Texas Schools Turn to IT to Secure Grounds and Facilities

EXECUTIVE SUMMARY

Katy Independent School District

- Education
- Katy, Texas
- 7315 Employees

BUSINESS CHALLENGE

- Improve physical security across all campuses in growing district
- Provide day-and-night IP-based surveillance of premises and high-risk areas
- Navigate major upgrade to video surveillance system in tight timeframe

NETWORK SOLUTION

- Cisco Video Surveillance Manager records live, high-quality footage of district facilities
- Cisco Connected Physical Security solutions scale instantly for flexible deployment
- Cisco Services aids in Cisco Video Surveillance Manager 7 migration

BUSINESS RESULTS

- Centralized management of video surveillance across eight facilities
- Improved video coverage and secured high-risk areas with more than 600 IP cameras
- Completed trouble-free migration to major new version of Cisco Video Surveillance Manager

Katy Independent School District creates safe environment for learning with Cisco Connected Physical Security.

Business Challenge

Covering 181 square miles in East Texas, Katy Independent School District (ISD) is charged with providing instruction to upwards of 60,000 students through its ever-growing network of facilities. To carry out that mission, it employs a staff of more than 7000 members scattered across 50-plus campuses.

With a police force of its own that covers a larger area than the city of Katy's police department does, Katy ISD has always made safety and security a top priority. During school hours an officer or security guard is on duty at every high school and junior high in the district, and no one can get past any school's front office without first signing in and receiving a security badge. And for years, the district employed individual video cameras to monitor specific campuses. These days, however, that is not enough.

Katy ISD Director of Technology Operations Lonnie Owens knew that the district's analog video surveillance solution would not suffice for long. "We had one DVR per campus, and no centralized management," he says. "Not only were we not able to store more than 10 to 12 days' worth of recordings, but image quality was incredibly poor. We could see that an incident had occurred, but we

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couldn't identify the perpetrator." Owens was convinced Katy ISD could do better. He also knew that the district's communications infrastructure would play a critical role.

Network Solution

Having standardized on Cisco solutions over the years, Katy ISD now uses Cisco® routers, switches, wireless access points, and IP phones. And with 10-gigabit Ethernet at its core, the district's network is more than capable of handling IP-based video.

Says Owens, "When we saw the high-quality video images, analytics, role-based physical access management, and shared communications afforded by Cisco Connected Physical Security solutions, we realized they could make us much more proactive about physical security." After receiving buy-in from school administrators, the police department, and the district's Safe and Secure Committee, Katy ISD purchased Cisco Video Surveillance Manager, Cisco Video Surveillance IP Cameras, Cisco IP Interoperability and Collaboration System (IPICS), and Cisco Physical Access Manager. Owens knew that these solutions would provide the standardization and scalability required for the flexible deployment the district's budgets and resources dictated.

Eighteen months after implementing Cisco Video Surveillance Manager, Katy ISD has deployed more than 600 cameras across eight campuses. The result: a constant stream of high-quality, real-time video from pan-tilt-zoom, dome, night-vision, and high-definition cameras located everywhere from classrooms, parking lots, hallways, and playing fields to the vast barns that house the livestock and equipment at the district's Agricultural Sciences Center.

Best of all, this wealth of video is now centralized so that anyone who has permission can view it live or recorded from any desktop or laptop computer. During the day, vice principals and security personnel monitor the feeds, while at night the Katy ISD police watch the footage. And adding cameras could not be easier. "If we need more cameras, we can purchase them, and the system can add them easily," says Owens. "We don't have to worry about space or impact on infrastructure."

Indeed, all of Katy ISD's 600-odd Cisco Video Surveillance IP Cameras currently occupy only a half-rack on the district's private cloud. As the backbone of Katy ISD's physical security system, the network transport is based on Cisco Catalyst 6509, Cisco Nexus 7000, and Cisco Medianet-capable access switches. All schools stream video to a Cisco Video Surveillance Manager private cloud located in the district's data.

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Business Results

Since Katy ISD depends on public funding, the district is often forced to make do with limited resources. And the best way to do that, says Owens, is through automation. To that end, the Cisco Medianet architecture employed by Cisco Connected Physical Security solutions has helped enable all sorts of efficiencies. Adding a Medianet-enabled IP camera, for example, involves nothing more than attaching it to the network, which then immediately provisions the camera with certain rights and rules with no intervention from the IT or security teams.

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Says Owens, “Users are a lot happier with the new video surveillance system, because it’s simpler and faster than the analog solution, and they can view much more video.” Indeed, with Cisco Video Surveillance Manager, they are now viewing three screens, with 16 camera feeds each, something that in the past would have required an additional application and two PCs.

The video surveillance solution has proven so successful, in fact, that Katy has already upgraded to the newest version, Cisco Video Surveillance Manager 7.0. With the help of Cisco Services, who also trained the police department and administrative personnel in the new version’s use, the district completed the upgrade over the course of a weekend in what Owens called “the smoothest migration in five years.”

The new version brings even greater benefits, including interface improvements that make it much easier to use with little or no prior training. Says Owens, “There’s no question that, from an operations standpoint, Cisco Video Surveillance Manager 7.0 is making us more efficient, since it’s putting more eyes on more parts of our campuses without an increased physical presence. And principals are saying the increased scrutiny absolutely reduces discipline issues.”

Next Steps

Although Cisco Video Surveillance Manager was the first of the Cisco Connected Physical Security solutions to be deployed in Katy ISD facilities, it was not the application that got the district looking at physical security solutions in the first place, nor was it the one that ultimately sold the police chief on the value of Cisco solutions. Those were Cisco Physical Access Manager and Cisco IPICS, respectively, and Owens is confident that the district will receive the funding to proceed with their deployment now that its schools have adopted the IP-based video. The former will allow Katy ISD to connect physical access controls to video feeds, leading Owens to hope for card-key access for all by 2015. The latter will allow disparate radio systems to communicate over a single “channel” via IP, with a mobile version helping enable smart phone and tablet users to share video content integrated through Cisco Video Surveillance Manager.

Both will significantly increase the district’s ability to secure its physical facilities now and into the future through a relationship with Cisco that Owens describes as “the partnership by which we measure every other vendor and manufacturer interaction.”

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- To find out more about Cisco Services, visit: www.cisco.com/go/services.

PRODUCT LIST

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- Cisco Video Surveillance IP Cameras
- Cisco Physical Access Control
- Cisco IP Interoperability and Collaboration System

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Printed in USA C45-727332-00 03/13

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