

Background

Located 370 km from Buenos Aires in Argentina, Villa Gesell is a coastal city with around 35 thousand inhabitants. Villa Gesell is a popular tourist attraction to visit that takes in approximately one million tourists per season. Villa Gesell currently has FTTH fiber optic networks installed and operated by Cotel LTDA. COTEL has been in charge of implementation of communication infrastructures for

the city residents since its establishment in 1963. The company also provides data network services for the city government and urban monitoring of the city.

Challenges

The municipality of Villa Gesell has different branches and administrative offices throughout the city. It needed to connect different branches, hospitals, the house of culture and schools in different places. In addition to providing stable WiFi connectivity to those places, the city government required separate public and private networks to ensure security and reduce congestion on

the network. The new installation also needed to be compatible with the existing system. COTEL, who provided the FTTH fiber optic network to the citizens, was looking for a stable, easy-to-manage and scalable solution to manage multi-site devices and to accommodate future expansions more easily.

Solutions and Benefits

COTEL chose Zyxel's **Nebula Cloud Networking Management** solution because of Zyxel's brand reputation in the industry and strong customer support as well as its proven history of solving customers' problems in a timely and effective manner. The **Nebula Control Center** features centralized control and visibility over each group and each client through a single pane of glass. It provides a simple and intuitive interface, making it easy to manage multiple devices in different places and simplifying administration of all the systems.

Cotel deployed 30 **NWA1123-ACv2 802.11ac Dual-Radio Ceiling Mount PoE Access Points** which features NebulaFlex™ and can be centrally controlled and managed through the Nebula cloud platform. Nebula cloud management allows for easy deployment, real-time configurations, and access to all access points at any time. Previously, installing and configuring new access points was time-consuming and difficult. Thanks to remote management through the cloud, the IT administrators of the municipality can register, connect and monitor APs remotely. In addition to remote access from anywhere at any time, onsite deployment and maintenance is also reduced. Nebula's zero-touch provisioning allows all the Nebula-supported access points

to be configured and deployed quickly and easily when they are connected to the internet. With the Nebula solution, onsite configuration and maintenance is minimized to almost zero.

APs can be managed through the cloud without any controller since the Nebula cloud platform can also act as an access point controller. Furthermore, the platform will send notifications to the IT staff in the event of an access point failure. It provides peace of mind through continuous updates on the status of APs throughout the city.

The Nebula solution supports multiple WiFi SSIDs and customization of captive portal with different SSIDs. The captive portal was used for user authentication before accessing the internet. The VLAN was used to separate the networks of offices, guests, and IT administrators, enhancing security and prioritizing network traffic for more efficient use of bandwidth.

With the Nebula solution in place, COTEL can implement new facilities on old infrastructure. The scalable solution enables the company to easily upgrade WiFi equipment for future growth.

