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Success Story

Chic Turkish Dormitory Gets a High-Tech Infusion with Zyxel's Wired and Wireless Solutions

INDUSTRY — Student Housing

CUSTOMER — Melisa Girls' Dormitory and Living Center

REGION — Turkey

SOLUTIONS — Wired & Wireless Solution

Overview

Challenges

• Provide fast, efficient, and secure internet access to meet students' growing bandwidth needs
• Deliver separate internet connections for two different locations

Solutions

• Zyxel wired and wireless solution

Benefits

• Implemented a new network infrastructure to meet the changing technology needs of students
• Set up VLANs to provide separate local network service to two locations
• Established a logging system in accordance with national law
• Ensured a secure network by using Turkish ID numbers as access keys

"We own two dorms in different areas in Turkey. In these two locations, we decided to set up our network infrastructure with Zyxel solutions so that students could take their online courses with fast, stable, and secure internet access.

At the end of the project, Zyxel solutions and partner MEB Computer proved that we made the right decision."

Mehmet Sadık Dizin
General Manager,
Melisa Girls' Dormitory and Living Center

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Background

The Melisa Girls' Dormitory and Living Center is a fully-serviced academic dormitory at two locations in Istanbul, Turkey. A short distance from five universities and only 2.5 km away from Istanbul Atatürk Airport, the Melisa dormitories meet the needs and expectations of students with a modern vision of academic housing. They offer students the comfort and luxury of spacious, hotel-style rooms—single or shareable for up to 4 people—with furnishings like dining tables and refrigerators and amenities such as satellite TV, high-speed internet, and central heating and cooling.

If residents actually decide to leave their oasis of an apartment, they can visit the myriad social areas to relax and mingle. The facility's e-card system makes it easy to access the library, study room, fitness center, laundry & ironing room, and infirmary. If that weren't enough offerings, a visit to the in-house Turkish bath will persuade even the most demanding guests to return. With 24-hour security, an internal phone system, and video surveillance, parents can rest easily knowing that the safety of their young scholars is never in doubt.

Challenges

E-learning and distance education have become two of the fastest-growing instructional trends across the globe. And students today don't just expect internet access; they're after a fast, stable, and secure network experience.

With an increasing number of patrons, Melisa Girls' Dormitory and Living Center needed to establish networks that were future-proof—unlikely to become obsolete anytime soon—and able to overcome the challenges posed by student users who crave unlimited bandwidth for apps, games, HD video, and the countless other creature comforts that the modern internet landscape has to offer.

Solutions and Benefits

Zyxel delivered on its commitment to the Melisa Girls' Dormitory and Living Center with the support of MEB Computer, a local partner. The first stage of Zyxel's end-to-end network solution entailed ensuring that the internet logging system was set up as required by Turkish law. For Melisa Residence, which was opened in the same neighborhood, local network traffic needed to be separated.

The backbone of the wired and wireless network infrastructure was a switching solution to unify and centrally control all network traffic. It was implemented with the **GS1920 Series Smart Managed PoE Switch**. The switch allows for effortless network management,

provides robust security features, and delivers reliable, high-speed performance. The **ZyWALL USG310 Unified Security Gateway** offered additional network safety, as dictated by Turkey's internet law regulations, securing both the network and students' data. The wireless network was implemented with an **NXC2500 WLAN Controller** and various access points, including **NWA5120 and WAC6100 Series 802.11ac Dual-radio APs** with smart antenna technology.

Students at Melisa Girls' Dormitory and Living Center can now enjoy stable, secure, and blazingly fast internet access thanks to the latest technology from Zyxel.

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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

GS1920-48HP • 48-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

NXC2500 • Wireless LAN Controller

- Auto provisioning and centralized management of up to 64 APs*
- Zyxel Wireless Optimizer for easy 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 or later

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NWA5121-NI • 802.11n Unified Access Point

- Ceiling- and wall-mountable design with optimized RF performance
- 2-in-1 standalone/managed AP design
- CAPWAP management supported
- Simple, speedy deployment with APFlex™ and Zyxel ONE Network utilities

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.