

Door Security + Safety

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School Safety and Security

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IVC in spring 2022.

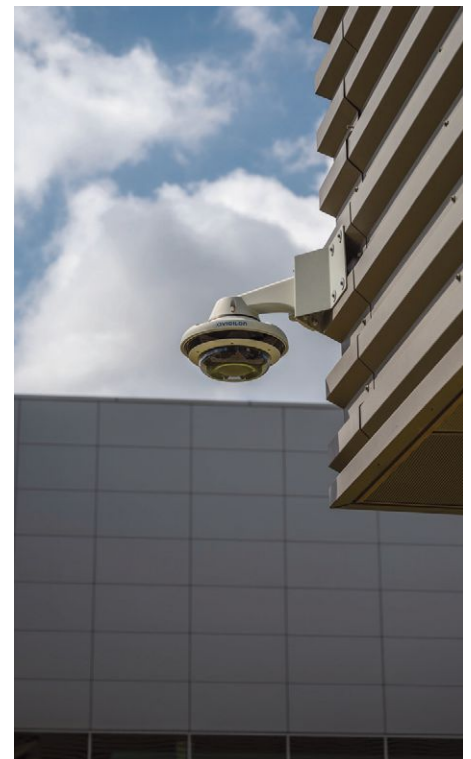
Community College Goes Keyless

Electronic security plan includes surveillance, duress system and automatic lockdown.

BY DAVID KIM

Irvine Valley College (IVC) is a liberal arts community college located in Orange County, California, just 40 miles south of downtown Los Angeles. IVC has an annual enrollment of nearly 13,000 students.

During the 2017-2018 school year, the IVC administration outlined a plan to become a fully keyless campus. The goal to transition all interior and exterior door locks to electronic locks connected them to BlueViolet Networks, a regional security and systems integrator that offered expertise in multiple areas of campus security.



Avigilon cameras mark and monitor outdoor spaces across the IVC campus.

PHOTOS COURTESY OF COOK & BOARDMAN GROUP, LLC. PHOTOS BY RANDY TOMA.

Over time, the college's project scope grew to include campuswide surveillance, a duress system and automatic lockdown capabilities. Work remains ongoing, though the result of the IVC campus security upgrades provides a snapshot of how modern technologies can revolutionize school safety from parking lot to classroom and every spot in between.

THE ACCESS CONTROL PIECE

Transforming IVC into a keyless campus would require upgrading over 900 interior and exterior doors that ranged between five and 40 years old. The campus was already using Allegion locks at every opening, which made the transition to Allegion electronic hardware and access control a natural choice for compatibility and convenience.

"We installed Motorola's access control for the campus because of its ability to accommodate every campus door with ease of use for the end user," says Sean Brown, Operations Manager at BlueViolet. "We went with Allegion's AD Series locks and mechanical locks throughout the campus to help with the cost of cabling, as well as product procurement to get the job installed in a timely manner."

To reduce costs, IVC identified certain campus doors, like to electrical and custodial rooms, which could be served by offline keyless locks. For these openings, IVC selected from the manually programmable line of Schlage digital keypad locksets.

COVERED WITH CAMERAS

A crime spike in the area made the need for campus-wide surveillance coverage a priority. After a handful of nearby incidents, students and faculty expressed concerns about new pay stations installed in parking lots, which criminals could easily target.

The solution was to cover the campus with a mixture of cameras, including 8-pro Avigilon surveillance cameras in the parking areas that would provide

amazing clarity even at great distances. For indoor spaces, fish-eye lenses were installed in lobbies and four- or six-megapixel dome security cameras in common areas.

"The parking lots presented challenges with getting cabling out to the cameras. For this, we reached out to a trusted wireless communication vendor to provide a foolproof wireless access solution to transmit video back to the campus," Brown says. "We also are using some of the world's most advanced software with Avigilon, which enables top-of-the-line search and tracking capabilities. With this technology, they can track any person or vehicle throughout the campus."

The fourth-generation Avigilon cameras designed by Motorola use a combination of facial-recognition technology and appearance search to perform the individual tracking capability.

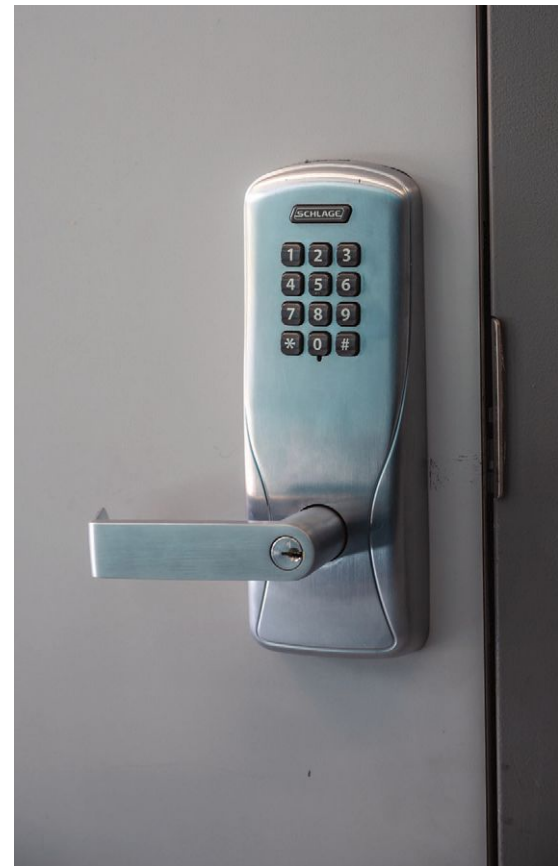
THE COVID-19 SITUATION

"No one ever would say COVID-19 was a blessing, but the empty school provided a window where our installation teams would have full access to every building on campus without working around class schedules, semester breaks or the time slots campus work is typically limited to," says BlueViolet Project Manager Jaime Briceno.

In early 2020, smaller crews were working on one building at a time and only at night. Once pandemic restrictions were established, BlueViolet took advantage of the opportunity by attacking on multiple fronts.

"At first, we thought the pandemic restrictions would only last eight months," says Lukas Rajnys, Project Manager at BlueViolet. "We increased our personnel on-site to make use of the time. My team increased to six door experts, three electricians and six technicians."

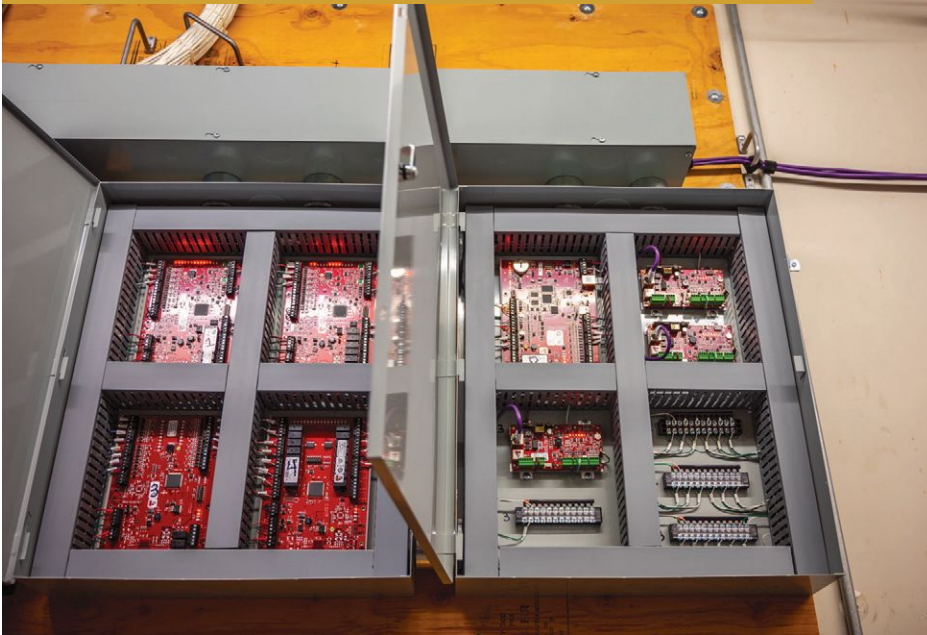
Other pandemic realities that crews dealt with were common COVID-19-related



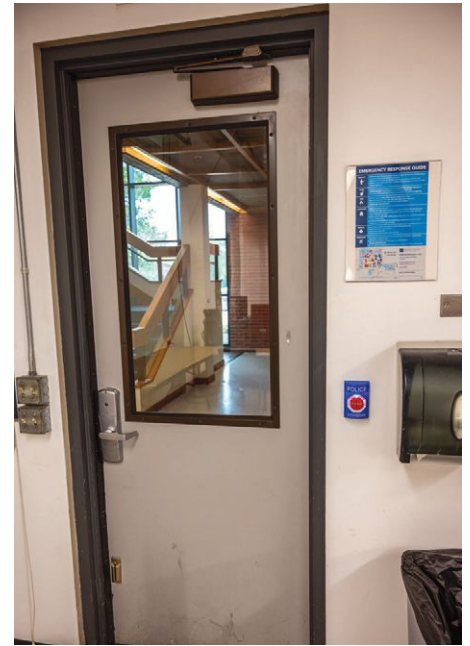
Schlage offline keyless lock with digital keypad.



Allegion's Schlage Access Control at Irvine Valley College.



Avigilon Mercury board and power supply.



The new duress system at IVC includes buttons, which alert police through wireless communication.

issues like long lead times, supply chain woes, and working around childcare schedules and quarantine timelines.

Once the eight-month mark passed without students returning to campus, budget concerns came into focus. IVC worked with BlueViolet to ensure they stayed within budget confines created by tuition shortfalls.

DURESS SYSTEM AND LOCKDOWN CAPABILITY

Keeping with the times means educational facilities must be prepared for the unthinkable. To keep the students and staff safe in the event of any worst case scenario, the administration decided to move forward with adding duress buttons to each classroom. They would add automatic lockdown capabilities that restrict movement by sealing off any or all campus buildings, including individual floors.

The duress system is a network of wireless buttons located in every classroom. Each teaching console includes a button that can be activated discreetly by the instructor in the event of an incident or emergency. On the wall by each classroom door is a second button that performs the same action: a notification is sent wirelessly to the school's security office and the local police department.

The system includes audio monitoring so authorities can immediately listen in to determine the level of threat. The audio monitoring capability helps the authorities take appropriate measures for locking down regions of buildings, whole buildings and even multiple buildings at once while mobilizing personnel for appropriate response and action.

ENTRUSTING CAMPUS SAFETY

"As Project Manager, I've been working with BlueViolet Networks for the past five years on two campuses on campuswide access control and security systems and hardware projects," says Anna Petrossian, LEED, AP, BD+C, Assistant Director of Capital Outlay Projects at IVC. "BlueViolet's work is impeccable. The company's understanding of working on campuses during instruction or pandemic, and on public campuses with shared governance, is outstanding. BlueViolet demonstrated excellent work, quality control, technical knowledge and a professional approach to all projects—and they have a very skilled and professional staff."

"We serve as the master integrator with IVC and are their main vendor. If you touch a door, we own that," Briceno says. "At times, we turn to our trusted network of subcontractors to provide the necessary expertise a specific job

component might require, though in the end it's our responsibility. BlueViolet supports the software, and we are responsible for the roughly 20 buildings on the main campus."

The result of the projects IVC and BlueViolet have completed provides a snapshot of how modern education facilities have evolved and a glimpse of what they will look like in the future.

"As we return to our campus in person, our expectations are that our advanced campus security technology will promote safety and security objectives, improve and modernize the user experience, and thus be a more attractive place to work and learn," Petrossian says. "Our security system allows us to apply immediate and effective remediation to protect and enhance preventative measures that became crucial for the greater good of society and the campus population." +



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