



Enhancing Care and Connections with Seamless WiFi for Elderly Home

Overview

Chang'an Elderly Care Center provides 24-hour care for seniors who need assistance with daily life. The organization struggled with unreliable internet, which made it hard for staff to stay connected and disrupted video calls between residents and their families. After partnering with Zyxel Networks to upgrade its network system, everything changed. The new network brought faster, more stable connections, improving communication and making work much smoother. Even in areas like the basement or during activities with multiple people connecting to the internet, network access is now reliable, and video calls are clear and seamless, bringing joy to both staff and residents.

Challenges

Family communication and care coordination relied on the internet, but with many users across multiple floors, the wireless network often encountered issues. Although signals appeared strong, connections were either painfully slow or wouldn't connect at all, which disrupted daily workflows and lowered efficiency. On top of that, video calls between seniors and their families suffered from delays and poor video quality, making it difficult for them to stay connected. Additionally, the organization has seven floors and a basement. The entire system was not centralized and consisted of different brands, which made upgrading the infrastructure harder and more time-consuming.

Solutions

Following a thorough onsite evaluation, the organization recognized the need for a complete network overhaul. Previously, the network relied on home routers, which led to frequent dropouts and instability, making it inadequate for simultaneous high network usage. Additionally, these routers could not provide sufficient coverage for high-demand environments and large areas, such as the basement, where high-density activities take place.

Customer

Chang'an Elderly Care Center

Industry

Non-profit organization

Location

Hsinchu, Taiwan

Customer Background

Chang'an Elderly Care Center offers care for seniors who cannot fully care for themselves, providing 24-hour residential and homebased services. Established in 1994, the organization aims to create a safe and loving environment for elderly individuals, easing family burdens, and promoting well-being through community services like home care and meal delivery.



For an elderly care facility providing 24-hour service, stable internet is crucial. Previously, we often encountered unstable connections and slow speeds. With the new equipment, work efficiency has greatly improved, and communication between residents and their families via video calls is now much smoother.”

Bo-Ju Chen, Director
Chang’an Elderly Care Center

To tackle these issues, the organization partnered with Zyxel Networks to replace home routers with fourteen NWA50AX WiFi 6 access points, enhancing network performance and stability. The dual-radio design minimized latency and interference, ensuring smoother user experiences. To further reduce interference and maximize coverage, the access points were installed on the ceilings. GS1200 switches were linked to the access points, extending coverage from the basement to the seventh floor and ensuring stable power supply and connectivity.

The GS2220-50HP L2+ Managed PoE Switch, featuring high port numbers, connected to the VPN300 firewall to create a core network. Installed on the first floor, the switch connected to access points in the administration office and conference room, while also providing routing to GS1200 switches on other floors. This setup ensured the network was reliable, efficient, and capable of supporting high user demand throughout the facility.

Product List



- NWA50AX WiFi 6 Access Point



- GS2220-50HP L2+ Managed PoE Switch
- GS1200-8HP Web Managed PoE Gigabit Switch



- VPN300 Firewall

Results

The comprehensive network upgrade has led to faster and more stable connections, even in bustling multi-floor environments. This improvement significantly enhances workflow efficiency at the elderly care center and enables smooth communication with the outside world. With reliable internet access available throughout the facility, residents can enjoy uninterrupted video calls with their families, resulting in greater satisfaction for all involved.

- Enhanced operational efficiency through faster, more stable network
- Greater coverage and stability in all areas, supporting high-density activities
- Seamless video calls and delay-free communication improve connections between seniors and families

