

Retrofitting School Safety With Virtual Networks

by John LeBoeuf

The shift from mechanical locks to electronic locks is transforming the industry, particularly in educational facilities.



The advantages of electronic access control (EAC) systems in educational facilities are numerous as they provide new options for security, safety and classroom management. However, older schools pose inherent challenges to most modern-day access control solutions because the original building infrastructure was never designed for wired and wireless locking systems. For most of these schools, setting up a networked access control solution typically is foiled by too many hurdles that create unfeasible budget constraints.

Not anymore.

Older schools across the country are converting to electronic locking systems using virtual networks that allow a seamless retrofit with minimal networking infrastructure. With this revolution in technology comes multiple benefits for students, faculty and administrators alike.

Common Threats and Access Challenges

The prevention of a school shooting is always at the forefront of any security conversation. But at the heart of what schools deal with daily are the challenges related to unauthorized access, theft and loss prevention.

“These everyday threats are why mechanical keys are rendered obsolete in today’s school environment,” explains Gordon Holmes, Product Manager at Hager Companies.

With the anticipated annual turnover of students and staff, a mechanical key system requires a sizable investment of time on the part of the maintenance team as well as the cost for the school to re-key those locking devices. Additionally, when a mechanical key goes missing – especially when it is a master key – the building’s security is at risk.



“There do not have to be nefarious reasons for a key loss,” Holmes observes. “Keys get misplaced all the time.”

The advantage of a virtual network system is that it is scalable – both to an institution’s needs and budget. For example, the virtual network equipment available today allows for the rapid upgrading of a classroom door from a mechanical lock to an electronic lock.

A virtual network allows information to be transferred to and from battery-operated standalone wire-free locks in areas where wired or wireless locking devices are not viable. Using a smart electronic credential (either physical or mobile) as a messenger, wired and wireless locking devices can communicate with offline locks.

Information such as access rights, low battery alerts, audits and deleted user lists can be transferred to and from wired or wireless readers and locking devices to the standalone locks.

This means that networked electronic access control can be used on door openings with no wired or wireless infrastructure. When working with a school district on a retrofit project, this is a tremendous advantage.

“In one example, we met with an East Coast school district’s representatives who were interested in exploring electronic access control,” says James Stokes, Director of Corporate Training at Hager Companies.

“During our discussions, they shared that a significant amount of money was allocated to key replacement each year, but they didn’t think they had the budget to start an EAC system. Once they saw a demonstration of what a virtual system could do, they understood the real value of retrofitting their building with an electronic access control system.” Stokes adds the school district representatives realized if they simply reallocated the money, they would never have to deal with re-keying doors again. For them, that was the deciding factor.

Another benefit of virtually networked EAC is the ability to provide flexible access to temporary users, who can take on many roles within educational facilities. School sports team coaches need access to facilities and equipment storage sheds. Parental groups, like the band boosters, need access to concession stands during games. School facilities, such as the gymnasium, are often used by other community groups during non-school hours. For these special uses, temporary access control can be issued for specific dates and times.

“An administrator can grant individual access while keeping others out, or use the scheduling feature to restrict entry during certain times of day,” Holmes explains. “It’s a smarter and more cost-effective approach to keep the school secure, rather than provide each person or group with a set of mechanical keys. In addition, because credentials hold the access rights, the maintenance crew never need to visit the offline locks to update them.”

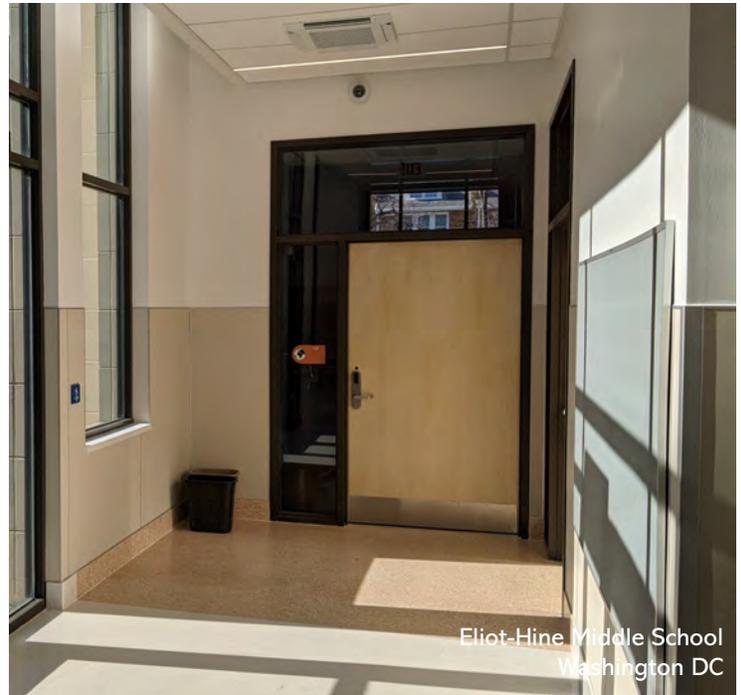
Evaluating Priorities

During the evaluation process, conduct a thorough conversation with the end user so you can provide a holistic evaluation of the property. School representatives often are not aware of the many options that electronic access control can provide, or that it is possible to retrofit a building using virtual networks. They are relying on your expertise to help them identify the best solution for their needs. Be ready to guide that conversation by asking the right questions:

- Where do you want access control? Will it be needed on other locking devices besides the traditional cylindrical and mortise locks and exit device trim, such as padlocks or locker locks?
- Is a solution needed for one building or multiple campuses?
- Are there any existing system considerations?
- What types of credentials are needed – mobile or physical?
- Who will manage the system?
- How involved are the IT staff in the security conversations?

One critical element of this process is to establish whether it is a short-term or long-term need or a blend of both. Often, you will find that you can marry short-term needs with a long-term goal.

One advantage of virtual networks in retrofit projects is they can be completed in phases. For example, in year one a school can focus on installing the wired components on the high-traffic perimeter openings. In years two and three, as the budget allows, wireless or standalone access control can be expanded to the interior of the building.



Evaluating the Solution

There are no one-size-fits-all solutions for access control, especially for school districts. Each district has its own unique set of concerns and budgetary limitations, which is why the end-user will rely on the door hardware industry professional to help them determine the best solution for their needs.

Positioning the Industry Expert

Security continues to be a top priority for school administrators, staff, students and parents. When older buildings need security upgrades and older construction techniques make installation of infrastructure difficult, be aware that virtual networks can help bridge the gap between the old and new.

Here are a few ways members of the door hardware industry can become leaders and help build that bridge.

- Be the solution expert that combines vast mechanical door, frame and hardware knowledge with electronic access control technology platforms. This will help you become the go-to retrofit subcontractor in your market.
- Combine pre-installation capabilities to deliver a turnkey electronic access control system. Sometimes, it is more cost-effective to approach the solution differently and do much of the commissioning before sending the components to the site. “We’re seeing distributors invest in pre-install capabilities,” points out Adam Bucko, Sales Director of the Western Region for Hager Companies. “This provides a clear competitive advantage, not just from a cost standpoint, but also by limiting the disruption on site.”
- Work on building strong relationships with school districts to drive future maintenance sales opportunities. When other opportunities naturally come up, you will already have your foot in the door.

“The goal is for the door and hardware professional to be seen as a critical component of the strategic planning process,” comments Stokes. “You want to be at the table, sharing your knowledge and guiding the client along, to help them make informed decisions that will achieve the level of safety and security they want – within their budget constraints.”

Older educational facilities that desire to move their security ecosystem to the next level can do so without the expense of hard wiring each opening. Virtual networks deliver flexible, convenient and capable security at a fraction of the cost of traditional wired systems.



John LeBoeuf is Business Development Manager
e: jleboeuf@hagerco.com

