



Success Story

Zyxel Saves Russian Municipal Construction Agency From Wild-West WiFi Nightmare



Government



Yekaterinburg
Municipal
Construction
Agency



REGION

Russia



SOLUTIONS

Zyxel
switching
solution

Overview

Challenges

- Implement a solution with high scalability to satisfy future growth needs
- Outfit building while it's still being constructed
- Complete project within strict government budget constraints

Benefits

- Centrally managed wireless network with seamless roaming across facilities
- Flexible deployment and redundancy

Solution

- Zyxel switching solution

"We're very happy with our choice [of Zyxel]. The performance of the network is excellent and there's a lot of room to scale up as we grow. I can safely recommend Zyxel solutions to my colleagues."

Sergei Zhigalov, Chief specialist
Yekaterinburg Municipal Construction Agency

Background

Industry and construction is in Yekaterinburg's blood. The city—Russia's fourth largest—was founded by Peter the Great in 1723 to serve as the country's mining capital. It remains the heart of Russian industry today and is home to three of the country's tallest buildings, including the 52-story Iset Tower.

With its resource-rich environment and industrial know-how, Yekaterinburg's population and economy are expanding at a steady clip. Helping drive the growth has been the municipal construction agency, which itself has grown—to the point of needing a new office.

Challenges

The agency's previous headquarters was clearly insufficient, with 50 staffers forced to huddle inside the cramped space. The facility was simply not designed to serve as a modern office; for example, there was a complete lack of fixtures and other infrastructure for the installation of computer networking equipment. The result: switches and Ethernet cables strewn haphazardly across the floor. In addition, the building lacked a centralized WiFi service, leaving employees to try to get wireless themselves by setting up routers intended for home use. Needless to say, internet access was often unavailable and speeds were less than impressive when it was.

The agency saw the new office as a chance to change all that. It wanted its next location to give staff a modern, secure network offering high speeds, expansive wireless

Solutions and Benefits

Installing the network infrastructure was a little trickier than usual as the process ran simultaneously with the construction and finishing of the office itself. However, a five-person team was able to complete the work in 20 days.

The new network comprises several IP cameras, two dozen IP phones, roughly 100 workstations, and countless wireless devices. The underlying infrastructure for the wired equipment is 16 Zyxel switches, most from the **GS1900 series**. All switches in the line feature Gigabit connectivity and multiple deployment methods to fulfill the needs of offices and meeting room environments. And happily for Sergei, they support Zyxel ONE Network Utility, which is complimentary and designed to simplify configuration, management, and troubleshooting, allowing the agency to focus on its business priorities.



coverage, and the ability to be scaled up in the future, particularly as dozens more staff were set to come on board.

But there were a few obvious constraints.

"For us, the most important factor was the price—after all, we're a government institution," the agency's Sergei Zhigalov said. "At the same time, the project demanded the use of the most modern equipment, with a long service life and convenient operation and maintenance."

Turning the dream into reality started with the tender process, which involved three bidders. "We knew Zyxel was exactly the supplier we needed, as it best met each of our requirements," Sergei said.

Meanwhile, employees' wireless needs are taken care of by eleven **NWA5123-AC 802.11ac dual-radio unified access points**. Also compatible with Zyxel ONE Network, these APs can work either autonomously or be centrally managed. Their ceiling-mountable design and smoke detector-style look also mean they blend seamlessly into any office.

Right from the project's start, the construction agency had one overall goal for its new network: scalability. With Zyxel's versatile and easy-to-manage infrastructure, that goal has been realized, according to Sergei. Looking forward, he said the agency planned to add more workstations and expand its wireless coverage further as more employees switched to mobile devices. His network is ready to handle it.

Products Used

XS3700-24 • 24-Port 10 Gigabit L2+ Switch



- Flexible 10-Gigabit connectivity with 12 SFP+ ports, eight 10G BASE-T ports, and four SFP+ combo ports
- Layer 2 Plus feature set equipped with static and policy-based routing as well as VRRP
- Hot-swappable power supply and fan modules
- No-single-point-of-failure hardware and software design
- Future-proofed with IPv6 support
- Comprehensive security features to ensure network availability

GS1900 Series • 8/24/48-Port GbE Smart Managed Switch



- Easy browser-based switch management with quick and easy setup wizard
- Advanced network error prevention features including loop protection, dual images, storm control, DoS, and SSL
- Fanless design
- Green Ethernet IEEE 802.3az support and intelligent ZyXel green features

GS1920-24HP • 24-Port Gigabit Smart Managed PoE Switch



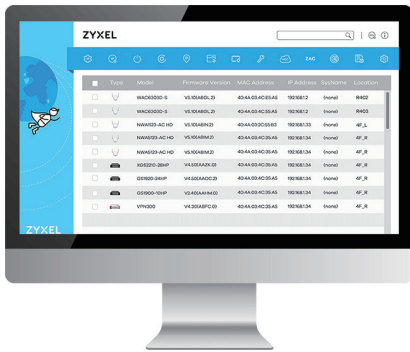
- Easy-to-manage rich L2 features with user-friendly Web browser-based management GUI
- PoE+ standard offers 30 W per port and a high PoE power budget of 375 W
- Smart fan design offers silent operation in both desktop and rack-mounted environments
- Supports ZON Utility and Smart Connect to simplify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

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

ZyXel One Network (ZON) Utility



- A unified and complimentary installation tool to discover and configure ZyXel switches, WLAN and gateways in the network
- Designed with an intuitive user interface to facilitate deployments and initial setup of network devices
- Using one single platform to assign new IPs and upgrade firmware for WiFi access points (APs), switches and gateways
- Working with ZyXel AP Configurator (ZAC) for further configuration of WLAN access points

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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