

D-Link Helps Joaquin ISD Overhaul Its Core Network and Become One of the Strongest School Networks in the Area

Gigabit managed switches, access points and IP cameras from D-Link help drive student learning, wireless flexibility and campus-wide security

Background

Joaquin Independent School District (ISD) is a small, rural 2A school district in Joaquin, Texas, located in northeastern Shelby County. On its two-square-mile campus, the school district has an elementary school, a junior high school, a high school, an administration building and a bus barn site, serving a total of about 750 students annually. Joaquin ISD's goal is to promote educational excellence in its schools by facilitating information access, resource sharing, innovation and communication. Part of that mission includes providing access to the Internet and computer technology to all students and teachers.

The Vision: Complete a core network upgrade for greater functionality and increase campus-wide security with a state-of-the-art IP Surveillance solution

As a small 2A school district (ranked nationally by enrollment size), Joaquin ISD has very limited funds for networking technology. And yet in 2012, this district's core infrastructure was in dire need of upgrading to keep it on the forefront of IT/communication technology.

"We were running a few newer switches but also a lot of old switches, too—some that were probably 15 years old," said Landon Oliver, Technology Network Administrator and Director. "When I came on in 2011, there were a lot of issues. Our old mix of switches kept locking up and had to be restarted—almost every day—and they didn't offer any Layer 2 or Layer 3 features. Our old wireless infrastructure was comprised of just Linksys consumer access points. We had no VLANs, no multicasting options, and everything was just on one, big, wide-open network."

The former 10/100 infrastructure was certainly no match for the school district's network demand, especially since the state of Texas now requires that most testing be done online. Even for a small 2A school district like Joaquin ISD, the number of devices connected to the network was staggering. Joaquin ISD's network needed to support over 800 PCs and about 500 mobile devices, since every staff member has at least three devices (a notebook, tablet and personal device), not to mention all the student traffic.

"I needed a network with a lot more muscle—something that could handle the client load," said Oliver. "Some larger 6A schools don't mind spending thousands of dollars on switches from more expensive providers, but I didn't have that kind of money. So I went out looking for a provider who had the same warranty and comparable hardware that was just as strong as popular name-brand competitors."

Joaquin ISD was also concerned about security. Without money in the budget for a 3-4 person law enforcement team, the district had to devise its own school security. Therefore, Joaquin ISD wanted to install a full IP Surveillance solution—enabling security cameras to provide the necessary eyes on the ground.

With all these needs in mind, Oliver began searching for a provider that could provide the quality, strength, security and value it needed. It wasn't long before Oliver was evaluating multiple solutions, but ultimately selected D-Link.

"I chose D-Link because they offered me everything I needed, and nobody else offered me more for such an affordable price," he said. "D-Link offered all the warranties, and offered strong equipment at nearly half the price as their larger competitors."



Key D-Link Purchase Drivers

Performance

A mix of networking gear, wireless infrastructure and IP Surveillance cameras from D-Link helps one small school district stay safe and current with the latest education technology.

Value

D-Link's affordable pricing and excellent warranty help Joaquin ISD optimize limited resources without sacrificing functionality.

Innovation

D-Link's DGS-3120 Series switches support physical stacking, multicast and enhanced security, making them an ideal Gigabit access layer solution.

case study

The Solution: Mix of D-Link switches, indoor/outdoor IP cameras and video management software for excellent resolution and complete campus coverage

Since Oliver was unfamiliar with D-Link, he only purchased four switches for his main MDF to start. When he witnessed how well they worked, he started replacing more switches in batches over time and eventually did a whole network flip. Three years later, Joaquin ISD's network has slowly grown into the workhorse it is today—running 80 D-Link switches and D-Link's full wireless infrastructure with about 80 access points.

Early on, Oliver was also intent on improving his campus-wide security. Initially, he tried to upgrade his 80 analog cameras to IP using encoders. However, he quickly learned that IP technology would prove ineffective without a stronger network to handle the security footage and also offer secure VLAN capabilities.

After upgrading his core network, however, he immediately launched a full-scale camera upgrade. D-Link assisted the process by providing a standalone IP camera as a trial.

"It was everything I was looking for," said Oliver. "It had an absolutely gorgeous picture, the bandwidth was low, and it was very price-worthy. Since then, I have slowly been upgrading, and I've gone from about 80 cameras to about 130 cameras. My D-Link cameras work beautifully with no glitches. We don't need to restart them; they sync up very easily with our Video Insights server—they're perfect."

"Everything I have now is D-Link," he said. "After I completed our major network upgrade in mid-2013, I was proud that 99.9% of my entire network infrastructure was from D-Link."

Looking back, Oliver says his biggest issue was taking a leap of faith with a new provider.

"It was just a slow process of making sure I could trust D-Link equipment," he said. "I've been burned before by companies claiming to have warranties but who never delivered," he said. "D-Link definitely honors its lifetime warranty and offers phenomenal support. Their equipment is also about 40% to 70% less than large competitors. It would have been foolish not to go with them. Another reason I really trust D-Link is that they've never tried to sell me something I don't need. It's hard to find a company that's so honest."

D-Link in Action: Gigabit connections, IP Surveillance cameras and excellent bandwidth enhance this school district's ability to serve students

Today, the strength of the new D-Link network is exactly what the Joaquin school district needed. The network currently supports nearly 800 LAN connections, about 300-400 wireless connections, 170 IP Surveillance cameras, 80 new IP phones, an all-new public Wi-Fi and a slew of virtual machines, which are known for hogging bandwidth.

Joaquin ISD also enjoys Gigabit connections from PC to server and has been able to increase its SAN storage capabilities for fast data transfers of very large files.

"Without the strength and reliability of the D-Link network, there's no way we could have run all of this," said Oliver. "Our network is extremely fast, extremely stable, and I'm not even running 20% of what it can handle."

"It's really been awesome," he added. "There are eight or nine schools in the surrounding area and I'm proud to say that I probably have the strongest network out of everybody. We have one incredible network. It simply doesn't go down—it always works."

Joaquin ISD's complete product integration includes:

Quantity	Part Number	Description
8	DGS-3420	xStack Gigabit Layer 2+ Stackable Managed Switch
36	DGS-3120	xStack Gigabit Layer 2+ Stackable Managed Switch
15	DGS-1210	10-port Gigabit Web Smart PoE Switch
2	DWS-4026	Gigabit L2+ Unified Managed Switch
13	DWL-6600AP	Unified Wireless N Simultaneous Dual Band PoE Band Access Point
69	DWL-8600AP	Unified Wireless N Simultaneous Dual Band PoE Band Access Point
6	DCS-6010L	2 MP Panoramic Wireless Cloud Camera
12	DCS-6112	2 MP Full HD Fixed Dome Network Camera
12	DCS-7010L	Outdoor HD Network Camera
32	DCS-101	Video Insight Camera License

Call or visit the web address below for more information on Networking, Wireless and IP Surveillance solutions for education.

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