Enabling effective teaching and learning

At Crosby Independent School District, digital transformation of the teaching and learning environment also results in improved network service levels and simplifies IT management.

Business needs

Crosby ISD had to create a new data center to improve the quality of educational services and roll out a one-to-one initiative that would provide a mobile device to every student. The district also decided to update its networking technology to reduce maintenance costs and increase the performance and reliability of its network.

Solutions at a glance

- Networking
  - Dell EMC Networking N2000 Series 1GbE Layer 3 switches
  - Dell EMC Networking N4000 Series 10GbE Layer 3 switches
- Network Security
  - SonicWall™ Network Security Appliance NSA 5600
- E-rate solutions

Business results

- Enables a more effective teaching environment
- Supports powerful, mobile learning by students
- Reduces support calls by half and issue resolution time by two-thirds
- Improves application performance by 50 percent

Reduces downtime by 60% and saves $60K annually.
Crosby Independent School District (ISD) — which serves 6,000 students in Harris County, Texas, with 843 teachers and support staff — relies on technology to facilitate learning and teaching. A one-to-one initiative to equip each student from grades 7 to 12 with a mobile device, together with the district’s goals for improving network performance and service quality. This prompted Crosby ISD to create a data center in a new high school, thereby consolidating its network operations, which were distributed across seven campuses.

Strong partner with school district expertise

After an intense vendor evaluation, Crosby ISD selected Dell Premier Partner Logical Front to build the new data center and network using Dell EMC equipment. The groups had worked together on an earlier server migration and virtualization project. Working long days and weekends, Logical Front and the school district completed the entire data center and campus build between spring break and the start of a new school year in August. Amy Davis, director of technology services at Crosby ISD, remarks, “We could never have completed this project without Logical Front’s expertise, guidance and tireless work.”

In its newly centralized network, Crosby ISD deployed more than 90 Dell EMC Networking N2048P and N4032 switches. At the network operations center, the district placed two SonicWall™ NSA 5600 devices in a high-availability configuration to safeguard the integrity of its data and applications. The Dell Networking solution supports 700 wireless access points across the seven Crosby campuses.

Saves $60,000 a year and boosts performance

Crosby ISD generated savings immediately. “By replacing the existing network switches with Dell EMC equipment, we eliminated $60,000 in annual support costs,” says Davis. “That allowed the district to purchase disaster recovery and uninterruptible power supply systems.” At the same time, the school district improved network performance.

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Amy Davis
Director of Technology Services,
Crosby Independent School District
Joey Hardwick, network manager at Crosby ISD, explains, “The Dell EMC N2048P switch is very easy to deploy and offers an excellent price-to-performance ratio. It’s our default in the data center, in every school and at the edge of the campuses. With 48 ports of Power-over-Ethernet Plus, we can expand and address performance issues at the same time.”

Improves network manageability

Hardwick manages the network and servers with help from a technician and a system analyst. He says, “We can now stack up to 24 switches and manage configurations, firmware updates and troubleshooting centrally, which was not possible before.” Issues are resolved much faster. “Instead of taking three or more hours to get to a site and resolve a problem, I now can usually accomplish this in an hour or less,” he adds.

Increases reliability and delivers a better user experience

Crosby ISD achieved its goals of successfully completing its one-to-one initiative, improving service levels and increasing network reliability. “Our attendance, grading, finance and evaluation systems depend on the WiFi, which connects to the Dell EMC switches to make the applications available,” says Davis. “With the Dell EMC hardware, we’ve been able to reduce downtime by 60 percent and accelerate application performance by 50 percent.” Those changes help Crosby ISD fulfill its mission. “Our new networking solution directly impacts the quality of teaching and learning, and helps us provide a better experience to students,” she adds. The improved performance and reliability of Crosby ISD’s network have reduced the number of calls for help-desk support by almost half. Hardwick comments, “Dell EMC provides full assurance with a unique lifetime warranty. The equipment is extremely reliable. I don’t worry about it when I’m not here.”