



Success Story

Zyxel's Comprehensive Network Coverage Helps Italian Sports Center to Offer Better Services to Customers



Entertainment

INDUSTRY



CUSTOMER

Funteam



Italy

COUNTRY



SOLUCIÓN

Zyxel
Wireless
Solution

Overview

Challenges

- Needed a wireless network that could manage several different kinds of devices serving different functions
- Separate, secure WiFi networks were necessary for different entertainment zones, office, and guests
- A better solution to manage the entire network and the devices from a single point was necessary

Results

- A secure wireless network that connected solutions ranging from home automation to video surveillance without interruptions
- Seamless connectivity throughout the site, including remote locations and large areas, with separate access for staff and guests
- A single-point management solution from Zyxel that makes operations easier and more convenient

Solution

- Zyxel Wireless Solution

Summary

The Funteam Sports Center is an avant-garde, multi-purpose facility born with the idea of creating a place that provides a fun, sporting, and recreational experiences. They needed a wireless network that would allow seamless integration of all their facilities and provide secure access to staff and guests. Unfortunately, their existing network was not up to the mark for several reasons. With the help of the systems integration partner, Extratel, Funteam decided to use Zyxel solutions to upgrade their network to improve their operations and provide an even better experience to their customers. After the project, the Funteam Sports Center has comprehensive network coverage throughout its site, with a more convenient and secure management system in place.

Background

The Funteam Sports Center is a preferred destination for many people when it comes to sports and recreational activities. The place offers a series of services to satisfy the needs of all ages - children, teens, or adults. The sports center has a football field, playground, swimming pool,

Challenges

As a multifunctional area, the facility consists of different types of spaces that are meant to meet specific needs. Funteam had tasked the system integrator Extratel S.r.l to manage the network with diverse requirements. It should support a home automation system, an audio system divided by zones (covered field, open field, bar, playground, offices), and a video surveillance system. Also, it should provide separate wireless connections for the office staff and guests while still offering the wired office network.

The network also had to connect software for managing bars and playgrounds, Ethernet fiscal printers, cash drawer, automatic pay stations, cameras that record goals in the playing fields, and the IP telephone switchboard with the

Solutions and Benefits

Extratel specializes in the integration of multimedia and communication systems. They worked with Zyxel Networks to complete this complicated project. In this project, Zyxel NWA5123-AC HD and WAC6103 Access Points were chosen to create a WiFi environment in the party rooms, restaurant, garage, and personnel offices for the indoor space and football fields. The WiFi APs can provide uninterrupted, high-speed connectivity for a large number of users in the high-density environment simultaneously.

Zyxel's **ZyWALL USG110 Unified Security Gateway** and **NXC2500 Wireless LAN Controller** were used to manage the whole network, allowing all devices to communicate with each other via a single interface. This simplifies and optimizes the operations of the entire network.

The NXC2500 controller was used to control all the WiFi devices throughout the facility, making network management easy, including more distant places such as garages or parking areas. The controller supports home automation management and access to the remote IP video surveillance system. For Funteam, this means benefits like being able to manage and broadcast the games in real-time.

GS1900, GS1920, and GS2210 series switches have been chosen to streamline networking management. They assigned multiple IP addresses based on home automation, video surveillance, office, and public WiFi services, and the wired LAN of the offices. The Zyxel switches guarantee greater agility and more effective traffic management for converged applications.

various areas for events, a meeting room, and a chalet bar. The place is also used for tournaments and events of several types. Such a diverse site required a robust wireless network, and this was lacking.

relative interconnection of telephones to the audio system for making public announcements (messages of interest to all guests).

But several problems kept plaguing the network. The individual modems were configured to function alone. When there was a data line failure, the related activity remained out of service until it was restored. Also, DHCP protocols were sufficient to handle assignment requests, but different standalone devices offered WiFi with separate addresses for each area. Finally, the phones did not communicate with the audio system, and the home automation system was not connected to the internet.

USG110 Unified Security Gateway helps the customer manage triple-play service with PTP Fiber, FTTCAB, and ADSL. The network was upgraded with more functions like identification and testing of individual LAN cables, collection of information on the operational needs, and related technological implementations. The security gateway features VLAN that can separate the network and supports cybersecurity protection features to provide comprehensive protection for the individual network.

Zyxel **VMG8924-B Dual-Band Wireless AC/N VDSL2 Combo WAN Gigabit IAD** and **VMG5313-B Wireless N VDSL2 VoIP IAD** were used to provide high-speed VDSL connectivity. The Zyxel VMG8924-B series offers fast VDSL Internet access when delivering triple-play services. With integrated 3x3 802.11ac WLAN, the device offers high-quality WiFi user experience and coverage without troublesome cabling. The Zyxel VMG5313-B series provides automatic detection between VDSL2 and ADSL2+ for high-speed Internet access. Also, the product features G.vector that can increase bitrates and coverage without altering the infrastructure.

Extratel deployed Zyxel's products, which met all the needs of the customer, from connecting home automation to video surveillance systems. They created a separate, secure network for the Funteam staff and guests. Now uninterrupted WiFi connectivity is available everywhere throughout the facility. Funteam and their guests no longer worry about losing connection in the remote place like a garage or the large areas with dead spots. Also, the security architecture guarantees the protection of user data according to GDPR guidelines.

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

NWA5123-AC HD • 802.11ac Wave 2 Dual-Radio Unified Access Point



- Excellent coverage and performance with 11ac Wave 2 3x3 technology
- Next generation beamforming delivers maximum coverage
- MU-MIMO technology increases downstream throughput
- ACC minimizes interference from 3G/4G cellular networks
- Support NebulaFlex™ Pro to provide triple mode functionality (standalone, hardware controller and Nebula)

WAC6103D-I • 802.11ac Dual-Radio Dual-Optimized Antenna 3x3 Access Point



- Dual-optimized antenna allows pattern optimization adapting to wall- or ceiling-mounted installation
- 3x3 802.11ac supports combined data rates of up to 1.75 Gbps
- NebulaFlex Pro allows users to switch among standalone, on-premises controller managed or intuitive Nebula cloud managed modes as needed
- Dual-image support for reliable WiFi connectivity
- ZyXel ONE Network for standalone AP management

Products Used

GS1900-8HP/48HP/48 • 8/48-port GbE Smart Managed PoE Switch



- Easy browser-based switch management
- Quick and easy set up wizard
- High PoE power budget for PoE model – 70W (8HP) and 170W (48HP)
- Green Ethernet IEEE 802.3az support and intelligent Zyxel green features
- High-power PoE support IEEE 802.3at

GS1920-24HPv2 • 24-port GbE Smart Managed PoE Switch



- Up and running in minutes — supports NebulaFlex Technology to shift between standalone and License Free Nebula cloud flexibly
- Standalone: Easy management and setup with web-based GUI
- Nebula Cloud: Nebula allows simple deployment with agile network management
- Unique port combinations futureproof the network
- Smart fan design offers silent operations in your office
- Complies with IEEE 802.3at PoE Plus with a large PoE budget of 375W

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

Products Used

ZyWALL USG110 • Unified Security Gateway



- High-performance, high-value Unified Security Firewall 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 34 APs
- Comprehensive mobile broadband USB modem compatibility and multi-WAN load-balancing, failover and fall back support

VMG8924-B • Dual-Band Wireless AC/N VDSL2 Combo WAN Gigabit IAD



- VDSL2 vectoring for maximized service coverage
- ComboWAN-in-a-box for optimized CAPEX of FTTH/VDSL2 deployments
- 5 GHz 11ac (3x3) for smooth, optimized HD IPTV services everywhere
- 2.4 GHz 11n (2x2) for superior performance and coverage

VMG5313-B • Wireless N VDSL2 VoIP IAD



- VDSL2 vectoring for maximized service coverage
- 2.4 GHz 11n (2x2) for superior performance and coverage
- Voice over IP service via FXS ports
- Remote provisioning and management through TR-069 and TR-181 issue-2

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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