



ACCESS CONTROL IN SCHOOLS: A KEY COMPONENT OF CAMPUS SECURITY

Here's how schools can bolster physical security, safety, and cybersecurity with today's advanced cloud-based access control systems.

Preventing intruders from coming onto school grounds has received an unprecedented amount of attention recently, and for good reason. High visibility tragedies like the May 2022 Robb Elementary School mass shooting in Uvalde, Texas, as well as this spring's active shooter attack of the Covenant School in Nashville, Tennessee, are just some of the latest painful reminders that it is critically important for schools to bolster their access control and keep up with the latest security technology advances.

K-12 schools, however, have a long history of experiencing significant challenges in controlling access to their campuses. Some have card access systems that may have worked well 10 years ago but are no longer able to address current and evolving threats. Many others only have traditional locks that must be locked or unlocked by someone who is onsite with a key.

"The traditional image of the janitor with a giant key ring with 50 keys on it for every door in the school is unfortunately_something we still run into frequently," says Jason Kaveney, director of product management for Brivo, a provider of cloud-based access control. "What happens, heaven forbid, if an unauthorized person gets their hands on that keyring? Now they have access to any door in the facility."

When a master key ring is lost or stolen, school staff must re-key every door on campus, an extremely expensive and time-consuming endeavor.

Schools also often struggle to maintain, secure, and integrate the many systems they have on campus that tie into the campus access control system, such as employee and student databases, video surveillance and intrusion detection systems. Another challenge is that many schools don't have the technical and cybersecurity know-how to properly install or maintain security systems that are housed onsite. Add to that the fact that most K-12 campuses simply don't have the space to physically house on site all of the equipment and network servers needed to run today's advanced security solutions.

It's often wise to enlist the help of a trusted and reputable systems integrator/security dealer/reseller to help with the specification and installation of a new system.

Get Help from a Reputable, Qualified Systems Integrator

Addressing all of these issues is no easy task and requires an extensive amount of technical expertise. It's often wise to enlist the help of a trusted and reputable systems integrator/security dealer/reseller to help with the specification and installation of a new system. By partnering with a qualified contractor, a school or school district has someone who understands them intimately, their overall security needs, the campus layout, including where the doors are located, and more.

Most reputable integrators/dealers/resellers are also authorized dealers of the products they sell, meaning they meet a high level of qualifications and are certified

by product manufacturers. For example, access control manufacturer, Brivo, offers numerous training programs to ensure its resellers are certified technicians that deliver top-notch service to end users.

"This way, schools have the confidence that the person doing their installation is going to be doing the right thing and isn't just picking another product off the shelf and trying to stitch it all together without really knowing the details," says Kaveney.

Site Surveys Help Schools Select the Right Access Control System

Once a systems integrator or security dealer/reseller is hired, the next step is for them to work with school safety stakeholders to determine what access control upgrades are actually needed.

Very often an integrator can reduce the cost of the installation by conducting a site survey to determine what technology the campus already has that can be repurposed. For example, an integrator might determine it's not necessary for a school to upgrade all of its doors. Most K-12 campuses have at least a few doors that are infrequently used and don't need to be re-keyed.

For the school or school district that only has traditional locks, the systems integrator will most likely recommend the installation of an access control system because it offers so many benefits compared to a standalone lock system.

For example, when a card access control system is installed, if a staff member loses their card, the credential can simply be invalidated and the user can be issued a new card. This process is much faster and cheaper than re-keying an entire campus. Security experts have also found that card systems encourage school employees to better adhere to campus access control policies because these systems are much easier to use and more convenient.

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Cloud-Based Platforms Offer Many Benefits

Although traditional access control platforms are a big step up from standalone locks, they still have their issues. That's why many security systems contractors are now recommending cloud-based solutions because of the greater security, ease-of-use, and cost savings they provide.



Many security systems integrators recommend cloud-based access control because of the great security, ease-of-use, and cost savings they provide compared to on-premise access control systems and traditional, standalone locks.

In its simplest terms, the cloud is a collection of computer servers in data centers that are offsite, in many cases located all over the world. "The cloud" refers to the storing and accessing of data over the Internet as opposed to on-premise hard drives. If you use software and services that run on the Internet instead of locally on your computer, on computer racks on your campus or in your emergency operations center, you are using the cloud. Examples of consumer cloud services are Microsoft OneDrive, Dropbox, Apple iCloud, Netflix, Gmail, Google Drive, etc.

A cloud-based access control system ultimately does all of the same things that an on- premise access control system does, but it does so much more, including offering a rich environment for integrations and interoperability.

For example, traditional locks and older access control systems can't be remotely monitored. So, when someone props open a school's exterior door, if administrators are off campus, they have no way of knowing about it. However, with a cloud-based access control solution that is integrated with video surveillance, an administrator who is off-campus but has access to the internet or even a mobile phone, receives notification of the open door and can get more information about the situation by viewing campus

video surveillance cameras. This type of integration also enables administrators to conduct audits and investigations when an incident occurs or unauthorized users gain access to a facility.

Another benefit of the cloud is that it enables campuses to take advantage of the latest technology without needing to devote as many IT resources to its upkeep.

This reduces costs and IT staff workload.

"By using a cloud-based solution, it's always kept up to date when a new version of our platform is available," says Kaveney. "You don't have to go to all of your staff members' machines and say, 'Hey, I need to update this program for you.' It's all web based. It will update automatically."

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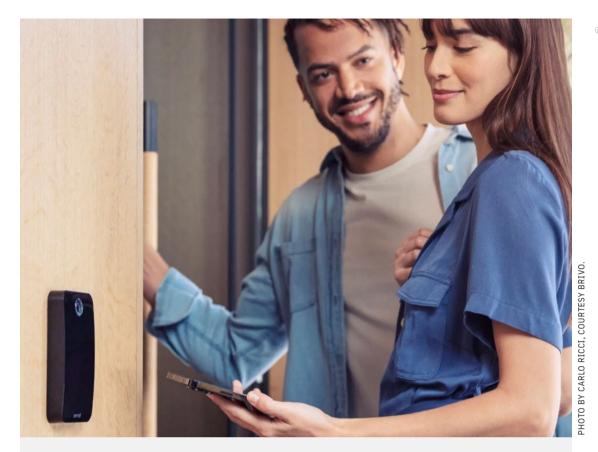
Scalability is yet another benefit of a cloud-based solution. A school or district only buys what it needs and can usually buy more capacity quickly when the need arises. In that same vein, many cloud-based solutions can be implemented on a piecemeal basis, so a school isn't forced to commit to a big upfront investment.

"We can get you started on a basic set of features, and it's very easy for you to then build on top of that as the school grows," says Brivo Lead Product Owner Joe Cunetta.

It's important to note, however, that access control by its very nature is on-premise. The onsite installation and maintenance of things like hardware, wiring, and batteries is normally done by the systems integrator/security dealer/reseller. Firmware updates and other services that can be sent over the internet, on the other hand, are delivered by the product manufacturer.

Mobile Credentials Augment Security, Convenience

A school's cloud-based access control system can be augmented even further with mobile credentials. With this type of credential, teachers and staff members download an app to their mobile phones so they can access a school, classroom, or other location by holding their phone near a reader installed on a door. Depending on the user's authorization status, the credentials allow or deny access via Bluetooth or Near Field Communications (NFC).



Mobile credential platforms make it easier for school administrators to add a new employee or delete a terminated employee. In some systems, vendors and visitors can also be granted temporary access to a school via email.

Mobile access control credentials are generally much more secure than traditional access control cards (mag stripe, proximity, or even smart cards) because people usually have their cell phones on them at all times.

"If you lose your phone, it's the first thing you notice, and you take immediate action," says Kaveney. "Compare that with your employee badge. Let's say you accidentally drop your badge in the parking lot on Friday afternoon and you drive home. You're not going to realize you've lost it until Monday. Not only that, you've lost it in a very public place. But, if the credential is on your phone, you would immediately realize you've lost it 15 or 30 minutes later when you arrive home... if not sooner."

Additionally, people are generally much less likely to share their mobile phones with their friends and coworkers. So, when campuses adopt mobile credentials, it reduces the unauthorized sharing of keys and key cards, which, in turn, reduces unauthorized entry.

Mobile credential platforms also make it easier for school administrators to add a new employee or delete a terminated employee. In some systems, vendors and visitors can also be granted temporary access to a school via email. That access automatically expires once a vendor's work is completed or the visitor's scheduled time on campus is up.

It's important to note, however, that often campuses issue both mobile credentials and physical badges because, in many cases, administrators want everyone on campus to display their identification so others can tell whether or not that person is supposed to be there.

Are Cloud-Based Systems Cyber-Secure?

Despite the many benefits of the cloud, some schools are still hesitant to make the switch. Their biggest concern is usually cybersecurity, especially with so many ransomware attacks happening right now.

However, cloud-based platforms are generally more secure than legacy, on-premise solutions because the cloud continuously delivers cybersecurity updates and software enhancements over the air. Additionally, reputable cloud-based solutions manufacturers take extreme measures to bolster the encryption of their systems. A well-qualified systems integrator/security dealer/reseller can assist schools in selecting the cloud-based solution that is the most cyber-secure for their application.

Another concern schools have with the cloud and systems that run over the internet is, "What if the internet goes down?" Fortunately, advanced cloud-based platform providers have designed their solutions so that they continue to function locally, even when there is no network connection.

Additionally, some manufacturers offer cellular modules that work when a campus experiences network issues.



It's also important to note that there are other security vulnerabilities with older door access control systems that do not really fall under the purview of cybersecurity but should also be addressed.

"If you are using a 10- or 20-year-old access control system today, there is a very good chance that you're using legacy 125 kilohertz proximity credentials," says Kaveney. "Those cards are probably the number one vulnerability your system has, even before servers or anything else that's available in the system. Those cards can be easily copied using a \$10 device you buy on the internet. They can be duplicated an infinite number of times, and there is nothing you can really do to stop that. So, before we even talk about cybersecurity, we need to talk about door security."

The Future of School Access Control Is the Cloud

Although onsite access control systems and traditional locks have been in existence for years, today's cloud-based platforms are delivering even more features and greater security than their older, on-premise siblings.

They are easier to learn and use, and today's top access control manufacturers are continuously working to make their systems even more user-friendly. This is particularly important in a tight labor market when there is so much campus employee turnover.

"We don't want to be an obstacle to customers," says Kaveney. "We don't want people to say, 'Oh, it's so difficult to work here because I have all of the challenges getting through the door,' or, "It's so difficult to be an IT administrator in this organization because you're also responsible for the access control system and everyone's confused.""

Installation and implementation are also getting easier, enabling schools to make better decisions more quickly during an emergency.

Today's advanced cloud-enabled access control systems allow school officials to evaluate a situation to determine if it is an actual threat or a false alarm. It can also provide them with the information they need to respond appropriately, regardless of the situation.

HOW BRIVO CAN HELP

An integrated security plan starts with cloud-based access control that connects all the tools needed to create a secure living and learning environment.

- Unified Security Platform: Monitor a single building, set of buildings (dorms, laboratories, sports facilities, etc.), or entire campus
- Integrated Video: Deter, detect, and verify to achieve real-time views of your facility
- Facility Lockdown: Shut down access from anywhere with the push of a button
- Visitor Tracking: Monitor and protect visitors, including parents, prospective students, and contractors
- Cost-Effective Security: Cloud and SaaS offer a low, predictable cost without the large upfront expense
- Health-Safety Tools: Monitor health and safety across campus.

An integrated security plan starts with cloud-based access control so you can connect all the tools needed for a secure learning environment.

Learn more about **Brivo solutions for Education**.



WHY BRIVO

Brivo, Inc., created the cloud-based access control and smart spaces technology category over 20 years ago and remains the global leader serving commercial real estate, multifamily residential and large distributed enterprises. The company's comprehensive product ecosystem and open API provide businesses with powerful digital tools to increase security automation, elevate employee and tenant experience, and improve the safety of all people and assets in the built environment. Brivo's building access platform is now the digital foundation for the largest collection of customer facilities in the world, occupying over 300 million square feet across 42 countries.

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