



Success Story

Italian Logistics Giant Improves Security, Efficiency, and Reliability of Its Network with Zyxel Nebula Solution



Logistics



Priano Marchelli



Italy



Zyxel
Nebula
Solution

Overview

Challenges

- Separate secure wireless networks had to be provided for the use of handheld devices, management system software, and guests
- Needed fast LAN connection for applications including video surveillance and VoIP
- All solutions and installation had to be GDPR compliant

Results

- A comprehensive, cloud-based network management system that ensures complete control over the infrastructure at all times
- Seamless wireless connectivity across offices and warehouse that is separated according to application
- Robust firewall system that ensures maximum protection against all kinds of threats, including zero-day vulnerabilities

Solution

- Zyxel Nebula Solution

"Priano Marchelli has developed and increased the reliability of the network infrastructure using the Nebula Cloud Networking solution in line with their consistent growth. Zyxel Nebula Solution allows centralized control of all devices, lowers costs, boosts competence, and facilitates secure and efficient operations."

Paolo Trucco
CTO, HTECH SAS

Background

Priano Marchelli S.p.A. is an integrated logistics company that provides third- and fourth-party logistics services for the Naval industry (merchant, cruise, and shipbuilding sectors). From its founding in 1934 with a team of 130 people in Genoa, the company has grown continually, connecting the hubs of Amsterdam, the United States, and Singapore with a network of specialized agents. The brand has now become synonymous with the shipping and logistics industry.

Challenges

The company needed separate wireless networks for handheld terminals, management system software, and guests. The management system software operates on external servers of a company to which it is outsourced to. The web management system had to ensure secure and stable connections.

Solutions and Benefits

For the headquarters, Priano Marchelli S.p.A used the ATP500 firewall to manage several ADSL lines and control twenty WAC6303D-S access points installed to cover the offices and the warehouse. The management chose the XGS3700 switch model as the star center.

The ATP500 firewall identifies zero-day threats, collects the results in the database, and provides the ATP with an update on such threats. The firewall is an optimal solution enhanced by Cloud Intelligence for Security. It not only supports Zyxel security services like Web Security and Malware Blocker but also has features like sandboxing, an isolated cloud environment that identifies new types of malware, and Secureporter, a cloud-based analytics and report service with collection and correlation functions. Furthermore, thanks to the UTM services of the Gold Security Pack, the ATP series guarantees compliance with GDPR.

The WAC6303D-S access point, featuring smart antenna technology, was mounted on the ceiling and wall. NebulaFlex Pro technology allowed tri-mode management of Stand-alone Access Points, Controller Managed Access Points, and Nebula Cloud Managed Access Points.

The XGS3700 Series, Layer 2 Plus (Layer 3 Lite) Advanced Gigabit Switch with 10G Uplink was also used. This device is designed with advanced features with static routing, policy-based routing (PBR), VRRP, and ECMP support. The switch features highly redundant hardware with dual internal power supplies.

Priano Marchelli has been expanding its office and warehouse complex for over a year to meet its growing needs. The new layout aims to simplify the communication processes between employees, facilitating better teamwork. The company needed a better wired and wireless network infrastructure and approached the systems integrator, Htech.

It also wanted to set up a fast LAN connection for both the warehouse and office to manage IP surveillance cameras that monitor internal and external warehouse areas. Finally, Priano Marchelli's external suppliers and partners needed to have dedicated, secure connections to allow seamless operations. All this had to be done in compliance with GDPR.

For the Genoa Airport and Genoa Port offices, the company used the USG210 firewall and the Nebula NSG100 native gateways. A critical goal of Priano Marchelli and the project was to manage all its infrastructure with Nebula Cloud Networking, which features simple, flexible, and efficient network management. The network was segmented to accommodate various departments' needs. By creating VLANs, the network met GDPR requirements.

The XGS2210 Layer 2 switch, used for the networking at office offices, carries traffic for VoIP, videoconferencing, IPTV, and IP surveillance. This provides the enterprise with greater agility and more effective traffic management for today's converged applications.

Thanks to the new hardware infrastructure, internal communication and navigation are lightning-quick now. Nebula Control Center (NCC) manages and optimizes connections from a single interface, making it possible to manage the network in collaboration with the internal IT staff and the HTECH supplier.

The Nebula Cloud Networking solution allows centralized control of all Nebula devices (access points, switches, and gateways), enabling better, reliable network performance while optimizing costs. Nebula enables the customer to manage and monitor the network through the cloud. Whenever there is an issue, both the systems integrator/distributor and the end-user receive prompt alerts on the Nebula Control Center.

Products Used - Central Office

WAC6303D-S • 802.11ac Wave 2 Dual-Radio Unified Pro Access Point



- NebulaFlex Pro allows users to switch among standalone, on-premises controller managed or intuitive Nebula cloud managed modes as needed
- Excellent wireless coverage and performance with the latest 3x3 802.11ac Wave 2 technology
- Unparalleled high-density performance boosted by Smart antenna, next generation beamforming and MU-MIMO technologies
- Solid state capacitors and advanced heat dissipation ensure high reliability and long life—even in the toughest environments
- Advanced Cellular Coexistence minimizes interference from 3G/4G cellular networks

XGS3700 Series • 24/48-port GbE L2+ PoE Switch with 10GbE Uplink



- Physical stacking up to 8 units and 384 Gigabit ports
- Four 10GbE SFP+ uplink flexibility
- Internal and hot-swappable power supply design
- PoE model supports IEEE 802.3at with high PoE power budget up to 1000W

ZyWALL ATP500 • ATP Firewall



- Machine learning threat intelligence with global sync
- Sandboxing defeats unknown threats
- Hybrid scanning leveling up malware blocking
- High assurance multi-layered protection
- Reporting and analytics on cloud and device
- 1-Year full functional license services

Products Used - Branch Office

XGS2210 Series • 24/48-port GbE L2 Switch with 10GbE Uplink



- Physical stacking up to 2 units and 96 Gigabit ports
- Gigabit connectivity plus four (4) 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 up to 375 W

NSG100 • Nebula Cloud Managed Security Gateway



- Complete network, security, and application control from anywhere via the cloud
- Zero-touch site-to-site VPN
- Secure networks with IDP and Application Patrol, Content Filtering and Anti-Virus
- Built-in DHCP, NAT, QoS, and VLAN management
- Static route and dynamic DNS support
- Identity-based security policies and application management
- Cloud management and cloud statistics

ZyWALL USG210 • Unified Security Gateway



- High-performance, high-value Next Generation Firewall (NGFW) for small and medium-sized businesses
- Complete network protection with firewall, Anti-Virus, AntiSpam, Content Filtering 2.0, IDP, Application Patrol
- Express Mode with advanced Cloud Query technology
- Robust SSL, IPSec and L2TP over IPSec VPN connectivity and VPN high availability (HA)
- SecuReporter, cloud-based intelligent analytics and report service
- Built-in WLAN controller for centralized AP management and effortless WLAN scalability of up to 18 Aps
- Comprehensive mobile broadband USB modem compatibility and multi-WAN load-balancing, failover and fall back support
- Zyxel One Network is supported

Products Used - Branch office

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

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.

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