

## Trading up with Axis video encoders.

Chicago's McCormick Place sees greater surveillance control over tradeshow and events with Axis video encoders.



**Organization:**  
McCormick Place

**Location:**  
Chicago, Illinois, USA

**Industry segment:**  
Stadiums and venues

**Application:**  
Safety and security, loss prevention

**Axis partners:**  
Johnson Controls,  
Milestone Systems,  
Briefcam

### Mission

McCormick Place, the largest convention facility in North America, had been using analog surveillance equipment for more than 25 years. All that changed when they opened the state-of-the-art West Building in 2007. The new exhibit hall boasted more than 300 advanced Axis network cameras covering 800,000 square feet of space. Noting the contrast between the analog and IP-based systems, the convention center began looking for a way to increase the performance of their legacy investment and integrate it with their new digital technology.

### Solution

With the help of Johnson Controls, an Axis National Systems Integrator partner that provides building security services for McCormick Place, the venue used Axis video encoders to network-enable hundreds of analog cameras in the North and South Buildings and the Lakeside Center.

Once the video streams were digitized, the analog cameras could be managed under the same Milestone XProtect® Enterprise video management software (VMS) as the new, high-resolution Axis network cameras.

### Result

Even with reusing their existing analog cameras, the video resolution delivered by the Axis encoders far exceeded the image quality security was able to get from its old DVRs. With clearer forensic evidence from their analog cameras coupled with high-resolution video delivered by new Axis cameras, the staff has been better able to investigate incidents and prosecute offenders. Additionally, with an all-IP backbone, McCormick can now utilize more advanced analytics, such as BriefCam® Video Synopsis® software, to compress hours of video into a minutes-long synopsis.

**“The Axis encoders increase the resolution we’re able to get from our old analog cameras, giving us more actionable details about offenders such as distinct facial features and uniform insignias.”**

Frank Solano, Security Systems Engineer for SMG, management company for McCormick Place.

### When one head is better than two

McCormick Place is a bustling hive of tradeshow activity. A typical convention attracts 10,000 to 12,000 attendees, and a big tradeshow could draw as many as 100,000. During its busiest season, McCormick Place might be hosting up to four different conventions simultaneously. The security team must remain alert to keep the thousands of attendees and vendors safe.

When McCormick Place opened its West Building, the convention center’s footprint increased to more than 2.5 million square feet. Though the new wing was equipped with the latest Axis IP surveillance technology governed by Milestone XProtect® Enterprise VMS, the rest of the facility remained reliant on legacy analog cameras attached to DVRs running a separate VMS.

“It was ridiculous to have control room operators looking at two different software interfaces to view video,” said Frank Solano, Security Systems Engineer for SMG, the management company that oversees McCormick Place.

SMG decided to integrate all the cameras into a single system. They retired their DVRs and network-enabled existing analog cameras with one-channel AXIS Q7401 Video Encoders and four-channel AXIS Q7404 Video Encoders. The digitized video from all cameras now streams live to a massive video wall in the convention center’s 24/7 command center. They are also able to store additional video footage in their Dell Quad-10 servers for later retrieval.

### A better alternative to “rip and replace”

The Axis video encoders offered a way for McCormick Place to extend the life of its analog investment and provided several added benefits.

“The big clincher for us was resolution,” Solano said. “With the DVRs, we couldn’t get anything better than 4CIF [704x420] from our analog cameras. With the Axis encoders, we can tweak resolution and frame rate for the cameras in the Milestone VMS to achieve much higher image quality within the bandwidth we’ve allocated for video traffic.”

### Remote management and video intelligence

Using AXIS Camera Management software, security engineers can remotely diagnose and troubleshoot all equipment, including analog cameras, as well as make configuration changes to ensure that surveillance traffic does not affect other network activity.

Because the IP system is based on an ONVIF open standards platform, McCormick Place can now leverage sophisticated video analytics across its entire hybrid surveillance network. For instance, BriefCam Video Synopsis software compresses hours of video into just a few minutes enabling security to focus quickly on the key footage. BriefCam is integrated fully with the Milestone XProtect® Smart Client interface.

According to Mark Eggerding of Johnson Controls, “The 60:1 compression ratio helps McCormick Place security discover patterns and sometimes forestall incidents of property damage and theft.”

### A massive transformation in convention surveillance

With such a massive venue to protect, McCormick Place is continuing to expand their use of Axis network cameras. AXIS P5532 PTZ (pan/tilt/zoom) Network Cameras monitor the lobby while 1080p HDTV resolution AXIS Q6035 PTZ Network Cameras watch the busy general concourse. For offices, utility closets and liquor storage cabinets, Johnson Controls installed 720p HDTV-quality AXIS M1054 Fixed Network Cameras, and uses pinhole-sized AXIS P1204 Network Cameras with HDTV video for covert surveillance.

“With manpower alone, it would take an army to keep the buildings secure and provide a safe environment for our exhibitors, attendees and employees,” Solano said. “That’s why our surveillance cameras are such vital tools. The more eyes we have on the exhibit floor, front of house, corridors and back hallways, the more vigilant we can be.”

