



REMOTE VIDEO SURVEILLANCE SYSTEM OVER WIRELESS PLATFORM

Surquillo district has areas where it is necessary to strengthen surveillance for safety of residents. Therefore, it has been deployed an IP network video surveillance cameras over a wireless platform support for high reliability from Netkrom Technologies, which works mainly with the MB-ROMB radios, as a center of communication between equipments system to the multiple links that are part of Multiband Backhaul. For the proper performance of this solution the wireless network operates in the ISM band 5GHz license-free frequency.

TECHNICAL DETAILS

Client:

Municipality of Surquillo

Location:

Surquillo District.
Region Lima, Peru.

Solution:

Remote Video Surveillance System
over Wireless Platform

WebSite:

www.munisurquillo.gob.pe

CUSTOMER DESCRIPTION

Surquillo district is characterized by a high turnover business that is located on the main avenues, and the great housing boom that has developed in recent years, especially in the area of Los Sauces, La Calera and the Medical District, that has increased traffic on the streets of the district.

Along with this recent development, Surquillo preserves vestiges of Peruvian history expressed in small ruins pre-Hispanic, and one of the trenches of Peruvian defense of the Pacific War, known as "Redoubt No. 5", in which Colonel Narciso Hill defended the city.

With an area close to the 4.5 km² and about 89 000 inhabitants, Surquillo district authorities took the decision to establish enhanced security measures, as its location in the Central-West only 13 miles from downtown the metropolitan area of Lima, the capital city, located in the district in an area of high pedestrian flow and car, a condition that increases because it adjoins districts (on the north by the district of San Isidro, San Borja northwest, Groove on the southeast and the southwest by Miraflores) are centers of trade and financial flows that share the different areas of the city. Therefore, the Municipality of Surquillo required to ensure the peace of its neighbors by eliminating criminal risk in critical areas of district.

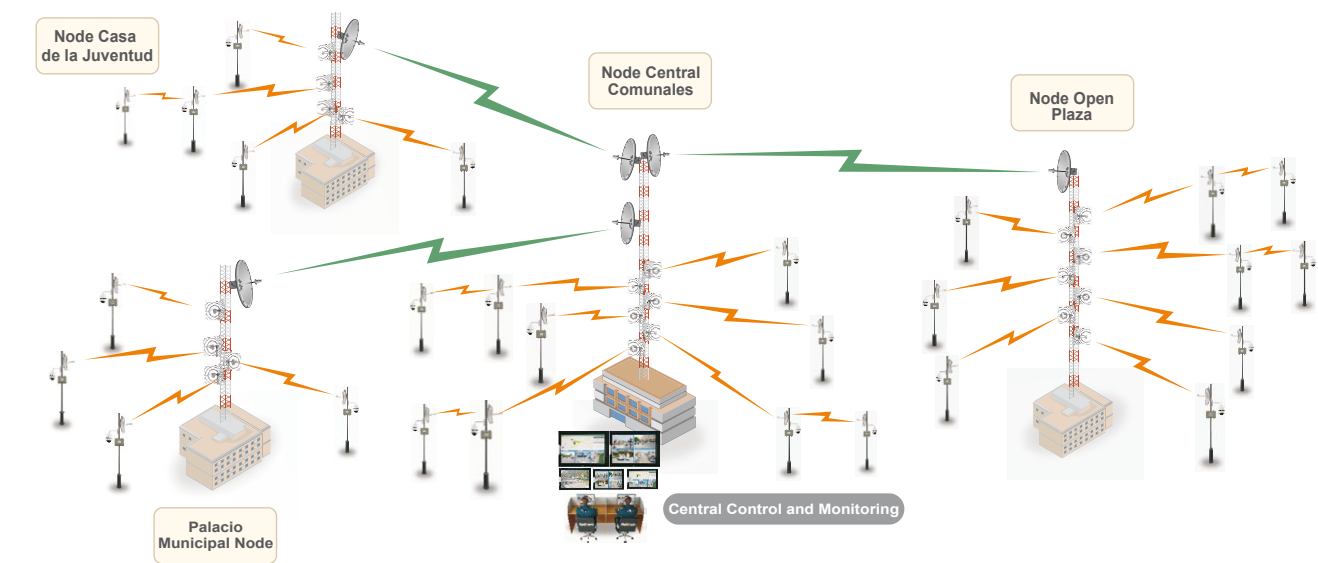
PROJECT DESCRIPTION

In order to meet the needs of the client implemented a wireless network that includes Point to Point and Point-Multipoint, using the extended star topology. For this design was considered the distribution hubs 3-node wireless signal, deployed under the criteria of engineering and scalability, which ensures both the central and peripheral points of the district in future expansions of the video surveillance system. Through the 3 nodes that form the system communicate last-mile links to subscriber stations via directional antennas (Netkrom W5G-25G model grid type high directivity). At the other end of the Central Node system communicates with the hub 3 nodes via high capacity links in the transmission of 7 cameras per node on average, with high resolution, thanks to satellite Netkrom-29D model type W5G Dish high gain and directivity.

Recording points are accounted for PTZ IP dome cameras that provide high quality resolution images and 4CIF 1CIF during the day and night, constantly working every day without interruption. And thanks to its low sensitivity to lighting and complementing the more efficient H.264 compression algorithm, the solution provided has presented a performance, combining ease of management and efficiency of bandwidth performance of the cameras, reflected in the transmission of high resolution images in real time.

It has also implemented the central recording centralized architecture to store the videos collected by the camera network, via 6 banks 1TB hard drive capacity to store an average of 20 days of video, with the possibility of increasing this future capacity according to customer requirements. In addition, the Center for Visualization and Monitoring System is an environment designed especially for the monitoring phase of the surveillance system. It has 5 high definition monitors 42 "Video-Wall mode and 5 monitoring stations, implemented each with widescreen monitors 22" LCD panels and camera control. This plant has allowed the deployment of trunked communications system to enhance security, taking advantage of the flexibility of wireless links for the benefit of citizens.

The project was implemented by Netkrom SAC Technologies, a subsidiary in Peru -Netkrom Technologies Inc. (manufacturer of radio link), which acted as an integrator and / or contractor directly through a highly qualified team of engineers and technicians.



Municipality of Surquillo
Location:
Latitude: 12° 06' 53"
Longitude: 77° 00' 42"

BENEFITS

- A centralized administration and monitoring of all points of the surveillance network through the wireless IP communications platform in combination with Netkrom NMS software.
- Reduce the number of robberies at the points where they are located surveillance cameras, radio with a range of approximately 250 meters.
- Strategic location of the camera network to monitor 24 hours a day, 365 days a year, the district hot spots have a higher percentage of insecurity.
- Have a recording system designed with flexibility and scalability criteria in the future, according to customer needs.
- Ability to review previous recordings without interrupting real-time recording.
- A communications platform IP-based broadband flexible, future ideal to integrate voice and data service to the offices of the municipality.