VIGI and Omada Ensures a Stable and Safe Living Environment for Four Apartment Buildings in Japan

Project Scope

Provide comprehensive networking and surveillance solutions for four apartment buildings.

Customer Profile

Name: Evergreen Yodogawa
Industry: Residential
Location: Japan

Challenges

• High costs for Wi-Fi access and surveillance
• Unstable Wi-Fi connections disrupting residential events
• Inadequate monitoring system affecting security effectiveness and reliability
• Difficulty in wiring for network and surveillance across buildings and elevators

Solutions

• VIGI C445 Camera ×15
• VIGI C345 Camera ×19
• VIGI C230I Mini Camera ×14
• VIGI NVR4032H ×4
• Omada OC200 Controller ×1
• Omada EAP650-Outdoor ×12
• Omada EAP215-Bridge-KIT ×14

VIGI and Omada delivered a unified networking and surveillance solution while maintaining clean, minimal cabling for Evergreen Yodogawa — a 1975-built condominium complex in Osaka with 1,470 units.

Secure Centralized Management with the Omada Hardware Controller

One Omada OC200 controller was strategically deployed at Evergreen Yodogawa to offer centralized management for multiple devices, ensuring rapid issue resolution and cost efficiency. Seamlessly integrated into their private cloud, the devices comply with strict data sovereignty standards, ensuring that sensitive information is stored locally, protecting core systems like the data center from external threats. Features such as Quality of Service (QoS) and bandwidth control are ideal for efficient traffic management, significantly ensuring stable Wi-Fi connections.

Flexible VIGI Camera Solutions for Multi-Scenario Applications

The VIGI surveillance system addresses three core application scenarios: indoor environments, outdoor areas, and elevator cabins. VIGI C445 and VIGI C345 feature IP67 waterproofing with durable steel housing, ensuring reliable performance and a long service life indoors and outdoors. For confined elevator cabins, the compact VIGI C230I Mini camera combines a space-efficient design with a 2.8mm wide—angle lens, delivering comprehensive coverage ideal for tight spaces requiring a maximum visual field. When integrated with VIGI NVRs, this unified cabling solution significantly reduces installation complexity and achieves unified management.

Efficient Operation with VIGI Cameras' High-Resolution Imaging and Intelligent Features

VIGI surveillance systems safeguard residential complexes through high-resolution imaging and intelligent detection technologies. Equipped with wide-angle lenses and 3MP/4MP HD imaging, the cameras provide full coverage of critical zones such as building entrances, elevators, and parking areas. Smart detection triggers real-time alerts for anomalies, while AI-powered people and vehicle analytics enable rapid post-event searches by filtering for multiple attributes.

This enables efficient identification and response to abnormal events like wrong-way movement, unauthorized parking, and elevator use, boosting operational management. Given the property's size and high density, the system reduces security workload while extending coverage to adjacent public areas, such as main roads, enhancing safety for both residents and the community.

Omada High-Speed Wi-Fi 6 for Surveillance and More

Omada's high-speed Wi-Fi 6 solution ensures stable and seamless connectivity for VIGI cameras, supporting uninterrupted video transmission and optimized surveillance performance. EAP650-Outdoor delivers dual-band speeds of up to 3 Gbps, utilizing 802.11ax technology to support continuous, high-quality video streaming. Designed for outdoor environments, it features horizontally and vertically polarized antennas with an IP68 weatherproof enclosure, providing strong, expansive wireless coverage for security cameras in various environments. Key features, like 2×2 MU-MIMO, 160 MHz bandwidth, and OFDMA technology, enable high-density client support without compromising network stability, making it ideal for large-scale monitoring deployments.

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> TP-Link enabled the construction of a complete wireless solution through its robust wireless LAN products and extensive camera lineup.
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> A site survey confirmed that wireless performance could be smoothly established, and after installation, 48 cameras were successfully and stably monitoring across two locations.
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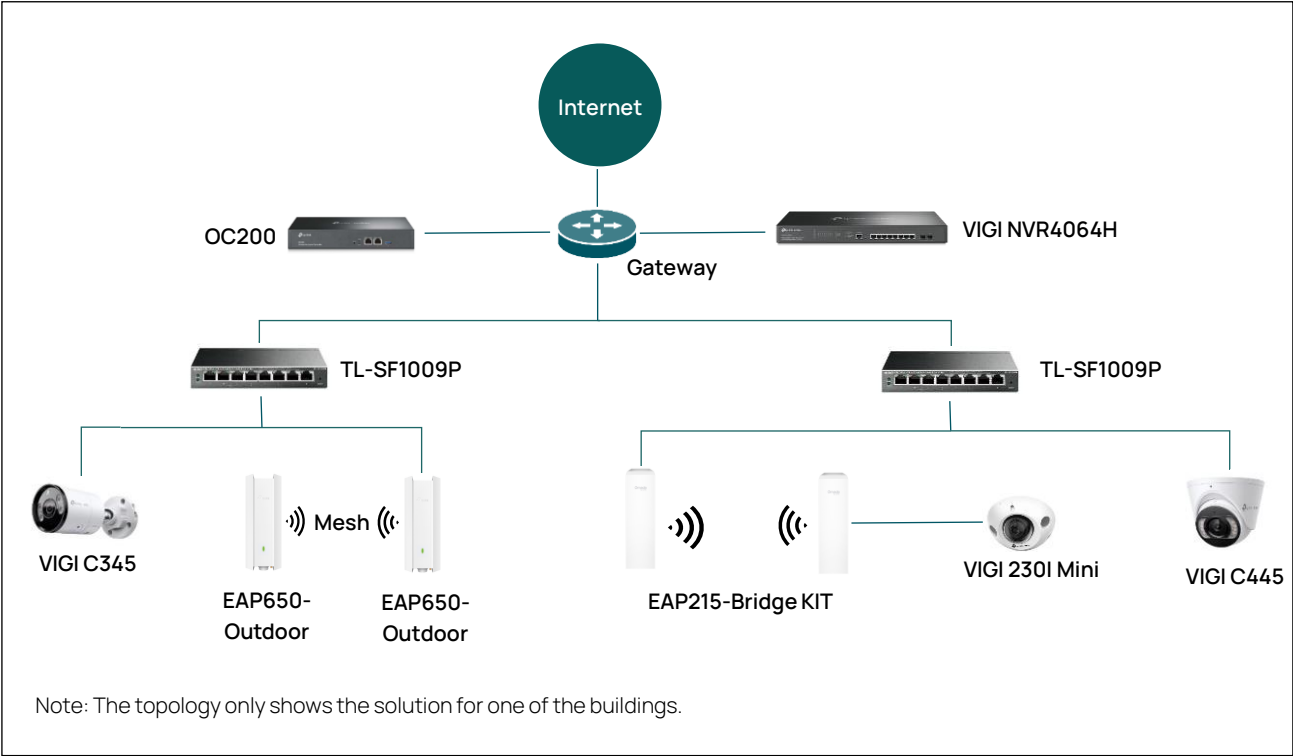> ——Chairperson of Evergreen Yodogawa Chijokan Management Association

Elevate Elevator PtP Wi-Fi for Surveillance with Omada's Wireless Bridge Solution

Omada's EAP215-Bridge KIT offered a high-performance wireless solution to ensure stable surveillance and network connectivity in elevator spaces across four apartment buildings. Supporting up to 3.1 miles (5 km) of long-range connectivity, it empowers seamless, real-time video streaming from elevator cameras to an NVR with minimal hardwiring. Its three-port design allows direct connection of multiple cameras and monitoring devices without needing an extra switch. Operating on the 5 GHz band, it guarantees stable, interference-free video transmission, making it the ideal choice for secure and efficient elevator surveillance networks in residential buildings.

Easy and Rapid Installation Ensures Quick Connectivity and Monitoring

In line with Omada and VIGI's recommendations and supported by Evergreen Yodogawa, all cameras and access points were installed across the four apartment buildings' common areas and elevators in a short time. EAP650-Outdoor and all camera models support PoE, reducing cabling complexity and cutting installation costs by removing the need for extra electrical wiring. Omada Mesh enables seamless wireless connectivity between Omada's APs, creating a full indoor and outdoor Wi-Fi mesh system with minimal cabling. This setup also reduces the need for extensive wiring, lowering cable costs.

Note: The topology only shows the solution for one of the buildings.

Topology