Boosting Operational Efficiency and Security for Leading Recycling Firm

Overview

Recycling – kovové odpady a.s. relies on robust IT infrastructure to ensure seamless communication and connectivity across its sites, as well as secure access for employees working remotely or on the go. However, as the company expanded, its outdated network infrastructure could no longer meet the demands of its growing operations, necessitating a complete overhaul. Partnering with Computer Services s.r.o., the company implemented a modern network powered by Zyxel Networks' reliable and centrally managed solutions. The upgraded system is designed to accommodate numerous connected devices and support specialized waste processing technologies, such as camera networks, radiation gates, and advanced sorting systems. Key priorities included enhancing security to meet current standards, optimizing operational efficiency, and ensuring consistent network availability. Zyxel Networks' high-performance, redundant backbone network, connected via optical fiber, provides ample bandwidth for critical systems and devices. The project also delivers reliable WiFi coverage, including outdoor areas. With remote management through the Nebula cloud platform and a scalable design, the network is prepared to support secure remote work and adapt to the company's evolving needs.

Customer
Recycling - kovové odpady a.s.

Industry
Waste management

Location
Chotěboř, Czech Republic

Partner
Computer Services s.r.o.

Challenges

As Recycling - kovové odpady a.s. expanded, its aging IT infrastructure became inadequate, failing to meet the demands of the growing company. The company experienced issues with inconsistent infrastructure across locations and a mix of devices from different manufacturers. Due to the increasing number of cyberattacks, the company needed to overhaul its network security and endpoint protection. Communication between sites had to be made more secure, and employees required safe access to systems and applications. Additionally, the lack of a unified device management system and guaranteed IT support further complicated operations.

Customer Background
Founded in 1996, Recycling - kovové odpady a.s., a family-run business in Chotěboř, plays a pivotal role in the Czech Republic's waste processing industry. With over 20 locations and 120 employees, the company is part of the RKO GROUP, specializing in sustainable recycling for clients ranging from businesses to municipalities.

> ## "Our old network couldn't meet our security and management needs, nor support secure connections and remote work. The new setup addresses these challenges while providing reliable performance with Zyxel Networks' equipment."

Roman Filip, CEO
Recycling – kovové odpady a.s.

Solutions

The revamped system includes the USG FLEX 700 firewall, which provides robust security and centralized network management. The firewall's UTM capabilities are deployed to guard against the latest threats. A secure IPSec VPN was set up to enhance communication across multiple sites. For endpoint security, a new antivirus solution with centralized management was introduced for both workstations and servers, ensuring comprehensive protection.

The network is supported by Zyxel XS3800, XGS1930, and GS2220 switches. The backbone switches provide 10Gbps transmission speeds and are connected via redundant optical links. The switches handling end-device connections feature gigabit LAN interfaces and enhanced Power over Ethernet (PoE) capabilities, ensuring smooth connections for numerous WiFi access points and security cameras.

WAC500, WAX510D, WAC6552D-S, and NWA55AXE access points provide seamless, high-speed wireless coverage. All network devices are centrally and remotely controlled through the Nebula cloud networking management platform. Managing network devices via Nebula enables two key functionalities: quick configuration adjustments and efficient troubleshooting.

Results

The new network has transformed the company's network infrastructure by providing robust cybersecurity protection, seamless connectivity, and streamlined network management. It ensures robust protection, seamless communication, and easy scalability. This transformation not only boosts operational efficiency but also supports remote work and strengthens the company's commitment to sustainable, eco-friendly waste processing.

- High-speed, secure, and stable connections facilitate seamless communication and efficient daily operations across all company locations
- Simplified management enables IT administrators to oversee all sites from a single, user-friendly dashboard, reducing time and effort
- Simplified network management allows for easy local monitoring and oversight of the entire network
- Comprehensive wireless coverage ensures reliable connectivity, including in outdoor areas

Product List

- USG FLEX 700 Firewall

- WAX510D WiFi 6 Access Point
- NWA55AXE WiFi 6 Outdoor Access Point
- WAC500 WiFi 5 Access Point
- WAC6552D-S WiFi 5 Outdoor Access Point

- XS3800-28 L3 Aggregation Switch
- XGS1930 Lite-L3 Smart Managed Switch
- GS2220 L2+ Managed Switch