

Cody High School sharpens security with Axis network cameras. Wyoming town replaces analog system at school to better protect students and secure community events.



Organization:
Cody High School

Location:
Cody, Wyoming

Industry segment:
Education

Application:
School safety and security

Axis partners:
ISC, OnSSI

Mission

The block-long high school in the rural town of Cody, Wyoming, not only serves as an education center but also as a busy after-hours hub for community programs, including concerts, lectures and collegiate coursework. The video captured by its decade-old analog video cameras yielded too few details to be useful – especially at night when most incidents occur. The district decided a higher resolution, feature-rich IP-based surveillance system would be a better deterrent for vandalism and other inappropriate activity on school property.

Solution

ISC, a network integrator and certified Axis partner headquartered in Casper, Wyoming, recommended an array of 80 indoor and outdoor network cameras from Axis Communications to monitor the school building and its 42-acre campus. The exterior cameras are equipped with automatic day/night functionality to provide a clear picture of people and objects even in low-light conditions.

Administrative staff uses NetDVMS, OnSSI's video management system, to monitor, manage and investigate the video as well as manipulate the Axis cameras over the school's fiber network.

Result

Having network cameras in and around the property has had a positive effect on the behavior of students, faculty and visitors to the campus. With the clarity of the images provided by the network cameras, administrative and security staff can zoom in on crucial details of an incident to identify faces, clothing and license plates. Parents now fully expect the cameras to settle the blame-game in student altercations.

"The video from our old analog camera system was so pixilated we only identified culprits about 15% of time. Our new Axis cameras have such amazing image clarity that we've been able to identify who was doing what 100% of the time."

Brandon Jensen, principal of Cody High School.

Taking proactive security measures

Rather than react to problematic events that are always a threat at the high school-level, the principal and the district's technology director took a proactive approach to ensuring the safety of the school population and community at large. Besides participating in crisis drills with local police, first responders and Homeland Security, the town contracted with ISC to replace its insufficient analog cameras with more effective network surveillance technology.

ISC deployed AXIS 214 PTZ and AXIS 225FD Network Cameras on building exteriors to cover entry doors, the senior parking lot, bus loading zone, and abutting parks and recreation areas.

"We get a lot of traffic in and around the school, depending on the time of day and events scheduled," says Jim Heath, technology director for Cody Public Schools. "We focus the cameras on areas where the students like to congregate and get into mischief, like the tennis courts across the street and city park north of campus."

Heath notes the dramatic difference between the network cameras and the old analog cameras. "With the old system, there were times when the perpetrator was looking directly at the camera and, because the lighting was off, we still couldn't see who it was. The Axis network cameras automatically adjust to the lighting conditions so we can zoom in and clearly see the details we need."

ISC also deployed AXIS P3301 Fixed Dome Network Cameras inside the high school to cover hallways, stairwells, the gymnasium and common areas, as well as outside bathrooms and classrooms. "While we don't have a lot of vandalism problems here," shares Brandon Jensen, principal of Cody High School, "the cameras help us hold students responsible for their actions, whether they are malicious or accidental."

Video analytics for efficient recording and archive searching

To avoid unnecessary archiving, ISC leveraged motion detection embedded in the Axis cameras to trigger recording using OnSSI's intuitive NetDVMS. "We custom-programmed the motion sensitivity threshold for the field of view," explains Jeff Ehrenhart of ISC Corp. "We blocked out motion sensitivity in areas of the frame where cars are constantly driving by." Efficient use of motion detection allows one camera cover both the park across the street and the parking areas close the school.

"We have 24 terabytes of disk space and archive our video for 45 days," states Heath. "Using the selective motion detection feature within the video frame saves us storage."

ISC also deployed an intelligent search feature to help Cody administrators quickly scan video for missing objects. The Smart Search allows Cody to select an area within the field of view – such as a laptop on a table – and instruct the VMS to fast forward to the next frame where that object moved.

"Instead of reviewing several hours of video, Smart Search greatly speeds up investigation," says Ehrenhart.

Maintaining wireless access in an emergency

The onsite school resource officer (SRO) has full access to the high school's cameras and serves as the liaison to the Chief of Police and Park County Sheriff's Department. In an emergency, the SRO can share password access to the cameras and, if needed, the mobile command unit operated by Park County Search and Rescue has wireless access to live video.

"We keep access to the cameras as limited as possible," says Heath. "We're not Big Brother. We installed them solely for the protection and safety of our kids and staff."

