



Success Story

Nebula Cloud Solution Powers Italian Manufacturer's Warehouse of the Future



Manufacturing

INDUSTRY



Cromatos

CUSTOMER



Italy

COUNTRY



Zyxel
Nebula
Solution

SOLUTION

Overview

Challenges

- Comprehensive tools to track production rate of dyes and manage the processing of raw materials
- Ability to coordinate all of the manufacturer's automated technology
- Stable wireless that covers office, warehouse, and production facilities

Results

- Cloud management enables simple anytime, anywhere monitoring of all connected devices
- Access points and switch technology work in unison to deliver breathtaking speed and efficiency
- Robust UTM services allow the company to remain in compliance with international data protection regulations

Solution

- Zyxel Nebula Solution

ZYXEL

Background

Founded in the northern Italian city of Forli in 1991, Cromatos is a company dedicated to the formulation and production of dyes, pigments, and chemical products. By carefully evaluating current trends and anticipating future solutions, they have not only stood the test of time—they've thrived. As they voyage through Industry 4.0, a technological phase where interconnectivity, automation, and machine learning lead the way, Cromatos has placed even greater priority on their network's efficiency, flexibility, and integration.

Challenges

After moving to a new headquarters, Cromatos had a couple major requirements for their warehouse network. First, it needed the ability to constantly track the production rates of the dyes and manage the processing of raw materials. Second, it had to coordinate all of the warehouse's automated features. To make it easy for personnel and smart machines to interact with the network, they knew it was essential to find and deploy a stable, widespread wireless solution for the offices, warehouses, and production facilities.



Solutions and Benefits

Cromatos enlisted the help of Wizard, an aptly named IT company in the Forli area. After a careful review of the manufacturer's wired and wireless needs, they chose to deploy Zyxel's Nebula cloud networking solution, which empowers businesses by providing centralized control, an expanding product portfolio, and an array of features.

The **Nebula Control Center** is the cloud solution's command room, giving network administrators quick access to each AP via a single pane of glass. With a host of features like dynamic channel selection, load balancing, and smart client steering, Nebula access points are able to deliver a wireless experience that's the definition of smooth. Cromatos installed 25 of Zyxel's **NAP203 Nebula Access Points**, ensuring that their entire business network—from the main office to the farthest reaches of their warehouse—had solid coverage.

Zyxel's Nebula switches, like the **NSW100 Series Gigabit Nebula Cloud Managed PoE Switch** deployed by Cromatos, can automatically detect connected wired and wireless devices and establish the optimal network topology.

It makes it easy for administrators to manage and troubleshoot, on-site or remotely. Cromatos is also using the **USG 1100 ZyWALL Unified Security Gateway**, since it provides a wide range of UTM services such as application intelligence, content filtering, anti-virus, anti-spam, and can keep their corporate network and critical resources safe from internal and external threats. By choosing ZyWALL, Cromatos won't have to worry about meeting the requirements of the recently enacted General Data Protection Regulation (GDPR), which outlines and enforces data security policies throughout the European Union.

The Zyxel solutions adopted by Cromatos have enhanced network quality, efficiency, and speed, spawning a number of tangible workflow benefits: improved order management, real-time inventory, and optimized product storage, to name just a few. Thanks to the integration of Zyxel's cutting-edge network technology, the ambitious Italian manufacturer is truly making the most of Industry 4.0.

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 • Nebula Cloud Managed PoE Switch



- Essential L2 features with user-friendly ACL and VLAN configuration
- Optimized for quality voice and video traffic with high 375(28P)/180(10P) watt power budget PoE technology
- Supports port mirroring for network traffic monitoring
- Supports DHCP server guard and IGMP snooping
- RADIUS, static MAC forwarding, and 802.1X authentication

Nebula Control Center (NCC)



- Multi-tenant and multi-site views
- 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, topology)

USG1100 • ZyWALL Unified Security Gateways



- UTM Firewall for medium- and large-sized businesses and campuses
- Anti-malware protection with Anti-Virus, Anti-Spam, Content Filtering 2.0, IDP, and Application Protocol
- Patrol and SSL inspection
- Robust SSL, IPSec, and L2TP over IPSec VPN connectivity and VPN High Availability (HA)
- Unified security policy
- Device HA Pro ensures smart handover
- Hotspot management supported
- Facebook WiFi for intelligent social media authentication

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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