
District Administration

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Digital IP-Based Security Cameras School districts are driving the need for this technology.

By Kurt O. Dyrli • August 2007

PROBLEM

THE GRAPEVINE - COLLEYVILLE

Independent School District (GCISD), located in the Dallas suburb of Grapevine, Texas, used to have 309 analog security cameras outside campus buildings to improve security for the 13,000 students in the district. The system used Digital Video Recorders (DVRs) for storage, which enabled technology administrators to review footage of security incidents. The poor image quality and limited features of the aging technology, however, made it inefficient and frustrating to use. The district therefore needed an up-to-date security system with new features and devices that would ideally incorporate and improve their existing technology.

SOLUTION

Unlike the district's original analog security system, a new system had to be more focused on the end users and not just technology staff. "We wanted a camera system that was accessible by everyone in the district, with user-friendly features that required little or no training," says Valerie See, director of special projects and operational services. The security cameras would be used only on the exterior of buildings and in certain main hallways, not in classrooms. GCISD officials decided to invest in the next generation of technology: an IP (Internet Protocol) based and fully digital camera system. In 2005, the digital camera company Axis Communications installed 149 new digital video cameras, as well as digital conversion equipment needed for the existing analog cameras. The software company Strand, which specializes

in school surveillance systems, provided the management software.

Driven by School Needs

The use of camera systems for security is increasingly common in a variety of public settings, but "the needs of school districts are driving the development of digital IP surveillance systems," says Tim Beerup, president and CEO of Strand. School districts benefit from digital IP security technology specifically because they already have Internet connectivity, typically need surveillance for multiple buildings, and require remote access for various staff members. Digital IP camera networks have much clearer image quality than analog and can be accessed remotely over the Internet. And unlike analog cameras, digital systems' features are much more flexible, depending on the needs of individual districts. For example, cameras can be set to be motion activated, archival access can be granted only to authorized personnel, and additional cameras can easily be added to digital systems. Ethernet controls also allow users to pan, tilt, and zoom cameras remotely, via any computer with Internet access. "In the past,

we would have had to call a technician to adjust the positions of cameras," said See.

The remote accessibility of the GCISD system is also customized, highlighting another flexible feature of digital. For example, access could be granted only to certain administrators, or to local law enforcement, with each given the login capability to view live video in the event of an emergency. "Since this is IP based, none of the users have to download any software," says Beerup, who notes that the GCISD system's graduated levels of access were decided by the school board.

On the Rise

Camera systems have appealed to many districts for years because they address a variety of security concerns. But today's digital IP technology, and its increasing affordability, makes video surveillance an even more effective security tool. Soon after installation, GCISD officials credited their new digital system with thwarting an attempted burglary.

The National Center for Education Statistics reported in 1999-2000 that 19 percent of all schools and 39 percent of secondary schools employed video surveillance, and by 2003-2004, the number had grown to 36 and 60 percent, respectively. While its increasing use may also raise concerns, particularly about privacy rights, digital IP surveillance is becoming one of the most popular ways to address school security.

RESOURCES

Axis Communications
www.axis.com

Grapevine-Colleyville
Independent School District
www.gcisd-k12.org

Strand Software
www.strandusa.com

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