



Success Story

ZyXEL Wireless Solution Links Up Rome Hotel Chain

Overview

Customer Name

Gruppo Bettoja Hotels

Customer Industry

Hospitality

Challenges

- Unify the networks of multiple hotels
- Unified network must be secure and stable
- Provide high-speed wireless connections for both guests and hotel staff
- Solution must be easy to manage and upgrade

Solution

- 802.11ac Dual Radio Smart Antenna 2x2 Access Point
- 802.11 a/b/g/n Dual-Radio Unified Access Point
- 24-port Gigabit Smart Managed Switch
- Wireless LAN Controller
- Unified Security Gateway

Benefits

- Centralized management achieved
- Easy management of user permissions
- APs blend in with environment

- Smart antenna technology provides reliable high-speed connections in high-density areas
- Automated firmware updates via controller

Background

The story of the Bettoja family, who originally came from Piedmont region of Italy, began in 1875 with the acquisition of the Restaurant Massimo D'Azeglio in Rome. The business was named in honor of the great Italian statesman and writer. Later with the development of the Termini Station area, the Bettoja family decided to buy the rest of the building and transform it into a hotel, which was named the Hotel Massimo D'Azeglio. This was followed with the purchase of the Hotel Mediterraneo, and finally the Hotel Atlantico, forming the Gruppo Bettoja Hotels.

Today, the group operates more than 505 rooms in its three hotels, which are periodically renovated while still retaining their original traditional atmosphere.

The three hotels are all located in the center of the city near the Basilica of Santa Maria Maggiore, the Opera House, and Termini Station. In recent years, the railway station and surrounding neighborhood have experienced a period of accelerated development with significant cultural and commercial investment. Other great historical landmarks are also located in close proximity.



Challenges

The Bettoja Hotels Group needed to unify the network infrastructure for all of its hotels in order to guarantee maximum stability, speed, and connection reliability. The upgrade would not only link the venues with the group's headquarters, it would provide guests and staff with wired and wireless connections. The new network had to be reliable and secure, as well as easy for hotel management to operate.



Solutions and Benefits

ZyXEL local solution partner ANY-TECH Ltd. designed a solution to meet the needs of the complex hotel structure. A firewall from ZyXEL's USG1900 series was deployed to provide UTM services with maximum protection from intrusions and attacks, as well as to facilitate analysis of Internet traffic based on different user profiles, thus securing the entire network. In order to ensure VLAN management efficiency, USGs were connected to 10 24-port gigabit smart managed switches. This created the backbone for an easily configurable, stable, powerful, and flexible network that was well-suited to the needs of the staff.

Next, a dedicated wireless network for the use of hotel guests was established with an NXC5500 series controller in combination with unified access points. The NXC5500 wireless LAN controller uses an automated routine to manage the maintenance of the Wi-Fi system for the three hotels. It provides complete reports on the health of the network, automatically updates the firmware of connected APs, solves malfunctions due to external interference or device failure, and manages multiple virtual networks by separating ones accessible to customers from the networks dedicated to employees of the hotel group.

Wi-Fi coverage is provided by 180 NWA5123-NI Dual-Radio Unified Access Point (subdivided at three locations). Each unit is managed by a single centralized controller installed at the headquarters data center. In addition, the APs are designed to look like smoke detectors to blend with the hotel environment. ZyXEL installed four WAC6502D-S access points with integrated smart antennas in the meeting rooms to ensure wide availability of wireless bandwidth and high Wi-Fi signal density.

With the implementation of the new wireless network infrastructure along with completely centralized management, the group's hotels now benefit from a wired high-speed network for staff and a fast and stable Wi-Fi network for guests that include log features and security options to fulfill all compliance requirements.

Products Used



NWA5123-NI 802.11 a/b/g/n Dual-Radio Unified Access Point

- Ceiling and wall mountable
- Plenum rated housing
- 2-in-1 standalone/managed AP design
- CAPWAP management supported
- 2.4 GHz and 5 GHz concurrent dual-band
- High-performance RF technology: Tx Beamforming and Rx Maximum Likelihood Demodulation (MLD)
- ZyXEL One Network is supported



WAC6502D-S 802.11ac Dual Radio Smart Antenna 2x2 Access Point

- ZyXEL smart antenna provides premium performance anywhere
- Advanced IEEE 802.11ac offers up to 1.1Gbps combined data rates
- Industry-leading Rx sensitivity as low as -102 dBm
- AP Flex™, ZyXEL ONE Network utilities, DCS and tool-less bracket design streamline deployment
- Load balancing and client steering ensure optimal wireless experience
- ZyMESH easily extends reliable Wi-Fi network



NXC5500 Wireless LAN Controller

- Centralized WLAN management and auto provisioning
- Manages up to 512 APs with granular access control
- ZyMesh simplifies complex, inconvenient cabling Wi-Fi Deployments
- Comprehensive features for WLAN performance optimization and always-on Wi-Fi connectivity
- Wireless LAN performance optimization via dynamic channel selection and load balancing
- Guest authentication by QR code



USG1900 Unified Security Gateway

- High-performance, high-value Next Generation Firewall (NGFW) for medium and large-sized businesses and campuses
- Complete network protection with firewall, anti-virus, antispam, content filtering, IDP, next-generation application intelligence and SSL inspection
- Robust SSL, IPSec and L2TP over IPSec VPN connectivity and VPN high availability (HA)
- Unified security policy streamlines the configuration and management efforts
- Built-in WLAN controller for centralized AP management and effortless WLAN scalability of up to 66 APs
- ZyXEL One Network is supported



GS1920-24HP 24-port Gigabit Smart Managed Switch

- Smart managed switch with essential L2 features
- GbE RJ-45, GbE combo (RJ-45/SFP) and fixed GbE SFP connectivity
- Compliant with IEEE 802.3af PoE and 802.3at PoE Plus
- High 375-watt power budget
- Supports ZON Utility, ZyXEL Smart Connect and iStacking facilitates easy network initialization and management
- Reliable network availability with Loop Guard, IPSG, and CPU protection
- RADIUS, static MAC forwarding and 802.1X authentication-enhance network security
- Future-proofed with IPv6 support

About ZyXEL Communications

ZyXEL Communications Corp., founded in 1989 and headquartered in Taiwan, is the leading provider of complete broadband access solutions. As one of the early modem manufacturers, ZyXEL has gone through transformations in the fast-paced networking industry. Delivering cutting-edge communications innovations to more than 400,000 businesses and more than 100 million consumers throughout the world, today ZyXEL is one of the few companies in the world capable of offering complete networking solutions for Telcos, small to medium-sized businesses, and digital home users for a wide range of deployment scenarios. Telco solutions include Central Office Equipment, Customer Premise Equipment, Wired and Wireless Access Network Devices, and Carrier Switches. SMB and Enterprise solutions include Unified Security Gateways, LAN Switches, WLAN, and IP Telephony. Digital Home solutions include Network Connectivity Devices and Multimedia Solutions.

The company has 1000 employees and distributors in 70 countries, reaching more than 150 regional markets. The ZyXEL Communications Corp. includes 35 subsidiaries and sales offices and two research and development centers worldwide. For more information, visit the company's Website, <http://www.zyxel.com>.

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