

Employers Mutual Casualty Company (EMC)



Des Moines, Iowa

Mutual Insurance Leader EMC Protects Its Leadership Position with Johnson Controls and HID

As a mutual insurance company, Employers Mutual Casualty Company (EMC) serves policyholders and independent insurance agents and prides itself on comprehensive protection, superior service, and financial stability.

In 1995, EMC built a 20-story corporate office building in Des Moines, Iowa. EMC worked with Johnson Controls, a security systems integrator, to design, install, and service their building equipment and security. At that time, they installed a Westinghouse system for access control, an IFC fire alarm system, and a Metasys® building automation system.

Fifteen years later, the security system was basically the same as when it was first installed, it was in dire need of an upgrade in order to perform the functions EMC needed.

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Scott Gooch
EMC
Control Center Supervisor

Challenges

As an established leader in the insurance industry, EMC has the responsibility to have a secure access control system twenty-four hours a day, seven days a week. As a standard aspect of its business, the company has files containing personal and confidential information. The office building also houses a law firm, so EMC is obliged to keep this tenant’s confidential client files secure as well. To help maintain its leadership position, EMC needed to update its security with the latest technology and resources.

“Our security system was definitely the weakest link of our systems,” said Scott Gooch, control center supervisor, at EMC. “The highest-risk system was the card access and security.”

Upgrading the Westinghouse system was not an option. Support was almost extinct because Westinghouse had moved on to newer systems. In addition, Westinghouse stopped making the older system’s field devices, so if EMC added any buildings, the Westinghouse system would not support it. As the Westinghouse security system became obsolete, EMC feared that it may become vulnerable to security risks.

EMC needed a new access control security system that could eliminate security risks now and serve the company well into the future. The company started searching for a security system that would support its whole corporate campus: six buildings, two parking lots and one parking structure in Des Moines, and an additional building in Ames, Iowa.

Genuine HID™ Products / Technologies:

- iCLASS® R40 Readers
- iCLASS® R90 Readers
- iCLASS® Contactless Smart Cards



Solutions

EMC naturally turned to their trusted systems integrator of more than 30 years, Johnson Controls, for expertise. Johnson Controls worked with HID Global to create an ideal solution for EMC.

“HID was a natural choice,” said Troy Marshall, of Johnson Controls. “HID products have a widespread reputation throughout the industry for high quality and flexibility.”

By contrast, a significant issue with the previous system was that only proprietary Westinghouse cards and products could be used. The interoperability of HID Global’s products allows EMC to use a variety of card technologies and not be tied to one supplier.

And while the Westinghouse system could provide location-based authentication, it required the addition of multiple readers – one for entering and another for exiting – it was cost prohibitive to do this with the existing system.

Johnson Controls recommended solutions that would alleviate the limitations of EMC’s previous system: The P2000 security management system integrated with iCLASS®/Prox combination cards with HID readers, iCLASS R40 readers for buildings and iCLASS R90 long-range readers for parking garages.

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Installation/Implementation

To make sure the entire campus is secure at all times, the joint Johnson Controls and HID solution was installed in phases over eight weeks.

Johnson Controls installed an access control system that encompasses the entire campus. 160 of the R40 readers, which have 64-bit authentication keys, and require matching keys to function. All RF data transmission between the card and reader is encrypted using a secure algorithm. These readers also have custom keys that provide the highest level of security, with cards and readers that are uniquely matched to individual sites or customers. These are non-interchangeable—specifically important for EMC’s multiple sites.

To keep the two parking structures secure, EMC went with 12 of the R90 readers from HID Global. These readers combine the longer read-range of contactless technology with the power and heightened security of smart card technology. The R90 readers make access control at EMC more powerful, more versatile, and most importantly, offer-enhanced security for EMC’s parking sites through encryption and mutual authentication.

While the new readers were being installed, EMC simultaneously took photos and made new badges for 1,800 employees. For less than four weeks, some employees had to carry both their old and new badge, but otherwise day-to-day operations were barely disrupted during the installation. The 1,800 new photo badges were printed over one weekend using two printers on site and distributed to employees over the following two weeks.

These photo badge cards recommended by Johnson Controls for EMC are HID Global’s iCLASS contactless smart cards. Optimized to make physical access control more robust, EMC’s new 32-bit photo badge cards provide high-speed, reliable communications with high data-integrity to further secure the company’s campus.



With field programming, it's also easy to add or subtract employees, or change their access. This way, someone in corporate security in Des Moines can program a card for someone in Ames, or anywhere else within the system. EMC also has the ability to add applications to the cards, including cashless vending, time/attendance, and logical access.

The entire installation of the new integrated security system was completed within eight weeks.

Leadership Protected

With the Johnson Controls access control system in place, the security of EMC staff, buildings and everything they contain has greatly improved. All of the system's information is centralized in an environment that uses current technology.

"The most significant return on our investment is the cost-avoidance strategy," said Gooch. "We wanted to proactively replace the security system rather than wait for a catastrophe."

The Johnson Controls and HID solution also integrated securely with the IT backbone already in place at EMC. Since the field network controllers are IP addressable, EMC can easily add controllers wherever the security system network expands.

"Because of this integration, lots of hours of labor are no longer necessary," said Gooch. "The system is extremely dynamic now--I can put a controller in my office or one in another location across the nation and be done. It's that simple."

Employees are also seeing an immediate benefit from this new technology – the elevators are faster. Upon entering the elevators, the iCLASS® photo badge is automatically read and gives secure access to the floor they need. With the old Westinghouse technology, employees had to wait for the reader to verify the cardholder and then grant employees access to a specific floor.

"It's unusual for employees to experience the benefits of a new security system," said Gooch. "They know they're more secure, but every time they get on the elevator they experience how much better our technology is now."

With iCLASS technology in place, applications are easy to add, and iCLASS smart cards do a lot more than just open the door. In the future, when an employee enters a building after hours, the HVAC and lighting systems associated with that employee's office will automatically turn on. EMC also plans to integrate the cards with the CCTV system for video authentication and with the VoIP intercom, as well as manage visitor security. The company will utilize all these upcoming applications with one smart card.

In just eight weeks with minimal business disruption, EMC dramatically increased security for 1,800 employees, six office buildings and two parking structures. Next, it will expand the system to its 17 branch offices across the country, from Providence, RI to Phoenix, AZ.