

School District Saves Money on Safety and Security Systems

Council Rock School District internally installs and supports its video surveillance and physical access control solutions.

EXECUTIVE SUMMARY
<p>COUNCIL ROCK SCHOOL DISTRICT</p> <ul style="list-style-type: none"> • K–12 Education • Newtown, Pennsylvania • 1295 Students; 965 Teachers
<p>BUSINESS CHALLENGE</p> <ul style="list-style-type: none"> • Create a safe environment for students and staff • Minimize deployment costs • Support security systems internally
<p>NETWORK SOLUTION</p> <ul style="list-style-type: none"> • Deployed Cisco® Video Surveillance solution, including wireless Cisco Video Surveillance 2500 Series IP Cameras • Implemented Cisco Physical Access Control solution to control and monitor exterior doors
<p>BUSINESS RESULTS</p> <ul style="list-style-type: none"> • Augmented school resource officers with video surveillance • Saved \$250 to \$300 per door with Power over Ethernet (PoE), freeing up funds for learning • Enabled collaboration with local police

Business Challenge

Located in Bucks County, Pennsylvania, Council Rock School District serves more than 12,300 students in its 10 elementary schools, 3 middle schools, 2 high schools, and an alternative high school. The schools are spread across 72 square miles.

Student and staff safety is a top priority for the district. Both high schools had limited video surveillance and door access control deployments, but they were costly to implement, manage, and maintain. Every video surveillance camera and door controller required its own power line, which cost \$250 to \$300 to install. The IT department could not centrally manage both schools' systems because they had to be managed locally. Video was stored on VCRs at each school, making it time-consuming to find a particular incident. And maintenance costs were high because the work was too time-consuming for the district's own electricians, and the service provider charged a \$500 minimum for travel plus \$150 per hour.

Council Rock School District needed more cost-effective physical security systems that it could also extend to middle schools and elementary schools. "Our IT department is asked constantly to come

up with new solutions to operate the district more efficiently," says Matt Frederickson, director of IT, Council Rock School District. "Fortunately, we had already invested in a solid IP network, so we decided to use it as the platform for video surveillance and physical access controls."

Network Solution

The Council Rock School District IT department, administration, and safety officers collaborated to develop a master security plan. It stipulated video surveillance and physical access control systems that were cost effective, easy to use, easy to manage, and could integrate with each other. The district is meeting its goals with Cisco Video Surveillance and Cisco Physical Access Control solutions. "When I visited the Cisco website to learn about the solutions, I was able to download the security camera system software to set up a trial," Frederickson says. "That was powerful proof that the Cisco solution would be easy to use, because another vendor needed two weeks just to prepare a demonstration."

Video Surveillance

The district has deployed 42 cameras in its two high schools, including wireless Cisco Video Surveillance 2500 series IP Cameras and wired cameras from another vendor. All cameras are monitored through Cisco Video Surveillance Manager software in the central IT office. School resource officers, principals, assistant principals, and the dean of students can view video from any camera, using a web browser. “We can view real-time video, but as a public school we don’t have the budget to have someone watch the monitor all the time,” Frederickson says. “Typically we review video after an incident to find out what happened and who did it so that we can prevent recurrences in the future.”

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— Matt Frederickson, Director of IT, Council Rock School District

The Cisco solution is easy to learn, which saves money on training. “Campus resource officers need only a couple of hours to learn how to switch between video feeds, review the 14-day archive, and export a video to a DVD to share with local police,” says Frederickson. “In contrast, a proprietary system might require 40 hours of training.”

The district is currently installing cameras in elementary schools, to create a secured entrance. Parents are responding very positively because they feel more comfortable if school staff are aware of who is entering and exiting the school.

Physical Access Control

Council Rock School District has installed the Cisco Physical Access Control solution in both high schools and is preparing to install it in the middle schools and elementary schools. Administrators use an intuitive web interface to schedule when exterior doors should be locked and unlocked. When doors are locked, staff can swipe their access cards to enter, and the system logs all entries and exits.

The district facilities manager initially wanted to continue using the same door access control system already installed in several areas. Frederickson built a prototype door to demonstrate the ease of installation of the Cisco Physical Access Control solution. “When our facilities manager saw that we didn’t have to bring a power line to the door, he recommended the Cisco solution,” Frederickson says. “Our electricians learned how to install the access control hardware in just 15 minutes. Not having to hire subcontractors saves money, helping us get the best use from taxpayer money.”

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— Matt Frederickson, Director of IT, Council Rock School District

Business Results

PRODUCT LIST
<p>Network Systems</p> <ul style="list-style-type: none"> • Cisco Catalyst® 6509, 4506, and 3750 Switches
<p>Physical Security</p> <ul style="list-style-type: none"> • Cisco Video Surveillance Manager • Cisco Video Surveillance 2500 Series IP Cameras • Cisco Physical Access Manager • Cisco Physical Access Gateway
<p>Security</p> <ul style="list-style-type: none"> • Cisco ASA Adaptive Security Appliance 5540
<p>Wireless</p> <ul style="list-style-type: none"> • Cisco Aironet 1200 Series Wireless Access Point

Increased Situational Awareness, for a Safer Campus

Video surveillance is helping school administrators create a safer environment by identifying students engaging in undesirable behavior. “Having video surveillance cameras in some areas frees up our school resource officers to patrol other areas of the campus, increasing coverage without adding costs,” Frederickson says.

Campus resource officers can move the wireless Cisco Video Surveillance IP Cameras to any location without advance planning, such as when they suspect students might be smoking in a particular area.

Collaboration with Local Police

Because the Cisco Video Surveillance solution operates over the IP network, Council Rock School District can grant access to the system

to people in any location. The district and the local police department established a memorandum of understanding giving police permission to view video from cameras outside one of the high school buildings. This didn't cost the district any money because the police need no special software other than a web browser. Access is secure because police must authenticate first with the district's Cisco Adaptive Security Appliance, which provides a firewall, and then with Cisco Video Surveillance Manager software. The Cisco solution also creates a report showing who accessed which cameras, and when.

Cost Savings

The IP-based Cisco Physical Security solutions cost less to install and maintain than the district's previous systems, freeing up money for learning and teacher salaries. One reason is the ease of deployment. “With our old systems, every camera and door controller needed separate connections, to the network and for power,” says Frederickson. “Now we just need one connection to the network, and the door controller receives power over Ethernet, through our Cisco switch.”

Extra Supervision for Students with Special Needs

The district has used the Cisco Video Surveillance system to remotely supervise students with special needs. For example, an administrator or aide can monitor a camera in a hallway to make sure a student makes it to the next class, giving the student more independence than he or she would have if physically accompanied by the aide.

Next Steps

Council Rock School District plans to continue adding video surveillance cameras and door access controllers as time is available.

The district plans to further increase the return on investment from its IP network by using it to reduce energy costs. Already the district has connected its building control systems to its Cisco network so that facilities personnel can change the temperature setback from home if school is closed because of weather, for example. The next step will be to use Cisco Network Building Mediator to automate policies, for example, by reducing temperature to 58 degrees in all buildings at 4:00 p.m.

For More Information

To learn more about Cisco Video Surveillance and Cisco Physical Access Control solutions, visit:

<http://www.cisco.com/go/physec>.



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