ZYXEL
NETWORKS

Success Story

Zyxel Nebula Solution Delivers Secure and Easy-to-Manage Network to Leading Taiwanese Pharmaceutical Packaging Company

INDUSTRY	**CUSTOMER**	**COUNTRY**	**SOLUTION**
Pharmaceutical Packaging	Chin-Tai Pharmaceutical Plastic Ltd.	Taiwan	Zyxel Nebula Solution

Overview

Challenges

- Complicated and difficult to manage network settings resulting from separated internal and external networks by two built-in network cards in every PC (originally to ensure network security)
- Unable to solve network issues in real time due to the absence of in-house MIS staff
- No network and phone line connection between new and old factories leading to communication issues

Results

- Seamless network and phone line connectivity between the old and new factories
- Secure wireless network through different network management permissions and separate guest network
- Centralized management enabling easy and unified network setup and management over two factories
- Real-time and remote monitoring and repair, leading to minimal facility maintenance and repair costs
- Easy setup and configuration via scanning QR code

Solution

- Zyxel Nebula Solution

"Thanks to Nebula Cloud Networking Solution from Zyxel Networks, we are now worry-free of network management in the absence of in-house MIS administrators."

Jerry Huang
General Manager, Chin-Tai Pharmaceutical Plastic Ltd.

Background

Headquartered in Central Taiwan, Chin-Tai Pharmaceutical Plastic Ltd specializes in manufacturing containers and packaging materials for medical drug and biotech products. Persistent in the optimization of their products and production quality, the company has been certified with GMP and DMF standards in Taiwan and the United States respectively.

The company has been consistently improving manufacturing quality and environment with new investments in top-notch production equipment from Europe in their two factories in Changhua, Taiwan. The new factory was established just two years ago.

Challenges

The existing network infrastructure was unable to support direct communication between the old and new factories through phone line and network connectivity. It was difficult to move forward and integrate more functionality without first unifying the communication system. When it came to security, the company's method was to install two network cards in each computer for connecting internal and external networks respectively. However, this made the network configuration much more complicated. The company was also considering building a network infrastructure for its factory that could support separate networks for corporate

staff and visitors. Plant visits are not allowed due to safety and health concerns. Therefore, the new wireless network had to be stable and fast enough to connect to cameras and send video streams to visitors smoothly. The company didn't have any in-house MIS staff so that they needed to spend more time and money just to maintain and repair their network, not even factoring the cost of creating a new secure network. They were looking for an easy-to-use network solution allowing them to check and fix network problems in a timely manner as well as creating a secure, separate network.

Solutions and Benefits

After careful evaluation of the suppliers, Chin-Tai decided to use Zyxel's Nebula Cloud Networking Solution to meet their needs. Before deploying the Nebula solution, their network device management process was time-consuming and inefficient. The Nebula Control Center (NCC) provided an easier and faster way to manage their employee's network. A new Wi-Fi network configuration could be created in the Nebula environment, including creating separate wireless networks for employees and visitors. This helped dramatically enhance network security and ease of management.

Additionally, NCC enabled the company to set up, configure and manage all network devices like access points and switches across different locations at any time from a single interface, making network management time-saving and efficient.

Nebula can also be operated on mobile devices like tablets and smartphones. NCC supports online registration of multiple Nebula-supported devices by simply scanning QR codes on the devices. When the devices are connected to the internet, the APs would be automatically discovered and preconfigured settings applied.

NCC also allowed the system integrators to monitor and manage the network from any tablet or smartphone with real-time multi-site graphic reports. It provided an efficient way to monitor and control the whole network.

After deploying the Zyxel's Nebula solution, the manpower for the on-site deployment and maintenance could be greatly reduced. The overall maintenance time and cost were drastically cut with a dramatic improvement in management efficiency and performance.

The success encouraged the company to replace all the network equipment with Zyxel Nebula solution in their other factory as well. They used Nebula solution to unify and control the networks in the two factories, and to set up secure VPN connectivity without hassle.

With the Nebula solution in place, the company now can provide seamless network coverage throughout the office and factories. They can send surveillance videos stably and smoothly, and save costs with smooth internal phone line connectivity.

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Products Used

NAP203 • 802.11ac Dual-Radio, Dual-Optimized Antenna 3x3 Nebula Cloud Managed Access Point

- Cloud-managed dual-radio 3x3 MIMO 802.11ac AP
- Supports combined data rates of up to 1.75 Gbps
- Dual-optimized antenna allows pattern optimization adapting to wall- or ceiling-mount installations
- Self-configuration and zero-touch deployment
- Enterprise-class security and RF optimization
- Dynamic channel selection, load balancing, and smart client steering
- Ultra-slim, 32-mm-thick ID design blends into any modern decor

NSW100 Series • 10/24-port GbE Nebula Cloud Managed PoE Switch

- Optimized for quality voice and video traffic with 375-watt power budget PoE technology
- User-friendly ACL and VLAN configuration
- Intelligent PoE technology and network topology
- Supports Port Mirroring for network traffic monitoring
- Supports DHCP white list and IGMP snooping
- RADIUS, static MAC forwarding and 802.1X authentication

Nebula Control Center (NCC)

- Responsive web design and intuitive user interface
- Multi-tenant, multi-site view
- First time setup wizard
- Role-based administration privileges
- Real-time and historical monitoring/reporting
- Rich site-wide management tools
- Powerful organization-wide management tools
- Configuration changing alerts
- Misconfigure protection against disconnecting NCC
- Configure login auditing

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Products Used

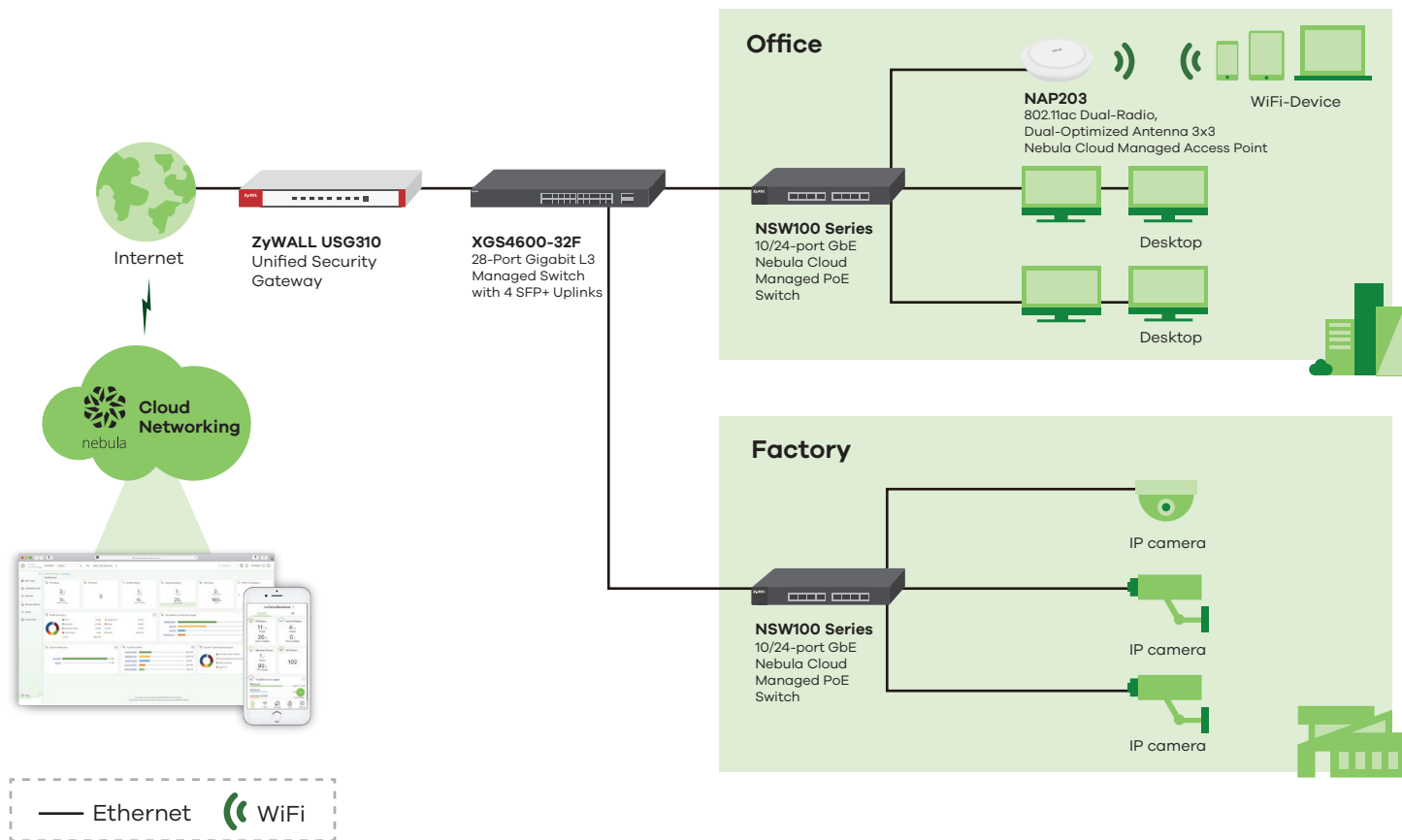## ZyWALL USG310 • Unified Security Gateway

- Unified Security Gateway Firewall for small- and medium-sized businesses
- Complete network protection with firewall, Anti-Virus, Anti-Spam, Content Filtering 2.0, IDP, and Application Patrol
- Unified security policy
- Cloud Helper makes firmware upgrades a breeze
- Device HA Pro ensures smart handover
- Hotspot management supported

XGS4600-32F • 28-Port Gigabit L3 Managed Switch with 4 SFP+ Uplinks

- Four built-in 10G SFP+ uplinks enable congestion-free, smooth data delivery for high-bandwidth applications
- Dynamic routing protocols such as RIP and OSPF
- Provides high-bandwidth with true physical stacking of up to 4 units
- L2 and L3 stacking capability to fulfill larger network deployment needs
- High resiliency with redundant power supply units

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Diagram

Office

NAP203
802.11ac Dual-Radio,
Dual-Optimized Antenna 3x3
Nebula Cloud Managed Access Point

WiFi-Device

NSW100 Series
10/24-port GbE
Nebula Cloud
Managed PoE
Switch

Desktop

Desktop

ZyWALL USG310
Unified Security
Gateway

XGS4600-32F
28-Port Gigabit L3
Managed Switch
with 4 SFP+ Uplinks

Internet

**Cloud
Networking**
nebula

Factory

IP camera

IP camera

NSW100 Series
10/24-port GbE
Nebula Cloud
Managed PoE
Switch

IP camera

—— Ethernet   ((WiFi

About Zyxel Networks

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 business and home users.
We're 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.