Customer Case Study

SOLUTION
Physical Security

CUSTOMER
Coeur d'Alene School District

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Community Supports
School Security Upgrade

Challenges

- Need for increased security

- Large sprawling district

- Multi building facilities

- Multiple points of entry

- Community use

Solution

- Access control and video surveillance

- Mobile video monitoring

- Single monitored entrance

- Bell and locking schedules

- Faculty, staff and student training

Results

- Control and awareness of who is coming into buildings

- Visibility and awareness of public areas in schools

- Positive environment for teaching and learning

Aerial view of Coeur d'Alene
courtesy of Joe Mabel

"I was greatly impressed and surprised by the level of security when I arrived."

Nationwide, school districts are devoting more resources to campus safety. Districts are looking for effective solutions to address security challenges. Coeur d'Alene School District #271, the largest in northern Idaho, was one such district. Stakeholder concern over the issue of school safety was the primary driver behind the district's decision to find a comprehensive security solution. Voters in Coeur d'Alene strongly supported a funding measure that allocated more than $1.4 million for increased security and safety upgrades. The district partnered with Ednetics, a company specializing in technology for education and government environments, to design a comprehensive security system. The objectives were to deter unauthorized building access and to give school personnel increased capability to monitor and respond to safety issues.

Challenges

Coeur d'Alene School District #271 faced several challenges to increased school and student safety. The district's size, combined with its expansive footprint, was a significant obstacle to a cohesive system-wide solution. Buildings were outfitted with outdated locks and many buildings had multiple entry points. The existing legacy video surveillance systems at the district's two high schools were standalone and provided low-quality footage.

With over 10,400 students and over one thousand teachers, administrators, and support staff, Coeur d'Alene School District #271 is the fifth largest district in the state. Schools range in size from compact, one building elementary schools to sprawling, multi building facilities including Coeur d'Alene High School. The district's wide range of building and facility sizes meant that a security solution would have to accommodate multiple environments.

Many buildings in the district had multiple entry points and used traditional key-operated locks. Teachers, staff, and students often entered the buildings through side doors rather than main entrances. The high schools were open campuses and students and staff were free to come and go. After school, community groups including the Boys and Girls Club and Coeur d'Alene Parks and Recreation used the facilities, adding another layer of complexity to building access. Community access required issuing and tracking keys for these groups in addition to those used by teachers and staff. Lost keys meant expensive, time-consuming lock rekeying. Understanding who was coming and going from the buildings at all times was not possible.

10,400
K12 Students

10
Elementary Schools

3
Middle Schools

3
High Schools

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Additionally, only the high schools had video surveillance systems. The coverage wasn't enough to be truly functional as it left blind spots in crucial areas including school hallways. The equipment included analog video cameras and local, standalone digital video recorders (DVRs). Footage was low resolution and low quality. Because these systems were standalone, video review was limited to fixed locations in each facility.

Solution

Coeur d'Alene School District #271 partnered with Ednetics to design a comprehensive and integrated access control and video surveillance system that would cover the district's 10 elementary schools, three middle schools, two high schools, and support facilities. Ednetics project managers, security experts, and account managers provided consultation and support at every stage of the project, from the initial walk through and planning to the final training and hand off.

The Coeur d'Alene School Board, district officials, and Ednetics understood this highly visible project needed community support and participation to succeed. District officials held several community forums to inform the public about the project and to invite suggestions and comments from community members. While there were some minor differences of opinion about some of the details of the project, the community strongly supported the new system. "Parents appreciate the extra level of protection between the inside and the outside of the school," said Kamy Cade, network supervisor for the district's IT Department. Jean Bengfort, the district IT director at the time of the project, echoed this sentiment: "They knew [the system] was in the best interests of their sons and daughters."

Because of the size and complexity of the project, it was essential that the elements of the system be tested at the individual school level before scaling up to the district level. In collaboration with the district's IT and facilities departments, principals, and teachers, Ednetics designed a pilot system that was tested at Coeur d'Alene High School. This test system was followed by two more pilot studies at Ramsey Elementary Magnet School of Science and Woodland Middle School. After testing and evaluating the results from the three pilot projects, the system was broadened to include the entire district.

The new system provides administrators and security personnel complete and centralized visibility across all schools and facilities in the district. Access control and video surveillance systems have been integrated into the district's IT network, so information on security issues and events can be monitored from a single point rather than school by school.

The access control portion of the new system eliminated the old key-operated locks and replaced them with card-operated locks that run over the district's IP network. Ednetics used Avigilon access control software for the system's electronic door locks and card readers. Now district staff configure access privileges electronically from a central location and users receive access only to doors they need. If a card is lost there is no need for expensive rekeying – the missing card is deactivated and the user is issued a

new one. Community groups and government agencies such as the Parks and Recreation Department that need after hours building access are issued cards that are limited to specific doors during specific times (e.g., Saturdays between 3 and 5 PM). This simplifies the access problem for the district's facilities department and relieves school staff of the need to physically lock and unlock school entrances during non-business hours.

School entrances have been reconfigured to eliminate multiple entry points. Staff, students, and visitors now use a single, easily monitored entrance. Visitors enter a vestibule where a wall-mounted camera lets staff verify identification and the purpose of their visit. Only then are visitors buzzed into the building. District Staff have gained enhanced control and awareness of who is coming onto school property and into school buildings.

The Ednetics team provided extensive training in the use of the new security system to members of the Coeur d'Alene School District #271 IT department and to principals and school staff who would be responsible for setting lock schedules and using the new vestibule door controls to admit visitors to school buildings.

The new system lets schools streamline bell and locking schedules, in some cases reducing more than 20 schedules to five. The schedules are preloaded on individual cards that contain the data for a specific schedule. In order to deploy a certain lock or bell schedule, all an administrator has to do is swipe the appropriate card. The access control system is integrated with the new IP-based video surveillance system. The cameras detect all motion automatically, so if a door is propped or forced open, opened during non-business hours, or otherwise compromised, a camera feed is initiated. Security staff can note events of interest and review archived footage for the time and location of those events using Exacq video management software.

Ednetics, the Coeur d'Alene Police Department's School Resource Officers (SROs), and district personnel worked together to ensure the new Arecont digital video cameras were placed and configured to provide maximum visibility and coverage of school buildings, grounds, and parking lots. Because SROs work extensively with school staff to ensure the safety of students, staff, and visitors and to help respond to potential security issues, it was critical that they be familiar with the functions and capabilities of the new security system.

The new cameras, which range from 5 to 20 megapixels, deliver clear, high-resolution images. The cam-eras are protected by weather- and vandal-resistant housings. Images are sharp enough to provide posi-tive identification of individual faces and the cameras' faster frame rates deliver more information. Every facility in the district is equipped with a network of cameras that provides visibility to entrances, play-grounds, and areas that are important to school safety. Authorized staff can view footage from anywhere in the district, rather than having to be physically present at a particular school. Footage is stored on the district's data center servers rather than on individual DVRs. This increases total storage capacity, main-tains data security, and allows staff to review archived and live footage from multiple locations.

Results

Ednetics worked closely with the Coeur d'Alene School District #271 to create and implement a powerful access control and surveillance system at all 16 schools that helps protect students, staff, and property. The physical security solution employs enterprise-grade equipment configured and designed using industry best practices. Building access points have been streamlined and are now fully monitored, greatly reduc-ing the possibility of unauthorized entry. The new camera system combines high-quality digital footage and high visibility with flexible reviewing options – security staff can now access real-time and archived footage from anywhere. The new system delivers both tangible as well as more subjective benefits. It gives staff and teachers greater control over and awareness of who is coming onto school property. It is a tangible demonstration of the district's commitment to the safety of its students and staff.

Ednetics played a key role in helping stakeholders understand their options and the impact of design decisions on project performance. Ednetics was able to deliver this solution ahead of time and under budget. Seth Deniston, the district's current IT director, said "I was greatly impressed and surprised by the level of security when I arrived." The Ednetics team helped Coeur d'Alene School District #271 realize its goal to provide a safer, more positive environment for teaching and learning.◊

Ednetics was founded in 1997 to bring IT services and solutions to education and public sector communities. Opportunities to improve education and government settings through the use of advanced technologies continue to be our focus. Network based services and solutions with our customer's needs informing our approach has led to an impressive portfolio. Understanding our customer's needs through the eyes of hundreds of tech directors and administrators has informed our products and services every step of the way. Our diverse team includes contractors, specialized engineers, dedicated support, project managers and specialists with an affinity for technology and a desire to be the best at what we do. We are inspired by how technology can help and we love making a difference.

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