

BRIVO E-BRIEF

Physical Security: Lock-and-Key vs. Cloud



Summary

From lock-and-key to on-premise computers to the cloud, physical access control has progressed to help businesses reduce risks while increasing efficiency, scalability, flexibility and convenience.

Level 1: Lock and Key

The lowest level of technology and security, dating back over 6,000 years, needs no explanation. A lock and key can still be a suitable solution for a small number of people and a small number of doors.



But as the number of doors you need to protect increases, so do the complexities of managing many keys for multiple locks. And what happens when someone loses a key – or a key is stolen? Changing locks and reissuing keys gets old – and expensive.

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none">✓ Easy to use✓ Low initial cost	<p>Rekeying is expensive, inconvenient</p> <p>Scalability severely limited: Many doors + many users = wild complexity</p> <p>Security challenges: Response to security threats is limited by physical access to doors; Must reclaim keys from former users</p> <p>No help for compliance: No audit trail of who entered</p> <p>Inflexible: Administrator must be present with key</p>

Level 2: On-Premise (computer) Solution

The next advance, the electronic on-premise solution, was a long time coming. Essentially, it's an electronic version of lock-and-key, with the lock now controlled by a computer server somewhere in the business, and the key evolved into a proximity card or key fob.



With these electronic credentials, you can not only track who has them, but also who's using them on which doors at what times. You can also revoke those privileges without having to physically take the card or key fob from the user.

On the other hand, instead of managing keys, you're now stuck managing and maintaining a complex piece of hardware and its wiring – not to mention keeping it updated and secure (do you trust your business to Windows 98?). And if you have multiple sites, that only multiplies the maintenance headaches.

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> ✓ Help in compliance: Individual entries and exits can be recorded for an audit trail ✓ More flexible: Guard or administrator at server can grant access 	<ul style="list-style-type: none"> Expense: Initial hardware investment is high, maintenance and upkeep is high Complexity: Have to locate server somewhere; Maintenance and expansion may require IT involvement Scalability is limited: Multiple sites require multiple servers, with attendant expenses and complexity Security challenges: Must keep software up-to-date against security threats; must make regular and secure data backups Flexibility limited: Guard of administrator must be on premises

Level 3: Cloud-Based Solution

Security administrators didn't have to wait nearly as long for the final evolution of access control, the cloud-based solution.

Cloud-based access control delivers all the benefits of an on-premises solution while minimizing its limitations. It's a simpler, more convenient and more flexible solution – just like other cloud-based services like banking, email, work collaboration and document management.



Now you're able to secure and control multiple locations from a browser or mobile device, revoke access credentials whenever it's needed, and view live or recorded video from any facility, regardless of location.

Ultimately, this flexibility means greater facility security as well. With a cloud-based solution, an administrator can respond quickly to any security event at any facility anywhere in the world.

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> ✓ Low Expense: Minimal hardware investment; minimal ongoing maintenance ✓ Simpler to Install and Operate: No servers to house; minimal IT involvement ✓ Unlimited Scalability: Add doors, offices, building, sites in any number, anywhere in the world ✓ Improved Security: System security and software always up-to-date; data securely backed-up and stored; Credentials can be granted and revoked anywhere, immediately ✓ Improved, simplified compliance: Individual entries and exits are recorded for audit trail, can be linked with recorded video ✓ Unlimited Flexibility: Administrator can secure or open doors at any facility from anywhere via browser or mobile device; security functionality and data available for import/export via API 	<p>Perceptions: People tend to associate "cloud" with a loss of control</p>