



MOBOTIX

Case Study

Network-Video: A Model of Airport Security

Ideal centre

Köln/Bonn are just GBP 15,99 (less than 25 €) away. To visit the leaning tower of Pisa or the Rialto bridge in Venice will also cost the same. As the first low-cost airport in the UK, Coventry Airport is offering flights to many distances for low cost.



Since 31st March 2004, the TUI subsidiary Thomson-fly.com is utilizing the Coventry Airport located in the heart of the English midlands as the ideal centre for low-cost flights to 17

European cities. In November 2004, the Coventry Airport will also become a destination for the German low-cost airline Hapag-Lloyd Express. In only less than six months since opening for business, more than 380.000 travellers have started their vacations from Coventry Airport. Within the first 12 months, altogether 500.000 passengers are expected.

Low Costs

The secret to success? In the face of fierce competition, Coventry Airport pursues to keep the running airport costs so low that airlines can offer their flights at competitive low-cost terms. This means that the infrastructure at Coventry Airport is not as luxurious as at other major airports. However, the passengers are glad to give up some of this luxury in order to save some money.

High Security

With all cost savings, security at the Coventry Airport does not fall short. Especially with the threat of international terrorism, security at Coventry Airport has the highest priority. To meet the request for high security, Coventry Airport selected MOBOTIX IP-cameras for their video surveillance system. This system is not only praised by the Ministry of Transport, but it also serves as a model for other airports.

Security Vision Systems





In Focus with 26 IP-Cameras

Conditions and Regulations

Since 11th September 2001 additional security measures have been put in place by the Department of Transport, relating to airport security. "At Coventry Airport we have further improved our security measures with the installation of CCTV," explains the Director of Customer Service, Mike Morton. "To be sure, we keep an eye on our passengers from the check-in to boarding and also upon arrival - the entire time they are on the airport premises."

Ideal Solution

But how to implement such tight surveillance? The original video system (six analog cameras with six recorders) proved to be unsuitable to fulfill the task. "The analog video technology is too expensive and awkward - and the image quality is not sufficient. This was enough reason for us to look for a better alternative", explains Mike Morton. All research lead to MOBOTIX, and soon it was clear that the digital network cameras from the German manufacturer were the ideal solution for Coventry Airport.

"The cameras include internal memory and can temporarily store the video sequences in the case of server failure", commented Security Administrator Dilip Mistry. "When there is disturbance on the network, it is no problem to access the camera storage. When the server is again available, it is automatically updated". The cabling was also simpler to implement with MOBOTIX cameras that need no extra power lines, but can use the power from the data cables. "Also the data communication is exemplary", describes the Administrator. "This way we can theoretically connect from anywhere over VPN to the sub network, with necessary authorization, to see the requested images. In addition, the MOBOTIX cameras are stable and robust as well as easy to install and upgrade."

Expressive Images

With so many advantages, it is no surprise that the relatively small Coventry Airport has at least 26 MOBOTIX IP-cameras in action that have focus on all areas possible. Seven of these cameras are mega-pixel cameras with zoom function, and they deliver expressive images also from far distances such as the parking area, the check-in and the departure hall.

All the cameras are arranged so that the appropriate sequence of images is transferred from each important location that the passenger walks through: check-in, security check, passport control, departure hall, boarding gate. The checking in of the luggage is also kept under surveillance just like the arrival hall baggage claim is.





All camera images simultaneously in sight with MOBOTIX Multiview.

Everything at a Glance

MOBOTIX Multiview makes it all possible: all camera images are observed in a control room through a simple internet browser 24 hours a day, 7 days a week. The Multiview function allows simultaneous viewing of all transferred images as well as an exact, closer look of each camera perspective.

All Essentials Recorded

The recording function of the MOBOTIX cameras is equally important since the right images of the extraordinary events must be readily available. According to the law, these video sequences must be stored for 30 days. However, it would be a waste of expensive hard drive space to have all data from all 26 cameras saved 30 days around the clock. For this reason, the MOBOTIX cameras record only when something in the clearly definable image zones moves.

This so-called event control is even managed to save storage space: the camera at the check-in counter for example, records an image only every 90 seconds. This is more than sufficient, since a passenger spends two minutes on the average at this counter.

With this arrangement and control in mind, a surveillance system that doesn't miss anything, was put to work at the Coventry Airport. Each passenger, in the interest of flight security, will be registered at all important locations during the length of their stay at the airport.

A Model of Security

"Even the British Ministry of Transport is impressed by this solution", explains Mike Morton. The natural result: the camera surveillance system serves as a model for other security projects to come. "London-Heathrow airport is planning on a new terminal. Short while ago, a colleague from there came to visit us to see our IP camera solution", Mike Morton describes proudly. "The railway company Central Trains and the British Telecom are also interested in our surveillance system".

The last question remains for Mike Morton and his colleagues to answer whether they are satisfied with the MOBOTIX solution. "More than satisfied", stresses the Customer Service Director.



Check-in, departure hall, boarding-gate, baggage check-in: all essentials are recorded (original images from MOBOTIX cameras)



Integrated Telephone Features

All MOBOTIX IT and Secure models feature bidirectional audio support. The built-in microphone and loudspeaker are used for live audio transmissions and storage purposes. Voice messages with PIN confirmation and call forwarding via IP or ISDN telephony have been integrated as well. Using the switch outputs, you can switch lights or open doors from the phone or from the computer.

Robust and Well-Protected

The fiberglass-reinforced housing is shockproof and the SecureFlex mount protects the network cabling as it completely conceals the cables (M12/D12 models). Weatherproof (IP65) from -30° to +60°C (-22° to +140°F).

High Return on Investment

Since the number of cameras and storage capacity are freely scalable and any kind of data connection can be used (ISDN, DSL, Ethernet, Wireless, GSM, copper, optical), MOBOTIX means high ROI, even years after installing.

State-Of-The-Art Technology

Developed and manufactured in Kaiserslautern, Germany, MOBOTIX produces image-storing weatherproof high-resolution cameras, including lens and wall/ceiling mount for as little as 598 EUR excl. VAT. To date, more than 100,000 cameras have been sold worldwide.

High Resolution For Sharp Images

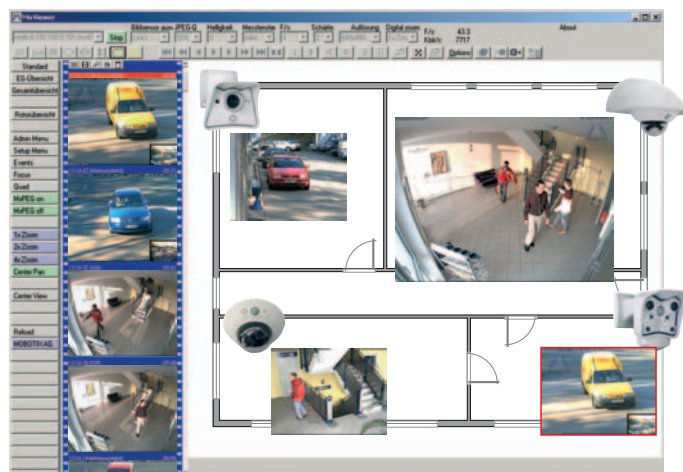
All MOBOTIX cameras are high-resolution cameras with integrated image storage and 960 lines (1280x960 pixels) resolution. The **stored image** thus contains 12 time more detail for creating zoomed sections of the image than regular cameras with 240 or 288 lines (CIF, 2CIF). This is why one single MOBOTIX camera with a 90° wide-angle lens is sufficient to monitor an entire room and yet provides more detailed images than traditional technology. The MOBOTIX Day/Night cameras feature zero maintenance with one color and one B/W image sensor.

Intelligent Storage Technology Uses Fewer DVRs

The new, decentralized storage technology pioneered by MOBOTIX reduces the number of recorders that store the smooth high-resolution video by up to 90%. 40 cameras store smooth video streams including audio on a single PC, each managing its own ring buffer and database. Intelligent search features provide swift access to the stored events. There is no software required for storing and managing video, eliminating license fees and the need for expensive software. Event-controlled recording and automatic increase of frame rates upon detecting movements drastically reduce the storage requirements.

Low Power Consumption Means Enormous Savings

Since MOBOTIX cameras are anti-fogging, do not require heating and only use 3 Watts each, power can be injected into the network cabling using standard PoE products, year round. This drastically reduces the amount of cables and the power requirements for backup power.



Download **MxViewer** alarm management software free of charge. 30 cameras with 30 fps each, layout editor, remote alert notification

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