



Success Story

Polish Aviation School Soars with Zyxel Wireless and Nebula Solution



Education



Warsaw
Aviation
Technical
School



Poland



Zyxel
Wireless &
Nebula
Solution

Overview

Challenges

- Upgrading computer lab so students have the best educational tools possible
- Widely used products from a single company to prepare students for professional work
- User-friendly control interface for quick, easy deployment and management of network devices

Results

- Cutting-edge infrastructure delivers fast and easy-to-manage wireless network
- Partnership with Zyxel ensures students get top-notch preparation for future professional endeavors
- Versatile, cloud-based architecture is scalable, giving school the opportunity to expand and develop its academic programs

Solutions

- Zyxel Wired and Nebula Solution

"Thanks to the impressive functionality of their Nebula-compatible products, we were able to equip our entire studio with Zyxel devices. The school has used them for the first half of 2018 with a high level of satisfaction."

Maciej Kolodziej
IT Instructor, Warsaw Aviation Technical School

Background

Warsaw Aviation Technical School, situated in the capital of Poland, was looking to furnish their computer lab with top-notch equipment. They specifically needed devices that would allow students in information technology classes to easily learn how to configure and create networks. It was also vital that the selected equipment come from a well-known brand, giving students a greater likelihood of applying their training in post-school professions. Lastly, they sought a user-friendly solution: intuitive to learn and easy to configure.



Challenges

Prior to this project, the school had used devices from various manufacturers, but none of them were able to meet the many needs of their IT department. After enduring numerous configuration issues and lacking a cohesive management interface from a single provider, they were desperate for a network upgrade. In 2014, they

tested several Zyxel products in the computer lab. The functionality of these devices and helpful, customer-centric service prompted the school to completely replace its legacy infrastructure with state-of-the-art Zyxel hardware.

Solutions and Benefits

Warsaw Aviation's computer lab was first equipped with the **ZyWALL Unified Security Gateway** and **WLAN controller** from Zyxel's NXC Series. This was followed by the rapid deployment of **Zyxel switches and 16 access points**. The school was so pleased with the overall project, they formed a partnership with Zyxel to exclusively use their products for the entire networking curriculum. Now, when students take examinations and complete coursework, they're mastering the most up-to-date Zyxel technology at the same time.

There are currently plans to launch optional courses where the best students can learn in greater detail about more advanced Zyxel technologies. In particular, scholars would have the opportunity to refine their knowledge of VPN configuration and switch products, in addition to having the chance to create their own wireless networks

with the **ZyWALL USG40 security gateway**.

Encouraged by the positive experience with Zyxel, the school decided to build another computer lab around the **cloud-based Nebula platform**. Nebula's intuitive interface makes it incredibly easy for students to use the lab's assortment of network equipment. It also enables remote access and configuration of devices, so instructors and technicians always have the ability to oversee, manage, and troubleshoot the network.

The school plans to purchase additional Nebula switches for more individualized academic paths. Since these switches are compatible with some of the school's existing access points, deployment will undoubtedly be hassle-free. Once again, Zyxel has delivered an intelligent future to students and educators.

Products Used

ZyWALL USG40 • Unified Security Gateway



- All-in-one Next Generation Firewall (NGFW) for small businesses
- Anti-malware protection with firewall, anti-virus, anti-spam, content filtering, IDP, and next-generation application intelligence
- Robust SSL, IPsec and L2TP over IPsec VPN connectivity
- Built-in WLAN controller for centralized management of up to 10 APs

ZyWALL USG110 • Unified Security Gateway



- USG for small and medium-sized businesses
- Complete network protection with firewall, anti-virus, anti-spam, Content Filtering 2.0, IDP, and Application Patrol
- Robust SSL, IPsec, and L2TP over IPsec VPN connectivity and VPN high availability (HA)
- Unified security policy
- Device HA Pro ensures smart handover
- Cloud Helper makes firmware upgrades a breeze
- Hotspot management supported

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



- Easy-to-manage, rich L2 features with user-friendly, browser-based 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

NXC5500 • Wireless LAN Controller



- Centralized WLAN management and auto-provisioning
- Manages up to 1,024 APs with granular access control
- ZyMesh simplifies complex, inconvenient cable-heavy WiFi deployments
- Comprehensive features for WLAN optimization and always-on WiFi connectivity
- Dynamic channel selection and load balancing
- Guest authentication via QR code
- Zyxel One Network support

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 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

NWA5123-NI • 802.11 a/b/g/n Dual-Radio Unified Access Point



- Ceiling and wall-mountable
- Plenum-rated housing
- 2-in-1 standalone/managed AP design
- CAPWAP management supported
- ZyXel One Network supported

NWA1123-ACv2 • 802.11ac Dual-Radio Ceiling Mount PoE Access Point



- NebulaFlex™ gives you the flexibility to switch between standalone mode and license-free Nebula cloud management
- Nebula cloud management enables easy deployment, real-time configurations, and round-the-clock access to all your access points
- 802.11ac 2x2 support for combined data rates of up to 1.2 Gbps
- Compact ceiling-mount design with optimized RF performance
- Robust build quality and solid-state capacitors to ensure longevity and operational reliability

About ZyXel

Focused on innovation and customer-centricity, ZyXel 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.

Copyright © 2019 ZyXel and/or its subsidiaries. All rights reserved. ZyXel, the ZyXel logo are registered trademarks of ZyXel and/or its subsidiaries. All other brands, product names, or trademarks mentioned are the property of their respective owners. All specifications are subject to change without notice.