

# Streamlining Learning with Premium WiFi at the Corporate Training Center

## Overview

To meet the customer's demand for uninterrupted and secure wireless connections throughout the facility, Zyxel Networks collaborated with LG U+ to deliver a premium WiFi solution. The network was meticulously designed to ensure seamless roaming, robust security against external threats, and centralized cloud-based monitoring for efficient maintenance. By deploying three types of access points—NWA90AX, WAX610D, and WAX650S—tailored to the user density in each area, the solution enabled smooth transitions between spaces without connection loss. Additionally, the cloud-managed platform provided real-time network oversight and swift issue resolution, ensuring a reliable and user-friendly experience.

## Challenges

The corporate training center faced significant challenges due to its diverse spaces and high user density. Accommodating up to 200 users in the auditorium, 50 to 70 in lecture rooms, and 20 in seminar rooms demanded a robust network capable of supporting simultaneous connections of different devices like smartphones, tablets, and notebook PCs without compromising performance. Ensuring uninterrupted WiFi connectivity as users transitioned between classrooms, lounges, and dining areas further added complexity. Additionally, safeguarding the network against external cyber threats while managing bandwidth efficiently to provide a seamless experience for all users was a critical requirement.

## Solutions

The WAX650S was installed in high-density areas, such as the auditorium and lounges, featuring Zyxel Smart Antenna technology to minimize interference and optimize signal strength, ensuring smooth connectivity for over 100 users simultaneously. The WAX610D was deployed in lecture halls, supporting up to 70 people, with dual-optimized 4x4 MU-MIMO antennas that allowed for wall-mounted installations to reduce signal interference between floors.

### Customer

Corporate Training Center

### Industry

SMB

### Location

Ilsan, Korea

### Partner

LG U+

## Customer Background

Located in Ilsan, Korea, the corporate training center consists of two buildings with various educational facilities spanning three underground floors. It also includes accommodations, convenience amenities, and indoor and outdoor sports areas. Widely utilized for workshops and training by organizations, companies, and associations, the center required a wireless network solution tailored to its educational spaces.



For smaller spaces like seminar rooms and lounges, the NWA90AX, equipped with the 2x2 MU-MIMO antenna, delivered stable WiFi 6 connectivity for lighter network loads. These wireless access points, combined with robust Quality of Service (QoS), ensured fair traffic distribution to prevent network monopolization by heavy users and enabled efficient traffic management through separate SSIDs created for various educational purposes.

To enhance the user experience, unified SSIDs allowed seamless roaming, enabling users to move between floors and spaces without reconnecting manually. The network's security was bolstered with integrated features to block malicious sites and unauthorized access. By configuring VLANs, the network was separated for employees and customers while ensuring real-time traffic, such as voice and video, remained uninterrupted. Cloud management capabilities allowed administrators to remotely monitor and manage the network via a mobile app, receiving real-time alerts to resolve issues swiftly. Topology mapping and wireless channel scans were used to optimize network performance.

## Product List



- WAX650S/WAX610D/NWA90AX WiFi 6 Access Point



- GS1920-24HPv2 Smart Managed PoE Switch



- USG FLEX 200 Firewall

## Results

Seamless connectivity ensured smooth roaming, providing uninterrupted WiFi that enhanced the user experience during training and workshops. Optimized performance through QoS settings effectively balanced bandwidth across users, supporting the simultaneous use of multiple devices. Enhanced security was achieved with VLANs and integrated firewalls, protecting both data and user devices. Meanwhile, simplified maintenance was made possible with real-time cloud management, enabling quick detection and resolution of any network failures.

- Uninterrupted connectivity and strong WiFi signals enhance user experiences throughout the training center
- Security firewalls and VLAN configurations enable robust protection for data and user devices
- Real-time cloud management streamlines maintenance, enabling quick issue detection and troubleshooting

