

Success Story

Historic Italian Restaurant Revives with High Performance and Secure Network with Zyxel Nebula and Security Solutions



Hospitality



Del Cambio



Italy



Zyxel Nebula/ Security Solution

Overview

Challenges

- Improvements to the network must be made without impacting the historic aesthetic of the complex
- WiFi network structure needed to be reorganized according to different needs of internal staff, customers, and devices within the building, such as POS and printers
- Coverage had to be consistent through thick stone walls and reach the offices, restaurant, kitchen, cellars, shops, bars, and laboratory
- Needed an advanced security solution to make the company GDPR compliant and protect corporate data and customer privacy
- Increase speed of the total IT infrastructure to support all of the above

Results

- Created new network for internal management devices used by staff, management, offices, and guests without impacting aesthetics of the building
- Significant increase of coverage quality, system stability and performance throughout the complex
- High-performance access points designed for high density environments have allowed users to connect throughout all areas in the building, including previously hard-to-reach areas like cellars
- Met enterprise level protection and GDPR requirements

Solution

- Zyxel Nebula Solution
- Zyxel Security Solution

"We're very happy with the significant increase in coverage quality, system stability and performance.

Zyxel's solutions enabled wide coverage and seamless connectivity in all areas in the building, including previously bard-to-reach areas like wine cellars."

Mauro Destro General Manager, AVN Sistem



Background

The Del Cambio, one of the oldest restaurants in the world, was host to famous artists from Mozart and Nietzche to Audrey Hepburn. The prestige and fortunes of Del Cambio rose and fell with the city , until it was revived by the passion of entrepreneur Michele Denegri and Michelin starred chef Matteo Baronetto. Now, the Del Cambio is a gastronomic marvel open to all. Under the lead of Chef Matteo Baronetto, the legendary restaurant was renovated into a go-to spot, providing exceptional dining experiences with great food, service, and atmosphere.



Challenges

Located inside a historic building, any projects or intervention of the restaurant must be made carefully without impacting on the aesthetics of the building, in particular the historic entrance hall and the Risorgimento room. The new WiFi network needed to be restructured and separated for staff, customers and connected devices like POS and printers while maintaining seamless connectivity. Constructed in 1757, the building with thick walls posed a unique challenge as the new network must maintain high

performance and coverage through the different areas, including offices, restaurant, kitchen, cellars and pastry shop. Besides the robust network, the overall data transfer speed should be increased compared to what the previous IT infrastructure delivered. Last but not least, Del Cambio was looking for an advanced security solution that could make the company GDPR compliant and protect corporate data and customer privacy.

Solutions and Benefits

To look for a reliable network solution, the restaurant worked with AVN Sistemi which specializes in networking and security systems installation. They system integrator chose Zyxel's Nebula and security solution which met all the requirements of the restaurant.

To ensure seamless connectivity for multiple users in high-density environments like events and meetings, NWA1123-AC HD 802.11ac Wave 2 Dual-Radio PoE Access Points were installed that delivered better coverage and faster connection speeds for each connected user. In the humid and cold environments like wine cellars, the restaurant chose robust NAP353 802.11ac Dual-Radio External Antenna 3x3 Nebula Cloud Managed Access Point for Harsh Environments, connected with the RGS200-12P 12-port Gigabit Managed PoE Switches, which were designed for wide operating temperature range in the harsh environment.

The GS1920 and XGS1930 switches were used to connect telephones, cameras and network devices, enabling remote network management with ease. The agile XS3800-28 28-port 10GbE L2+ Managed Switch, used as a core switch, supports multi-gigabit connectivity up to 10 Gbps. This made the restaurant to be less worried about the increasing demand of bandwidth capacity. Besides, the switch features a restore button that saves the last workable configuration as the custom default, enabling the

device to fall back instantly in the event of misconfigurations. Compatible with CAT5e standard, switch can connect the existing cabling to upgrade network speed to 2.5G/5 Gbps operations without re-wiring and worrying about the connection downgrading to 1Gbps.

To respond to the need for advanced security and GDPR compliance, the **ZyWALL ATP500 Firewall** was chosen because of its advanced security services for websites, applications. The firewall features sandboxing that can identify new types of malware, ensuring protection from zero-day attacks. Empowered with smart cloud intelligence, ATP500 was designed to protect against Advanced Persistent Threats as well as future unknown attacks. Besides, the firewall provides cloud-based analytics service called SecuReporter and generates reports with user-friendly visual traffic summary and threat statistics.

After the deployment, the restaurant has secure and seamless network connectivity for staff and guests. There was a significant increase of coverage quality, system stability and performance. Coverage is guaranteed throughout the building, including the most critical areas, like wine cellars. The staff can operate internal facilities without interruption, and the guests can enjoy high-speed WiFi service from anywhere. Finally, it was possible to provide enterprise level of protection and meet all of the requirements imposed by the GDPR.



Products Used

NWA1123-AC HD • 802.11ac Wave 2 Dual-Radio PoE Access Point



- NebulaFlex gives you the flexibility to switch between standalone and Nebula cloud management
- Nebula cloud management allows easy deployment, real-time configurations, and access to all your APs at any time
- Achieve reliable connectivity, support for more connected clients, and better wireless coverage with the latest Wave 2 WiFi standard
- Up to 300% more performance from MU-MIMO technology
- Robust build quality, including solid-state capacitors and advanced heat dissipation design, to ensure long life and operational reliability
- Protect against 3G/4G cellular network interference with Zyxel advanced cellular mitigation design

NAP353 • Nebula Cloud Managed Access Point



- 3x3 802.11ac AP supports combined data rates of up to 1.75Gbps
- IP66-rated weather protection for harsh outdoor environments
- Self-configuring, zero-touch deployments
- Enterprise security and RF optimization
- DCS, load balancing and smart client steering

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
- \bullet Reporting and analytics on cloud and device
- 1-Year full functional license services



Products Used

RGS200-12P • 12-port Gigabit Managed PoE Switch



- Rugged and reliable design for harsh environments
- \bullet Wide-ranging operating temperature design from -40°C to 75°C
- Fanless design and compact mechanism with IP30 standard
- Redundant ring technology with quick failover in less than 20 ms
- Dual power inputs for high network resilience
- Full PoE+ support and high PoE power budget up to 240 W

GS1920-8HPv2 • 8-Port GbE Smart Managed Switch



- Up and running in minutes supports NebulaFlex Technology to shift between standalone and License Free Nebula cloud flexibly
- Easy management and setup with web-based interface
- Smart fan design offers silent operations in your office
- Offering 30-watt (802.2at) PoE+ to each port and gives a large PoE+ budget of 130w
- User-friendly design includes one-touch "Restore" button and intuitive PoE usage LED

XGS1930-28HP • 24-port GbE Smart Managed Switch with 4 SFP+ Uplink



- Four high-speed 10G fiber slots
- Up and running in minutes supports NebulaFlex Technology to shift between standalone and License Free Nebula cloud flexibly
- Easy management and setup with web-based interface and intuitive wizard
- Smart fan design offers silent operations in your office
- Offering 30-watt (802.2at) PoE+ to each port and gives a large PoE+ budget of 375w
- User-friendly design includes one-touch "Restore" button and intuitive PoE usage LED



Products Used

XS3800-28 • 28-port 10GbE L2+ Managed Switch



- NebulaFlex Pro allows users to switch between standalone management and intuitive Nebula cloud managed mode with 1-YEAR Pro Pack bundled
- Unique port combination brings maximum flexibility to network diversity
- Supports Multi-Gigabit for 100M/1G/2.5G/5G/10G connections Provides high-bandwidth with true physical stacking of up to 4 units
- Designed with "Restore to last custom default" button and redundant power supply to deliver high resiliency and availability

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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