

# **Success Story**

Villa Gesell City Hall Offices Achieve Seamless WiFi Connectivity with Zyxel Nebula Solution



Service Provider



COTEL



Argentina



Zyxel Nebula Solution

### **Overview**

#### Challenges

- Provide connectivity to the city hall office and dependent organizations
- Deliver WiFi connectivity in public and private areas
- Integrate new and existing systems that are already installed
- Provide scalable and future-proof solutions for future expansion

#### Solution

• Zyxel Nebula Solution

#### Results

- Easy installation on old infrastructure
- Simplified, central management of multi-site access points
- Scalable Solution, built for easy future growth
- · Savings on maintenance time and cost

"The Nebula solution was selected because it could manage the whole system on the cloud without any controller. The Nebula cloud networking management solution provides visibility over each group and client with reports and statistics. The solution enables easy connection of new devices to each site. The good value of the equipment was also a determining factor."

Andrés Gallo

Head of systems of the Gesell Telephone Cooperative, COTEL



# **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.



### **Products Used**

## NWA1123-ACv2 • 802.11ac Dual-Radio Ceiling Mount PoE Access Point



- NebulaFlex™ gives you the flexibility to switch between standalone and license-free Nebula cloud management
- Nebula cloud management allows easy deployment, real-time configurations, and access to all your access points at anytime
- 802.11ac 2x2 supports a combined data rate of up to 1.2 Gbps
- Compact ceiling-mount design with optimized RF performance
- Robust build quality including solid-state capacitors to ensure long life and operational reliability

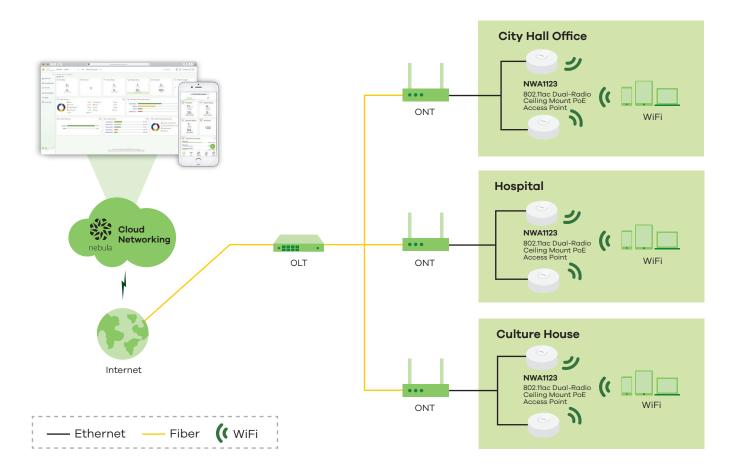
### **Nebula Control Center (NCC)**



- Responsive web design and intuitive user interface
- Multi-tenant and multi-site views
- Role-based administrative privileges
- Real-time, historical monitoring and reporting
- Site-based auto and smart configuration tools
- Misconfiguration protection to prevent NCC disconnections
- Rich, site-wide management tools (dashboard, map, and floor plan)



# **Diagram**



#### **About Zyxel**

Focused on innovation and customer-centricity, Zyxel has been connecting people to the Internet for over 30 years. Our ability to adapt and innovate with networking technology places us at the forefront of creating connectivity for telcos and service providers, business and home users.

Zyxel is building the networks of tomorrow, unlocking potential, and meeting the needs of the modern workplace — powering people at work, life, and play. Zyxel, Your Networking Ally.

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