

busted...



caught on video

***National Car Parks uses IBM
digital media technology to
help fight crime in the UK***

Electronic security surveillance can make the difference in solving a crime—an image of a criminal in the act gives police a face to look for and evidence for a jury to see.

As the UK's largest commercial car park operator with more than 580 car parks, National Car Parks (NCP) has seen crimes in Manchester drop 40 percent, coupled with a 60 percent increase in arrests since the introduction of the new control center. The solution? Swiveling, tilting, staring cameras in a closed-circuit television (CCTV) surveillance system supported by IBM digital media technology.

“Surveillance is a strong crime deterrent,” explains William McLean, operations director at National Car Parks. “But it is the high-resolution digital images that help take criminals off our streets.”

NCP partners with Manchester City Centre to improve security

Not surprisingly, the crime-busting success of National Car Parks has captured a lot of attention. In a first-of-its-kind partnership with the City of Manchester, NCP developed its “proactive” video surveillance system to extend coverage from the car parks to

include the city-owned cameras of Manchester City Centre. The goal is to stop crime before it occurs. This 24x7 video surveillance system delivers high-quality images to the police and local authorities. Manchester wanted cameras not only to spot crimes as they happen, but also to patrol constantly for potential street incidents and to relay images and information instantly to the police.

Above all, the entire system—from surveillance to image storage and management—had to be reliable. “To enable NCP to offer this solution to the City of Manchester, and in the future to other local authorities, we needed to be 100 percent sure that the technology we used was stable and secure 24 hours a day, and easily maintained. We chose IBM as a technology provider because we knew that its server and storage solutions would stand up to any test,” McLean says.

State-of-the-art technology enables vigilant security

IBM delivered state-of-the-art digital media technology for the integrated CCTV control center, where operators can scan the car parks and city streets to identify problems before they occur. Once a problem is identified, police and local authorities can respond in seconds.

NCP developed its integrated CCTV digital video surveillance system with the help of Sagitta, an IBM TotalStorage Solutions Center, and specialized software provider





Synectics. The switching gear manufactured by Synectics turns the analog camera stream to a digital stream; it also controls the camera movement and the control-center screen controls. This digital video surveillance system oversees a network of approximately 400 NCP and city-owned cameras that monitor

streets, shopping areas, public spaces and parking sites maintained by Manchester City Centre.

With all 400 CCTV cameras sending images to the center at once, it takes a bank of eight IBM @server xSeries 220 servers and 1TB of disk storage to digitize the images. The 24-hour control center boasts an 18-meter monitor wall, displaying from 6–180 simultaneous CCTV images that are stored in a centralized, scalable, multi-user storage pool provided by IBM TotalStorage technology. These images are then split into files of one-minute lengths and sent to a high-performance xSeries 350 server running Tivoli Storage Manager (TSM).

IBM and Sagitta provide the storage and servers, along with custom code from Synectics to manage the image retrieval. Sagitta set up the portal to TSM to manage the storage of all the data streams. Touch-screen view selection and zooming as well as joy-stick camera controls help to simplify access to the images. To speed the communications, three radio networks also are integrated into the system.

TSM initially holds the video images for rapid access from ten 73GB FASt500 Fibre Channel drives before archiving them to 60TB of Linear Tape-Open (LTO) tapes. Performance and scalability of the LTO library are key factors in the system. Images from the 400 cameras are stored for up to 92 days.

According to McLean, “This IBM digital media solution allows police and other

authorities to retrieve and broadcast video and audio information faster, more efficiently and less expensively than previously possible. It’s a fundamental leap forward in crime prevention. It is just beginning to open the door to many new and better uses of this information, such as license plate identification and facial recognition capabilities.”

IBM digital media technology provides end-to-end solution

NCP’s partnership with Manchester not only reduces crime and cuts costs for both NCP and the City of Manchester, but it also results in the end-to-end digital media solution that provides the technical tools of tomorrow—today.

The 24x7 video surveillance from Manchester City Centre frees up work force resources and provides blanket security. This increased surveillance prevents potential incidents, increases conviction rates and allows for fast police reaction. And this is only the beginning. Video surveillance enhanced by digital imaging provides a cost-effective solution for accessing and retrieving digital images today. IBM digital media technology provides the centralized, scalable and multi-user capabilities to extend crime detection and prevention systems of tomorrow. ■

To learn more about IBM Digital Media solutions, call your local IBM sales representative or visit our Web site at ibm.com/industries/digitalmedia

National Car Parks	
Challenge	Implement a security surveillance system to reduce crime and improve safety for 24x7 operations at a car park and on city streets
Solution	IBM digital media video surveillance featuring IBM @server xSeries 220 and 350 servers; IBM 3584 UltraScalable Tape Library with IBM Linear Tape-Open (LTO), IBM Fiber Array Storage Technology (FASt) and Tivoli Storage Manager; design and integration services from Sagitta, an IBM TotalStorage Solution Center; and special software from Synectics, an IBM Business Partner
Benefit	40 percent reduction in car crime; arrests up by 60 percent; fewer potential incidents and increased conviction rates because of increased monitoring; faster police response; increased revenue streams as a result of extended operational hours and lower cost monitoring
SPOTLIGHT	