



Optimizing Hotel Operations and WiFi Experiences with Reliable Networks

Overview

A prominent hotel in Busan's Haeundae district, spanning 26 floors with 383 guest rooms and various amenities, needed to ensure uninterrupted WiFi coverage throughout the property and prevent disruptions in wired internet services. They worked with Zyxel Networks to tailor a cloud-managed network solution. High-performance WiFi 6 APs were installed in public areas, while guest rooms were equipped with APs to provide consistent coverage without dead zones. Smart managed switches were deployed to detect and block network failures, ensuring a stable network environment. Additionally, Zyxel Nebula Cloud Networking solution provides a centralized, cloud-managed solution, allowing for real-time monitoring and proactive issue resolution. This comprehensive approach significantly enhanced the hotel's network performance, increasing guest satisfaction and operational efficiency.

Challenges

The hotel had to maintain seamless connectivity and robust network performance across all areas while managing the technical complexities and potential wireless and wired network issues. These challenges could significantly impact operational efficiency and guest satisfaction. First, they needed to provide uninterrupted WiFi service throughout the property, including high-traffic areas like lounges, business centers, and restaurants, ensuring guests could comfortably use WiFi even in crowded spaces. Second, they had to prevent network disruptions caused by incorrect cable connections in wired internet service areas such as business centers and meeting rooms. Additionally, with new devices continuously connecting to the network and generating diverse traffic from internet surfing to streaming services like YouTube and Netflix, it was essential to install APs based on the space and user density within the hotel.

Customer

Busan Hotel

Industry

Hospitality

Location

Busan, Korea

Customer Background

The hotel, located in the bustling Haeundae district of Busan, spans 26 floors with 383 guest rooms. It offers a range of amenities, including a lounge, restaurant, fitness center, and swimming pool. Catering to leisure and business travelers, the hotel sought to enhance its service quality by providing a seamless and high-performance network experience.



Solutions

In high-traffic areas like restaurants and fitness centers, WAX510D WiFi 6 APs optimize connections. Crowded spaces such as banquet halls and lounges use WAX650S APs with 4x4 smart antennas, supporting 80 users per AP and extending the WiFi range. WAC500H APs with 2x2 MU-MIMO Wave 2 antennas were installed in guest rooms for seamless coverage without dead zones.

Unifying the WiFi network under a single name allows guests to seamlessly connect to the nearest AP as they move throughout the hotel. The cloud management platform ensures uninterrupted connectivity by automatically connecting users to the optimal AP. Continuous monitoring and QoS settings ensure equal service for all users while differentiating between guest and business networks.

The DHCP Server Guard and Loop Guard functions detect and block failures, ensuring network stability. Managed switches prevent disruptions from incorrect cable connections and facilitate efficient traffic separation and management. VLANs block unnecessary multicast and broadcast traffic, maintaining a pleasant network environment.

Product List



- WAX650S/WAX510D WiFi 6 Access Point
- WAC500H WiFi 5 Access Point



- XGS4600-32F L3 Aggregation Fiber Switch
- GS1920-24/24HP Smart Managed Switch



- USG FLEX 700 Firewall

Results

The tailored network solution has significantly enhanced the hotel's service quality and operational efficiency. The unified WiFi network allows seamless roaming, and Nebula Cloud Networking solution provides complete oversight, enabling swift issue resolution through real-time monitoring and notifications. These improvements have effectively addressed the hotel's connectivity challenges, increasing guest satisfaction and network reliability.

- Improved guest experience with uninterrupted WiFi throughout the hotel and reliable connectivity even in high-density areas
- Smart managed network prevents network disruptions from improper cable connections
- Proactive network management with comprehensive oversight, minimizing downtime and providing a convenient WiFi experience

