ZYXEL

Success Story

New Stadiums Score State-of-the-Art Networks with Zyxel Wired and Wireless Milestones

INDUSTRY
Sports and Entertainment

CUSTOMER
Hidegkuti Nándor Stadium & Haladás Sports Complex

COUNTRY
Hungary

SOLUTIONS
Zyxel Wireless Solution

Overview

Challenges

- Deliver WiFi to thousands of fans throughout massive stadiums
- Produce signal that can maneuver around concrete structures
- Install fast and secure networks for management and team use

Benefits

- Indoor and outdoor APs allow for versatile WiFi capability
- Security Gateway keeps complex network safe and sound
- Wired setup offers speedy, efficient connectivity

Solutions

- Zyxel Indoor-Outdoor Wireless Solution

"These successful projects are undoubtedly milestones in our company's history. We're not only proud of our diligent work, but the fact that we were able contribute to such important local institutions. Our company has gained a lot of experience building systems, so we hope to bring our knowledge and solutions—with the help of our partners—to as many people and communities as possible."

Treso Tamás
Regional Channel Sales Manager, Zyxel Hungary

Background

The Hungarian government and Budapest-based MTK football club initiated work on the second Hidegkuti Nándor Stadium in the autumn of 2015. The original stadium, named after the famous Hungarian footballer, had been in use for nearly 70 years until its demolition. Upon completion, the 5,000-plus seat complex was able to host not only football games; it served as home to entertainment ranging from wrestling matches to chess tournaments. At the same time, in the city of Szombathely, the Haladás Sports Complex was in the works. With a capacity of nearly 10,000 spectators, the stadium would also serve a multipurpose role. The Haladás finished construction in 2017, featuring its first official match in November of that year.

Challenges

Setting up a network for a mammoth complex such as a stadium is more than just a challenge—it's a treacherous undertaking requiring vision, planning, and precise execution. To meet the diverse network demands of spectators, athletes, coaches, and management, Zyxel would need to deliver strong and sustainable wireless solutions to the multi-story, reinforced concrete structures of both stadiums.

Solutions and Benefits

Both network installations began with the setup of the **ZyWALL USG1900 Unified Security Gateway**, part of Zyxel's next-generation extreme series of USGs, featuring full UTM services on-board. Providing numerous safeguards against external network threats—anti-spam, anti-virus, and state-of-the-art content filtering technologies, to name just a few—the ZyWALL USG also delivers VPN and hotspot capability.

The technical teams then set up the switch infrastructure, deploying units from the XGS3700 and XGS2210 Series. The **XGS3700-48 Gigabit L2+ Managed PoE Switch with 10G Uplink** offers all the power and flexibility required for complex network setups. Allowing for physical stacking of up to 8 units and providing 384 Gigabit ports, the potent switch is the epitome of simplicity, scalability, and flexibility. **The XGS2210 28/48-port Gigabit L2 Switch with 10GbE Uplink** gives devices Gigabit connectivity and a wide range of protective features to ensure the network is running efficiently and securely.

Two different access points were stationed at the network's edge: the **NWA5123-AC 802.11ac Dual-Radio Unified AP and WAC6553D-E 802.11ac Dual Radio External Antenna 3x3 Outdoor AP**. The NWA5123-AC, with its convenient design and fast data rates, is perfect for typical interior connectivity. The WAC6553D-E, on the other hand, is built to withstand the wrath of the outdoors. The switch, which features a smart external antenna for 1.75Gbps combined data rates, delivers premium performance with enterprise-grade security.

As a result of Zyxel's commitment to powerful, reliable, and cost-effective solutions to network problems, the Hidegkuti Nándor Stadium and Haladás Sports Complex were both given high-tech upgrades to meet 21st-century needs. Fans, athletes, and stadium employees were able to enjoy all the benefits of a truly world-class wired and wireless network.

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Solutions

ZyWALL USG1900 • Unified Security Gateway

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

XGS3700-48HP • 48-port Gigabit L2+ Managed PoE Switch with 10G 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

XGS2210 Series • 28/48-port Gigabit L2 Switch with 10GbE Uplink

- Gigabit connectivity plus four SFP+ ports for handling high-bandwidth networks with ease
- Physical stacking of up to two units through two standard 10G SFP+ ports
- VLAN static routing for agile, reliable network operations
- Supports sFlow, which analyzes client behavior to discover sources of bandwidth abuse
- Enhanced network protection with IP source guard, DHCP snooping, ARP inspection, and CPU protection

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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

- 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

About Zyxel Communications

Focused on innovation and customer-centricity, Zyxel Communications 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.