



## Success Story

Zyxel Nebula Solution Brings Robust, Easy-to-Manage Wireless and Surveillance Network to The Heeren



Real estate  
and property  
management



The Heeren



Singapore



Zyxel  
Nebula  
Solution

## Overview

### Challenges

- Connect and manage wireless access points through the cloud
- Deliver robust, stable and secure WiFi from the basement to the 22nd floor rooftop
- Create a central management platform to monitor the health of devices and schedule firmware upgrade flexibly
- Maintain and troubleshoot surveillance network throughout the entire building in an easy and efficient way

### Results

- An effortless, quick, plug-and-play deployment within the client's budget
- User-friendly remote management and configuration of wireless access points
- Reliable connectivity for security camera feeds and wireless network
- Peace of mind with high network uptime and security
- Monitor the entire building with instant and smooth surveillance video stream

### Solution

- Zyxel Nebula Solution

"We have chosen Zyxel because of their promise to provide the products that suited our needs as well as their product support. They delivered on their promises and we are happy with their products and services. Definitely value for money. They worked closely with the system integrator TACHub Systems and the authorized value-added distributor Go Nimbus to ensure our project finished on time."

Jackson Goh  
Assistant Property Manager  
Swee Cheng Management Pte Ltd

## Background

The Heeren tower's unique architectural design has made it a landmark at the corner of Orchard and Cairnhill roads in the island's upscale retail district. The 20-story commercial development, which also has four basement levels, was awarded the BCA Green Mark Award (Platinum) by Building and Construction Authority for its environmental design and construction.

## Challenges

To stay up to date in one of Asia's most dynamic economies, a modern wireless network and surveillance system covering all common areas was in order for The Heeren, as was the capacity to handle security cameras from the fourth basement level all the way up to the 22nd floor rooftop. But The Heeren's service operation team wanted a solution

The Heeren, meaning "gentlemen" in Dutch, now proudly stands where the original Heeren Building was built in the 1930s. Owned and managed by Swee Cheng Management and named after prominent philanthropist Chee Swee Cheng, The Heeren provides prime office location and management service to its valued tenants.

that could do more than that: it wanted one that could help them arrange tasks, identify problems and maintain the system in an intuitive and effective manner. In addition, the nature of The Heeren as home to both high-end retailers and business operations demanded a network with robust security and high uptime.

## Solutions and Benefits

The Heeren deployed Zyxel's Nebula cloud networking management solution, and attracted to its easy deployment as well as real-time configuration and access to all APs.

The new network infrastructure comprises **GS1920v2 series GbE smart managed switches** which connect **NWA1123-ACHD** and **NWA1123-ACv2 access points**. When used with Nebula, The Heeren can centrally manage, access real-time network information from and gain effortless control over Nebula-supported devices, with no need for additional software or equipment such as a WLAN controller. The streamlined installation and control that Nebula provides means the service operation team can monitor and manage the network from any tablet as well as instantly view video surveillance footage throughout the entire building.

Key to The Heeren's new network are **Zyxel GS1920-8HPv2, GS1920-24HPv2 and GS1920-48HPv2 GbE Smart Managed PoE Switches**. Being PoE-capable, the switches can power and connect peripheral devices, such as Nebula-supported wireless access points and video surveillance equipment.

**Zyxel NWA1123-AC HD 802.11ac Wave2 Dual-Radio PoE Access Points** were deployed, providing an optimized wireless experience through innovations like its "RF First" approach, which increases coverage and improves connection speeds for client devices. Featuring 802.11ac Wave 2 technology, the APs support multi-user MIMO and transmit beamforming. This enables them to communicate with multiple clients at the same time in order to deliver reliable high-density WiFi and enhanced network data transfer rates. Additionally, The Heeren was able to easily create a customized captive portal on the Nebula Control Center to require user authentication for internet access.

Equipped with Zyxel's weather-resistant enclosures, the NWA1123-ACv2 APs became weatherproof outdoor APs extending The Heeren's WiFi coverage to its rooftop areas. The durable enclosure is designed to withstand wide temperature ranges and features a certified IPX5 rating and extended lifespan, with UV-stabilized plastic. It also allows an AP to be mounted on a wall or pole, or to be installed on a ceiling with clips.

The switches and NWA1123-ACHD APs support a virtual local area network (VLAN). This gives The Heeren the option to separate various services into different VLANs so as to build a more robust and secure network. This enhanced security and prioritized network traffic also facilitates more efficient bandwidth usage.

With this cloud management solution, all crucial information about network operations can be accessed at any time. This insight allows The Heeren to maintain high availability for its infrastructure by remotely installing and configuring a new AP to boost WiFi network performance or replace a broken AP.

With the Zyxel's wireless products and Nebula cloud networking management solution in place, The Heeren is now enjoying the benefits of enlarged service coverage for more clients and better-quality connections. The good results extend to the hotel's solution integrator, too, which can now respond quickly to any issues and can perform firmware updates in an unprecedentedly short time to fend off emerging threats, ensuring high uptime and secure network infrastructure.

## Products Used

### GS1920v2 Series • 8/24/48-port GbE Smart Managed Switch



- Up and running in minutes — supports NebulaFlex™ Technology to shift between standalone and Nebula cloud flexibly
- Standalone: Easy management and setup with web-based GUI
- Nebula Cloud: Nebula allows simple deployment with agile network management
- Smart fan design offers silent operations in your office
- PoE models comply with IEEE 802.3at PoE Plus with high power budget

### NWA1123-AC HD • 802.11ac Wave2 Dual-Radio PoE Access Point



- NebulaFlex™ gives you the flexibility to switch between standalone and Nebula cloud management
- Nebula cloud management allows easy deployment, real-time configurations, and access to all your APs at any time
- Achieve reliable connectivity, support for more connected clients, and better wireless coverage with the latest Wave 2 WiFi standard
- Up to 300% more performance from MU-MIMO technology
- Robust build quality, including solid-state capacitors and advanced heat dissipation design, to ensure long life and operational reliability
- Protect against 3G/4G cellular network interference with Zyxel advanced cellular mitigation design

### NWA1123-ACv2 • 802.11ac Dual-Radio Ceiling Mount PoE Access Point



- NebulaFlex™ gives you the flexibility to switch between standalone and Nebula cloud management
- Nebula cloud management allows easy deployment, real-time configurations, and access to all your access points at anytime
- 802.11ac 2x2 supports a combined data rate of up to 1.2 Gbps
- Compact ceiling-mount design with optimized RF performance
- Robust build quality including solid-state capacitors to ensure long life and operational reliability

## Products Used

### Nebula Control Center (NCC)



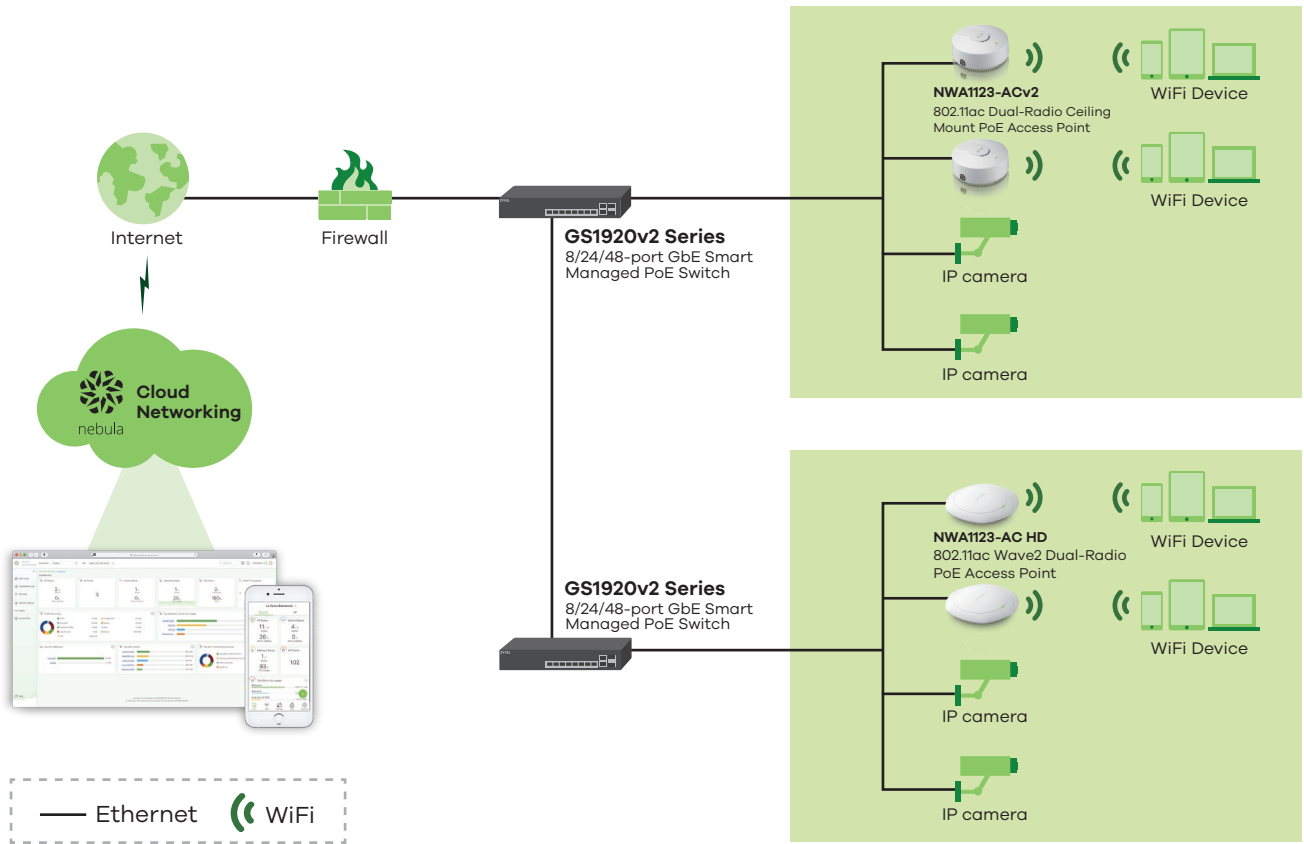
- Responsive web design and intuitive user interface
- Multi-tenant and multi-site views
- First time setup wizard
- Role-based administrative privileges
- Real-time, historical monitoring and reporting
- Site-based auto and smart configuration tools
- Misconfiguration protection to prevent NCC disconnections
- Rich, site-wide management tools (dashboard, map, and floor plan)

### Accessory • Weather-Resistant Enclosure



- Compatible with various APs including unified, cloud-managed and standalone units
- Wide operating temperature range from 50°C to -20°C
- Compact size easily blends into any environment seamlessly
- UV stabilized plastic extends enclosure lifetime
- Flexible mount design for wall mount, or pole mount installation with pole mount kit (sold separately)
- IPX5 rating makes Zyxel indoor AP weatherproof

## Diagram



### About Zyxel

Focused on innovation and customer-centricity, Zyxel has been connecting people to the Internet for over 30 years. Our ability to adapt and innovate with networking technology places us at the forefront of creating connectivity for telcos and service providers, business and home users. Zyxel is building the networks of tomorrow, unlocking potential, and meeting the needs of the modern workplace — powering people at work, life, and play. Zyxel, Your Networking Ally.

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