

Success Story

Geothermal Oasis Gains Cutting-Edge Connectivity with Zyxel Wired and Wireless Solution





Bilici Thermal



Turkey

SOLUTIONS

Zyxel Wired & Wireless Solution

Overview

Challenges

- Provide network coverage to the building lobby, social areas, and more than 150 rooms
- Ensure that wired and wireless connectivity is fast and secure
- Manage all network activity from a single, convenient interface

Results

- State-of-the-art switch technology guarantees congestion-free data delivery for high-bandwidth applications
- Built-in security and fail-safe features allow network processes to run smoothly in the event of disruptions
- Setup and management are a breeze thanks to the ZON Utility and easy-to-use, browser-based configuration

Solutions

• Zyxel Wired and Wireless Solution

"People are happiest in places they feel comfortable and safe. Bilici Thermal, Turkey's first geothermal resort, has been able to create such an environment. The resort can easily handle more than 800 visitors at any given time with its luxurious bedrooms, meeting spaces, swimming and spa areas, and popular bars and restaurants. We thank Zyxel partner Öz Soft Computer for setting up a truly modern network that exceeds the already-high expectations of our guests."

Akif Bilici Chairman of the Board of Directors, Bilici Thermal

ZYXEL

Background

The mission at Siv Yapi, a Turkish real-estate developer, is to conceive of spaces where people can discover methods of self-healing and relaxation—then bring these spaces to life. This was its goal when developing the plans for the Bilici Thermal resort in the cultural hub of Sivas. Opened in 2015, the resort boasts 12,000 square meters of floor space, 159 guest rooms, and a multipurpose conference room with a 250-person capacity. For wining and dining, there are two restaurants and four bars that can cater to a maximum of 300 patrons. The management team at Siv Yapi hopes to bring more projects to successful fruition—not only in Sivas, but throughout Turkey.



Challenges

As the creative minds at Siv Yapi were drawing up the plans for Bilici Thermal, they understood that the resort could not just provide the physical amenities customarily found in spas and bath houses. The massive building complex needed to have the most up-to-date network to meet the needs of the modern, device-tethered guest.

Solutions and Benefits

Knowing they needed the most potent network hardware, Öz Soft Computer called upon Zyxel's XGS4600-32F Gigabit Ethernet L3 Switch with 10G Uplink. The powerful switch enables fast and secure data transmission for the largest of businesses, especially those within the hospitality industry. In addition to this switch, Bilici Thermal deployed the GS1900-24HP and GS1920-48HP Gigabit smartmanaged PoE switchess, which both offer Zyxel One Network support for simple, browser-based setup and management. The GS1920 series offers an array of L2 features, such as LACP to provide redundancy, QoS (Quality of Service) for shaping data traffic, and VLAN capability to allow for a more organized and secure network. Both switches deliver Power-over-Ethernet functionality—perfect for getting IP cameras and phones up and running without having to worry about setting up costly additional wiring for power.

Öz Soft Computer installed ceiling- and wall-mountable

With over 1,000 users to consider—including staff and management— setting up a fast, efficient, and safe network would be no easy feat. Another question that arose during planning: how to manage such an intricate, sprawling network? The technicians at Öz Soft Computer, a local Zyxel partner, had the answer.

NWA5121-NI Unified Access Points at the periphery of Bilici Thermal's network. Designed to blend into the surrounding space, these APs eliminate dead spots and boost overall wireless performance. They also boast Gigabit WiFi speeds, standalone-to-centrally-managed conversion, and Zyxel's proprietary APFlex™, which provides Zero-touch provision and IP configuration features.

One of Bilici Thermal's critical requests was to have the entire network infrastructure managed via a single point. This was achieved with the **NXC2500 Wireless LAN Controller**, which gave the resort the ability to plan, deploy, and oversee its APs. With auto healing and client steering features, the controller is key to maintaining a strong, efficient network. It also offers impressive scalability, to ensure that as Bilici Thermal adapts and grows, so will its network.



Products Used

XGS4600-32F • 28-Port GbE L3 Managed Fiber Switch with 4 SFP+ Uplink



- Four built-in 10-G SFP+ uplinks enable smooth, congestionfree data delivery for high-bandwidth applications
- Provides high bandwidth with true physical stacking of up to four units and 112 Gigabit ports
- "Carbon fiber"-style name plate delivers a modern look and feel
- High resiliency with redundant power supply units

GS1920-48HP • 48-port Gigabit Smart Managed PoE Switch



- Easy-to-manage rich L2 features with user-friendly, browserbased management GUI
- Supports PoE+ standard to offer 30 W per port and a high PoE power budget of 375 W
- Smart fan design ensures silent operation in both desktop and rack-mounted environments
- Supports ZON Utility and Smart Connect to simplify network management and maintenance

GS1900-24HP • 24-Port Gigabit Smart Managed PoE Switch



- Easy browser-based switch management, with quick and easy set up wizard
- Advanced network error prevention features (loop protection, dual images, storm control, DoS and SSL)
- Green Ethernet IEEE 802.3az support and intelligent Zyxel green features
- IEEE 802.3at PoE plus support per port



NXC2500 • Wireless LAN Controller



- Auto provisioning and centralized management of up to $64 \ \mbox{APs}^*$
- Zyxel Wireless Optimizer for easy planning, deployment, and maintenance
- Advanced ZyMesh technology for simplified 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

*Management of 64 APs is supported with firmware version V4.10 or later

NWA5121-NI • 802.11n Unified Access Point



- Ceiling- and wall-mountable design with optimized RF performance
- 2-in-1 standalone/managed AP design
- CAPWAP management supported
- Simple, speedy deployment with APFlex[™] and Zyxel One Network utilities

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.

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