

Wild about safety.

Elk Island National Park employs Axis network cameras, speakers, and gate/door controllers to maintain a positive wildlife experience for all.



Organization:
Elk Island National Park

Location:
Fort Saskatchewan,
Alberta, Canada

Industry segment:
Government

Application:
Safety and security

Axis partner:
LSR Solutions

Mission

When Elk Island National Park embarked on its latest 10-year management plan for maintaining healthy animal populations and diverse ecosystems, it also decided to upgrade its security system to better protect visitors, staff and high-value remote assets. Park managers were looking for an integrated technology solution that could help them deter vandalism and theft, simplify credentialing of seasonal staff, and identify individuals breaking park rules and regulations.

Solution

To accommodate the distance between locations and the challenging terrain, LSR Solutions, a surveillance systems integrator and an Axis Application Development Partner, created a fibre and wireless network that could stream video and trigger alerts from multiple security devices across several kilometres. Twenty Axis high-resolution network cameras, deployed at key locations throughout the park, stream video to an AXIS Camera Station video management system where the footage can be viewed live and archived for forensic review in case of incidents.

By customizing integration between Axis network gate/door controllers, Axis I/O modules, Axis network speakers and third-party alarm panels, the integrator created a more secure and manageable system for daily opening and closing of buildings, entrance gates, and kiosks. Lastly, to spot suspicious individuals at night, LSR Solutions installed an Axis network radar detector at the equipment yard that signals an Axis pan/tilt/zoom camera to record activity when motion is discovered.

Result

The wireless network finally gives park management the ability to proactively live monitor the beach and remote parking lots to identify vehicles and individuals causing mischief or acting recklessly. In one instance, the Axis cameras captured distinguishing details about several vehicles racing through one of the parking lots late at night, which officials then shared with local law enforcement. Instead of spending days inputting seasonal employee credentials at each location, management now uses a centralized door access database to add credentials for the whole park in just a few minutes.



Conserving the wildlife of Canada

Less than an hour from the bustling capital city of Edmonton, Alberta, lies the picturesque wildlife refuge of Elk Island National Park. The 194-square-kilometre park is haven to herds of plains and woods bison, elk, deer, and moose along with coyotes, beavers and more than 250 species of birds. During high season, the park attracts upwards of 500 visitors per day on weekdays and over 2500 per day on weekends. In addition to wildlife watching, summer visitors can enjoy hiking on over 80 kilometres of trails, biking, canoeing, picnicking, overnight camping and other activities. In winter, visitors can ski and snowshoe along trails or across Astotin Lake.

Concern about how they could better protect all the people-facing operations of the park led administrators to re-evaluate their current security system. "When we undertook an internal security audit for Elk Island, we knew upgrading our camera system had to be part of the program," says Mark McIntyre, Asset Manager for Elk Island National Park.

McIntyre initially contracted LSR Solutions, an industrial surveillance integrator and Axis Communications software development partner, to help them improve surveillance and security at the Visitor Centre. That first project became the jumping off point for a series of interconnected security solutions at various touch-points within the park.

A new approach to Visitor Centre security

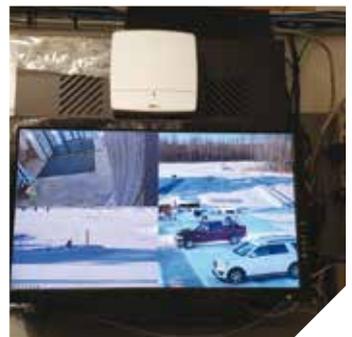
To meet McIntyre's goals, LSR Solution engineered a unique alarm system that integrated Axis high-resolution network cameras with an AXIS Camera Station video management system (VMS), an Axis network door controller, an Axis I/O module, an Axis network speaker and a third-party alarm panel. With the new system, when staff unlock the building in the morning, the camera detects motion and triggers a speaker to announce that the person has 30 seconds to enter their passcode into the door controller. If they fail to respond in time, the camera sends an alert to management that there is a security breach they need to address. At the end of the day, staff reset the camera motion alarm with their passcode before locking the building.

"The benefits of this system are multifaceted," says McIntyre. "I now receive notifications when the system is activated or deactivated or if motion is detected overnight. With the audible alerts from the speakers the system meets the emergency dispatch requirements set by the Parks Canada agency that oversees all of Canada's national parks."

McIntyre noted several other advantages to this innovative solution. "Now we can monitor the Centre's souvenir area which helps us with loss prevention and deters visitors from damaging the displays," says McIntyre. "And having surveillance cameras on the outside significantly improves staff safety and peace of mind." Before leaving the building at night, staff now check the cameras to see if any people or vehicles are lingering around the premises.

Protecting staff

The next project was to enhance security at other transaction locations in the park. In addition to Axis surveillance cameras, LSR Solutions installed Axis network door controllers at the park's three entrance gates, beach concession stand, and campground kiosk to ensure only authorized staff would have access to the structures. Staff key in their passcode at the door controller to lock and unlock the door. For added security, LSR Solutions installed panic buttons in these booths that staff can push in case of emergency or duress to send an alert to the park officials that assistance is urgently needed.





"Having cameras at the entrances also allows us to easily check vehicles entering the park after hours," says McIntyre. "This can provide a critical piece of evidence should an incident occur when the park is closed to visitors."

Managing credentials centrally

Elk Island relies heavily on temporary help to staff its operations during the high season. In the past, managing and updating credentials for all these people was very labour intensive because each building had its own independent alarm panel which had to be programmed separately for each employee's access code and security level. When LSR Solutions integrated Axis network door controllers at these locations, they were able to streamline credentialing through a centralized database using AXIS Entry Manager, a built-in web-based application. Now the operations manager can easily revise credentials, add and delete staff, and export that updated information to the door controllers over the network with a few simple keystrokes.

"We really streamlined their ability to add and remove staff from their system," explains Byron Plumptre from LSR Solutions. "It used to take them up to two weeks to key in all their new employees for the season. Now they can do it in a matter of minutes."

Protecting high-value assets with intelligent cameras and radar detection

The next task was to address security for the Park Operations and Administration Buildings and surrounding yard. After installing the same door alarm configuration used at the other buildings, LSR Solutions mounted an Axis network door controller and intercom at the entrance gate to the property to prevent intruder theft of fuel from the fuel depot, vandalizing maintenance equipment, or stealing small equipment vehicles and other high-value assets.

"Because the gate entrance and the buildings are 200 metres apart from each other, we use high-frequency radio communications between them," says Plumptre. "We integrated this wireless network into the overall security system so park administrators could remotely manage credentials for these areas' door controllers like they do all the others."

Stepping up safety at beach and theatre

The most challenging location to secure was the Astotin Lake recreation area and beach, which includes the Astotin Theatre and beach. For this set up, LSR Solutions used high-powered wireless communications to stream video and door alerts back to the Park Operations building.

Even in inclement weather, such as rain, snow or fog coming off the lake, McIntyre receives crystal-clear images of activity around the theatre, parking lot and beach from 2.6 kilometres away.

Banning bad behaviour

"I think the biggest benefit of the Axis network security cameras and other technology is the sheer deterrent factor," says McIntyre. "Seeing the cameras and hearing the messages from the speakers makes people think twice about behaving poorly."

If that disruptive behavior persists, "We'll catch them in the act," says McIntyre. For example, there was an individual who kept rummaging through the park's trash bins searching for bottles and cans and leaving a mess behind each time. "We caught him multiple times on camera and were able to identify him and pass the information along to the police."

In another instance, the Axis network cameras caught several vehicles racing and doing donuts in the parking lot late at night. Since the cameras were equipped with AXIS Lightfinder technology that enables full-colour recording in extremely low light, park officials were able to identify the vehicles by their license plates and pass the information to the police.

Creating a holistic approach to security

McIntyre applauds the reliability of the Axis technology and how easy it is to use, especially for the constant turnover of temporary staff. He already has plans in the works to expand the security solution to other buildings in the park and to improve operations at the entrance gates by monitoring incoming traffic.

"We want to be a good neighbour to the surrounding community," says McIntyre. "We plan to use queue analytics in the gate cameras to detect when the line of vehicles is stretching too close to the highway. When that happens, it would trigger a message over an Axis network horn speaker that would direct drivers to a less congested entrance."

Using Axis technology to keep safety and security in the forefront ensures that Elk Island National Park continues to be a magnificent wonderland for everyone to enjoy.

"At first our staff was apprehensive about the Axis cameras and other security technology. But now they realize we put it there for their protection and to help us ensure that all our visitors have a positive and safe experience in our park."

Mark McIntyre, Asset Manager for Elk Island National Park.



Parks Canada
Parcs Canada



LSR Solutions Inc.
INDUSTRIAL SURVEILLANCE EXPERTS

About Axis Communications

Axis enables a smarter and safer world by creating network solutions that provide insights for improving security and new ways of doing business. As the industry leader in network video, Axis offers products and services for video surveillance and analytics, access control, and audio systems. Axis has more than 3,500 dedicated employees in over 50 countries and collaborates with partners worldwide to deliver customer solutions. Axis was founded in 1984 and has its headquarters in Lund, Sweden.

For more information about Axis, please visit our website www.axis.com.

For more information on Axis solutions, visit www.axis.com
To find a reseller of Axis products & solutions, visit www.axis.com/where-to-buy

©2020 Axis Communications AB. AXIS COMMUNICATIONS, AXIS, ETRAX, ARTPEC and VAPIX are registered trademarks or trademark applications of Axis AB in various jurisdictions. All other company names and products are trademarks or registered trademarks of their respective companies. We reserve the right to introduce modifications without notice.

