



Mobile DVRs Go Undercover with London Police

Wireless Integration Gives Detectives Remote Access to Video 24/7

DETECTIVES with a large municipal police force in Canada have deployed a powerful new tool for expediting criminal investigations and collecting evidence to help put lawbreakers behind bars.

The London Police Service, responsible for law enforcement in London, Ontario, a city of 348,000 located 185 kilometers (114 m) west of Toronto, is using wireless-enabled March Networks Mobile DVRs (MDVRs) for the lawful conduct of video surveillance.

According to Rick Gillespie, detective superintendent of the service's Criminal Investigation Division (CID), the March Networks system is easy to set up, efficient to use and provides high-quality images that are more likely to be accepted as evidence in court.

The March Networks™ 5308 MDVR with optional wireless capability was designed for use in harsh, mobile applications such as bus and light rail transit systems, and first responder vehicles. The London Police Service originally had a slightly different application in mind, but came to the conclusion that the system was exactly what they were looking for.

High quality

The VCR-based video equipment that detectives previously relied on for video surveillance was notorious for capturing grainy images, says Gillespie.

“There have been many cases where we went to court with video evidence and the judge said, ‘That picture doesn’t prove anything. The quality is so poor.’ So, it was important to upgrade to a system that would provide us with very high quality images.”

The March Networks 5308 MDVRs operate on the high-bandwidth Bell Canada 1X wireless data network, allowing detectives at police headquarters to remotely view live or recorded video and download clips from MDVRs deployed anywhere in the police service's extensive jurisdiction. The units also feature a removable hard-drive that allows users to archive all recorded video by simply unlocking and removing the old drive and inserting a new one.

London police use March Networks DVR Viewer software to control pan-tilt-zoom (PTZ) cameras remotely, allowing them to record a moving target and zoom in for a close-up of a suspect or a vehicle's license plate. Using the system's motion detection capability, they are able to trigger recording when there is activity within a user-defined area of the camera view.

“There have been many times in the past when we wanted to do surveillance but we couldn't get an officer close enough to install a fixed camera,” says Gillespie. “With the mobile DVR system connected to PTZ cameras, we can conduct surveillance in places we couldn't access before.”

Managing resources

Jeff Craigmile, London Police Service supervisor of system analysis and programming, says the MDVRs help detectives allocate their resources more efficiently.

“Video surveillance will quickly tell us whether or not there is criminal activity at a site. If there isn't, then we can redeploy our resources. If there is something suspicious going on, the system will provide us with

evidence to build the case and go forward that much more quickly.”

Craigmile is impressed with how easy it is for detectives to set up the system.

“We realized early on that the March Networks MDVRs were going to be very easy for investigators to use. All they have to do is take a configured unit to a target site, plug it in and it’s ready to go.

“There’s significant time savings as well,” he adds. “With our older surveillance equipment, an officer might waste up to an hour on the way to work in the morning to change a tape. Then, in the evening, he might have to put in an hour of overtime to change it again. We’ve eliminated all of that driving and tape-handling with the mobile system.”

Admissibility of video evidence in court was another key requirement, notes Craigmile. The March Networks MDVRs are not only able to provide high quality images but also conform to generally accepted standards for video authentication, digitally sealing the video images and date and time stamping them to verify that the evidence has not been altered.

Bill McKaig, a detective constable specialist with CID, was trained to configure and operate the systems. He, in turn, teaches detectives how to operate the PTZ controls, download video clips and perform other basic functions.

Cost-efficiency

The London police acquired the MDVRs last year and put the systems to the test at the Ontario Summer Games, which the city hosted in August 2004.

“The Games organizers were concerned about all of the equipment that was going to be left out in the open overnight at the venue for canoeing and rowing, so we set up a mobile DVR at the boathouses and monitored the site from police headquarters as part of our initial testing of the equipment,” recalls Gillespie.

“It gave the Games co-chair tremendous peace of mind to know that we could keep an eye on everything remotely, because there was no budget to hire security to watch skulls sitting on a shore overnight.”



The London Police Service's (from left to right) Bill McKaig, Detective Constable Specialist with CID; Rick Gillespie, Detective Superintendent with CID; and Jeff Craigmile, Supervisor of Systems Analysis and Programming.

While the MDVR systems will be used primarily to gather evidence in criminal investigations, Craigmile sees a wide range of possible applications.

“We have already used the system to help provide cover for an undercover officer in a location where backup officers could not get close enough without risking detection. The equipment provided us with good quality images of the undercover officer, which we could view from a distance while maintaining our investigative integrity.”

Additional applications are sure to surface, agrees Gillespie.

London Police Service

For 150 years, the London Police Service (www.police.london.ca) has safeguarded the community of London, Ontario (population 348,000), and is currently responsible for law enforcement over a 422-square kilometer (163-sq m) area. The service employs more than 530 sworn officers, 165 civilian staff and 19 cadets, and operates with an annual budget of \$52 million.

The London Police Service is recognized nationally and internationally for its progressive use of technology. It won an Innovation in Technology award from the International Association of Chiefs of Police (IACP) in 2004 and an ITX Technology Excellence award from CIO Canada magazine in 2000.

Innovation

“One thing about police officers is that once they know a tool is out there, they can be pretty imaginative about using it to enhance an investigation.”

The police service is still using older VCR equipment for video recording in holding areas, interview rooms, cell blocks and around the perimeter of its headquarters, but that could change.

“We know VCRs are an aging technology,” says Gillespie. “Hopefully, our success with these DVRs will help us move forward.”

The London Police Service’s pioneering use of wireless digital video recording in criminal investigations is just one example of its well-earned reputation for excellence in the application of information technology.

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London Police Service

police agency in the country,” says Gillespie. “They’ve taken a real interest in using technology to efficiently and effectively meet the operational needs of the organization. Collaboration is part of our corporate culture. It’s just how we do business.” ✨

