

Next generation learning  
in a safe, secure environment.



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welcome to  
the human network.



# Ensuring students, faculty, and staff are safe and secure.

## Inspiring new connections.

At Cisco, we're working hard to help create a connected way of living and learning. Cisco® Solutions give institutes of higher education the ability to create a connected on-demand learning environment — removing barriers to communications, enabling real-time interactions, and expanding access. Education opportunities are everywhere. Our goal is to help keep those connections safe and secure. Our vision is a secure, connected campus that inspires students, faculty, and staff to engage in lifelong learning.



A safe, secure campus is central to creating successful 21st century learning environments. For today's institutions of higher education, enabling this takes diligent effort. Open learning environments that provide easy access to resources and seamless mobile connectivity throughout campus make security increasingly important. You are charged with balancing secure accessibility for students and faculty with protecting your network and providing a safe learning environment.

Today's colleges and universities must proactively protect the students, faculty, staff and administrators that live, work, and learn there.

From keeping buildings and grounds secure and ensuring access to only authorized users to protecting your network from malicious attacks, your safety and security efforts must cover a great deal of literal and virtual ground. Beyond protecting individuals, you also have liability, legal regulations, and financial risk and responsibility to consider. Ultimately, all of the work you do around safety and security must ensure that your students and staff can maintain their focus on learning and teaching.

When it comes to keeping your campus safe and secure, you may be facing at least three key challenges on a daily basis:

- Protecting students, faculty, staff, and the campus against threats
- Ongoing identification, prevention, and deterrence of incidents
- Integrating disparate systems to enable more effective response

We understand these challenges. Our goal is to help you find the best solutions to these issues so you can focus on creating the most effective 21st century academic environment available.

When humanity meets technology, the way we work changes and the way we live is transformed. We are realizing human potential, seeing the results of our actions. When humanity is connected, wonderful things happen, innovative and sustainable solutions are born both locally and globally. That's the human network effect.

# Safety and security strategies for everyday effectiveness.

## Delivering protection.

Protecting students, faculty, and staff from physical and cyber attacks involves people on your campus and throughout the community. On the physical front, your institution must have systems and procedures in place to enhance security and reduce the destruction of property. In the event of an emergency, you need to ensure that you can effectively communicate with first responders and provide them the information they need to be most effective. And on the cyber-front, you need the IT security systems in place that support secure wired and wireless network access to students, faculty, and staff, while also protecting your institution from unauthorized users and malicious attacks.

In traditional higher education safety and security models, response to a threat typically happens in a linear fashion — independent systems are checked; affected people notified, and specific individuals lead the charge in executing the response. The results can be time consuming and not always wholly effective. When safety and security systems are integrated on the same platform, and management and monitoring are centralized, actions can occur in parallel, policy-related responses can be automatically triggered, and everyone impacted can be notified quickly. This helps to improve first responders' preparedness and ensure the right level of response to incidents.

### Key questions to ask about responding to threats:

- How many and what types of safety and security systems do we have in place?
- How do these different systems work together to strengthen our response?
- What protections do we have in place to prevent and respond to unauthorized network access and malicious attacks?
- Does our system support quick and secure connectivity to external safety and security resources like police and emergency personnel?

## Taking a proactive approach.

Identification. Prevention. Deterrence. These are key priorities in ensuring safety across your campus. From enhancing network protection to minimizing liability issues, you need to be continually locating and eliminating security gaps in both your physical and virtual environments. Centralizing your management and monitoring of safety and security systems is a critical first step.

With hundreds of devices and thousands of active users on your network at any given time, it is important that you can quickly identify and respond to threats that may occur. You need to quickly control and contain security breaches to limit widespread damage. You need a solution that supports your complex, open academic environment, but also offers unprecedented insight into network activity, tighter controls, and enhanced network security. With the right technologies in place you can respond more quickly and appropriately to minimize harm and limit liability.

### To help identify, prevent, and deter threats, consider these questions:

- How can we centralize management and monitoring of our safety systems?
- What kinds of controls do we have in place to ensure appropriate access to our network?
- How can we proactively monitor user activity and bandwidth usage?
- What systems do we have in place to identify and eliminate security gaps?
- What else can we be doing to keep unauthorized visitors off campus and unauthorized users off our network?

## Simplifying safety and security.

Most institutes of higher education have between seven and nine different networks for handling safety and security issues. From phones, paging systems, radios, and facilities monitoring, these tools have been added in a piecemeal approach that while intended to strengthen preventive methods may in fact, reduce responsiveness.

Today's colleges and universities need to find a way to leverage their IT infrastructure to strengthen defenses over time. A single network and unified communications platform is the first step. By centralizing management and monitoring, an integrated approach can help enable adaptive threat defense and improve collaboration across your campus and with the surrounding community. With a safety and security approach that builds on a single wired and wireless network infrastructure, your campus can benefit from physical services that leverage IT intelligence, reduce costs through consolidation, and improve communications for prevention and in the event of an incident. Add to this the expanded coverage enabled by mobile solutions and applications, and you have a comprehensive, yet easily managed approach to safety and security.

### Enable effective integration of safety and security systems by considering these questions:

- How many wired or wireless networks or systems are in place in our safety and security infrastructure?
- How well do these systems interoperate?
- Are there areas we can consolidate systems and still maintain effective security measures?
- Where do we have unnecessary redundancies in our safety and security systems?
- How can we use our systems to facilitate collaboration across campus and with our community?

# Cisco Solutions for safety and security.



Think of your IP network as the platform for ensuring integrated emergency detection, prevention, and response. By using the network as the foundation for your communications tools, network security capabilities, physical safety solutions, and mobility infrastructure, you can help ensure that you have the systems and procedures in place that will keep your campus safe and ensure you can respond to safety incidents immediately and appropriately. Our solutions optimize that network to help you respond to the ever-changing threats that exist in our world today.

#### Cisco Solutions deliver:

- **Enhanced visibility:** Gain critical insight into safety and security systems and network usage with tools designed for today's sophisticated higher education environment.
- **Improved communications and collaboration:** A single communications system combining voice, video, and data ensures on- and off-campus safety and security staff can work together effectively.
- **Minimized legal, regulatory, and financial liability:** With more effective safety and security

systems in place, your institution can better protect students, faculty, and staff, while ensuring appropriate response in the event of an incident.

- **Reduced costs:** By consolidating various networks, you can lower maintenance costs and ensure your staff can more effectively use safety and security resources.
- **Improved mobility:** Access security resources and tools while in motion from anywhere on campus – indoors or outdoors.
- **Secure network access:** Prevent unauthorized or nefarious network usage while ensuring your students have secure access to academic resources wherever their studies may take them.

#### These Cisco Solutions are designed to help institutions of higher education improve safety and security:

- **Cisco Unified Communications:** Enhance communications security, flexibility, and first responder information access with a single IP network that includes data, voice, and video capabilities.
- **Cisco Network and Information Security:** Implement identity-based network security to improve user authentication, authorization, and access control to maintain secure wired and wireless access for students, faculty, and staff.
- **Cisco Physical Security:** Monitor and protect students with video surveillance and access control capabilities that enable faster threat detection and response.
- **Cisco Unified Wireless Network:** Provide high-speed, next generation wireless access while keeping the network secure from unauthorized access and malicious attacks. Add wireless video surveillance cameras to support real-time video surveillance monitoring from anywhere on campus — indoors or outdoors.
- **Cisco Digital Media System (DMS):** Deliver updates and critical information via digital signs for immediate dissemination. Train staff on emergency procedures and provide updates with the desktop video portal.

At Cisco, our goal is to put the human network effect to work for you to create an optimal learning environment for your students, faculty and staff. Ensuring a safe and secure campus is at the heart of this effort. By helping you integrate your safety and security systems, centralize management and monitoring, and implement technologies that help you maintain tighter controls on your physical and virtual environments, we provide a solid foundation that will allow you to focus on learning and teaching. Your network is at the center of this integrated effort.

To learn more about the Cisco Solutions designed to improve safety and security in higher education, contact your Cisco representative or visit [http://www.cisco.com/web/strategy/education/SafeSecure\\_RiskHigherEd.html](http://www.cisco.com/web/strategy/education/SafeSecure_RiskHigherEd.html)