



## Connectivity Comes Home with Integrated Solutions Based on ZyXEL Solutions

## **Overview**

Customer Name Inspired Dwellings

Customer Industry Residential

#### Challenges

- Create a stable wireless network to support an increasing number and variety of connected household devices
- Provide high-speed connectivity to meet the demands of various applications throughout the home, such as bandwidth-intensive activities like video streaming
- Provide consistent coverage to support 24/7 network uptime and customer care

 Deliver enterprise-class security on home Wi-Fi

#### Solution

- 802.11ac Dual Radio Unified Pro Access Point
- Wireless LAN Controller
- Unified Security Gateway

#### Benefits

- Rapid setup time and the reporting functionality
- Instant monitoring of Wi-Fi strength and the number of devices connected to the network
- Data bandwidth monitoring to track download speeds and detect attacks on the system

- Best possible Wi-Fi coverage in homes for unrivalled performance
- 802.11ac standard support with smart antennas boost network speed and signal strength
- Wi-Fi network is future-proofed to support additional Internet-enabled devices
- End-to-end solutions provides high level of service

# Background

Priding itself on its reputation for "bringing technology and homes to life," Inspired Dwellings is a home technology consultancy, design, and delivery company that specializes in the high-end residential sector. Based in South West London, its projects are located around the country as well as in local areas around London, such as Kensington and Chelsea, where it has transformed spaces through innovative smart home technology and automation solutions. Its leading presence in the audio-visual (AV) industry is evidenced in that it is an Industry Partner of the British Institute of Interior Design (BIID), a CEDIA accredited member, and a multi-award winner. It strives to deliver exciting AV solutions to its clients, working in collaboration with its network of industry-leading technology partners.



# Challenges

The number of Internet-enabled devices hitting the market is rising exponentially. The average British household now owns 7.4 Internet devices, with four out of 10 households buying a tablet in the last year, according to YouGov.

Moreover, the Internet of Things (IoT) is on the rise, with everyday items such as refrigerators, ovens, and cars increasingly being embedded with electronics, software, sensors, and network connectivity. This enables these devices to collect and exchange data and be managed remotely. Analysts at IDC predict that the number of IoT devices will grow from 10.3 billion in 2014 to more than 29.5 billion by 2020. This means that more powerful Wi-Fi networks are playing a crucial role in supporting this rapid increase in connected devices.

### **Solutions and Benefits**

ZyXEL collaborates with Inspired Dwellings in order to deliver a reliable network to its clients in two ways. Firstly, Inspired Dwellings' clients expect an enterprise-grade wired and wireless network to support all the latest devices they use in their homes, such as smartphones, tablets, laptops, home PCs, and wearables. Secondly, Inspired Dwellings uses ZyXEL products to deliver the solutions it promises to clients such as AV features, heating, lighting, CCTV, control panels, TV, telephone, and door entry systems. These systems are all integrated with the network to enable them to communicate with each other and, in turn, produce a whole home automation system.

With the amount of hardware being connected to the home network, there is increasing demand for a reliable wired and wireless network. Not long ago, only a handful of devices relied on a wired or wireless network in a home. Now, it is common for Inspired Dwellings to expect on average over 48 devices to be hardwired to the network as well as multiple wireless devices.

Inspired Dwellings aims to provide a network with an uptime of 24 hours a day and seven days a week. ZyXEL produces a wide array of products to meet this need via solutions for the small- to large-scale home networks.

With ZyXEL's Unified Security Gateway (USG) products, Inspired Dwellings' clients are given the peace of mind that their network is secure, with no impact on network performance. It also conveniently enables the Inspired Dwelling's technical and engineering team to deliver its Smart Support service, as they can remotely access the client systems. This is crucial when technical issues arise and there is a need to deliver fast solutions.



Furthermore, through the use of USG, clients are able to access their home, or homes, from anywhere in the world, whether it's to turn on the heating system or — for more security-conscious clients — view their CCTV cameras when they are away.

A key advantage of using ZyXEL wireless network solutions is the rapid setup time and the reporting functionality. The technical support team is contacted with any Internet network-related issues and they're able to instantly monitor the Wi-Fi signal strength and the number of devices connected to the network. Data bandwidth can also be accessed, which determines download speeds and if there are any attacks on the system

By leveraging WAC6500 802.11 ac Dual Radio Unified Pro Access Point, which support the AC standard with smart antennas, even the most demanding clients are able to achieve the speeds they require from the wireless network. This is because the 802.11 ac standard equipment delivers speeds three times faster than its predecessor, 802.11 n.

Furthermore, using ZyXEL's WAC6500 series smart antenna Wi-Fi access point means the Wi-Fi network can be future-proofed to support the introduction of any extra Internet-enabled devices.



### **Products Used**



#### WAC6503D-S 802.11ac Dual Radio Unified Pro **Access Point**

- ZyXEL smart antenna provides premium performance\ anywhere
- Advanced IEEE 802.11ac offers up to 1.75Gbps combined data rates
- Industry-leading Rx sensitivity as low as -102 dBm
  AP Flex<sup>™</sup>, ZyXEL ONE Network utilities, DCS and tool-less bracket design streamline deployment
- · Load balancing and client steering ensure optimal wireless experience
- ZyMesh easily extends reliable Wi-Fi network

#### NXC2500 **Wireless LAN Controller**

- Centralized management for up to 64\* APs
- ZyMesh mitigates complex, inconvenient cabling Wi-Fi deployments Comprehensive features for WLAN performance optimization and always-on Wi-Fi connectivity
- · Seamless integration with external AD, LDAP, **RADIUS** authentication
- User-friendly authentication by QR code facilitates keyboard-less mobile devices accessing Internet

\*Management of 64 APs is supported with firmware version V4.10 or above



### **USG110 Unified Security Gateway**

- 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)

#### 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 gone through transformations in the fast-paced networking industry. Delivering cutting-edge communications innovations to more than 400,000 businesses and more than 100 million consumers throughout the world, today ZyXEL is one of the few companies in the world capable of offering complete networking solutions for Telcos, small to medium-sized businesses, and digital home users for a wide range of deployment scenarios. Telco solutions include Central Office Equipment, Customer Premise Equipment, Wired and Wireless Access Network Devices, and Carrier Switches. SMB and Enterprise solutions include Unified Security Gateways, 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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