day with a quick peek at Marvis to see if any actions are waiting.

"Being able to leverage Marvis for network troubleshooting is an absolute timesaver," says Miranda. "Marvis takes us to a higher echelon for network management."

Working nights and weekends to make network changes are a thing of the past, improving Miranda's quality of life. "With Mist AI, I can make a change, and within 30 seconds, it's running as it should be," he says.

"We are commited to a top-notch experience for our students, teachers, and staff," adds Davis. "With Juniper, everything works as expected."

"Marvis is like being able to clone myself. Juniper allows me to significantly cut down my network troubleshooting time."

Jorge Miranda
Network Administrator, Dalton Public Schools

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