



## Success Story

### ZyXEL Builds an Efficient Full-Coverage Network System for Liquor Distillery Organization in Thailand



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**"ZyXEL offers highly efficient and stable devices compatible with various applications tailored to the needs of the project. As a result, the Liquor Distillery Organization is able to function and communicate more efficiently. The devices are also compatible with the future expansion of the organization. The Liquor Distillery Organization made an excellent decision by choosing ZyXEL."**

## Overview

### Customer Name

Liquor Distillery Organization, Thailand

### Customer Industry

Alcohol industry

### Challenges

To provide a network system that can adapt to expansion and ensure the highest levels of stability and efficiency.

### Benefits

- A full-coverage network that is able to connect to each building and ensure the highest level of stability.
- Allow continuous workflow and maximized efficiency.
- Significantly minimize network system downtime.
- Reduced work time by speeding up flow of data for analysis.

## Challenges

At present, the Liquor Distillery Organization's network system supports communication and business operations across 12 buildings for approximately 140 users. Due to the distance between these buildings, coupled with damaged and outdated devices and cabling, the original network system is not equipped to handle an increased user load.

The Liquor Distillery Organization is therefore seeking to expand its network system to improve efficiency and support the increased number of users.

## Background

Liquor Distillery Organization produces and distributes pure alcohol in Thailand. The organization distributes to various industries, including the pharmaceutical and hospital industries, as well as the food industry.

The Liquor Distillery Organization has received orders from its Management Committee to relocate its headquarters to Chachoengsao Province. As part of this move, the organization will improve its network systems to ensure increased efficiency. The network system currently in use is not efficient enough for organizational expansion, and as such could potentially cause work delays.



## Solutions and Benefits

The Liquor Distillery Organization has a number of office buildings, each separated by a significant distance. It is therefore necessary to consider how to connect to network systems of each building to optimize stability and efficiency. For this reason, the organization decided to install the ZyXEL USG300 Unified Security Gateway device to serve as the firewall gateway and VLAN splitter for easy management of the entire network system of each building. The Liquor Distillery Organization uses two XGS-4528F L3 switches with 10GbE uplink as the core switch, which connect to each other through Port 10G, linking to the buildings. This type of connection ensures that the overall network system maintains operation even if the core switch is damaged or malfunctions. The device has been installed in the executive building at the center of the IT system of the Liquor Distillery Organization.

The ZyXEL GS2200-24 Access switch has been installed in each department building to send information to department computers, which are connected to the core switch via fiber optic cabling in order to maintain

gigabit connection speeds despite the considerable distance between the buildings. To ensure the GS2200-24 is sufficient to support the anticipated number of users in a particular department, the Liquor Distillery Organization has selected the GS1100-24 Unmanaged Gigabit Switch's Edge Switch to add a number of connection ports to the network system. For its wireless LAN configuration, the organization has elected to use the NWA3160-N Wireless Business Access Point and Controller functioning in stand-alone mode to provide a wireless network signal throughout the building.

Following the installation of the new ZyXEL solution for the network system, the Liquor Distillery Organization significantly reduced the time to complete the work by quickly utilizing data for analysis and applying such data to calculate business implementation. In addition, network downtime has been significantly decreased, allowing for continuous flow of work and maximizing efficiency. The project has been both rewarding and satisfying for all parties involved.

## Products Used



### USG300 Unified Security Gateway

- High performance and comprehensive protection
- Supports IPSec, SSL and L2TP over IPSec VPN
- Zero-configuration remote access with Easy VPN
- Dynamic, real-time threat prevention and protection
- High availability (HA) ensures non-stop business operations



### XGS-4528F 24-port GbE L3 Switch with 10GbE Uplink

- IPv4/IPv6 routing
- L3 advanced routing protocols, OSPF, DVMRP, VRRP and ECMP
- Optional modular 10 Gigabit Ethernet support
- Multilayer-aware (L2/L3/L4) ACL for security protection and traffic optimization
- Guest VLAN
- IGMP Snooping v1, v2, v3, MVR
- sFlow, CPU protection
- RSTP, MSTP, MRSTP, VRRP



## **GS2200-24** **24-Port GbE L2 Switch**

- Comprehensive L2 switching features
- 56 Gbps non-blocking switch fabric
- 2/4 dual-personality (RJ-45/SFP) GbE interfaces
- Port security and enhanced 802.1X port authentication
- MAC freeze and intrusion lock
- 8 IEEE 802.1p hardware priority queues
- WFQ, WRR and SPQ queuing algorithms
- IPv6 Ready Logo approved



## **GS1100-24** **24-Port GbE Unmanaged Switch**

- Non-blocking full wire-speed forwarding
- IEEE 802.3x Flow control supported
- IEEE 802.3p CoS supported
- Jumbo frame supported up to 10K bytes
- Auto MDI/MDI-X support
- 1U, desktop design with rack-mountable & wall-mountable
- Fanless
- IEEE802.3az compliant



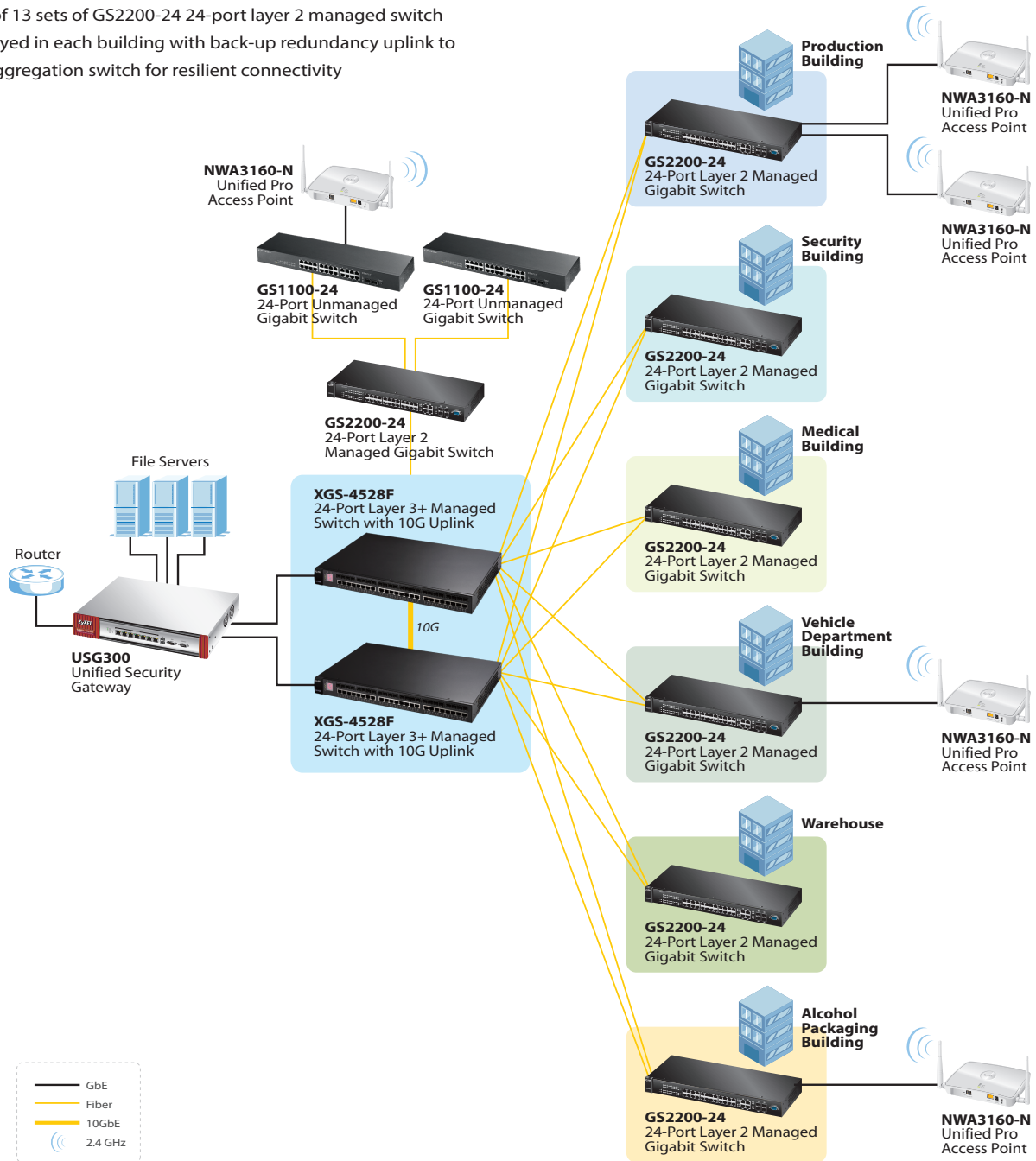
## **NWA3160-N** **802.11 a/b/g/n Unified Pro Access Point**

- 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



## Diagram

- One of 13 sets of GS2200-24 24-port layer 2 managed switch deployed in each building with back-up redundancy uplink to the aggregation switch for resilient connectivity



### 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 and WLAN. Digital Home solutions include network connectivity devices and multimedia solutions.

The company has 3200 employees and distributors in 70 countries, reaching more than 150 regional markets. The ZyXEL Communications Corp. includes 33 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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