

K-12 School District Improves Physical Safety

The Moss Point School District deployed a video surveillance solution to monitor its ten schools and district offices.

EXECUTIVE SUMMARY

Moss Point School District

- K-12 Education
- Moss Point, Mississippi
- 3100 students; 280 teachers and administrators

Challenge

- Enhance student safety
- Protect property
- Minimize costs

Solution

- Deployed Cisco physical security system for video surveillance

Results

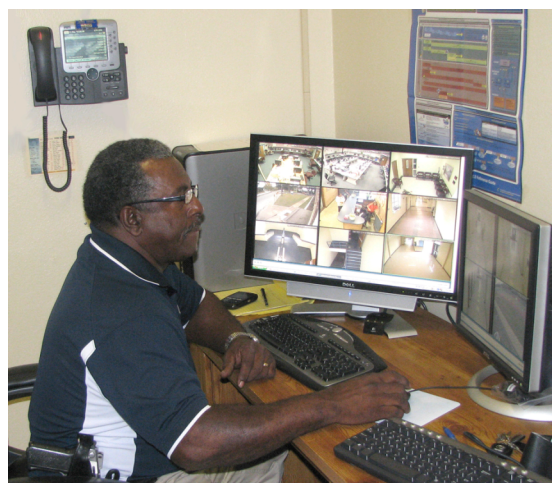
- Gained earlier awareness of campus incidents
- Helped change student behavior
- Avoided cost of separate infrastructure for video surveillance

Challenge

Located in Moss Point, Mississippi, the Moss Point School District serves 3100 students in a high school, junior high, and six elementary schools. The district has 250 teachers and 30 administrators.

Creating a safe environment for learning ranks high as a priority for the district. "We have a responsibility to protect our students, and we also need to protect property," says Lieutenant Colonel Kim Staley, district superintendent. In elementary schools, the main safety concern is monitoring entries and exits to help ensure that unauthorized adults do not enter or leave with a child. In the junior high and high school, major goals are preventing theft, graffiti, and vandalism and finding out about fights to stop them quickly. In addition, the high school's location between two major

streets increases concern that people might enter or leave the campus without permission. "To protect students and district property, we need a way to be vigilant about activities in different locations throughout the district," Staley says.



A few schools in the district had video surveillance systems, but the video quality of the VCR-based system was grainy, making it difficult or impossible to identify people. In addition, the video could only be viewed and accessed within the school. Therefore, when a fire started in an elementary school playground, district staff members had to spend many hours reviewing archived video to find out what happened. "We wanted a video surveillance system that would enable our campus safety officer to centrally monitor all facilities," says James Glover, chief information officer.

The district established two important requirements for a new video surveillance solution. It had to work with the schools' existing analog video surveillance cameras. And later it would need to integrate with other physical security systems, such as access controls and alarms.

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—Brian Bowman, Systems Administrator, Moss Point School District

Solution

In 2006, Moss Point School District had received a Cisco® 21st Century Schools Grant, using it for a Cisco IP network, Cisco IP telephony, Cisco Unified MeetingPlace conferencing, and sending pages to IP phone speakers using Berbee Informacast software. The district wanted its physical security solutions to operate over the same Cisco network.

“Non-networked video surveillance solutions might cost less to purchase, but IP-based video surveillance solutions cost less in the long term, because they do not become obsolete in a few years,” says Brian Bowman, systems administrator, Moss Point School District. “And network-centric video surveillance solutions can be easily integrated with other physical security applications, such as building access control and unified communications, to improve response, alerting, and notification.”

Moss Point School District chose a Cisco physical security system. “We didn’t want to buy separate monitoring and control systems for our video cameras, HVAC [heating, ventilation, and air conditioning], access controls, and intercom systems,” says Glover. “Only the Cisco physical security solution lets us control all of these systems from a single interface.”

The district began with video surveillance and later will add access control and alarms. “Video surveillance is easy to cost justify because it helps to deter equipment theft,” says Glover.

For help with planning and implementing the solution, the district turned to Coleman Technologies, a Cisco Gold Certified Partner. “We wanted to work with a Cisco partner with experience designing physical security systems for other school districts,” says Glover. Coleman Technologies first conducted a site evaluation of each school and met with district administrators and school principals to identify the locations that they wanted to monitor. “In elementary schools, the area of concerns were entries and exits so that the wrong person would not pick up a child,” says Glover. “In the junior high and high school, principals also wanted to monitor out-of-the-way areas, where students tend to congregate, as well as areas housing expensive equipment.”

Before the fall semester of 2008, Coleman Technologies installed more than 200 cameras in the district’s 10 facilities, most in hallways and the campus perimeter, and a few in classrooms. Later, the district will install a surveillance camera in every classroom. Enclosures protect the cameras from tampering.

“For individual schools, we designed the system for simplicity,” says Tom Julian, manager of situational awareness for Coleman Technologies. “The school principals do not have to learn to use any special software.” For instance, the junior high principal can get a quick overview of campus safety by glancing at a large plasma screen containing feeds from all 16 cameras.

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—James Glover, Chief Information Officer, Moss Point School District

Results

Earlier Awareness for Enhanced Safety

“Students don’t want to tell on each other, so we used to spend a lot of time trying to determine what led up to a safety incident,” says Myya Robinson, communications director for Moss Point School District. “With the Cisco video surveillance solution, we can see what happened. We can also be more proactive, for example, by detecting signs that a fight might occur and acting quickly before it starts.”

Reduced Vandalism and Unsafe Behavior

Students sometimes damage vending machines and computer equipment. “Our old video surveillance system had poor camera quality and slow frame motion,” says Robinson. “The higher resolution and better images from the new digital cameras and IP network make it easier to identify the people in the video. We are already seeing a deterrent effect.” The district has also noticed a decrease in unsafe driving in the high school parking lot, which is covered by several cameras.

Reduced Loss from Theft

The district anticipates reduced loss from equipment theft now that storage areas are monitored.

Lower Costs and Higher Value

“Network-centric video surveillance solutions are easier to manage and deploy and provide standardized capabilities throughout the school district,” says Bowman. “And unlike proprietary CCTV [closed circuit television] systems or digital video recorders that quickly become obsolete, the Cisco physical security solution will increase in value as vendors introduce cameras and software with new capabilities.”

Superintendent Staley concludes, “You can’t put a price on providing a safe and healthy place to learn. We believe the Cisco physical security system will play an important role by helping us deter unwanted behavior, intervene early to prevent harm, and identify the causes when incidents do occur.”

Next Steps

Moss Point School District has completed the first phase of the Cisco physical security solution by deploying cameras in hallways and campus perimeters. The next stages will be:

- **Enabling centralized monitoring of all video surveillance cameras on all campuses:**
To accomplish this, Coleman Technologies will install a Cisco Metro Ethernet solution that interconnects all of the district’s campuses.
- **Adding video surveillance cameras in classrooms.**

- **Adding physical access controls:** By integrating building access controls with the IP-based video surveillance cameras, the district will gain new safety capabilities, such as automatically capturing people's images as they enter controlled areas. "If someone loses a card and someone else uses it, we will be able to see who it is," says Glover.
- **Enhancing emergency communications by deploying digital signage around district campuses:** When an incident occurs, authorized district security personnel and administrators will be able to immediately send information and instructions over the IP network to digital signs in some or all district locations.

Technical Implementation

Currently, school principals, campus security personnel, teachers, and administrators can view live or recorded video from specific cameras or locations from their own campus, based on their privileges, using any campus PC. The Cisco Video Surveillance Media Server manages, replicates, distributes, and archives the video streams.

PRODUCT LIST

Switching and Routing

- Cisco Integrated Services Router

Physical Security

- Cisco Video Surveillance Media Server
- Cisco Video Surveillance Operations Manager
- Cisco Video Surveillance Virtual Matrix

Unified Communications

- Cisco Unified Communications Manager
- Cisco Unified IP Phones
- Cisco Unified MeetingPlace

In the next phase of the deployment, video from each school will travel over a Cisco Metro Ethernet network to the central office at the high school, where campus security personnel can monitor it using Cisco Video Surveillance Operations Manager, a web-based interface. Security personnel will be able to control which video feeds are pushed to principals' monitors using Cisco Video Surveillance Virtual Matrix. The district superintendent will be able to monitor video from all campuses.

For More Information

For more information on Cisco physical security solutions, visit:

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



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