



Success Story

Student Dorm Takes Wireless Connectivity to the Next Level



Student
Housing



College of
Berrospe



Spain



Zyxel
Wireless
Solution

Overview

Challenges

- Create a fully customizable wireless solution for the student residence hall that replaces the outdated legacy network
- Locate a reliable vendor that has a local support team
- Deploy a solution that is scalable and future proof to grow with technological advancements
- Utilize products with outstanding specs and proven technology

Benefits

- Excellent price-to-performance ratio
- Exemplary customer service
- Centralized management for ease of use
- Captive portal allows user tracking and management of user permissions
- Enhance security to protect students and network from online threats
- Stable wireless access to high-speed internet throughout residence hall
- PoE switches reduce wiring and cabling to simplify installation and preserve aesthetics

Solution

- Zyxel wireless solution

"Zyxel is a brand we know of and their products and solutions are always preferred. By the end of the project, we can see that we have selected the right solution. We received the right support to have the network secured and working the same day."

Pedro Alvite,
IT Manager, Alvite Instalaciones



Background

Founded in 1955 by the Congregation of the Daughters of Jesus, Colegio Mayor Universitario Berrospe (College of Berrospe) is a university center providing residency to university students in the Madrid metro area with the goal of serving both the university community and society. The University Center seeks to promote a sense of coexistence to encourage better human, civic, social and ethical growth among student residents. The goal is

to instill a spirit of responsibility in students, especially through study and participation in different activities organized around collegiate life. Residence hall facilities include a central salon, fitness center, study hall, sports facilities, laundry room, chapel, computer room, television room, library, conference hall, dining hall, vending machines, and dorm rooms — all of which provide internet access.

Challenges

The legacy network in the girl's student resident hall was designed to provide internet access for both research and entertainment, but was unable to cope with the modern demands of high-definition streaming services, bandwidth hungry online games, and increased student traffic. Not only was the school's management faced with issues related to unstable connectivity and lack of speed, security was also a major concern. The administration required a solution that would offer the ability to protect

the students from online threats while managing unauthorized use of the network.

Zyxel networking specialists arrived to find a mix of outdated and poorly matched legacy wireless equipment that struggled to deliver the level of service students and staff needed. The team put together a comprehensive solution that was designed to meet the demands of today and was ready to take on the challenges of tomorrow.

Solutions and Benefits

The captive portal helps residence hall administrators set time of use and block unauthorized applications from the network, creating a secure and safe environment for student residents. Resident network users are issued a single wireless network name when connected, which

makes it easier to track and manage network use. Students now have access to high-speed Internet to download research files from ftp servers or stream their favorite movies.

Products Used

ZyWALL USG310 • Unified Security Gateway



- Unified Security Gateway Firewall for small- and medium-sized businesses
- Complete network protection with firewall, Anti-Virus, Anti-Spam, Content Filtering 2.0, IDP, and Application Patrol
- Unified security policy
- Cloud Helper makes firmware upgrades a breeze
- Device HA Pro ensures smart handover
- Hotspot management supported

NXC2500 • Wireless LAN Controller



- Auto provisioning and centralized management of up to 64* APs
- Zyxel Wireless Optimizer for easily planning, deployment, and maintenance
- Advanced ZyMesh technology for simplified AP deployment and WLAN extension
- Enhanced RF management with auto healing
- Flexible traffic forwarding with tunnel and distributed modes
- Comprehensive guest network management and granular access control

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

GS1920-24HP • 24-Port Gigabit Smart Managed PoE Switch



- Easy-to-manage rich L2 features with user-friendly browser-based management GUI
- Supports PoE+ standard to offer 30 W per port and a high PoE power budget of 375 W
- Smart fan design ensures silent operation in both desktop and rack-mounted environments
- Supports ZON Utility and Smart Connect to simplify network management and maintenance

WAC6103D-I • 802.11ac Dual-Radio Dual-Optimized Antenna 3x3 Access Point



- Dual-optimized antenna allows pattern optimization adapting to wall- or ceiling-mounted installation
- 3x3 802.11ac supports combined data rates of up to 1.75 Gbps
- Load balancing for both standalone and managed modes
- Dual-image support for reliable WiFi connectivity
- Zyxel ONE Network for standalone AP management

About Zyxel Communications

Focused on innovation and customer-centricity, Zyxel Communications has been connecting people to the Internet for nearly 30 years. Our ability to adapt and innovate with networking technology places us at the forefront of creating connectivity for telcos and service providers, business and home users. Zyxel is building the networks of tomorrow, unlocking potential, and meeting the needs of the modern workplace — powering people at work, life, and play. Zyxel, Your Networking Ally.

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