Enhancing Office Connectivity for Higher Speeds and Productivity

Overview

The sports brand company introduced a smart office seating system for flexible movement. To ensure seamless WiFi connectivity and fast data transmission, they upgraded their network infrastructure with Zyxel Networks' solutions, including the USG FLEX 700 firewall, WAX650S AP, and smart managed switch for wider coverage and improved connectivity. As a result, employees now experience faster data transfer and uninterrupted WiFi, enhancing overall productivity and efficiency. Also, by leveraging cloud networking capabilities, the company can easily monitor the network status with comprehensive oversight of all installed equipment and services through the dashboard.

Challenges

To provide employees with the flexibility to move between seats while working on laptops and tablet PCs, regardless of their location, the company required an environment with WiFi connectivity remaining uninterrupted during movement. Additionally, designers and platform developers frequently uploaded large files such as design proposals and promotional videos to servers and cloud drives. However, the existing office infrastructure operated on a 1G network, resulting in significant delays for designers and platform developers when transferring large files due to traffic bottlenecks. Moreover, positioning wireless APs based on population density can cause frequent disconnections as devices roam between closely located APs, leading to connectivity interruptions.

Solutions

Considering customer requirements such as a wireless Internet-oriented work environment and the need for large-capacity traffic transmission, a backbone switch, the XS3800-28, supporting 10Gbps on all ports, was deployed to connect servers and XGS2210-28 L2 switches at 10Gbps, eliminating speed issues due to insufficient bandwidth.

Customer
Sports brand office

Industry
SMB

Location
Seongdong-gu, Korea

Partner
KCF International

Customer Background
A sports brand company employs around 200 staff, with 90 percent utilizing laptops and the wireless network for their work. The staff includes around 20 designers and fashion commerce platform developers who frequently transfer large files to servers or storage.

Additionally, the company deployed the USG FLEX 700 firewall that can automatically balance the traffic load amongst the available WAN connections to enhance overall network throughput, thereby reducing bottlenecks with internal servers.

For wireless access, WAX650S APs were installed to establish a 5Gbps uplink environment for fast network connectivity. Equipped with high-performance hardware and 4x4 smart antennas, they offer a range of around three times wider than existing WiFi 5 APs, accommodating more users and reducing potential failure points, such as minimizing roaming sessions. Moreover, the WiFi QoS function ensures smooth employee workflow even during peak traffic periods, maintaining a stable wireless environment. The network status is monitored by Nebula cloud networking solution, tracking network traffic usage and AP status 24/7, keeping the company informed of the network's health. These APs can create zones within this kind of office, tailored to accommodate up to 80 users each, thereby enhancing the environment for smooth usage of 3 to 4 wireless devices per employee. This setup is particularly beneficial for individuals with high demands for data transmission, such as designers.

Product List

- WAX650S WiFi 6 Access Point

- XS3800-28 L3 Aggregation Switch
- XGS2210-28 Layer 3 Access Switch
- XS1930-12HP Lite-L3 Smart Managed PoE Switch

- USG FLEX 700 Firewall

Results

With a network infrastructure tailored for handling large-capacity traffic, employees, particularly designers and platform developers, now enjoy faster data transmission. This facilitates the quick and efficient transfer of large files such as design proposals and promotional videos to servers and cloud drives. Furthermore, employees experience uninterrupted productivity thanks to seamless WiFi connectivity as they move around the office, whether between seats, meeting rooms, or common areas. Moreover, the adoption of cloud-based network management ensures a stable wireless network environment, minimizing downtime and ultimately enhancing overall operational efficiency.

- Enhanced data transmission through 10Gbps connectivity, enabling smooth handling of large traffic
- Minimized roaming and uninterrupted productivity regardless of their location within the office
- Cloud-based network management allows for remote control and monitoring of all network equipment