



## Success Story

### Zyxel Wireless Solution Revitalizes Italian Manufacturer's Production Facility



Manufacturing

INDUSTRY



CUSTOMER

Ondulati ed  
Imballaggi del  
Friuli



COUNTRY

Italy



SOLUTION

Zyxel  
Wireless  
Solution

## Overview

### Challenges

- Needed reliable and secure system to link manufacturing plants
- Required broader coverage for additional warehouse space
- Preferred versatile wireless connectivity to accommodate different environments, departments, and users
- Desired single, centralized interface for quick and simple management

### Results

- Delivered high-speed, optimized connectivity to every part of the sprawling business facility
- Set up separate networks for staff and guest users, ensuring sensitive business data remains secure
- Constructed robust network core with fiber cabling to achieve enterprise-level performance and resiliency
- Enabled the company to fully automate much of the production area

### Solution

- Zyxel Wireless Solution

### Summary

Ondulati ed Imballaggi del Friuli is an Italian manufacturing company that specializes in the production of corrugated cardboard packaging. Their many years of experience have allowed them to expand their reach to numerous foreign markets. Recently, they were looking for a way to overhaul their business network, which was quickly becoming obsolete. It was also important for them to have the ability to further develop their automation technology, which would give them an edge on the competition by increasing efficiency. Discover how a Zyxel wireless solution made this successful business even stronger.

## Background

For businesses, being efficient and investing in technology are fundamental to standing out in the market. Therefore, this has been one of the core operational principles of Ondulati ed Imballaggi del Friuli, an Italian company specializing in the production of corrugated cardboard packaging. Having leveraged their considerable experience to expand into foreign markets with important European

clientele, the company offers consultancy, quality, and innovation, along with customized solutions that meet every need.

## Challenges

The company's primary requirement was to completely upgrade their network, which was becoming obsolete. They desired a reliable and secure system that would link the existing manufacturing plants, made even more necessary following the addition of 1,000 square meters of warehouse space and a massive shed eclipsing 2,000 square meters. Furthermore, it was important to find a

wireless solution that could accommodate different environments, departments, and users—such as employees and guests—from a single, main hub. Office Point, a local company dedicated to hardware and software automation, came to their rescue with a comprehensive Zyxel wireless solution.

## Solutions and Benefits

Office Point used Zyxel equipment to provide optimal connectivity to the entire production area and offices, including a separate network for guests. This ensured easy access to WiFi and uniform coverage.

The **WAC6502D-E Access Points**, ideal for environments like warehouses and storage areas, don't merely offer the best possible signal speeds. Thanks to external antennas, every network user receives the ideal wireless experience—no matter the location. The **NXC2500 Wireless LAN Controllers**, one of which serves as a backup, make it easy to optimize and manage large WiFi networks. In addition, Office Point designed a network core with XGS2210 L2 PoE Switches with 10GbE Uplink that use fiber cabling to connect the many cabinets, further ensuring a fast and high performing network.

Lastly, the manufacturer is covered by a guarantee of next-business-day delivery: in the event of hardware failure, Zyxel will send out a replacement product on the day of notification.

The Zyxel products have dramatically increased their network performance, in no small part because of the segmentation of voice, wired, and wireless traffic. In addition, they obtained a more efficient network management system that makes it easy to monitor wireless service to external transporters, robotic shuttles that move raw materials from one shed to another. After the network upgrade, much of the warehouse was completely automated, a great technical achievement that has primed Ondulati ed Imballaggi del Friuli for the future.

## Products Used

### NXC2500 • Wireless LAN Controller



- Auto provisioning and centralized management of up to 64 APs\*
- ZyXel Wireless Optimizer for easy planning, deployment, and maintenance
- Advanced ZyMesh technology for streamlined AP deployment and WLAN extension
- Enhanced RF management with auto healing
- Flexible traffic forwarding with tunnel and distributed modes
- Comprehensive guest network management and granular access control

\* Management of 64 APs is supported with firmware version 4.10 or later

### WAC6502D-E • 802.11ac Dual-Radio External Antenna 2x2 Access Point



- NebulaFlex Pro allows users to switch among standalone, on-premises controller managed or intuitive Nebula cloud managed modes as needed
- Advanced IEEE 802.11ac delivers up to 1.2 Gbps combined data rates
- Industry-leading receive sensitivity as low as -100 dBm
- APFlex™, DCS, and tool-less bracket design streamline deployment
- ZyXel One Network is supported

### NWA5123-AC • 802.11ac Dual-Radio Unified Access Point



- Ceiling- and wall-mountable design with optimized RF performance
- 2-in-1 standalone/managed AP design
- CAPWAP management supported
- Enterprise-class 2x2 802.11ac AP supports combined data rates of up to 1,200 Mbps
- Simple, speedy deployment with APFlex™ and ZyXel One Network utilities

## WAC6553D-E • 802.11ac Dual-Radio External Antenna 3x3 Outdoor Access Point



- NebulaFlex Pro allows users to switch among standalone, on-premises controller managed or intuitive Nebula cloud managed modes as needed
- Dual-band 2.4-GHz and 5-GHz 802.11ac Wireless Access Point
- Designed with IP66-rated weather protection which is ideal for harsh outdoor environments
- Advanced IEEE 802.11ac delivers up to 1.75 Gbps combined data rates
- Industry-leading receive sensitivity as low as -102 dBm
- APFlex™ and DCS for streamlined deployment

## GS2210-24HP • 24-port Gigabit L2 PoE Switch



- High power budget of 375 W
- L2 multicast, IGMP snooping, MVR, and voice VLAN for convergence
- Enhanced network protection with IP source guard, DHCP snooping, ARP inspection, and CPU protection
- L2, L3, and L4 filtering, MAC freeze, port isolation, and guest VLAN for improved isolation and access control

## XGS2210-52HP • 48-port GbE L2 PoE Switch with 10GbE Uplink



- Physical stacking up to 2 units and 96 Gigabit ports
- Gigabit connectivity plus four SFP+ ports
- VLAN communication through access switch by static routing feature
- Supports sFlow that analyzes client behavior
- PoE models comply with IEEE 802.3at PoE Plus with high power budget

## GS1900-8HP • 8-Port Gigabit Smart Managed PoE Switch



- Gigabit connectivity
- High-power PoE supports IEEE 802.3at
- Easy browser-based switch management
- Quick and easy setup wizard
- Advanced network error prevention features (loop protection, dual images, storm control, and DoS, SSL)
- Fanless design

### About Zyxel

Focused on innovation and customer-centricity, Zyxel has been connecting people to the Internet for nearly 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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