



Network Infrastructure at HOTEL KUKUČKA is Built on ZyXEL Hospitality Solution, Slovakia

"We decided to deploy the ZyXEL product because ZyXEL provides unified configuration capability for the whole wireless network, easy configuration, superior reliability and local technical support. Thanks to ZyXEL's initial discussions and comprehensive solution, the deployment of switches and Wi-Fi connections was effortless. Upon configuration, no serious problems were encountered. After raising concerns over minor problems, they were eliminated to achieve the highest level of customer satisfaction."

Michal Piala

ESIN energy, s. r. o., Slovakia

Overview

Customer Name

Hotel Kukučka, Slovakia **Customer Industry** Hospitality

Challenges

- Protect the IT system from data hacking and unexpected attacks.
- Provide convenient Internet access to guests while securing hotel network.

Solutions

• ZyXEL MGS-3712F, GS2200-24/48, GS2200-24P and NWA-3166

Benefits

- Provide secure, high-quality network to all users.
- Simple installation—access points are only connected to the Ethernet cables that power them.
- Convenience—users can move around with a connected device without losing or interrupting the connection.

Challenges

Hotel Kukučka needs a wireless network for both guests and hotel employees. Because data from guests and employees may contain information of a sensitive or personal nature, privacy and data security are top priorities to avoid the hacking or interception of confidential material.

Background

The recently constructed four-star Hotel Kukučka is situated in Slovakia's High Tatras mountains beneath Lomnicky peak, directly alongside a ski resort. Hotel Kukučka provides guests with luxury accommodation and services that include a wellness center. In order to make Internet access available to guests, Hotel Kukučka decided to establish a high-quality network infrastructure to facilitate more customer-oriented services.

Solutions and Benefits

The ZyXEL hospitality solution was chosen for its unified wireless network configuration capability eliminating the need to set up individual access point separately—as well as for the superior reliability and quality of ZyXEL products. For the core switch, the ZyXEL MGS-3712F was selected and it provided SFP ports for the optical interfaces which allow subsequent connections with five ZyXEL GS2200-48 switches installed at each building. In each building, Internet access was available at each building in two formats—wired and wireless.



For wired Internet connections, the GS2200-48 linked to core switch provided direct access via sockets that allows PCs, FAX machines and Internet-enabled devices to connect Internet by simply plugging the cable into the socket. For wireless Internet connections, the ZyXEL GS2200-24P PoE switch was installed to power the connected access points via Ethernet cables so that access points did not require external power sources, making it possible to significantly streamline the network infrastructure. ZyXEL NWA-3166 access point is a 3-in-1 hybrid AP that can

Products Used



be operated as AP controller mode, managed AP mode and stand-alone AP mode, and also its centralized management for up to 24 WLAN access points is beneficial to Hotel Kukučka who does not have enough IT staff. Wireless access service was offered to guests and internal operations, as well as to management and administration. These networks are segregated by VLAN to ensure the highest levels of security. The wireless network for guests is protected by the WPA2 security protocol, and guests can ask for a password at the hotel reception desk. Wireless networks for internal purposes and administration are also protected by WPA2, with the SSID not being broadcast.

MGS-3712F 8-port GbE L2 Switch with Four GbE Uplink Ports

- 16K MAC address table
- Policy-based QoS optimizes multi-service quality
- IGMP snooping v1, v2, v3; MVR
- Multilayer-aware (L2/L3/L4) ACL for security protection
- High redundancy and resilient architecture with RSTP and port trunking
- "Front access" design; external alarm input/output block
- Temperature hardened and protected against humidity and dust
- Removable fan module
- Power-saving intelligent fan control
- AC/DC dual-power input flexible for service provider

GS2200-24/48 24/48-port GbE L2 Switch

- Comprehensive L2 switching features
- 56 Gbps non-blocking switch fabric
- 2/4 dual-personality (RJ-45/SFP) GbE interfaces
- Port security and enhanced 802.1X port authentication
- MAC freeze and intrusion lock
- 8 IEEE 802.1p hardware priority queues
- WFQ, WRR and SPQ queuing algorithms
- IPv6 Ready logo approved



GS2200-24P 24-port GbE L2 PoE Switch

- Comprehensive L2 switching features
- 56 Gbps non-blocking switch fabric
- 2 dual-personality (RJ-45/SFP) GbE interfaces
- Port security and enhanced 802.1X port authentication
- MAC freeze and intrusion lock
- 8 IEEE 802.1p hardware priority queues
- WFQ, WRR and SPQ queuing algorithms
- IPv6 Ready logo approved
- IEEE 802.3af PoE support
- PoE power consumption mode for enhanced energy efficiency





NWA-3166 Wireless LAN Access Points

- 3-in-1 hybrid AP including AP, controller mode, managed AP mode and stand-alone AP mode
- Centralized management for up to 24 WLAN access points
- Back-up redundancy supported to provide reliable connection service
- Secured tunnels for communication between controller and managed AP to prevent leaking of configurations
- Enterprise-class access point functionalities with comprehensive configuration interfaces
- Built with LSOH (Low Smoke Zero Halogen) material for plenum rating UL 2043 support



About ZyXEL Communications

ZyXEL Communications Corp., founded in 1989 and headquartered in Taiwan, is the leading provider of complete broadband access solutions. As one of the early modem manufacturers, ZyXEL has undergone many transformations in the fast-paced networking industry. Today, ZyXEL is one of the few companies in the world capable of offering complete networking solutions of Telco, SME/Enterprise, and Digital Home for a wide range of deployment scenarios. Telco solutions include wired and wireless access network equipments, networking customer premises equipments, and Carrier Switches. SME and Enterprise solutions include Unified Security Gateway, LAN Switches and WLAN. Digital Home solutions include network connectivity devices and multimedia solutions.

The company has 3200 employees and distributors in 70 countries, reaching more than 150 regional markets. The ZyXEL Communications Corp. includes 33 subsidiaries and sales offices and two research and development centers worldwide. For more information, visit the company's Website, http://www.zyxel.com.

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