



## Success Story

### Thai Manufacturer Jaronrat Achieves Wireless Network Connectivity with ZyXEL Solution



**Mr. Patomphorn Kaewkul**

Management of Information Systems Department, Jaronrat Products Co., Ltd.

**“The quality of work through the wireless network is running smoothly and communication between branch offices is very stable, allowing production work to operate consistently without stoppages. Communication between branch offices was very stable. This makes production work consistent without stoppages. The solutions of ZyXEL have not let us down!”**

#### Overview

**Customer Name**

Jaronrat Products Co.

**Customer Industry**

Manufacturing

**Challenges**

- Provide wireless network connectivity to manufacturing company with several large facilities
- Network must be centrally controlled and allow for easy modification and upgrade
- Solution must be cost-effective
- Wireless network solution should be secure and stable, blocking unwanted traffic while preventing breaks in service

**Solutions**

- Unified Security Gateway
- L3 Managed Stackable Gigabit Ethernet Switch

- Wireless LAN Controller
- 802.11 a/b/g/n Dual-Radio Outdoor Business AP
- 802.11 a/b/g/n Business AP
- 24-port GbE Smart Managed PoE+ Switch

**Benefits**

- Ability to regulate employee usage of network and create VPNs for communication between branches
- Easy management of log servers via core switch
- Easy management of indoor and outdoor APs
- High-bandwidth fiber for fast, efficient and stable data transfers
- Cost-effective solution
- Easily upgradeable

#### Background

Founded in 1995, Jaronrat Products Co., Ltd. covers an area of more than 9,600 square meters. The company engages in the business of electrophoretic and phosphate deposition (EDP) for parts used in automobiles and other types of vehicles. Jaronrat has served its customers for nearly 20 years, earning its reputation as a leader in the electrophoretic deposition (EDP) industry and receiving a number of awards.

Jaronrat Products Co., Ltd has worked with the Thai government to develop the automobile electrophoretic deposition industry in the country, helping Thailand progress towards becoming the “Detroit of Asia.” The company is constantly upgrading its production process to deliver high-quality products while meeting the demands of customers in the electrophoretic deposition (EDP) industry. Jaronrat Products Co., Ltd is the first company in Thailand to receive the International Standard Organization awards ISO/TS 16949:2002 and ISO 9001:2000.



## Challenges

The company's large facilities and its numerous branches in various locations, as well as the fact that it maintains two production lines, make it possible for production operations to remain online continuously and for company operations to proceed without the need for all staff to be present on the production lines. All operations can be controlled and maintained through the implementation of wireless networks, allowing for modifications and maintenances to be performed immediately. In addition, since the facilities are designed as production factories, business operations can rely heavily upon wireless networks. For these

reasons, wireless networks play an important role throughout the production process.

Jaroonrat Products Co. Ltd chose the wireless networks provided by ZyXEL because of the products' ability to respond effectively to work demands and their affordability. ZyXEL wireless networks help deliver smooth, reliable and effective business operations free of stoppages, without a large financial investment.



## Solutions and Benefits

The Chonburi Branch of Jaroonrat Product Co., Ltd which focuses on both the production and business management, chose the USG300 Unified Security Gateway as their network gateway equipment, due do the company's desire to control the Internet usage by employees through the use of the Application Patrol function, as well as the ability to create VPNs for communication purposes between the four other branch offices.

For the core switch, the company chose the XGS-4528F 24-Port GbE L3 Switch with the 10GbE uplink to connect with the file and log servers on which Software Vantage Report has been installed, as well as to store log files from the USG300, of which five units have been installed in the Chonburi Branch and other branches. The wireless controller and edge switch equipment were also included. The company chose for its wireless LAN equipment the NXC2500 Wireless LAN Controller, which is connected to the XGS-4528F.

The NXC2500 effectively controls the eight NWA3550-N 802.11 a/b/g/n Dual-Radio Outdoor Business Access Points and ten NWA3160-N 802.11 a/b/g/n Business Access Points that have been installed in various branches.

For the edge switch, the company chose four GS1910 24-port GbE Smart Managed PoE+ Switch, which connect to the core switch through fiber optic cables, enabling the company to access high bandwidth. The units have been installed throughout the work area to channel power to the NWA3550-N, NWA3160-N, IP Phones, and security cameras.

Ever since installing ZyXEL's wireless network, Jaroonrat Products Co., Ltd has been able to work without stoppages, with very good stability, and without experiencing any operational problems whatsoever, as the wireless network is performing at its highest level of efficiency. It is considered to have a high value relative to the investment made and the company is satisfied with the solutions provided by ZyXEL.

## Products Used



### USG300 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)



## **XGS-4528F** **L3 Managed Stackable Gigabit Ethernet Switch**

- Fully managed Layer 3 switching solution
- High performance switching with 10GbE uplink connectivity
- Resilient networking with RSTP, MSTP, MRSTP, ECMP and VRRP support
- RIP, RIPv2, DVMRP and OSPF for advanced routing applications
- Advanced security with multilayer (L2/L3/L4) ACL, Guest VLAN and CPU protection
- CoS, DSCP, IGMP snooping v1, v2, v3 and MVR for convergence
- Future-proofed with IPv6 support



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

- Centralized management for up to 64\* APs
- ZyMESH mitigates complex, inconvenient cabling Wi-Fi deployments
- Client steering enhances efficiency of wireless spectrum utilization
- Auto healing maximizes Wi-Fi service availability
- Seamless integration with external AD, LDAP, RADIUS authentication
- Best investment protection with built-in RADIUS server

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



## **NWA3550-N** **802.11 a/b/g/n Dual-Radio Outdoor Business AP** **NWA3160-N** **802.11 a/b/g/n Business AP**

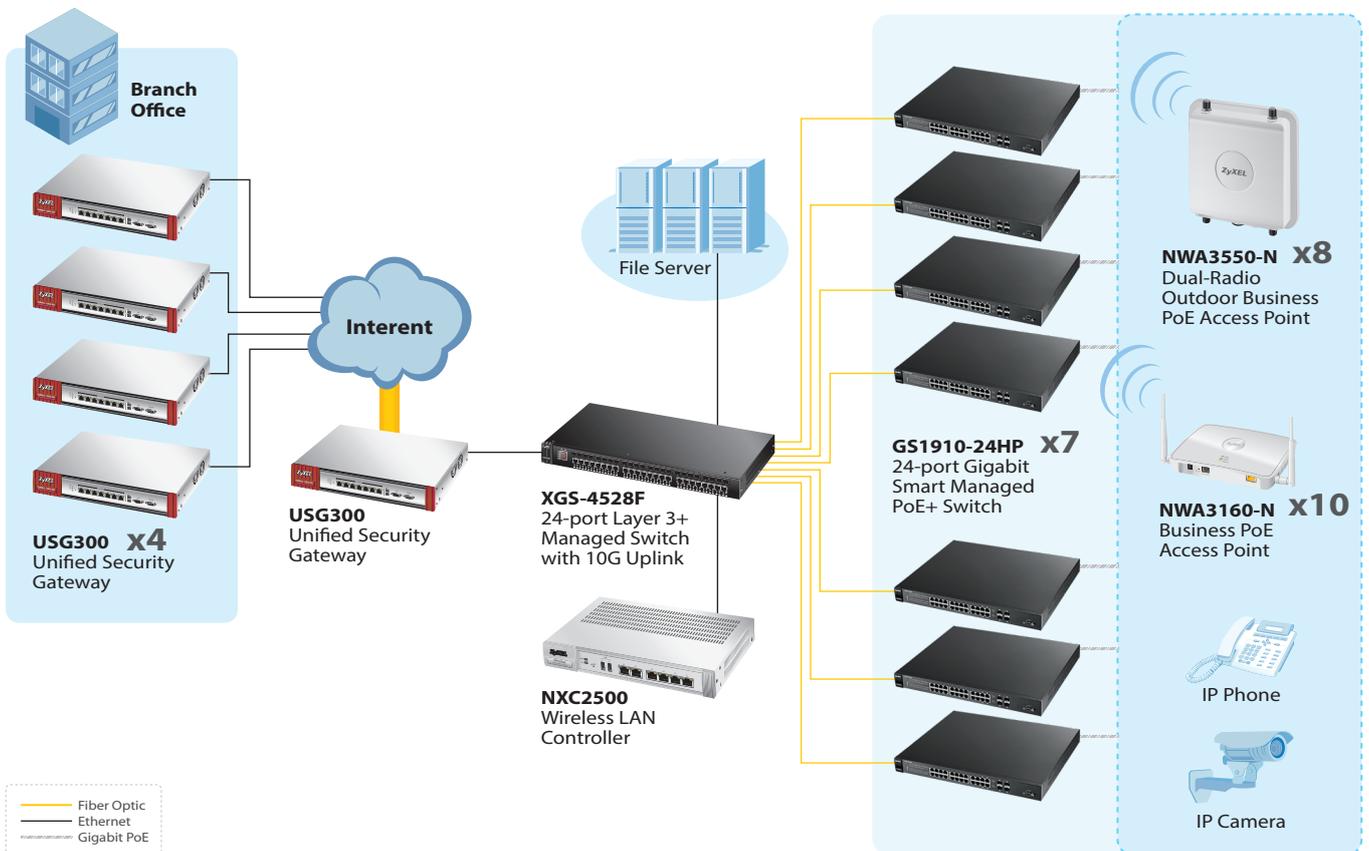
- Higher bandwidth and superior performance with 802.11n
- 3-in-1 hybrid AP WLAN including AP controller mode, managed AP mode and standalone AP mode
- Brand new centralized graphic management interface for up to 24 WLAN APs
- Back-up redundancy supported to provide reliable connection service
- Secured tunnels for communication between controller and managed AP to prevent leaking of configurations
- Enterprise-class AP functionalities with comprehensive configuration interfaces
- Built with Low Smoke, Zero Halogen (LSOH) materials for plenum rating for UL 2043 support



## GS1910-24HP 24-port GbE Smart Managed PoE+ Switch

- Advanced Smart GbE L2 ACL switching features
- 48 Gbps non-blocking switch fabric
- IEEE 802.3at Power over Ethernet Plus
- Supports IPv6

## 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 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 more than 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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