ZyXEL

Success Story

Auto Service Center Rolls Out Wireless Network Built on ZyXEL Solution

One of the important projects we have implemented in terms of power in network infrastructures was this work we conducted for Evren Automotive. The automotive industry has specific dynamics and this is an area where all steps should be taken carefully. Here, with our IP PBX & VPN project, we managed to establish a wireless communication infrastructure between the buildings of our customer without using cables and the power requirement for data communication was fulfilled using ZyXEL products.

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Overview

Customer Name
Evren Automotive

Customer Industry
SMB

Challenges
• Ensure that the network infrastructure is up-to-date by using state-of-the-art products and solutions
• Provide all guests and staff with uninterrupted, stable, and reliable Internet access
• Ensure that the solution provided is compatible with the requirements of the Law No. 5651
• Ensure the scalability of the solution in accordance with the increased usage in the future

Solutions
• Next Generation Unified Security Gateway-Advanced Series
• Gigabit Smart Managed PoE Switch
• 802.11 a/b/g/n Business Access Point
• 802.11 a/b/g/n Outdoor Business WLAN Access Point

Benefits
• The power requirement for wireless data communication in the headquarters and retail buildings was fulfilled
• Solution is secure and stable
• Easy management and scalability.

Background

Established in 2000, Evren Automotive sells high-quality replacement parts for Japanese and Korean cars. The company employs 60 individuals in its headquarters and retail outlets in Istanbul, Turkey. Evren Automotive prides itself on delivering the best quality parts at an affordable price.

Challenges

To better service its customers, Evren Automotive needed to upgrade its wireless network. The new network would provide Internet connectivity to both staff and customers, linking the corporate headquarters and retail facilities. Staff would use the new network for sales, inventory, and customer care. The network would allow Evren Automotive's staff within the headquarters to directly manage and oversee operations at all its retail buildings. Because of the space that had to be covered between the buildings, creating a seamless wireless network presented challenges, particularly with regard to coverage.

Solutions and Benefits

ZyXEL specialists and solution partners performed an extensive analysis to determining the data security, interior Internet, and exterior roaming requirements of Evren Automotive. The goal was set up new wireless networks with sufficient power to provide uninterrupted and secure connectivity. The solution would utilize the latest end-to-end network solutions created by ZyXEL.

The IP PBX & VPN project was carried out by ZyXEL solution partner MEB Computer. Wireless data communication was established between buildings without the use of cables by installing NWA3550-N dual-radio outdoor business access points at the headquarters and the retail buildings.

At the headquarters, a ZyXEL GS1920-48HP Gigabit Smart-Managed PoE Switch made it possible to meet power requirement in the locations where it was not possible to access direct power for the outdoor and indoor APs. Each switch connected one outdoor access point and six indoor access points. Likewise, a ZyXEL GS1900-8HP Gigabit Smart-Managed PoE switch — handling one outdoor AP and two Indoor APs — managed the connections in the retail building.

The Metro ETH was terminated at a ZyXEL USG 210 Next Generation Unified Security Gateway deployed in the main building, which allowed backup processes over both a VDSL line and 3G, preventing interruption. Content filtering at the firewall was enabled, and user access was controlled and logged. Access requests from outside the office would be carried out through IPSec, SSL, and L2TP with the enabling of the VPN feature. The indoor APs were set up to be managed at the firewall, without any additional devices. With VLAN identification handled by the switch, the data center, management, various other departments, and the Wi-Fi networks were separated. Because up to eight (8) SSIDs were manageable through the firewall's wireless management feature, separate SSIDs could be created and managed for guests and mobile devices at Evren Automotive.

The new network met Evren Automotive's coverage and connectivity requirements for wireless data communication at its headquarters and retail buildings. As ZyXEL products meet high standards necessary within the scope of the project, Evren Automotive was provided with a modern, stable and secure network solution

Product Used

USG210
Next Generation Unified Security Gateway-Advanced Series

- 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
- Comprehensive mobile broadband USB modem compatibility and multi-WAN load-balancing, failover and fall back support

GS1920-48HP
48-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

GS1900-8HP
8-port Gigabit Smart-Managed PoE Switch

- Gigabit connectivity
- High-power PoE support IEEE 802.3at
- Easy browser-based switch management
- Quick and easy set up wizard
- Advanced network error prevention features (loop protection, dual images, storm control, DoS, SSL)
- Fanless design

NWA3550-N
802.11 a/b/g/n Outdoor Business WLAN 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

NWA3160-N
802.11 a/b/g/n Business Access Point

- 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.