High-definition video surveillance.

Venaria Reale is the first Italian city to use H.264 and HDTV technologies for video surveillance.

Organization:
City of Venaria Reale

Location:
Venaria Reale, Italy

Industry segment:
City surveillance

Application:
Traffic management, crime prevention and monitoring of areas at risk

Axis partner:
Azienda Speciale Multiservizi

Mission

Venaria Reale, in the province of Turin, lies at the junction of the Ceronda and Stura di Lanzo rivers, in the foothills of the Graie Alps. The city boasts two monuments which are UNESCO-registered sites: the Royal Palace of Venaria Reale and the Castello della Mandria, precious cultural gems that attract many tourists to the city (1,000,000 people in 2008) and require careful conservation.

To be able to benefit from greater security, the local City Council decided to invest in video surveillance, and Mr. Luca Vivalda, the Municipal Police Chief, resolved to implement the project, in which he was a firm believer. The project aimed at achieving three primary objectives: efficient management of traffic and access to the city, monitoring of areas at risk for disaster prevention such as flooding from the rivers, and crime prevention.

Solution

The mandate was entrusted to Azienda Speciale Multiservizi (ASM), a company based in the municipality of Venaria Reale, which is a legal entity enjoying statutory

and entrepreneurial autonomy, and has the purpose of undertaking entrepreneurial economic activities and any other service-related activities in the interests of promoting human health and well-being.

Several models of Axis network cameras with HDTV resolution and H.264 were placed at strategic locations in the city and on the Ceronda river to be able to monitor it, especially in the case of flood risks. The cameras, connected to the operations center and the control room of the Municipal Police headquarters, are controlled using Milestone video management software.

Result

Thanks to the quality and leading-edge technology of Axis network cameras, the City of Venaria Reale can now rely on a video surveillance system capable of efficiently protecting people and property and anticipating flood risks.

AXIS COMMUNICATIONS

"The fascination of places steeped in history, together with the excellence of the innovative solutions, which have made Venaria and its Royal Palace the 5th biggest destination for tourists in Italy, have become the key to its attractiveness. The innovation offered by Axis is the perfect match for the spirit of excellence which the city embodies."

Nicola Pollari, Mayor of Venaria Reale.

Venaria, a pioneer city

The analog system previously installed in the city helped the Municipal Police Chief better understand the needs and define the criteria that the new solution had to meet. After careful consideration, he decided to implement the current system. The Police Chief also decided to stop outsourcing the video surveillance management. Since he wanted to be able to rely on the timely intervention of a technician when necessary, he therefore entrusted the mandate to ASM.

One of the main requirements needed from the new system was that, in the process of examining the recorded events, it could be genuinely useful for identifying people and objects, and the images had to be able to be processed. The Police Chief demanded a solution that would be versatile, easy to use and with excellent image quality.

Chief Vivalda, together with Ivano Voghera, Technical Manager of ASM, examined various companies and made several visits to other municipalities to inspect other systems. They finally selected Axis as the sole supplier of network cameras, supported by Milestone for the video management software. A mesh network was created for wireless operation, and in the meantime, work began on the fiber-optic cabling in the city area.

Three months after the start of the work, 25 network cameras were installed, and the system continues to expand: there will be 50 cameras by the end of 2009, with more to be installed. The models selected were the AXIS 223M, AXIS 233D and AXIS Q1755 Network Cameras, which combine the benefits of HDTV and H.264. Venaria is the first municipality in Italy to apply these new technologies to video surveillance.

"We selected the AXIS Q1755 simply because we'd seen it in operation," commented Vivalda and Voghera in unison, adding: "The image output leaves no room for doubt: the image quality is optimal and the low bandwidth requirement convinced us totally; in addition, they were the latest technologies and we needed to stay constantly up to date."

The cameras were placed at strategic locations in the city and on the Ceronda river to be able to monitor it, especially in the case of flood risks. It is no longer necessary to send the Municipal Police to check the water level, because they can simply zoom in remotely on the water level gauge.

The network cameras are connected to the operations center and the control room at the Municipal Police headquarters. There are two other locations: the Carabinieri post, which can view the images live, and the offices of ASM, which check the network functionality; in the control rooms, two 30" full HD monitors were installed to fully take advantage of the AXIS Q1755 features.

Milestone video management software is used both for video surveillance and for reading vehicle license plates. The images recorded in high resolution are stored for 7 days and then overwritten, unless the prefecture decides otherwise, in the case of major events in the Royal Palace. "We also use the SD cards integrated into the network cameras, so that even if we lose control, for example if the radio-relay link fails, we still have a guaranteed local backup," concludes Voghera, who is fully satisfied with the technology choices made.

"We appreciate our collaboration with Axis and the availability of the Italian team. We anticipate a more widespread surveillance of the city, and we're certain that the quality and stability of the images will help. The city is becoming an example to follow. Other municipalities are calling us about visiting the system, which is unified in all respects: Venaria is a pioneer city," states Mr. Luca Vivalda, Municipal Police Chief of Venaria Reale.

CITTÀ DI VENARIA REALE

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