ZyXEL

Success Story

Italian Hotel's Network Upgrade Earns Raves for ZyXEL Wireless Solution

Overview

Customer Name
Hotel Luise Riva del Garda

Customer Industry
Hospitality

Challenges
• Improve wireless network coverage
• Improve service quality and
  accessibility of wireless networks
• Create multi-tiered network with
  different levels of service for
  customers, staff and security

Solutions
• 802.11 b/g/n Unified Access Point
• Wireless LAN Controller
• 24-port GbE Smart Managed PoE+ Switch

Benefits
• APs blend in with décor and allow for up
  to 30 simultaneous connections
• Simplified management and maintenance
• Switching allows for management of
  multiple VLANs for various user levels
• Easy installation

Background

Hotel Luise Riva del Garda is one of the largest family hotels in Trentino, Italy, an ideal destination for holidaymakers as well as for a last-minute getaway. Located on the shores of Lago di Garda, the lakeside resort is a popular destination for those who enjoy outdoor sports, relaxation and culture. The Mart di Rovereto museum is located just a few kilometers from the hotel, the lakefront beach only 200 meters away, and the center of town is within walking distance. Hotel Luise is one of the largest hotels in Riva del Garda, with 64 rooms, four suites, a restaurant, a bar, and a swimming pool. It caters to both business meetings during fairs or conferences, as well as tourist customers, of which 90% come from abroad.

Challenges

The Hotel needed to improve its wireless coverage, which had originally been set up with devices from multiple brands. This resulted poor wireless service and, consequently, bad reviews on social networking and online booking sites. To create the most efficient infrastructure, it was necessary to design three separate virtual networks with different levels of Internet access. One network was dedicated to internal use for reception, office, back office and management. Another would be reserved for the video surveillance system. The third was for the exclusive use of guests.

Solutions and Benefits

ZyXEL and local solution partner Tecnoprogress created a completely new infrastructure, which includes both wireless and wired elements. Wired connectivity is delivered via three web-managed switches, one on each floor, which also deliver power to the access points via Power over Ethernet (PoE). The GS1910 series switches manage the virtual LAN networks (VLAN). The same hardware is used to manage the three different networks (employees, video, guests), but each is given its own prerogatives and regulations.

Wireless coverage was achieved with 15 professional access points, each the size of a smoke detector, which were easy to install on ceilings and virtually invisible in corridors. Each access point could handle up to 30 simultaneous users. A controller from the ZyXEL NXC series was used to manage the daily maintenance of the wireless network, optimizing its operations in real time. This includes tasks such as updating the firmware of the connected APs, solving malfunctions due to external interference or failure of the devices, and managing multiple virtual networks to allocate separate network access for customers from the ones dedicated to hotel employees.

The new infrastructure has solved the problems that previously plagued the network at the Hotel Luise. Wireless coverage, which had before generated negative reviews, is now considered one of the strengths of the hotel. Furthermore, a network for employees was set up on the same hardware as the internal networks of the hotel, which means employees can easily access corporate resources. Another network was established for the IP-based video surveillance cameras, which also permits staff to monitor the cleaning process of the rooms using special software.

Product Used

NWA5121-N
802.11 b/g/n Unified Access Point

- Ceiling and wall mountable
- Plenum rated housing
- 2-in-1 standalone/managed AP design
- CAPWAP management supported
- High-performance RF technology: Tx Beamforming and Rx Maximum Likelihood Demodulation (MLD)

ZyXEL

NXC2500
Wireless LAN Controller

- Centralized management for up to 64* APs
- ZyMesh mitigates complex, inconvenient cabling Wi-Fi deployments
- Client steering enhances efficiency of wireless spectrum utilization
- Auto healing maximizes Wi-Fi service availability
- Seamless integration with external AD, LDAP, RADIUS authentication
- Best investment protection with built-in RADIUS server

  * Management of 64 APs is supported with firmware version V4.10 or above

GS1910-24HP
24-port GbE Smart Managed PoE+ Switch

- Advanced Smart GbE L2 ACL switching features
- 48 Gbps non-blocking switch fabric
- IEEE 802.3at Power over Ethernet Plus Supports IPv6

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.