

YOUR IP VIDEO SURVEILLANCE CHEAT SHEET:

Becoming a Big Man on Campuses

Higher risks, higher profiles, higher scrutiny and higher expectations are driving campuses to achieve higher levels of safety and security. Along with that, however, is a higher need to stretch dollars. Fortunately for integrators there are higher levels of technology to satisfy these requisites and yield higher profits. BY SCOTT GOLDFINE



Becoming a trusted security solutions provider to school, university, health-care and corporate customers entails expertise across a range of business and technology considerations germane to campus environments. Those integrators that invest the focus, time and resources toward understanding these end users' unique organizational and safety needs, and how to match them to today's advanced technologies position themselves for a wealth of opportunity and long-term client relationships.

That's because campuses not only have a great need for security but are also prone to facility and grounds expansion. Thus they are looking for partners, and this latest installment of Your IP Video Cheat Sheet — once again brought to you by IQinVision — confers with one of the leading providers to the market for best practices guidance. Experts from Texas-based LENSEC, responsible for more than 30,000 camera installations in 30+ states, reveal the ropes of satisfying and delivering optimized solutions to campus clients.

Network With the Network Manager

The first step when approaching a campus prospect is to identify the primary stakeholders and chief decision-makers, and then concentrate your efforts on and communications with those individuals. This encompasses a wide variety of job titles and roles, from C-level and administrators to security and facility managers to IT/network engineers and technicians. In each case, the integrator must be sensitive to their specialized needs and constraints.

"To become a trusted partner, we talk a lot about meeting with the technology stakeholders, understanding both the physical

security architecture and the network topology," says Jeff Kellick, LENSEC director of product development. "Being able to understand and meet with them from the very beginning really helps to facilitate a good working relationship."

Due to the superior features and capabilities of IP-based security systems, especially video surveillance, the vast majority of campus applications involve either migrating from analog, upgrading existing networked systems or installing brand new IP solutions. Thus, from both budget allocation and logistical standpoints, the most critical person or people with whom to get buy-in and ingratiate are often the IT managers. That means gaining an intimate grasp of their pain points and helping to alleviate them.

"A lot of times the IT department steers the business versus the business steering the IT department," says Jamie Bradford, LENSEC director of system solutions. "It's important to understand their language and to have a comprehension of the technology. Many have a 'not on my network' attitude. You have to engage them early and gain their trust so they appreciate that what you're trying to do is not going to damage them."

That level of engagement can only come about if the integrator has highly skilled sales and technical personnel comfortable talking the IT talk and walking the IT walk. It can be a steep learning curve that requires understanding network topology, transport, and the entire Open Systems Interconnection (OSI) model from the wire all the way to the data presentation. The degree of detail needed to get the thumbs up varies by project, but it is critical for integrators to be able to intelligently speak a

IP VIDEO BRINGS UNIVERSITY'S SECURITY INTO SHARPER FOCUS

Ottawa (Kan.) University has a rich heritage of educating students since 1865. Many generations have relied on Ottawa University to help them achieve a lifetime of personal growth and significance. The faculty and staff at the university are also charged with keeping students safe. Ottawa's three residence halls become home to students away from their families.

AN END TO ANALOG

Somewhat ahead of its time, Ottawa University installed analog video cameras in its residence halls about 10 years ago. The number of cameras and the available technology were limited. "We really didn't have enough cameras," recalls Tom Taldo, dean of Student Affairs, "and the camera placement wasn't good. But our biggest problem was you couldn't make out any faces — the recordings were practically useless."

The university had a longstanding relationship with security integrator Midwest Card and ID Solutions. Gary Williams, a Midwest sales engineer, met with Taldo to discuss options to upgrade the school's video surveillance system. Williams introduced Taldo to LENSEC IP video management software (VMS) and to IQinVision megapixel camera technology. Taldo was sold immediately. "We wanted an IP-based system with crisp image resolution," he says. "We wanted a cost-effective system for indoor and outdoor surveillance. Gary Williams and Mike Brimmer from LENSEC showed me a system that meets my needs."

Phase one of Ottawa University's plans calls for IQeye Alliance dome cameras to be installed in the campus' new student union.



ROLLING OUT IP VIDEO SURVEILLANCE

Phase one of Ottawa's plans calls for IQeye Alliance dome cameras to be installed in the university's new student union. All cameras will be managed by LENSEC's Perspective VMS and monitored by security personnel. Phase two will see additional IQeye cameras installed at the student center library. In all, 50+ cameras and servers running Perspective VMS will be deployed.

"The new system is much more user-friendly," explains Taldo. "We're able to stop and review the video, we can E-mail video clips, and the clarity of the images doesn't even compare — we are able to make out exactly who is in the frame. Also, not everyone who uses the system needs to be considered an IT expert. I really appreciate the minimal training needed to run this software effectively."

In addition, LENSEC provides a browser-based solution that displays quality video whether the user has a Mac or PC. In an education environment, that is useful.

CREATING A SAFER ENVIRONMENT

"We've had a few theft issues," says Taldo, "especially at the end of the semester when electronics are stolen. The new system with its capabilities and image clarity is helping us solve many of those incidents."

The university also has plans to expand video surveillance outdoors. "We've had some bike thefts," says Taldo. "The students are going to be quite pleased when we protect the bike racks and reduce problems."

CONTINUED SYSTEM EXPANSION

Working together, Midwest Card, LENSEC, IQinVision and Ottawa University are drawing up expansion plans to install video surveillance throughout the entire campus. When completed, the system will have hundreds of cameras inside buildings and monitoring grounds.

Working off this project success, Taldo hopes to extend IP video surveillance to several remote Ottawa campuses located in Arizona, Wisconsin, Indiana and Kansas City. LENSEC and IQinVision intend to tie campuses together across the network for a seamless solution, providing remote video streaming among the campuses.

"Everybody has really enjoyed the quality of this new system, including our information technology team. The IT folks have fully embraced LENSEC and IQinVision, and are excited to help in laying the foundation for future expansion across all of our Ottawa University locations," concludes Taldo.

common language with their IT counterparts.

"You need to understand their network and infrastructure," says Bradford. "Ask the right questions; understand their topology as far as the speeds of bandwidth, private or public fiber, their switching distribution, their core and their access layer. It's also important to understand the limitations of their network, and how to expose or explore their network to leverage it."

As mentioned, particularly in light of ever-rising cybersecurity threats, IT administrators are increasingly guiding or influencing buying decisions that affect physical security. It is vital integrators have a handle on funds sourcing for this market. For education and health-care clientele this often involves federal or state dollars and grants that integrators can not only participate in but, when appropriate, assist in the application process. Integrators should understand the customer's budget and what they're trying to accomplish, and help them get the most value for the money they have.

Getting the Lay of the Land

Having landed a campus client project, the next step in the progression is conducting a needs and risk analysis, which will call for a multitude of assessments. The crux of it is conducting a thorough site survey that not only takes the campus structures and grounds into account but also the surrounding environs. In the case of video surveillance, anything less will subvert its intended purpose.

"It involves understanding the architecture of the building, of the actual site where the equipment will be installed, making sure you're not running into obstacles with how you can run your cabling and your camera placement, and verifying you're capturing accurate views from each camera location," says Keith Harris, LENSEC marketing and PR manager. "Also understanding where your equipment will be installed and what kind of environment it is. And you have to evaluate the offsite surrounding area. For example, if it's a high-crime area you may have particular parts of the perimeter with a higher threat."

The large size and scheduling parameters of campus deployments often necessitate integrators coordinate a phased approach. A key component of that is helping the client prioritize which allocated dollars to spend first and on what. This plays into the return on investment (ROI) and total cost of ownership (TCO) equations, and incorporates focusing on equipment lifecycles and three- to five-year roadmaps that cultivate long-term business relationships.

“Making that dollar stretch and really leveraging the technology is essential,” adds Bradford. “Camera technology has become very sophisticated. There’s lighting challenges, field-of-view challenges. There are anamorphic lens challenges in which one camera can now do the work of four or six. With IP, there are a lot of efficiencies gained. So understanding what technology fits in the right location is a big benefit to be trusted that you’re not just saying you need 16 cameras when it could be accomplished with eight.”

Megapixels at Home on Campuses

There are so many exciting and advantageous security technologies for campus customers to select from today, especially in the video surveillance and access control categories. Options are terrific but can also be overwhelming. That is why it is imperative for integrators to be up to speed on the latest products and systems, serving as a trusted and expert advisor. According to Kellick, megapixel cameras and video analytics in particular can achieve powerful results in campus settings.

“Megapixel technology allows for viewing into larger quads, parking lots, athletic fields than previously you were able to get. It gives a much greater scope of the entire campus,” he says. “Systems that leverage true megapixel technology allow for greater forensic development after an incident or better real-time surveillance. And adding video analytics ties into the mindset of gaining intelligence from your video.”

Campus applications for video analytics include directional use that detects someone moving from the left to right on the screen, or from the safe side to the secure side of a facility; tracking an object that’s been left behind; and alerting for something as simple as a camera being tampered with (i.e. vandalized or covered with spray paint). The most common type of video analytics is based on motion detection. When you’re managing several dozen or hundreds of cameras across a campus, the video management and security benefits of being able to sense or record only motion-triggered events is highly appealing. It heightens time and resource efficiencies.

An additional area generating a sizeable buzz and representing a potentially big upside for campuses is license plate recognition (LPR).

“We have talked with and worked with a lot of campuses that have this desire to identify license plates that come on and off their campuses,” says Kellick. “The use case is something happens and they want to be able to review all the vehicles that were on their campus at that time, or coming into the campus during that time period. However, although license plate recognition is talked about a lot, license plate identification ends up happening more. This involves human intervention to manually read the license plate, which is usually more appropriate for the budget constraints.”



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As indicated, access control to regulate who goes where when and with what level of authorization is also in high demand in campus situations. Tying it into the video piece further maximizes security and operational effectiveness and efficiencies. These solutions are usually in the form of cards/tokens and readers often used in conjunction with PINs, or increasingly biometrics. Visitor management is another popular offering, and radio frequency identification (RFID) is growing in its use, for both data/asset protection and human tracking throughout a campus.

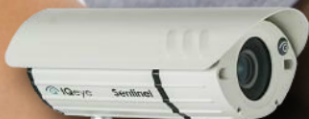
Shedding Light on Video Design

The needs assessment and site survey set the stage for designing a solution that meets or exceeds your campus customer’s expectations. Some of the key elements in the IP video plan should be the building(s)/grounds layout(s), intended purposes (i.e. detection vs. identification), lighting, and network capabilities and limitations (i.e. bandwidth, storage, redundancy).

“Understand the lighting. Sometimes you have to do site surveys at night to see how it will affect a camera image. You may have to add additional visible lighting or covert or semi-covert infrared lighting,” says Bradford. “Understand how much motion is going to be in a scene. Stairwells are going to have less motion than a lobby. Understand where you’re placing a camera and consider blind spots. Understand the horizontal field of view, as far as how many pixels per foot are you going to gain. Understand the lens coupled with the resolution of the camera and what benefits can be yielded from that combination. Understand the system’s impact on the network.”

According to Bradford, it can be prudent to exercise economy in deciding the number of cameras to install. He recommends speaking with the client about chokepoints, entryways and exits to, for example, see who’s coming and going and not necessarily attempting to capture everything that’s going on in the hallways. This approach also promotes an integrator’s honesty and concern for the client’s budget.

“At the end of the day, it’s understanding what you’re selling, what you’re installing, and the confidence will come through to your clients as you become that expert,” says Bradford.



Securing Your Most Precious Asset

IQinVision has been a trusted name in campus surveillance for over 15 years. IQeye cameras produce clear, high-quality video backed by comprehensive warranty programs, award-winning customer service and competitive pricing.

HD Megapixel IP Cameras | H.264 | Indoor and Outdoor | Audio | WDR | Built-in IR
| True Day/Night | Integration w/ Access Control | On-camera storage | Analytics
| ONVIF | Accessories

Committed to Exceeding Your Expectations

14-Hour/Day Live Support M-F | 6 Languages | 98% Documented Satisfaction Rating | Field Support Available | Knowledgeable and Courteous Support Staff | 100% Warranty Advanced RMA | 5-Year Warranty (Dome and 3 Series Cameras Excluding AZF Models) | 3-Year Warranty (Standard, Stick and Bullet Cameras) | MTBF Tracking | Research and Development | Software API and SDK Available for Partner Integration | Comprehensive Quality Control Protocols

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