ZyXEL

Success Story

Wireless Network Setup for SMEs Has Never Been This Easy

Eduard Papen
Founder and General
Manager, Edlin Automation

"ZyXEL has supported us from the beginning to the end and helped us create solutions."

"We are very satisfied ZyXEL's excellent after-sales services. There are not many suppliers who provide such good and fast after-sales support. They help us to think of possible solutions even during the training. We can also take training courses in Belgium or Germany so as to reduce travel time"

Overview

Customer Name
Michel Oprey & Beisterveld
Customer Industry
Natural stone wholesaler
Challenges
To build a roaming wireless network for visitors and employees and meet the fast-growing BYOD trend

Solutions
- Wireless LAN Controller
- Dual-Radio Unified Access Point
- 48-port GbE Smart Managed Switch
- Unified Security Gateway
- 8-port GbE Unmanaged PoE Switch

Benefits
- Complete network from one supplier
- Central management solution
- Multiple networks within the same infrastructure

Challenges

Michel Oprey & Beisterfeld wanted to make the headquarters environment wirelessly accessible for employees and visitors. Employees are expected to have their smartphones, tablets and notebooks on hand in keeping with bring-your-own-device (BYOD) principles. This growing trend is reflected in employees bringing more and more devices to the office. In order to make the best use of these devices, Internet access through a Wi-Fi network with optimal accessibility is essential. Michel Oprey & Beisterfeld therefore needed wireless controller technology to support smartphones and other BYOD demands. The NXC2500 WLAN Controller is ideal for this purpose.

Background

Michel Oprey & Beisterfeld is one of the largest natural stone suppliers in Europe. The company has grown at a rapid pace and now has 100 employees working at two locations in the Netherlands. The corporate headquarter is located in Echt, and has an extensive showroom, show garden and office building.

Solutions and Benefits

Edlin Automation, a local reseller, chose ZyXEL products and wireless solutions for Michel Oprey & Beisterfeld because ZyXEL offers a complete end-to-end network portfolio for handling wireless network challenges. ZyXEL's portfolio consists of managed, unmanaged and smart switches, WLAN controllers, access points, and unified threat management (UTM) appliances for creating a secure network.

The ZyXEL NXC2500 WLAN Controller is the ideal wireless solution for SMEs (small and medium enterprises) like Michel Oprey & Beisterfeld. The WLAN controller is scalable and supports up to 24 APs. ZyXEL provides a wireless solution that consists of the NXC2500 WLAN Controller and ZyXEL Wireless Optimizer (ZWO). The product differs from the competition in its ease of use, whereby wireless networks can be fully managed and monitored. Makeshift infrastructures are no longer necessary because multiple APs can be coupled with the NXC2500. This allows more wireless devices, including mobile devices, to use a single network, providing integrated WLAN control via a box that controls the complete Wireless LAN. The controller and APs have sensors that relay data about the condition and performance of the network back to the ZyXEL Wireless Optimizer (ZWO).

Edlin Automation founder and general manager Mr. Eduard Papen states, "At Michel Oprey & Beisterfeld, everything goes to the NXC2500 through the 16 APs that we have installed. It is a dual network of 5 GHz, where 30 to 100 devices are registered daily." The visitors that Michel Oprey &

Beisterfeld receives at its showroom daily, as well as its employees, can now access the Internet and email on the wireless network. Moreover, Mr. Papen and his team installed a separate WLAN for visitors and an internal WLAN for internal users only. When a staff member walks from the back of one building to the front of another, he can roam and stay connected without interruption because the APs overlap. Mr. Papen says, "We created a system with full roaming WLAN throughout the entire premises." The NXC2500 also solves the problem of running out of IP addresses. Thus, a one-time investment of a few thousand euros resolved several issues in the management of mobile networks.

As a result, Michel Oprey & Beisterfeld was so satisfied with their new stable and secure wireless network at the Echt facility that, they decided to have the same wireless solution set-up at another location in Vianen. Mr. Papen says he is extremely satisfied with the pleasant customer service and support provided by ZyXEL. Mr. Papen concluded, "The next customer who wants the same setup, we will make the same recommendation."

Products Used

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

NWA5123-NI
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)

GS1910
48-port GbE Smart Managed Switch

- Advanced Smart GbE L2 ACL switching features
- 104 Gbps non-blocking switch fabric
- IEEE 802.3az Energy Efficient Ethernet (EEE) complies with best energy-efficient platforms
- Supports IEEE 802.1AB LLDP/LLDP-MED to provide easy mapping for network management applications
- Supports IPv6

GS1100
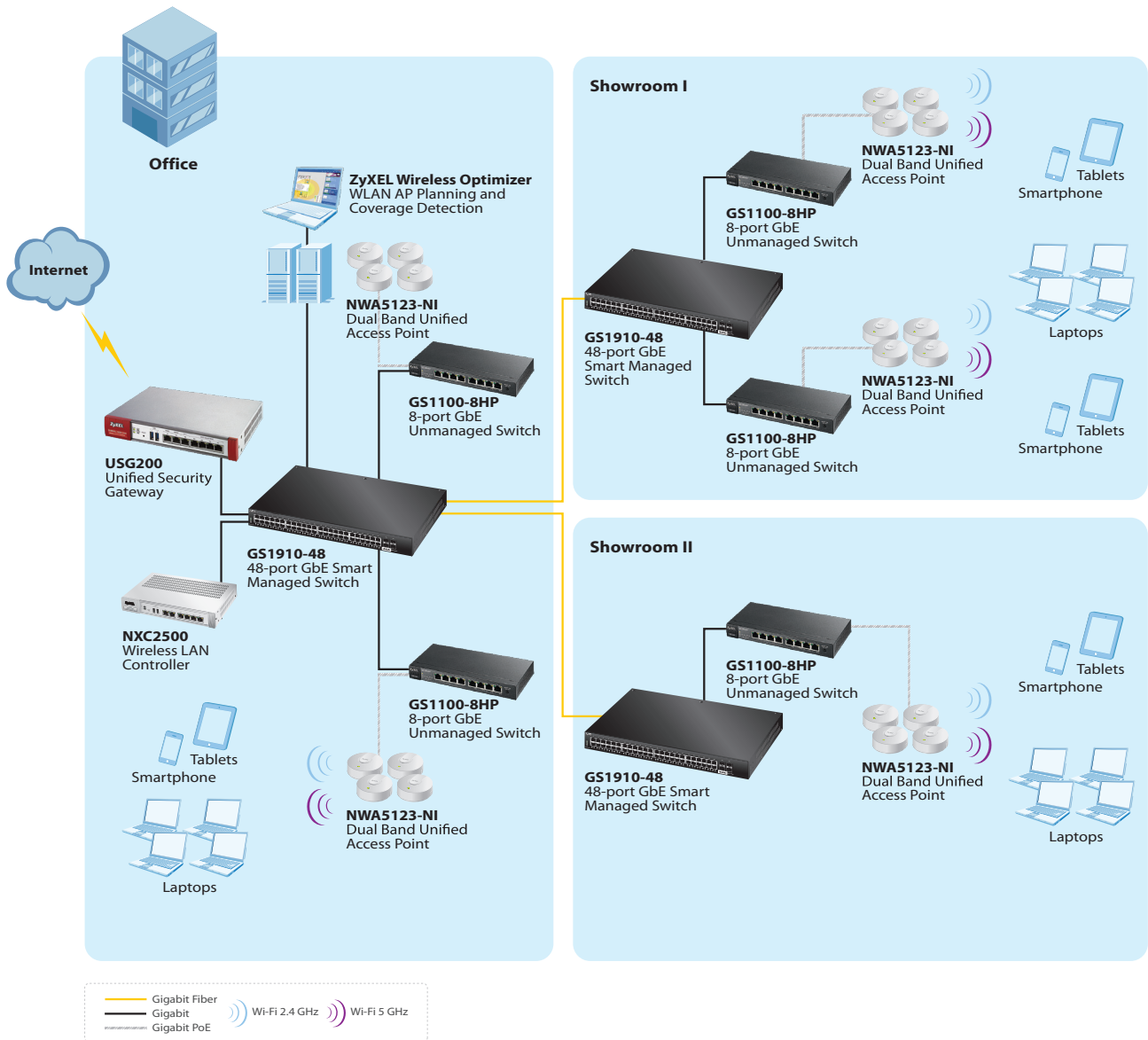### 8-port GbE Unmanaged PoE Switch

- Non-blocking full wire-speed forwarding
- IEEE 802.3x Flow control supported
- IEEE 802.3p CoS supported
- Jumbo frame supported up to 10K bytes
- Auto MDI/MDI-X support
- Desktop and fanless design
- EEE 802.3az compliant

USG200
Unified Security Gateway

- Robust hybrid VPN (IPSec/SSL/2TP)
- Zero-configuration remote access with EASY VPN
- Supports L2TP VPN on mobile devices (iPhone and Android phones)
- ICSA Firewall, IPSec certification
- Content filter stops malware and Web threats
- Powerful e-mail security
- Non-stop Internet access with multiple WAN and 3G backups

Diagram

Office

ZyXEL Wireless Optimizer
WLAN AP Planning and
Coverage Detection

Internet

NWA5123-NI
Dual Band Unified
Access Point

USG200
Unified Security
Gateway

GS1100-8HP
8-port GbE
Unmanaged Switch

GS1910-48
48-port GbE Smart
Managed Switch

NXC2500
Wireless LAN
Controller

Tablets
Smartphone

Laptops

GS1100-8HP
8-port GbE
Unmanaged Switch

NWA5123-NI
Dual Band Unified
Access Point

Showroom I

NWA5123-NI
Dual Band Unified
Access Point

Tablets
Smartphone

GS1100-8HP
8-port GbE
Unmanaged Switch

GS1910-48
48-port GbE
Smart Managed
Switch

Laptops

NWA5123-NI
Dual Band Unified
Access Point

GS1100-8HP
8-port GbE
Unmanaged Switch

Tablets
Smartphone

Showroom II

GS1100-8HP
8-port GbE
Unmanaged Switch

GS1910-48
48-port GbE Smart
Managed Switch

NWA5123-NI
Dual Band Unified
Access Point

Tablets
Smartphone

Laptops

Gigabit Fiber
Gigabit
Gigabit PoE
Wi-Fi 2.4 GHz   Wi-Fi 5 GHz

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 undergone many transformations in the fast-paced networking industry. Today, ZyXEL is one of the few companies in the world capable of offering complete networking solutions of Telco, SME/Enterprise, and Digital Home for a wide range of deployment scenarios. Telco solutions include wired and wireless access network equipments, networking customer premises equipments, and Carrier Switches. SME and Enterprise solutions include Unified Security Gateway, LAN Switches and WLAN. 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.