## An intelligent video surveillance system for Aéroports de Lyon.

Thanks to Axis Communications IP video, Lyon's Saint Exupéry Airport is able to estimate wait time at access control points and inform travelers.



Organization: Aéroports de Lyon

Location: Lyon, Rhône-Alpes, France

Industry segment: Transportation

Application: Crowd flow management

Axis partners: Roiret Transport, Foxstream

## Mission

Saint Exupéry Airport is the third largest in France. With over 8 million passengers in 2011, it can accommodate up to 32,000 travelers per day. In an effort to constantly improve its service quality, the airport wanted to set up an intelligent video surveillance system to give passengers more information as they move around, including the wait times between security checkpoints and in departure lounges.

## Solution

Aéroports de Lyon was seeking a reliable, autonomous solution. The company thus approached several specialists. The airport's consultations led to a number of equipment and software solutions, which were studied closely for three months. Foxstream recommended a solution based on Axis network cameras, with software developed by Foxstream's own engineers that analyzes and process images automatically and in real time.

## Result

Close to 50 network cameras were installed, and it took three months to test and adapt the installation from a technical and architectural standpoint. Aéroports de Lyon is very satisfied with the solution.

"This solution based on IP video and image analysis has allowed us to flesh out the details of our project and to perfect operations at the airport. Beyond the satisfaction of the passengers that we achieve, we can see that it is a daily work tool that allows us to enhance our organization and assist our development," said Frédéric Besson, the airport's Information Systems project leader. Looking forward, Aéroports de Lyon may plan to deploy the same equipment at arrivals control booths.



"The intelligence of Axis cameras combined with our software has allowed us to provide a rapid response that is well-adapted to our customer's specific challenges."

Jean-Baptiste Ducatez, CEO of Foxstream.

## Optimizing the infrastructure

With the number of passengers growing daily, Lyon's Saint Exupéry Airport is trying to enhance its infrastructure in order to make life easier for passengers by giving them more information while they are in the airport, particularly regarding wait times at security checkpoints and in departure lounges. The airport identified the wait times leading up to access control, and the duration of the control itself, as potential stress factors for passengers, or ones which simply lead to poor management of time spent in the terminals.

The challenge was to find a reliable solution that estimates crowd flows and the expected time spent from the moment of joining the waiting line to passage through the metal detectors, and informing the travelers. At the same time, the airport did not want a solution that required large numbers of staff or substantial equipment and maintenance liable to disrupt operations. Aéroports de Lyon chose to use IP video, backed by a software solution developed by Foxstream. Foxstream chose Axis network cameras since their characteristics could be controlled so as to minimize the technical risks of the project.

# A solution combining appropriate equipment and software

Two types of cameras were installed to monitor airport checkpoints. AXIS M3203 Network Cameras are set in fixed compact domes, perfectly adapted to institutions that require discreet surveillance in a spacious indoor environment and which have exceptional image quality and high-resolution progressive scan. The second were AXIS 216MFD Network Cameras, which offer high performance megapixel images. They offer numerous adjustment possibilities: panorama, tilt, and rotation of the varifocal lens according to the desired angle. These cameras were matched with the Foxstream software solution, which performs three different functions for wait time: measuring the number of persons in the line, the outgoing flow, and taking into account the number of open checkpoints.

In the transportation sector, video surveillance can improve day-to-day service as well function as a security tool. IP video can also be useful to corporate users, such as to ensure and improve the management of their activities.

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#### Foxstream - www.foxstream.fr

Created in 2004, Foxstream is a publisher of software solutions that allow automatic and real-time analysis and processing of video image content. The company specializes in the area of video surveillance and the security of goods and persons. It provides assistance with surveillance in order to increase the efficiency of existing systems while at the same time reducing operating costs.

## $\label{lem:continuous} \textbf{Roiret Transport - www.roiret.fr}$

Roiret Transport, a subsidiary of Vinci Energies, is well-established in the Lyon region. It provides expertise in centralized technical management, in low-current and high-current equipment, in security systems, and in communications systems, all applied to inter-urban transport (subways, streetcars, trolley buses), airports, parking lots, and the TER lines of the French national railroad.

### Lyon-Saint Exupéry Airport

In 2012, the Lyon-Saint Exupéry Airport will receive more than 8.4 million passengers, growth of approximately 6% compared to 2010. Currently the third busiest airport in French and the major airport in southeastern France, it offers more than 120 direct destinations and transfers throughout the world through numerous connections to the largest European hubs. It is the only French airport to have received the Best European Airport Prize, 5 to 10 million passengers category, on two occasions (2008 and 2010).













