



## Success Story

### Four-Star Italian Resort Hotel Extends Wi-Fi Coverage with ZyXEL Hardware

#### Overview

**Customer Name**

Hotel Balocco

**Customer Industry**

Hospitality

**Challenges**

- Extend Wi-Fi availability beyond hotel common areas
- Provide wireless access in guest rooms
- Solution could not interfere with existing data wiring
- Network must provide secure, robust, and stable service to all guests

**Solutions**

- 802.11 a/b/g/n Dual-Radio Unified Access Point
- 802.11 a/b/g/n Dual-Radio Outdoor Business AP
- Unified Access Gateway
- 24-port Temperature-Hardened VDSL2 Box DSLAM
- Wireless N-lite ADSL2+ 4-port Gateway

**Benefits**

- Quality high-performance wireless access
- No extra costs or damage to the building from new cabling
- Solution takes advantage of existing wiring
- Future-proof
- Expandable

#### Background

Hotel Balocco, a four-star boutique hotel established in 1973. It is located in Porto Cervo, a few minutes from one of the most beautiful beaches of Northern Sardinia. The hotel artfully creates a world to take care of the wellness of each guest—a charming atmosphere of relaxation,

harmony, and a taste of exclusive sophistication. In a testimonial to the attention paid to new technologies and business opportunities, Hotel Balocco was awarded the 2014 Certificate of Excellence by Tripadvisor.



## Challenges

Hotel Balocco was initially equipped with a Wi-Fi facility limited to the common areas, but management wanted to extend coverage to the guest rooms. They hoped to provide customers of the prestigious four-star hotel with a free high quality wireless Internet service as a strong selling point. To do that, the main challenge was to set

## Solutions and Benefits

Martinasso Engineering of Olbia and the ZyXEL technical support team identified the ideal solution for difficult situations like the one presented by Hotel Balocco. Using the existing telephone wiring to bring data connectivity to the rooms, they were also able to deliver VoIP and Wi-Fi connectivity. The heart of the solution is a ZyXEL VES1724 DSLM switch, capable of delivering the ADSL/VDSL connectivity at 100Mbps to 24 rooms via the telephone cable. Instead of using access points, 24 AMG1202 wireless gateways, which receive connectivity from the DSLAM were installed in each room. The ZyXEL NWA5120 and NWA3550 series access points were used to provide wireless coverage in the common areas and outdoors, which were already equipped with some multiband APs. The UAG4100 Unified Access Gateway supplies access credentials to guests to log on to the Wi-Fi network.

At this point, installing an xDSL wireless router in each

room was sufficient to ensure connectivity. In the future, it will be possible to connect VoIP phones to the routers to upgrade telephone service to the hotel. Access credentials to the wireless network are issued by a gateway as required by current regulations. The gateway is capable of providing the passwords through sales receipts, SMS, Web or social login.

The new wireless infrastructure provides quality wireless connectivity, without affecting the existing cabling or imposing additional masonry costs. Taking advantage of the existing telephone wiring is a brilliant solution whenever it is impossible to intervene with traditional data systems. In the future, it will be possible to integrate VoIP and IPTV services simply by updating the routers in the rooms.

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## Product Used



### NWA5120 Series 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



### **NWA3550 Series 802.11 a/b/g/n Dual-Radio Outdoor Business AP**

- No extra cost converting stand-alone AP architecture into management WLAN architecture
- Simplified management with scalability
- Secure architecture for reliable, scalable Wi-Fi networks
- Enterprise-class Access Point functionality



### **UAG4100 Unified Access Gateway**

- IEEE 802.11 a/b/g/n dual-radio (2.4 GHz and 5 GHz) design
- Supports 200 concurrent users by default and up to 300 via license upgrade
- Integrated account generator, Web-based authentication portal and billing system
- Supports external RADIUS servers
- Per account bandwidth management
- Built-in WLAN controller (supports 8 APs by default and up to 16 APs via license upgrade)
- SP350E Service Gateway Printer enables one-click account and billing generation
- SMS ticketing with ViaNett protocol support



### **VES1724-56 24-port Temperature-Hardened VDSL2 Box DSLAM**

- Complies with VDSL2 standards including ITU-T G.993.2, G.994.1 and G.997.1
- A 24-port DSLAM with downstream/upstream performance of up to 100/100 Mbps (30a profile)
- Comprehensive Triple Play functions
- Complete QoS for service differentiation



## AMG1202-T10B Wireless N-lite ADSL2+ 4-port Gateway

- Standard-based WPS for easy and secure WLAN establishment
- Robust SPI Firewall protection
- Complete QoS solution to ensure triple play service quality
- Remote provisioning and management through TR-069
- IPv6 support
- Parental control scheduling by different interface and MAC address
- ROM-D feature for distributor/operator easy customization

### 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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