CASE STUDY

Protecting school population and property.

Chippewa Valley Schools deploy Axis network cameras to safeguard their learning environments.

Organization:
Chippewa Valley Schools

Location:
Macomb County, Michigan, USA

Industry segment:
Education

Application:
Student safety and property protection

Axis partner:
Spiritech, Inc.

Mission

Chippewa Valley Schools felt that hall monitors and security guards were doing a good job patrolling school buildings and grounds and making students and faculty feel they were in a safe learning environment. But principals were still spending a large portion of their workday investigating complaints, taking eyewitness statements and doing follow-up interviews to get to the crux of an incident. Administrators for the suburban Detroit school system, the ninth largest school district in Michigan, were looking for a cost-effective tool to shorten the investigative process and augment their security efforts.

Solution

Chippewa Valley Schools contracted with the district's IT consultants, Metro Technology Services, to design a network video solution that would help school administrators and other key staff to closely monitor activity in and around their premises. Troy, Michigan-based Metro Technology Services recommended an array of Axis network cameras and video encoders as well as video management software from Milestone Systems.

Axis partner, Spiritech, Inc., a Warren, Michigan-based full-service supplier of surveillance technology, installed the Axis components for the comprehensive surveillance system in the district's two high schools and two ninth grade centers.

Result

School officials are using the network video system to augment security staff in high traffic areas throughout their buildings and grounds, including hallways, cafeterias, computer labs, media centers, school stores, gymnasiums, parking lots and athletic fields. With dedicated monitors connected to their desktop computers, principals and assistant principals can watch multiple camera views simultaneously. Security stations have been fitted with dual monitors to allow staff to keep tabs on a larger number of camera views at the same time.

AXIS COMMUNICATIONS

35574/EN/R1/0905

"If children don't feel safe in school, they'll be distracted from learning. Our new IP-based Axis / Milestone network surveillance system helps us cost-effectively augment the security our hall monitors and security guards provide."

Mark Deldin, Superintendent of Chippewa Valley Schools.

Food service directors, maintenance directors and technology staff also have access to select network cameras to monitor activity in their respective areas. Should an incident occur, principals can quickly search the video archives to substantiate who was involved and exactly what took place.

Modernizing legacy surveillance solution

All 22 schools in the district had been using analog cameras linked to an onsite DVR player. "Those legacy systems were difficult to support because we had to visit a closet at the head-end where the specialized equipment was housed," explains Craig McBain, Director of Technology Services for Chippewa Valley Schools.

Since the DVRs had no event tracking capabilities, administrators had to review hours of video to find when the incident occurred. With only seven days of archiving, the DVR-based system forced school personnel to rush investigations before critical video was automatically erased from the system. "Not only that," says McBain, "in the course of an investigation we'd discover that a camera had been malfunctioning for months but no one knew about it."

With the new Axis / Milestone system, the video from all the schools is stored on central server that can be accessed through a standard PC with web access. The IT department uses Active Directory to control user permissions to the network cameras like any other software in the district's network application portfolio. Since the Axis network cameras use enhanced H.264 compression coupled with built-in analytics, the district can afford to extend video archiving to 35 days. In case of a malfunction, the cameras send an alarm to system administrators to expedite repairs, which minimizes video gaps during critical periods. And because of the system's motion-based analytics and event logs, it is easy to go back and track an incident for further investigation. Using AXIS Q7406 Video Encoders to digitize analog video transmissions allows Chippewa Valley to integrate its legacy analog cameras into the new IP-based system, extending the return on the district's original technology investment.

Choosing the right Axis cameras for the task

More than 600 Axis network cameras and video encoders were deployed to the district's four most populated schools. In the cafeterias and gymnasium, they use the vandal-resistant AXIS 216MFD-V Network Camera, a megapixel, fixed dome network camera with wide angle lenses. For hallways, they deployed vandal-resistant, fixed dome AXIS 216FD-V Network Cameras because of their efficient use of bandwidth and ability to operate with Power-over-Ethernet (PoE), avoiding the expense of running a second cable to power the cameras. Spiritech also installed vandal-resistant AXIS 212 PTZ-V Network Cameras in the middle landing of stairwells to monitor their entire length with a single camera.

AXIS Q1755 Network Cameras, Axis' first HDTV-quality cameras, were mounted on building exteriors to cover the full length of school parking lots, giving administrators the high resolution necessary to identify faces and license plates from a great distance. AXIS 214 PTZ Network Cameras were mounted on exterior corners to provide a sweeping view of the property and walkways into adjacent residential subdivisions.

Taking the subjectivity out of investigations

"Having a video clip of the incident takes all subjectivity out of the investigation," explains Mark Deldin, School Superintendent for Chippewa Valley. "It also reduces immensely the amount of time a school principal has to spend on investigating complaints." Finally, the school board reviews the video before deciding whether to expel a student or impose some other form of punishment.

Tying video surveillance into future initiatives

"We're currently reviewing electronic access control systems that can coordinate video with door opening events," says Deldin. "As we go forward, we might even consider tying our IP-based system into HVAC, time card and burglar alarm systems to give us a complete range of control over our premises."

Spiritech

METRO TECHNOLOGY SERVICES

AXIS COMMUNICATIONS