



Success Story

Turkish University Ramps Up Internet Performance with ZyXEL's Solutions

"Educational institutions have to be sensitive and attentive with regard to data communication infrastructures. An infrastructure capable of supporting a sizable density during the extended hours of operation and providing service at every location at the same quality level is important for user satisfaction. At the school, both students and teaching staff use Internet service intensively. In such a case, stable and uninterrupted communication is a must. We are now able to provide service at this level owing to ZyXEL hardware and solutions. We are also happy these high-tech products better position us for future growth."

Görkem Burak Görgülü

Dataproces Information and Communication Services

Challenges

For a school like Nigde University that aspires to have international competitive capacity in both science and technology fields, provision of rapid, uninterrupted, and high-speed Internet is critical to establishing credibility with both students and faculty members alike.

Another challenge for officials and administrators is offering the robust, sophisticated levels of security that wireless network users increasingly require in an age where hackers proliferate. The large campus not only includes the usual mix of lecture halls, administrative buildings, student housing, cafeterias and dining areas, etc. but also a number of external structures and open spaces, all which the project was tasked with including in the new wireless network.

Overview

Customer Name

Nigde University, Turkey

Customer Industry

Education

Challenges

- More than 15,000 students, faculty, and staff spread across fifteen separate locations
- Fast-growing university requires reliable and secure infrastructure that can be easily managed
- Provide rapid, uninterrupted, and high-speed wireless expected of leading, technology-oriented educational institution

Solution

- 802.11 a/b/g/n Dual-Radio Business Access Point
- 802.11 a/b/g/n Outdoor Business WLAN Access Point
- Business Wireless LAN Controller

Benefits

- Campus-wide wireless network covers over 100 locations on spacious Nigde University grounds
- All student, personnel, and various guest networks centrally-managed with assigned permissions and security levels
- Wireless network positioned for future expansion and growth with minimal added investment required

Background

Nigde University in Central Anatolia in Turkey is a public higher educational institution comprised of six faculties, two institutes, two colleges, and six vocational colleges. Established in 1992, the university currently has more than 15,000 students and faculty members. The large campus features an extensive number of faculty, student, and administrative buildings including lecture halls, meeting rooms, dormitories, and guest houses.

Solutions and Benefits

The project was realized with the cooperation of ZyXEL Premium Solution Partner - Dataproces Information and Communication Services. Installation of 185 NWA3560-N Pro access points enabled wireless Internet access for all enclosed and open spaces at the university. The model selected is especially popular with small- and medium-sized enterprises poised for future growth.

The second access point used in the project, ZyXEL's NWA3550, was in part selected due to its specific design for open-air campuses. The solution's third component is a pair of NXC5200 wireless LAN controllers that enable administrators to efficiently manage each segment of the wireless network regardless of physical location in the large, fast-expanding campus.

With the completion of the project, wireless access service is now provided to users at every Nigde University faculty building, administrative building, service building, dormitory, external campus building, and open space. This includes more than 100 classrooms, lecture halls, cafeterias, meeting rooms, guest houses, and similar common areas.

The new ZyXEL solution allows personnel, student, and guest networks at the university to be used by an array of users with different wireless network names in a safe manner through the secure, world-wide roaming service edu roam and local RADIUS verification at all locations.

Product Used



NXC5200 Business Wireless LAN Controller

- Centralized WLAN management and auto provisioning
- Manages up to 240 APs with granular access control
- Advanced RF management for optimized Wi-Fi performance
- Secured wireless edge with IDP, anti-virus and firewall
- Flexible traffic forwarding with tunnel and distributed modes
- Comprehensive guest network management features
- User-centric management solution for BYOD trend



NWA3550-N 802.11 a/b/g/n Outdoor Business Dual-Radio Access Point

- 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



NWA3560-N 802.11 a/b/g/n Dual-Radio Business AP

- Higher bandwidth and superior performance with 802.11n
- 3-in-1 hybrid AP WLAN including AP controller mode, managed AP mode and standalone AP mode
- Brand new centralized graphic management interface for up to 24 WLAN APs
- Back-up redundancy supported to provide reliable connection service
- Secured tunnels for communication between controller and managed AP to prevent leaking of configurations
- Enterprise-class AP functionalities with comprehensive configuration interfaces.
- Built with Low Smoke, Zero Halogen (LSOH) materials for plenum rating for UL 2043 support

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>.

Copyright©2015 ZyXEL Communications Corp. All rights reserved. ZyXEL, ZyXEL logo are registered trademarks of ZyXEL Communications Corp. All other brands, product names, or trademarks mentioned are the property of their respective owners. All specifications are subject to change without notice.