

## Manaus has the largest IP monitoring system in Brazil with Axis. Monitored sites had up to 70% decrease in crime rates.



Organization:  
Amazonas State  
Government

Location:  
Manaus, Brazil

Industry segment:  
Government

Application:  
Public safety and  
security

Axis partner:  
Eyes nWhere

### Mission

The city of Manaus is the Amazonas State Capital and the leading financial center in the north region of Brazil with about 1.7 million habitants and the sixth largest GDP in the country. The economic growth of the region has risen over the last years, followed by an increase in criminality. The State Government decided to invest in a modern IP monitoring system to support extensive patrolling, besides using the powerful presence of cameras to prevent crime.

There was also need to support the security of festivals in the metropolitan area of Manaus, such as the Festival de Parintins, Manacapuru and Itacoatiara that receives over 300 thousand tourists. For this, it was necessary that the cameras were connected to a network in order to support a mobile tactical unit.

### Solution

Manaus adopted a network of 240 connected cameras that send the video to the Security Operations Integrated Central (CIOPS) via fiber optics. The cameras cover about 2/3 of the city and this makes Manaus one of the cities with the largest coverage range system in Brazil, approximately 400 km<sup>2</sup>. Under a project from Eyes nWhere, an Axis partner, the cameras were integrated into the Apolo software, which combines intelligent resources for better monitoring and IP video recording. In addition, the Intelligence and Logistics Tactical Unit was launched with Axis network video technology for monitoring crowded events.

### Result

The crime rates in monitored sites decreased by about 70%. In many situations, the cameras provided videos that prevented kidnappings, helped locate missing people, aided with finding and fighting fires, and offered tactical support to Civil Police investigations.

"This is a project with great public acceptance and has brought a lot of benefits to the State. That is the reason why investments should continue."

Ari Gomes Firmino, Telematics manager for the Public Security Office of Manaus.

### Advanced security solutions

With the network of cameras, Manaus acquired flexible solutions integrated into intelligent IP video resources, which enabled public surveillance in 24x7x365 format. Many departments make use of the videos, such as the Fire Department, the Traffic Department, and the Military and Civil Polices.

The video solutions employed are from the AXIS 232D+ Network Dome Camera model. "The choice was based on strict security criteria established by the Public Security Office of Amazonas. Besides, the equipment presented better cost-effectiveness," says Amilton de Lucca, President Director of Eyes nWhere.

Among the most prominent features of the AXIS 232D+ is the generation of high-definition images in any light condition. The camera is equipped with infrared filters to allow night-time recording. Its 360° rotation capacity offers all-round vision, and it also has 18x optical zoom and 12x digital zoom. A protective dome provides safeguard against vandal attacks, different weather conditions, and natural wear.

### Managing software support

The images generated are managed using the APOLO software developed by Eyes nWhere. This tool has seven different modules, which allow monitoring and recording IP video. "The operator can look at multiple screens at a time and preset alerts and automatic patrolling to places that demand more attention. When the system detects any suspicious movement in the area or an agglomeration of people, the image of that location automatically pops up in a window or an alert icon appears on the screen," explains de Lucca.

The software can also display a synoptic chart (showing the position of the cameras) of the city, with the exact location of each device. "The operator only has to click on the camera icon of choice to obtain a real-time image of the corresponding spot," says the Eyes nWhere executive.

### Video management centralization

All these operations are performed from the management center, the CIOPS. Its facilities were planned with a functional outlook aimed at providing maximum monitoring efficiency. The operation desks have 24 monitors, four big screens, a dual server and storage.

Tape backup was implemented and the storage time is now undefined, with capacity increase to 44TB and a mechanism to load tapes automatically. A crisis management room was built next to the center, providing Police Intelligence with suitable facilities to organize the most important operations.

The State Government intends to extend the monitoring system by the end of 2010, totalizing 340 network cameras. "Crime fighting used to be taken only on the streets, on site. We now keep the same focus, but employing new tools to give the police officer the opportunity to foresee any act that puts the citizen's life and possessions in risk," explains Edmilson Duarte, MP reserve warrant officer.

