



# Enhancing Wireless Connectivity at a Korean Children's Hospital

## Overview

A Korean children's hospital needed enhanced network security, seamless coverage, and support for high user density. To meet these requirements, Zyxel Networks' solutions, combined with LG U+ Premium WiFi service, provided comprehensive support, including robust security, streamlined network management, and high-speed wireless connectivity. The USG FLEX 200 firewall safeguarded sensitive patient data from potential threats. WAX610D WiFi 6 access points ensured fast and reliable connectivity in key areas such as lobbies, waiting rooms, and treatment rooms. This tailored solution delivered a secure and stable network, enhancing the experience for patients, visitors, and staff while supporting the hospital's mission to provide high-quality healthcare.

## Challenges

Network security was a top priority to protect patient data and prevent external threats. Given the constant movement of patients, staff, and visitors, maintaining uninterrupted WiFi connectivity throughout the facility was essential for a smooth user experience. Additionally, the hospital needed to accommodate a high number of concurrent users, especially during peak hours when patients and their families accessed the network simultaneously. Unlike general hospitals, this children's hospital served young patients, often accompanied by their guardians, resulting in a higher volume of wireless network users. Visitors registered at the outpatient center on the third floor and waited for their turn, frequently using WiFi for streaming services like kids' channels on tablets or mobile phones and watching videos on YouTube to keep children entertained. A network capable of handling multiple simultaneous users smoothly was crucial to meet these demands.

## Solutions

Zyxel Networks' solutions and LG U+ Premium WiFi service were deployed to meet the hospital's diverse needs.

### Customer

Korean Children's Hospital

### Industry

Healthcare

### Location

Dasan, Korea

### Partner

LG U+

## Customer Background

The Korean children's hospital specializes in providing healthcare services for children and adolescents. The facility includes an outpatient center, an inpatient center, and a developmental center, spanning three floors. The hospital sought to offer seamless wireless network connectivity across critical areas such as lobbies, waiting rooms, hallways, examination rooms, and treatment rooms to enhance the experience for patients and visitors.



WAX610D WiFi 6 access points were placed in lobbies, waiting rooms, hallways, and examination rooms to provide high-speed, stable connectivity. They ensured smooth, uninterrupted connectivity for visitors. They allow staff to have real-time access to medical records and diagnostic tools, enhancing patient care efficiency.

To ensure seamless connectivity, all access points were unified under a single WiFi name, enabling automatic transitions between them. Even with a network free of dead zones, a surge in simultaneous WiFi users could still cause slowdowns if bandwidth was monopolized by certain individuals. To prevent slowdowns from high user density, the hospital applied Quality of Service (QoS), ensuring fair bandwidth distribution and optimal WiFi performance for all users.

While seamless connectivity was vital, network security was even more critical. A simple NAT setup wasn't enough for a hospital's complex needs. The USG FLEX 200 firewall was installed to block harmful traffic. With intrusion prevention, content filtering, and application control, it safeguarded patient data and ensured secure internet access for staff and visitors.

## Product List



- WAX610D WiFi 6 Access Point



- GS1920-8HPv2 Smart Managed PoE Switch



- USG FLEX 200 Firewall

## Results

The new network strengthened security, safeguarding sensitive data from external threats. It also provided fast, reliable connectivity and efficiently handled high user density, ensuring seamless access for patients, visitors, and staff, even during peak hours.

- Creating a seamless wireless environment for users while moving around the hospital and ensuring optimal WiFi speeds for everyone
- Strengthening network security to ensure a reliable and protected digital environment
- Simplified network management for IT teams, allowing them to focus more on hospital operations

