CASE STUDY

Averting trouble on school property.

Taos Municipal Schools enhance district security by adding a surveillance system to their IT network.

Organization:
Taos Municipal School District

Location:
Taos, New Mexico, USA

Industry segment:
Education

Application:
Multiple campus surveillance

Axis partner:
CDW-G

Mission

The school district's technology coordinator and network administrator began lobbying for surveillance cameras in the Taos High School, New Mexico, to avert the usual mischief that high school teens get into. But with the building being used by the University of New Mexico for evening classes, after hours security was another area of concern. Coupled with the fact that the high school housed an enormous inventory of technology components, both for computer classes and maintaining systems for the whole school district, Taos needed a surveillance system that could ensure the safety of its students and technology assets.

Solution

Over the next several years, Taos Municipal Schools will be working with CDW Government, Inc. (CDW-G), a leading source of information technology solutions to educators and governments, to deploy 100 network cameras from Axis Communications to ensure the safety and security of its student body, staff and school property.

The first 25 cameras will be installed at the high school. Another 25 will be deployed at the middle school. And the remaining 50 will be divided among the district's three elementary schools.

Result

In the initial phase, the district deployed AXIS 221 Day & Night Network Cameras at 21 points of entry into the high school. Since their installation, the cameras have already caught a student in the act of pulling a false alarm. Robert Spitz, technology coordinator and network administrator for the Taos Municipal Schools, expects he will be expanding coverage as school administration and security personnel single out other areas around campus that they would like to monitor.

AXIS COMMUNICATIONS

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"Given the reports I've seen from other cities about how much damage two or three vandals can cause in a couple of hours, I think the school board and the citizens of Taos agree that the protection of our students and property is well worth the investment in our Axis multi-campus surveillance system."

Robert Spitz, Technology coordinator and network administrator for the Taos Municipal Schools.

Choosing an IP solution over analog surveillance

The district chose the Axis network cameras rather than older analog technology because of the lower cost of installation and ease of deployment. "Network cameras don't need special cables and separate power supplies for each camera," explains Spitz. "Since the network cameras support PoE (Power over Ethernet), it's easy to put them wherever we need them." Spitz and his technology team run a single Cat-5 Ethernet cable from each AXIS 221 to the network switch to power up and transmit data directly to the network. This eliminates the time and expense of installing a separate power outlet for each camera.

IP-based technology also gives the school district enormous configuration flexibility. "It's about as simple to add a camera to the network as it is to add any other peripheral device," says Spitz. "And you can add cameras in any increment you choose." Given Spitz's hectic schedule – he and his staff maintain more than 2,000 computers on six campuses throughout the district – he appreciates being able to add cameras at his own pace and as funding becomes available.

Features that fit the environment

Because the AXIS 221 Day & Night Network Cameras operate under infrared lighting conditions, they give security staff added visibility at night when vandals think they can operate undetected. The added benefit of a motion-sensing feature means the network cameras only begin recording when they detect motion. "This saves us from recording countless hours of video when nothing significant is happening," observes Spitz.

Though the Axis network cameras also support a vandal alert feature – sounding the alarm if they are being tampered with – Taos will not be using this feature in the initial rollout. But if the school district decides to upgrade campus alarm systems, Spitz assures that the district will be able to tie the cameras into that upgrade to take full advantage of the enhanced security.

Balancing the surveillance load on the network

About 400 computers at the Taos High School actively access the network on a daily basis. By design, the district connects all its network devices to the gigabit backbone via Fast Ethernet switches. "Since the Axis network cameras give us the flexibility to choose a reasonable frame rate for our environment," explains Spitz, "surveillance activity won't place any undue burden on our network bandwidth or degrade the performance of any other IT activity we currently run."

As Spitz rolls out the surveillance system to all the schools in the district, he will provide each school's administrative staff with a list of IP addresses for the cameras at their respective campuses. The video management software will allow the principal, vice principal, security guard and on-site police officer to pull up the view from any particular camera they want at any time they wish or monitor multiple camera feeds simultaneously.

The 60/40 rule

About 60% of the school district's security concerns focus on night time and weekends, when the buildings are unoccupied. The remaining 40% of the focus is on maintaining order during the school day. "When kids know that the principal can review the surveillance footage and identify the perpetrators," states Spitz, "they're less likely to start trouble in the first place."