



Wireless Network Provides Campus-Wide Access to Internet and Network Resources

The need for a robust wireless infrastructure to provide reliable, secure network connectivity for students and staff across the campus was fulfilled with EnGenius' business-class wireless networking solutions.

Dawson Independent School District

Dawson Independent School District (DISD) is a public school district based in Dawson, Texas. DISD serves southwestern Navarro County in Central Texas, including the unincorporated community of Purdon, Texas. An extremely small portion of the district extends into neighboring Hill County.

DISD has one location that houses three campuses - Dawson Elementary (grades pre-k through 6), Dawson Junior High School (grades 7-8), and Dawson Senior High School (grades 9-12). The school district services 454 students with the support of 90 administrators, faculty, staff, and teachers.



The Need: Seamless Wireless Network Access Across Campus and to Remote Locations

The educational landscape has been revolutionized by the integration of web-based content into K-12 curriculum. The exponential growth in the quality and sheer amount of multimedia content available through the Internet has created a requirement to deliver that content into the classroom to supplement and enrich classroom learning.

In addition to supporting the network-related administrative applications of the DISD teachers and staff, the wireless network infrastructure needed to have the capability to deliver to the classroom bandwidth-intensive content including video, educational online games and multimedia materials without slowing down the network. Network access would not only have to be enabled throughout the offices and classrooms of the elementary, junior high and high schools, but would also need to be extended to remote locations including the district's transportation center and maintenance building, and the fieldhouse at the high school's football field.

According to Cameron Shaw, Information Technology Director at DISD, deploying a wireless network that would address all of the school's requirements would not be easy. Shaw stated that the physical construction of the building was problematic for deploying the wireless network. "We were concerned that the signal wouldn't penetrate the sand-filled cinderblock walls of the school."

To deploy a wireless networking in this complex environment would take a serious business-class solution.

The Solution: EnGenius' High-Performance Wireless Bridge and Access Points

DISD needed a wireless networking infrastructure that would provide solid, reliable coverage throughout the offices and classrooms in each of the school buildings and across the campus to remote facilities that were up to 150 yards away from the main campus. Not only did the wireless network have to provide pervasive coverage throughout the property, it needed to deliver the performance required to support the school's bandwidth-intensive applications.

The deployment included EnGenius ECB9500 Business Class Long Range, Wireless N, Gigabit Access Points to provide on-campus connectivity inside the classrooms, and EOR7550 Business Class 802.11a/b/g/n Outdoor Dual Radio Repeaters to provide the campus-wide outdoor link for network access and bridging to the remote facilities.



EOR7550 802.11a/b/g/n
Outdoor Dual Radio Repeater

"We chose EnGenius' solutions because of their extreme range capabilities, high data transfer speeds, reputation for reliability, and ease-of-setup and administration," explained Shaw. He explained that to reach the campus' remote facilities, he mounted the EOR7550 on an old microwave tower on the campus and bridged the network to all three remote locations. "The setup has worked for a year and a half now and I've never had any problems with it."

The Results: Pervasive Wireless Coverage for an Enhanced Educational Experience

Thanks to EnGenius' industry-leading long-range, wireless networking devices, DISD students now enjoy an enriched educational experience with the ability to access and reference the world of Internet-based information wirelessly from their classrooms and throughout the campus.

According to Shaw, the deployment of the EnGenius wireless network was easy and the performance has exceeded their expectations, delivering reliable WiFi access even through thick cinderblock walls. "I couldn't be happier with how well the EnGenius wireless network performs in our school," Shaw said. "The on-campus wireless network and connectivity have been terrific. The system has always provided us with an instant, constant connection and we can't tell the difference in speed between the wired and wireless LAN connections."



Shaw explained that extending the wireless network to the remote facilities on campus has also gone very well. "The EnGenius equipment is enabling us to bridge the network at least 150 yards to the fieldhouse from the tower and about 100 yards to the other two remote locations and is giving us between 70-80 percent signal strength."

"Each EnGenius device that we've deployed really is best-in-class."