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Trusting In Digital

NEW CONSTRUCTION LEADS TO SYSTEM-WIDE ANALOG-TO-DIGITAL VIDEO UPGRADES FOR A TEXAS SCHOOL DISTRICT

The Cypress-Fairbanks Independent School District is similar to a lot of school systems in the United States. Money is tight, but the need for security is high. The Cypress-Fairbanks system has undertaken an upgrade to convert 114 video surveillance systems to digital video recording by next spring, using the ViconNet IP video solutions from Vicon Industries Inc., Hauppauge, N.Y.

As the third-largest school district in Texas, Cypress-Fairbanks will enroll 85,000 students this fall. It has eight high schools, 14 middle schools, 42 active elementary schools and several administration buildings. Additionally, three more elementary schools are scheduled to be completed next year.

In 1997, the school district installed analog video systems with multiplexers. "Every facility has an analog camera system now," says David Straughan, director of security for the school district. However, a few years later, when student growth necessitated a building expansion, technological advancements became a priority.

Testing, testing

As new buildings came on line, the school district looked to enhance security with the latest technology, which meant going digital. The district then began a two-year search for the right vendor.

"We began checking at the ASIS show once a year to look at products and see how digital was formatting and coming along," Straughan says. "We decided to set up criteria and invite vendors to visit us and demonstrate their products. That was quite expensive and a major undertaking."

Straughan and a panel – which included himself, technicians, the assistant director and some of the school principals – came up with a list of 14 criteria any new digital system would have to meet. Among the considerations were: Did they like it? Was it user-friendly? Did it lock or freeze up? What were the storage capabilities? How many errors occurred? Did it have simultaneous playback and search capabilities? Was the technical support there? Was it standalone? What were the warranty standards? Was there duplex view and record with streaming video?

"We took those 14 criteria and tested 16 different digital recording systems," Straughan says. "We gave each one two weeks and installed them in three of our schools. At the end of the two weeks, we evaluated their system."

The process took about a year, he says. In the end, Vicon was the winner, and the next step became to select an integrator to implement the system. Cypress-Fairbanks issued a request-for-proposals in July 2005. After a detailed analysis, the school district awarded the project to Convergent Technologies, Houston, Texas. Convergent got the job based on their experience delivering

the Vicon solution and their successful track record with K-12 installations in Houston. To date, the district has installed more than 40 of Vicon's Collector Pro DVRs in multiple district schools.

The digital edge

"The new Vicon DVR has the multiplexer and the recorder all in one unit," Straughan says. "We have been able to replace it unit for unit without having to reconfigure our system. We just unplug one and plug in the new. We add a data drop line to go through the computer network, and it plugs in just like any computer."

The Vicon system also allowed the school district to keep its extensive investment in analog cameras. "The Vicon product takes the analog cameras and records them digitally," Straughan explains. This allows assistant principals and key people on campus to review video from their desktops. The system can also use newer digital cameras. Both analog and digital cameras can coexist on the same system.

"We wanted our principals, who aren't in the security business, to not have to be technology experts," Straughan says. "It's like Windows. We found that the Vicon system had point-and-click and drag operations. It was very simple." Other benefits included high resolution and storage. "With 16 cameras, we can get two weeks of recording time," Straughan says.

However, unless the school could come

up with the funding, the only facilities that would have this new video technology would be the ones being built.

Going forward

As with many other school districts, Cypress-Fairbanks is in a financial crunch. But it put together a bond package and hoped for the best. "We are a high-growth district," Straughan says. "We felt this issue was important enough. We took it to our committees. The principals wanted this type of digital system in the schools. They felt it would enhance security and complement existing systems."

Voters agreed. "We put on a bond package," Straughan says. "It was voted in last spring. We were able to get the funding source." Cypress-Fairbanks worked out the final bids through a request-for-proposal from vendors that handle Vicon. Soon after final approval from the board, they began retrofitting.

The first digital units came on line last fall. "This year we are going to be able to retrofit the remainder of the district. By spring, we will have every building with digital recording," Straughan says.

What will that mean for the district? "This is going to be the first year [for digital video] at any of the schools," Straughan says. However, the system has been in use for a year in

the agricultural and transportation centers. "At the agricultural center we have livestock. If there are any intruders, our dispatcher can make a virtual tour of the facility. If we have an incident, officers can look at the video first. Operators at the transportation center use it to keep up with buses and numbers. Incidents at the bus centers have dropped dramatically," he says.

"It will be a good resource at the schools. We believe it will increase our safety." Straughan says that the analog video made an impact in 1997. "When we first put the camera system in, we were losing \$100,000 a year district-wide due to vandalism and graffiti. Once we put the cameras in, our vandalism dropped to less than \$5,000 a year. We believe [going digital] will enhance this system even more and bring it up to where review capabilities are much better," he says.

Court admissibility

Soon after the first systems started going in, the district and a neighboring district with the same Vicon system experienced break-ins. In both cases, recorded video clearly showed the perpetrators' activities and was later presented and accepted as evidence by the court. Very few digital video systems have been tested in court. ■



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