

GROOVY

APARTMENT & CONDO

Success Story

ZyXEL Provides Internet Solution to Tara Group's 161-Unit Condo Development in Thailand



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"ZyXEL provides hardware from provider to end-user, making efficient and easy to maintain solutions to provide Internet services to customers. With its friendly cost, the decision to choose ZyXEL's solution is not difficult to make."

Overview

Customer Name

Groovy Apartment & Condo

Customer Industry

Real Estate Development and Management

Challenges

- Provide Internet access to residents of 161-unit condominium complex
- Many residents are students who rely on stable Internet access
- Must be able to handle connections from a wide range of devices
- Large number of units complicates management and coverage issues
- Solution must be stable, efficient and affordable

Solutions

- Unified Security Gateway
- 24-Port Gigabit Smart Managed Switch
- Long Range PoE Business Access Points
- 6-Slot Chassis MSAM
- ADSL Splitter
- Wireless N150 ADSL2+ 4-Port Router

Benefits

- Offers affordable coverage for large number of units
- Easily managed and upgradeable
- Provides complete coverage to communal areas
- Provides dependable high-speed Internet access to large number of units

Background

Groovy Apartment & Condo by the Tara Group is a residence targeting younger-generation of tenants. Its goal is to offer tenants a happy and fulfilling living experience, with enough space within the project design to accommodate a wide variety of activities — such as sharing fun with friends — and a range of lifestyles. Groovy Apartment & Condo, an affiliate of Tara Group, was founded in 1989 with a focus on

real estate development for quality residences and communities. With more than 25 years of experience administering more than 10 projects and constructing more than 1,500 residential units, the Tara Group has evolved and expanded to the extent that it is recognized as one of the leading residential developers for the quality and unique style it offers, as well as its ability to meet to any of its customer's needs.

Challenges

Groovy caters primarily to younger residents who are looking for convenience in a stylish setting. The majority of Groovy's residents are college students. Groovy residents—both students and non-students—want the most from modern technology, including smooth and stable network



systems, as well as ubiquitous accessibility. Groovy features 161 rooms across eight floors, which is a considerable amount of space to cover. Each room is equipped for a range of wired and wireless electronics, such as telephones, televisions, and Internet-connected devices. Groovy gives high priority to providing connectivity because most residents are college students who require the Internet for research and other education-related activities. Groovy places the utmost importance on Internet coverage that is stable, smooth and fast, as well as able to reach all areas of the residence complex.

Groovy chose network hardware that meets the customer's requirements and boasts the highest efficacy, while still offering a reasonable price point. Groovy chose ZyXEL because the company can satisfy these requirements while building confidence in the products that Groovy offers by providing high-quality hardware at affordable prices.

Solutions and Benefits

Groovy is a newly built condominium complex featuring a large number of rooms, each of requiring its own Internet connection. A network system solution to provide Internet service to all rooms was required. Installing a LAN in the building would have been prohibitively expensive. Instead, Groovy chose to provide Internet services with a widely used format of Internet connection—ADSL with the highest possible bandwidth at 24 Mbps—through the telephone lines to a router installed in each room.

The hardware Groovy chose to provide Internet to residents is as follows: A USG300 Unified Security Gateway manages Internet service and keeps traffic information in compliance with Computer Crime Act 1997, including load-balancing functions for simultaneously connecting to two lines of FTTX for stability and efficacy. A GS1910-24 24-Port Gigabit Smart Managed Switch broadcasts the network signal to the wireless access points: IP PBX and IP DSLAM.

The wireless access points for Wi-Fi in the lobby, swimming pool and adjacent areas are provided by three NWA1100-NH 802.11 b/g/n Long Range PoE Business Access Points, while Internet service for rooms is accomplished with the IES-5106M 5U 6-Slot Chassis MSAM, with four ALC1248G-51 48-Port ADSL Line Cards. The Internet signal is broadcast through telephone lines to residential rooms in the building across eight floors, 161 rooms in total. An IES-5005ST ADSL Splitter is also utilized to combine Internet signals and telephone signals within the condominium complex, which are broadcast together to the rooms. The devices used

for receiving the Internet signal from telephone lines and broadcasting it within the rooms are 161 units of the AMG1202-T10B Wireless N150 ADSL2+ 4-Port Router.

After Groovy Apartment & Condo implemented ZyXEL's network solution, Groovy could easily meet resident expectations for network connectivity. All systems proved to be stable and efficient, easily justifying the investment. Most importantly, Groovy's resident customers were satisfied with the results, resulting in a substantial return on investment for Groovy Apartment & Condo.



Products Used



USG300 Unified Security Gateway

- Ultra-high performance and protection
- Comprehensive support to IPv6
- Supported various VPN solutions (IPSec/SSL/2TP)
- ICSA Firewall, IPSec certification
- Real-time, dynamic malware protection
- High Availability (HA)



NWA1100-NH **Long Range PoE Access Point**

- High-output power of up to 28 dBm delivers extended coverage
- Two (2) external antennas with high 5 dBi gain optimized for mobile devices
- Fast 802.11n Wi-Fi with speeds up to 300 Mbps improves transmission of large files or videos
- Easy deployment via client mode or repeater AP and IEEE 802.3af PoE support
- ZON Utility and ZAC minimize repetitive configuration processes and effort
- Certified WPA2 Enterprise access control management and user traffic control for strict network protection



GS1910-24 **24-port GbE Smart Managed Switch**

- Advanced Smart GbE L2 ACL switching features
- 48 Gbps non-blocking switch fabric
- Supports IPv6
- Fanless design



AMG1202-T10B **Wireless N150 ADSL2+ 4-Port Router**

- Standard-based WPS for easy and secure WLAN establishment
- Robust SPI firewall protection
- Complete QoS solution to ensure triple play service quality
- Remote provisioning and management through TR-069
- IPv6 support
- Parental control scheduling by different interface and MAC address
- ROM-D feature for distributor/operator easy customization



IES-5005ST **3.5U 5-slot Chassis MSAN**

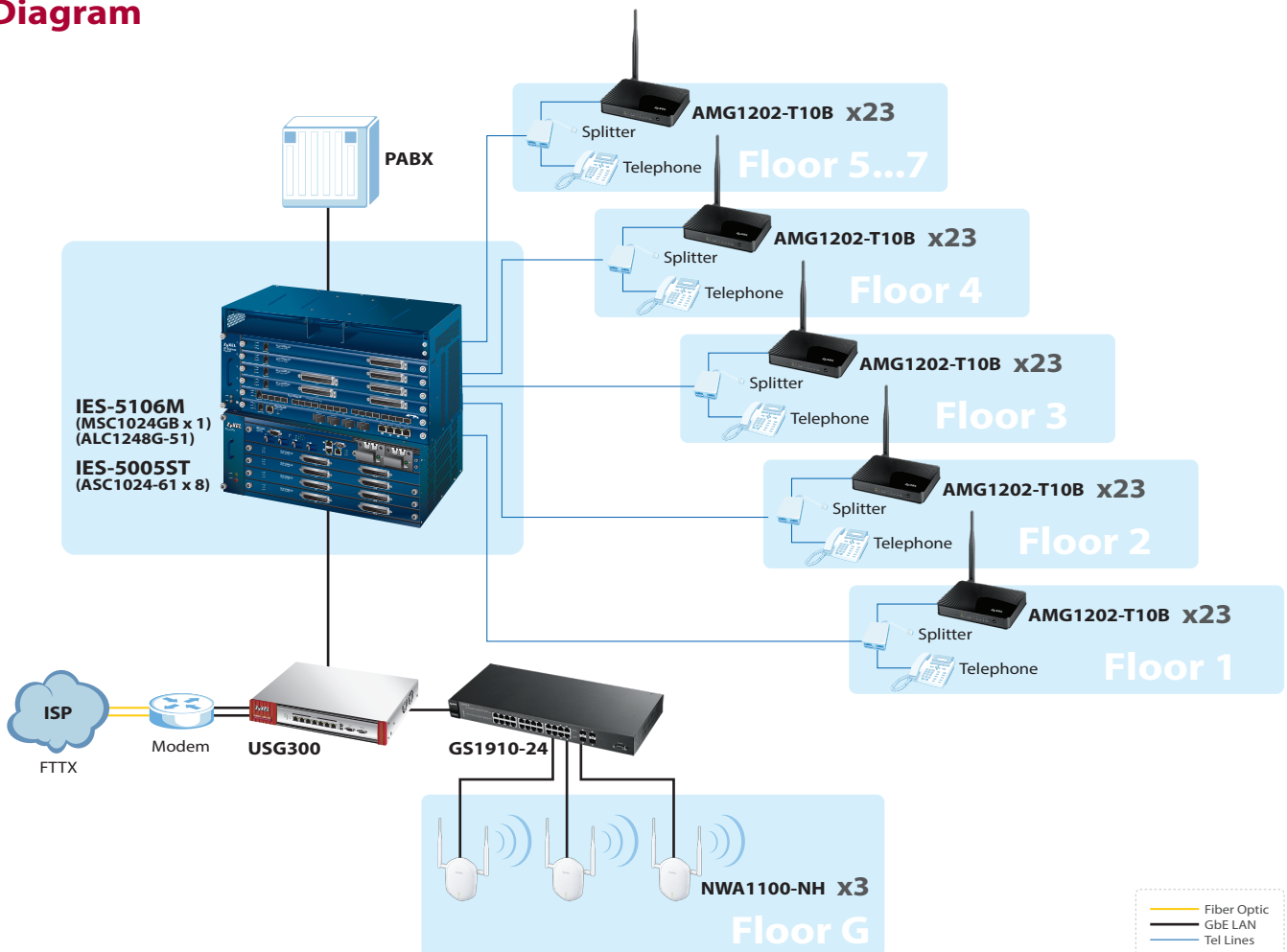
- Fully gigabit backplane supporting to provide non-blocking bandwidth from each line card to management card to solve traffic congestion problem. Also provides a good mechanism for video multicasting applications.
- Two power modules for Telco/ISP full redundancy requirement that can flexibly continue the user services
- Each slot including fan module are designed to be hot-swappable, increasing reliability and Mean Time Between Failure (MTBF) value, thereby extending the life span of the unit



IES-5106M 5U 6-slot Chassis MSAN

- Gigabit backplane support to provide non-blocking traffic for optimized IPTV performance
- Power Redundancy support to ensure services stability
- Hot-swappable design on line cards and fan module to increase reliability while extending Mean Time Between Failure (MTBF) value for longer unit life span
- Comprehensive QoS to enhance triple play users' experience (SR, WRR)
- Field proven IGMP v1, v2 snooping and proxy for IPTV deployment

Diagram



About ZyXEL Communications

ZyXEL Communications Corp., founded in 1989 and headquartered in Taiwan, is the leading provider of complete broadband access solutions. As one of the early modem manufacturers, ZyXEL has undergone many transformations in the fast-paced networking industry. Today, ZyXEL is one of the few companies in the world capable of offering complete networking solutions of Telco, SME/Enterprise, and Digital Home for a wide range of deployment scenarios. Telco solutions include wired and wireless access network equipments, networking customer premises equipments, and Carrier Switches. SME and Enterprise solutions include Unified Security Gateway, LAN Switches, WLAN, and IP telephony. Digital Home solutions include network connectivity devices and multimedia solutions.

The company has 1000 employees and distributors in 70 countries, reaching more than 150 regional markets. The ZyXEL Communications Corp. includes 35 subsidiaries and sales offices and two research and development centers worldwide. For more information, visit the company's Website, <http://www.zyxel.com>.

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