



## Success Story

### ZyXEL Network Connects Guests at Switzerland's Historic Castle Coudrée

**"The uniformity of configuration interfaces and perfect equipment compatibility have greatly facilitated the integration. The accompanying support offered by the ZyXEL pre- and after-sales teams have ensured the provision of optimal and adequate responses to the many constraints that this type of building – a centuries-old a castle – often create. Our client and their many customers are fully satisfied with the installation."**

**Christophe Rachel**  
Business Director of ALP'COM.

#### Overview

##### Customer Name

Château de Coudrée

##### Customer Industry

Hospitality

##### Challenges

- Deploy a new high-performance and secure Internet connection
- Provide an integrated management solution
- Provide discreet, optimized wireless coverage that is compatible with environmental constraints

##### Solution

- Unified Security Gateway
- Unified Access Gateway

- 24-port Gigabit Smart-Managed PoE Switch
- Dual-Radio Unified Access Point
- 48-port Temperature-Hardened ADSL2+ Box DSLAM
- Wireless N-lite ADSL2+ 4-port Gateway

##### Benefits

- Reliable and high-quality Wi-Fi accessible for all customers
- Compliance with environmental constraints through the use of existing wiring
- Compliance with EU directives on the conservation of navigation data

## Background

Castle Coudrée is a 12th century castle located on the banks of Lake Geneva, Switzerland, between the towns of Evian and Geneva. Today, second- and third-generation hoteliers Catherine Reale-Laden and daughters Marina and Caroline continue to maintain this cultural and historical heritage site. The four-star hotel boasts 17 rooms for guests, a gourmet restaurant, historic lounges, and terraces for stopovers and events catering to up to 300 attendees.





## Challenges

With services in both hotel accommodations and catering, it became essential for Coudrée Castle to offer reliable Wi-Fi connectivity to its customers, who were increasingly demanding this service.

Indeed, hospitality and the comfort of customers remain a top priority for the establishment. All variety of guest services — including accommodations for leisure travelers, seminar venues for business guests, as well as the lobby and the dining areas in general — would benefit from stable, high-performance connectivity as well as secure and simple access.

## Solutions and Benefits

After an initial full-capacity simulation test had been successfully concluded, Christophe Rachel, business manager at ALP'COM, deployed a complete ZyXEL infrastructure throughout the castle in February 2015, drawing on his technical expertise as well as recommendations made by ZyXEL France.

Previously inaccessible areas can now be covered thanks to IES-1248 48-port Remote DSLAM equipment and a hotspot solution. Network management is enabled via fiber links and a ZyXEL GS1920 Series 24-port GbE smart managed PoE switch, thus offering the most efficient flow rates and the necessary connection stability.

The WAN access is governed by a USG110 Unified Security Gateway that allows the combination of multiple connections to the Internet, navigation control by means of content filtering, and proper allocation of available bandwidth to each of the parties involved.

Wi-Fi bottleneck management and reception for wireless equipment are provided by three single 2.4 GHz NWA5123-NI dual-radio unified access point. Equipped with integrated antennas, these ZyXEL Wi-Fi terminals are able to fit discreetly into an environment with many constraints and still provide optimal coverage for all areas concerned. They also support PoE technology.

These connections also allow the differentiation between employee Wi-Fi access and customer Internet availability in while maintaining the confidentiality of information exchange. In addition to the usual environmental constraints encountered in castles and other such historical structures — thick walls, consideration for cultural heritage, and the near impossibility of wiring and drilling — the proposed solution also had to be accommodate a limited budget, as maintenance costs of the castle were already high.

Compliance with local laws governing the provision of public Internet access is ensured through a ZyXEL service gateway associated with a log storage server and printer that provide visitor login details.

Each of the 18 rooms is equipped with an AMG1202 wireless gateway that provides broadband Internet connectivity. With its compact design, the case takes up minimal space and is integrated discreetly into the room.

Placed upstream, the DSLAM was able to utilize the existing telephone network to disseminate data to the 18 rooms, thus avoiding costly re-wiring work and indirect costs relating to the obstruction of normal hotel operations.

## Products Used



### USG110 Unified Security Gateway

- High-performance, high-value Next Generation Firewall (NGFW) for small and medium-sized businesses
- Anti-malware protection with firewall, anti-virus, anti-spam, content filtering, IDP, next-generation application intelligence and SSL inspection
- Robust SSL, IPSec and L2TP over IPSec VPN connectivity and VPN high availability (HA)
- Built-in WLAN controller for centralized AP management and effortless WLAN scalability of up to 34 APs
- Comprehensive mobile broadband USB modem compatibility and multi-WAN load-balancing, failover and fall back support



SP350E  
Service Gateway Printer

### **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



### **GS1920 Series 24-port Gigabit Smart-Managed PoE 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



### **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



### IES-1248 48-port Temperature-Hardened ADSL2+ Box DSLAM

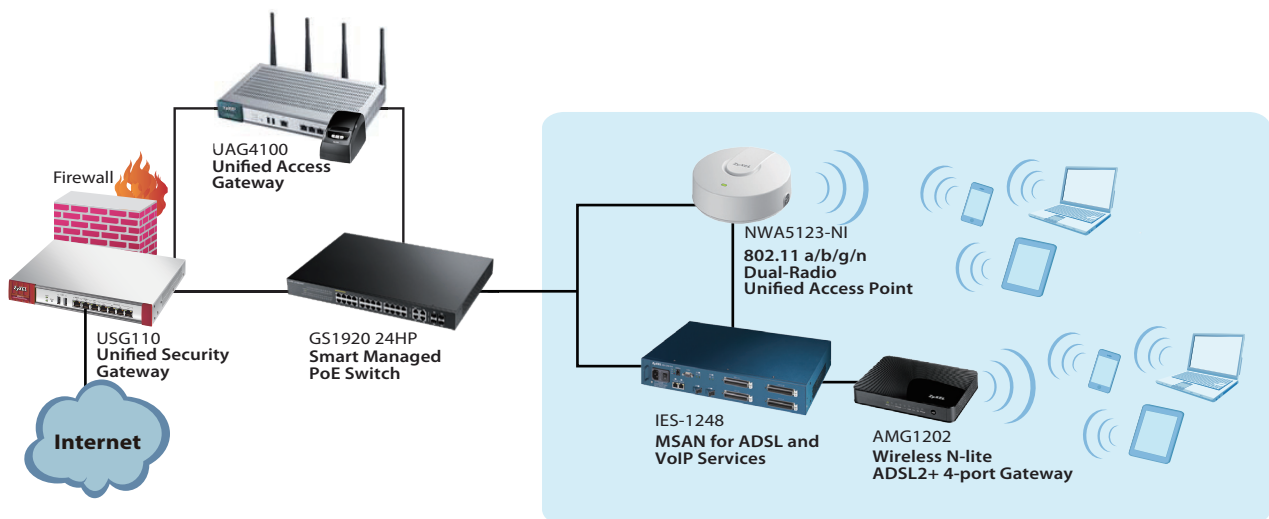
- The fastest speed with the most advanced and flexible DSL transport available, adjustable speeds for multiple service offerings down/up stream Up to 24/1.2 Mbps
- Application flexibility, with asymmetric data transport over a single copper pair (software configurable)
- Compliant with ITU, ANSI and ETSI standards
- POTS/ISDN in overlay mode
- Deployment from CO, cabinet or basement, multi-tenant units/multi-dwelling units



### 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 event interface and MAC address
- ROM-D feature for distributor/operator easy customization

## Diagram



### 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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