



Cisco Physical Security Solutions: Improve Safety on College and University Campuses

High-profile incidents have prompted educational institutions to invest in technology to prepare for, prevent, detect, assess, and respond to physical safety threats. Physically safe campuses help attract and retain faculty and students. And preventing theft and vandalism frees up money for instruction and other programs.

To help create a safe and secure environment, campus security departments have developed plans, trained staff, and implemented systems such as video surveillance cameras, physical access controls, and paging and radio systems. All of these are wise investments, helping to protect against threats ranging from vandalism to armed intruders, and from bomb threats to natural disasters.

And yet these investments in physical security can be far more effective and cost less to manage when you tie them together over your existing IP network. Benefits include earlier threat detection, faster response, and enhanced collaboration with public safety agencies.

To illustrate, consider a before-and-after scenario involving an intruder considered armed and dangerous.

Campus Safety: Before and After

Before: Campus security officers who are patrolling the campus are not immediately aware of the intruder because video is available on one console in the security office. Administrators and police have to wait for the security officer or IT department to create a copy of the video before they can circulate the intruder's picture. If a classroom and dormitory lockdown is imposed, facilities personnel have to walk from building to building to lock doors, lengthening the time an intruder can enter. Administrators may have no way to alert faculty and students and issue instructions. Campus security personnel cannot communicate directly with first responders because they don't have the right kind of radio system. In the absence of official communications, anxious parents who have received text messages from their children flood the dean's office with phone calls.

After: The scenario unfolds more efficiently in colleges and universities that use Cisco® physical security systems that interoperate over the existing campus IP network. Security personnel use their smartphones or any web browser to view live and archived video from Cisco IP Video Surveillance Cameras, tracking the suspect's location. Security or facilities personnel remotely lock buildings and dormitories from a web interface, using a Cisco Physical Access Control solution. Campus security or local police can use the web to send updates and instructions to Cisco Digital Signs deployed throughout the campus, which are used at other times for campus news. Campus security personnel can also send text or audio pages to Cisco Unified IP Phones in classrooms. Using the Cisco IP Interoperability and Collaboration System (IPICS), campus security officers and administrators can use ordinary phones, mobile phones, and radios to communicate directly with police on their radios, sharing status, campus maps, building blueprints, and relevant video and photos.

“Students feel very secure in the residence hall. It’s not economically possible to have security guards everywhere, and [Cisco] video surveillance provides another set of eyes.”

—Dr. Sue Henderson, Vice President for Institutional Advancement, Queens College, New York

“We have already seen evidence that the Cisco Video Surveillance solution is a deterrent of small crimes on our campus.”

—Chuck Gantos, Chief of Police, Elon University, North Carolina

When a campus shooting occurred at Northern Virginia Community College in December 2009, local police used a web interface to send emergency instructions and updates to all of the Cisco Digital Signs on that campus, with just a few clicks. Nobody was hurt during the incident and NOVA received praise from law enforcement officials for rapidly disseminating evacuation and procedure information across the digital signage.

Cisco Solutions for Campus Safety

Cisco Physical Security Solutions harness the power of the existing campus IP network to help protect people and property and encourage good behavior. Unlike proprietary physical security solutions that only work with equipment and software applications from the same vendor, Cisco solutions are based on open standards to interoperate with cameras, sensors, and applications from other vendors. This preserves your investment in existing equipment, such as video surveillance cameras, and gives you the flexibility to add new safety capabilities as they become available, extending the life of the investment.

The complete portfolio of Cisco Physical Security Solutions supports the safety plans developed by campus safety organizations and local police (Figure 1):

Figure 1. Cisco Connected Physical Security



Solution	Campus Safety Benefits
Physical Security	
Video Surveillance Cisco Video Surveillance Manager and Cisco Video Surveillance IP cameras enable you to easily access real-time and archived video from any camera on the campus network Cisco also offers VSS Alloy for Cisco Video Surveillance Manager, a Solution Plus product that is an user interface designed for the education market	<ul style="list-style-type: none"> ▪ Allows you to place cameras in any location with a wired or wireless network connection, avoiding new cabling costs ▪ Enables authorized personnel to securely access video from anywhere, at any time ▪ Stores video on or off campus ▪ Integrates with existing and new cameras, video analytics, and other systems using open standards ▪ Intuitive user interface for live and recorded camera viewing ▪ Integrated mapping interface ▪ Quick access to video archives ▪ Video paging
Access Control Cisco Physical Access Control lets you manage a schedule for unlocking building doors and indicate who can enter	<ul style="list-style-type: none"> ▪ Helps prevent unauthorized access to buildings and dormitories ▪ Enables remotely controlled lockdowns to isolate safety incidents ▪ Reduces personnel requirements for entry monitoring ▪ Creates an accurate log of who enters your buildings ▪ Integrates with Cisco Video Surveillance Manager to increase situational awareness by automatically tagging video when someone swipes an access card
Incident Response Cisco IP Interoperability and Collaboration System (IPICS) solution allows colleges and universities to rapidly respond to incidents, emergencies, and facility events and collaborate with first responders	<ul style="list-style-type: none"> ▪ Provides communications interoperability among people using practically any analog or digital radio system ▪ Consolidates all information relating to an incident ▪ Enables sharing of multimedia data such as video, images, web links, and alarm status ▪ Easily activates predefined security notification policies with a single click
Other Cisco Technologies	
Self-Defending Network Cisco Self-Defending Network technologies include: <ul style="list-style-type: none"> ▪ Identity management ▪ Network Admission Control (NAC) ▪ Firewall ▪ VPN ▪ Intrusion prevention system (IPS) ▪ Cisco Security Agent ▪ Email and web security 	<ul style="list-style-type: none"> ▪ Protects the network from intentional or unintentional damage, keeping it available for vital communications and security systems ▪ Protects confidential student and staff information ▪ Helps prevent infections from student and teacher laptops and smartphones
Mobility and Wireless Cisco Unified Wireless Network enables anytime, anywhere access to critical information and accelerates mobile emergency responses	<ul style="list-style-type: none"> ▪ Enables mobile administrators to carry a Cisco Unified Wireless IP Phone and be reached at the same number from any location ▪ Provides secure guest access ▪ Pinpoints the location of laptops and other wireless devices and can track the location of people wearing RFID bracelets and assets with RFID tags, such as lab equipment
Unified Communications Cisco Unified Communications Manager enhances communication within the district, with first responders, and with parents	<ul style="list-style-type: none"> ▪ Provides one-touch phone access to first responders ▪ Enables emergency alerting to multiple devices using text messaging and recorded voice announcements ▪ Reports the precise location of the phone used to dial 911, and can send emails to specified people's inboxes or IP phones so that they can confirm the emergency and provide help sooner ▪ Easily integrates your communication systems with public safety answering points and first responder agencies ▪ Lowers number of dedicated phone lines to reduce infrastructure costs
Digital Signage Cisco Digital Signs display safety messages and instructions in common areas with centralized control and scheduling	<ul style="list-style-type: none"> ▪ Enables you to create, publish, and distribute emergency information across all campus locations ▪ Decreases operational costs compared to standalone digital signage systems ▪ Can also be used for training, district news, broadcasting graduation ceremonies, and more
Smart Connected Buildings Cisco Network Building Mediator monitors alarms, temperatures, heating, ventilation, and air conditioning systems, and can automatically shut down or adjust systems depending on conditions	<ul style="list-style-type: none"> ▪ Identifies environmental anomalies and initiates appropriate response, based on policy ▪ Reduces personnel requirements for building system monitoring ▪ Monitors and reduces energy consumption
Desktop Video Cisco Show and Share makes it easy to create, edit, and publish web-based videos to train students, faculty, and staff while Cisco WebEx™ supports real-time, interactive training	<ul style="list-style-type: none"> ▪ Reduces the time and cost of regular safety training for staff, faculty, and students
Cisco Partner Solutions	
Video Analytics Detects motion and sounds and alerts appropriate people	<ul style="list-style-type: none"> ▪ Reduces the need for manual building checks and accelerates incident detection ▪ Initiates predefined responses to reduce response time
Notification Services Enables administrators to broadcast announcements to Cisco Unified IP phone speakers and external IP speakers	<ul style="list-style-type: none"> ▪ Integrates intercom, bell, and alarm systems, reducing maintenance and management costs ▪ Centralizes pages and automatic emails and phone notifications ▪ Integrates with other student information systems
Visitor Management Systems Automatically captures visitors' images and identification, making it unnecessary for a staff person to always be at the desk, and can also check visitor names against databases of unwanted persons.	<ul style="list-style-type: none"> ▪ Replaces inefficient, paper-based logging systems ▪ Maintains an accurate visitor record for auditing and safety-incident reporting ▪ Automatically identifies unwanted visitors and denies them access to campus buildings

Why Cisco?

Higher education institutions worldwide are choosing Cisco solutions to enhance safety and security because Cisco offers:

- **Comprehensive physical security solutions:** Combining video surveillance, access control, and incident response, Cisco Connected Physical Security Solutions are easy to manage and easy to support. And because they're based on open standards, you can easily integrate Cisco solutions with products from Cisco partners to meet your specific requirements.
- **Strong understanding of and commitment to education:** Cisco recruits employees with education backgrounds to help guide product development for colleges and universities of all sizes. Cisco is a strategic partner in the Global Education Initiative, led by the World Economic Forum, as well as other worldwide education programs. Cisco's largest education initiative is Cisco Networking Academy®, a proven model for 21st century learning that equips students with the IT and networking skills necessary to compete in a global economy. Networking Academy is available in more than 160 countries and serves more than 900,000 students in the United States alone.
- **Commitment to customer service and customer success:** In addition to hardware and software products, Cisco provides a broad range of service offerings to help colleges and universities successfully implement safety and security programs.
- **Technical expertise:** Cisco and our partners help to make networks, applications, and people work better together. We make sure your Cisco security solutions and network operate efficiently and benefit from up-to-date system and application software. Cisco Advanced Services integrates safety and security solutions from Cisco and our partners and helps you lower your operational costs, increase network availability, and optimize performance.
- **Interoperable, standards-based solutions:** Cisco's standards-based solutions interoperate with hardware and software from other vendors, enabling you to extend the value and life of your investment in a Cisco network.
- **Cisco CapitalSM finance programs:** Innovative financing enables colleges and universities to easily acquire, deploy, and optimize their solutions. Options include Tax-Exempt Lease Purchase (TELP), Fair Market Value Lease, and Cisco Technology Migration Program.

"We chose the Cisco Video Surveillance solution because it is open, giving us the flexibility to use any vendor's cameras, encoders, and storage."

—Dave Temple, Assistant Director of Technology Strategy, Loughborough University, England

Harness the Power of Your IP Network to Improve Campus Safety

Cisco can help campus security organizations and community first responders create safety plans that take advantage of the power of your IP network to improve campus safety. By using your IP infrastructure to deploy networked services, you can:

- More effectively prevent, deter, detect, and respond to safety incidents
- Enhance collaboration between higher education institutions and first responders
- Communicate quickly to students, faculty, staff, parents, and the surrounding community during an event
- Improve operational efficiencies of your physical security systems and resources
- Reduce financial and legal liability
- Reduce costs compared to deploying standalone security systems, freeing up funds for instruction and research

For More Information

To learn more about Cisco Safety Solutions for Higher Education, contact your Cisco representative or reseller, or visit www.cisco.com/go/campussafety

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