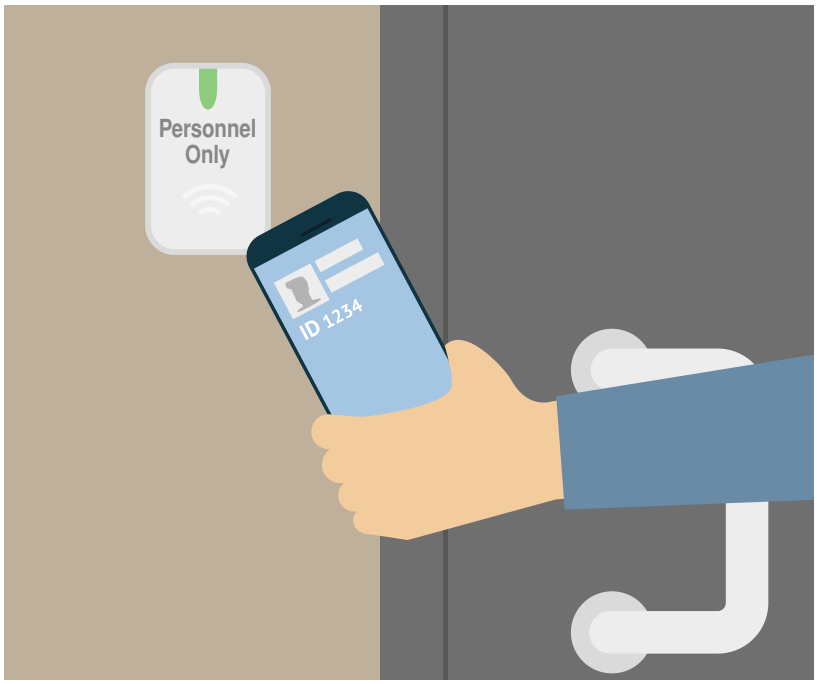
Virtual Credentialing Can Eliminate Headaches for Facility Managers

By Gorm Tuxen



Technological breakthroughs are happening so frequently today that it can be difficult to keep track of them and easy to take them for granted. This is particularly true for cellphone technology. It seems that there's a new "life-changing" app introduced just about every week.

While most new apps don't live up to the hype, one recent innovation promises to make life easier for facilities managers and their tenants. Virtual credentialing (also known as "mobile access") allows developers and property managers to provide a safer and more convenient environment, while significantly cutting their development and management costs. Virtual credentialing platforms allow people to access buildings and areas within buildings using their personal smartphones, rather than keys or physical credentials. The technology can be used for both staff and tenants, and it doesn't require any special capital investments for keys or ID badges. Just hold up your phone near a reader and you are in.

Why is virtual credentialing a big deal? The benefits to tenants are obvious: Smartphones are everywhere, and most people always carry one with them. People are much less likely to lose their phones than their keys, and when they are lost, "find my phone" services can generally help recover them. For residents of condominiums or employees of businesses in a development, virtual credentialing provides extraordinary convenience.

There are also important advantages for developers and facilities managers, particularly those with large properties. The cost of setting up tens of thousands of keys for business tenants, in terms of both time and money, can be daunting. And when one tenant moves out and another moves in, the process repeats itself. With virtual credentialing, access can be arranged with a simple keystroke. Lost keys are no longer an issue (particularly the expense of replacing keys or other credentials), because with virtual credentialing there's no physical element to lose. In addition to making management much simpler, virtual credentialing can save thousands of dollars a year.

HOW DOES VIRTUAL CREDENTIALING WORK?

Most virtual credentialing platforms rely on Bluetooth to make the phone communicate with a reader that's located next to a door, or perhaps built right into the door lock. Bluetooth Low Energy (BLE) enables devices to communicate automatically, without requiring manual pairing. Because Bluetooth can generally communicate from several feet away, the technology offers sufficient bidirectional bandwidth to set up a secure connection. While other technologies, such as Near Field Communication (NFC), can manage mobile access, BLE is the technology of choice because it has much longer range. Plus, most

users are already familiar with Bluetooth, so it's easy to use and there's no learning curve. Finally, BLE is supported on most Android handsets and iPhones.

Virtual credentialing platforms utilize a cloud-based service to forward a unique number, called the "identifier," to the platform apps. This number is then sent to one or more readers or locks. Remember the old days when you needed to call a locksmith to change the locks if a tenant lost a key? Not anymore. Now, you can just wirelessly send a new number to change the access data for whichever locks are impacted.

Obviously, being able to change access data when necessary is an important security advantage. However, the security doesn't stop there. Mobile-access control platforms also promote security through the use of encryption to secure the communication between the cloud-based server and the smartphone, as well as between the smartphone and the mobile-access control reader associated with a particular lock. Encryption keys are used to authenticate the identity of the smartphone and its user, and virtual credentialing is just as secure as the RFID (radio-frequency identification) cards that are commonly used to manage entry into high control areas in public safety facilities, schools, laboratories, and other buildings where security is vital.

A virtual networking system is also easy to install. While there's an initial cost to mount specialized readers and access the necessary software, the technology should rapidly pay for itself by eliminating the need for keys (and replacement keys when they are lost).

STEPPING INTO THE FUTURE, TODAY

Most of us have grown accustomed to using our mobile phones to perform a variety of tasks in addition to making telephone calls. We use our phones to access the Internet, keep an eye on the weather, communicate with friends, and do many other things throughout the day. Now virtual credentialing offers facilities managers an exciting, secure, and cost-effective way to better manage how staff and tenants access their buildings and complexes.

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