College IT Team Offers Video Surveillance as a Service

NorthWest Arkansas Community College deployed centrally managed, high-definition video surveillance IP cameras.

EXECUTIVE SUMMARY

NorthWest Arkansas Community College
- Higher Education
- Bentonville, Arkansas
- 8500 students, 900 faculty, and staff

BUSINESS CHALLENGE
- Strengthen campus safety
- Minimize management overhead for video surveillance system
- Increase return on investment from IP network

NETWORK SOLUTION
- Implemented Cisco Video Surveillance 4400 Series High-Definition IP Cameras
- Centrally managed and monitored cameras with Cisco Video Surveillance Manager
- Connected existing analog cameras to same system

BUSINESS RESULTS
- Captured detail such as faces, clothing, and car scratches
- Enabled IT team to offer valued service with almost no added burden
- Avoided need for separate video surveillance network

Business Challenge

Located in Bentonville, Arkansas, NorthWest Arkansas Community College (NWACC) is a comprehensive, public two-year college. Since the college opened its doors in 1990, enrollment has grown from 1200 to more tha n 8500, making NWACC one of the largest and fastest growing two-year colleges in the state.

The eight campuses and 12 buildings are considered very safe, and administrators are committed to keeping them that way. "Our students are the college's number-one asset, and it's our duty to protect them in every way possible," says Paige Francis, associate vice president of IT for the college.

The public safety department previously monitored building interiors and exteriors with approximately 120 analog video cameras, viewing video feeds on a small display in the public safety office. The main drawback was the lack of image clarity, a liability that became evident when the public safety department and administrators needed to investigate an incident. "The video was so blurry we could not see the person's face, clothing, or anything else needed for positive identification," says Francis. "Administrators immediately authorized us to implement a high-definition video surveillance system that would provide value."

The public safety department established two main requirements: high-definition video and the ability to view camera feeds from anywhere on campus, not just the building where the video was captured. Officers also wanted an easy way to set up custom views for hallways, common areas and parking lots, enabling centralized monitoring and management of all cameras in all buildings.

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> — Paige Francis, Associate Vice President of IT, NorthWest Arkansas Community College

Network Solution

NWACC already had the foundation for IP video surveillance, having recently built a secure, high-performance Cisco network with the intelligence to carry video traffic without slowing other applications on the network. Such a network is called a medianet. "We transformed our network from a source of constant complaints from students, faculty, and staff to one of the most advanced in the state," says Francis.

After evaluating IP video surveillance solutions, the IT and public safety departments decided to implement a Cisco® Video Surveillance Solution. "Cisco Video Surveillance meets our requirements for high-definition video, ease of management, and integration with existing analog cameras," says Ryan Moore, manager of networks and infrastructure for NorthWest Arkansas Community College. "In addition, we have a trusted relationship with Cisco because of our excellent experience with the network."

Ease of management was particularly appealing to the IT department. The facilities team had managed the previous video surveillance system, and was eager to turn over the task to IT. "We do not have the resources to manage a cumbersome system, but the Cisco Video Surveillance solution is plug-and-play, and requires almost no additional management time," says Francis. "Everyone agreed that the slightly higher upfront costs would pay dividends by minimizing operational burden for the college over many years to come."

The college began with one building, implementing almost 60 Cisco Video Surveillance 4000 Series high-definition IP cameras. Most cameras monitor hallways and offices, and a few are mounted outdoors. The physical safety officers monitor predefined groups of feeds using Cisco Video Surveillance Manager, and can enlarge any single feed to full screen.

Officers use the same interface to centrally monitor about 44 analog cameras in the student center and another building, which connect to Cisco Video Surveillance Manager by way of a Cisco Physical Security Multiservice Platform for Video Surveillance. Connecting all cameras in all buildings to a common platform for viewing and management simplifies security operations and management.

Business Results

Clear Images for Incident Investigation

The college's public safety team and administrators are now confident that they can produce clear images to investigate campus safety incidents. When someone reported car door damage in the college parking lot, for instance, the physical safety team used the video to prove that the damage was not present when the car exited the lot.

The college will replace the remaining analog cameras with Cisco High-Definition Video 4500 IP Cameras as funding becomes available. When the video surveillance server in the student center needed repair, the college decided to replace it with a Cisco solution. "Even though the purchase cost twice as much as the repair, administrators realized the Cisco Video Surveillance solution would cost less over time, because we could continue to use it after we replaced analog cameras with high-definition IP cameras," says Francis.

Low Support Requirements

Ease of management further reduces total cost of ownership. "The Cisco Video Surveillance solution requires almost no effort from the IT team," says Moore. In fact, one of the public safety officers learned how to change camera views without any involvement from IT.

The college IT team also appreciates the responsiveness of the Cisco support organization. The Cisco SMARTnet service provides access to the Cisco Technical Assistance Center (TAC) support and a guaranteed turnaround time for replacement parts. When TAC determined that a server needed a new hard drive, the replacement arrived

the very next day, resolving the issue. Moore says, "Experts on IP video surveillance are still fairly rare, and we have access to them through Cisco TAC."

Higher Return from Network Investment

The college's existing Cisco network already provided the bandwidth needed for IP video surveillance, a fact confirmed by Cisco partner AOS. "In the past, even an application as simple as grade book software could overwhelm the network, slowing the performance of all of our other applications," says Moore. "Our new Cisco network is the foundation that lets us take advantage of advanced technology such as Cisco Video Surveillance, Cisco Unified Communications, and virtual desktops."

Francis agrees. "Using an end-to-end solution from Cisco means we don't have to worry that we're missing a capability we need to introduce other campus services for physical safety, learning, or administration. We know we have the foundation."

Sharing in Higher Education Community

College leaders also appreciate being part of a larger higher-education technology discussion. "NorthWest Arkansas Community College is tucked away in a remote area of the state, making it harder to share IT ideas with our peers," says Francis. "Using Cisco technology, such as Cisco Video Surveillance, gives us common ground with higher education institutions throughout the U.S. We can share our objectives and vision, confirming we're heading in the right direction."

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>
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PRODUCT LIST
Physical Security
• Cisco Video Surveillance Manager
• Cisco High-Definition Video 4500 Series IP Cameras
• Cisco Physical Security Multiservice Platform for Video Surveillance
Routing and Switching
• Cisco Catalyst® Switches 6500 Series, 3750 Series, and 2960S Series

Next Steps

The college will gradually integrate video surveillance cameras in all buildings into the Cisco Video Surveillance System.

In addition, the IT team is planning to take advantage of the new Cisco network to deliver more campus services. For example, migrating from the traditional voice system to Cisco Unified Communications will eliminate the cost of separate networks and also enable advanced collaboration capabilities such as video conferencing, presence (seeing whether coworkers are online or on the phone), and instant messaging. Another plan is providing virtual desktops in labs and the student center. Students will be able to log on to their desktop from any thin client on campus. Virtual desktops can reduce application-licensing costs, reduce or eliminate helpdesk costs, and enable the college to use lower-cost thin clients instead of PCs.

Finally, the advanced Cisco network has prepared NWACC to join the Arkansas Research and Education Optical Network (ARE-ON), a consortium formed to foster research, education, public service, and economic development. Francis concludes, "We're so well prepared with our Cisco network that we are in a position to reach out and help others."

For More Information

To learn more about Cisco Physical Security Systems, visit: http://www.cisco.com/go/physec.

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