



Success Story

Zyxel Wireless Solution Upgrades Historic Russian Hotel with Modern Network and Services



Hospitality

INDUSTRY



CUSTOMER

Military
Minister's
Mansion



Russia

COUNTRY



SOLUCIÓN

Zyxel
Wireless
Solution

Overview

Challenges

- Create LAN and WiFi network to include low-voltage networks in the historic building
- Deploy the complex infrastructure combining different systems from scratch under a tight schedule
- Deliver stable and seamless wireless coverage in each room
- Centralize management of various network devices like video surveillance system, digital televisions and smart home systems

Results

- Implemented robust wired and wireless networks under a tight schedule
- Delivered uniform and reliable network coverage within a historic building
- Connected devices are centrally controlled and managed with ease

Solution

- Zyxel Wireless Solution

Summary

Management of the Military Minister's Mansion, a culturally significant hotel in St. Petersburg, wanted to install new connected equipment and network infrastructure to provide an array of modern hospitality services. However, the project involved a complex system installation and needed to be completed within a short period of time. Specifically, systems integrators needed to meet the very tight deadline while maintaining high standards of work. With the new network infrastructure in place, the century-old historic hotel could deliver all the amenities expected with modern accommodation in terms of network communications, security and sense of comfort for guests.

Background

Built in the 19th century in St. Petersburg, Russia, the Military Minister's Mansion was the residence and workplace of Dmitry Alekseevich Milyutin, a great military reformer during the reign of Emperor Alexander II. Since 1925, the building had been used as a hotel for high-ranking military officers. After reconstruction of the building, the hotel was renamed the Mikhailovskaya Hotel in 2009 and then returned to the historical name Military Minister's Mansion in 2013. Sitting in the center of St. Petersburg, the hotel is adjacent to famous tourist attractions such as Mikhailovsky

Castle, Mikhailovsky Garden, the Russian Museum, Summer Garden, the Field of Mars, the Hermitage and Palace Square, Russian Museum, Summer Garden, Engineering Castle, Kazan Cathedral, Mikhailovsky Theater and Faberge Museum. Featuring exquisite ceremonial halls from the 19th century, the building has hosted luxurious balls and special events for 150 years. Its unique combination of classic and stylish architectural and interior designs as well as proximity to iconic sights make it a can't miss landmark and popular accommodation choice for visitors.

Challenges

In 2018, the hotel management decided to implement a reconstruction plan to renovate the culturally significant building. They planned to create a new LAN and WiFi network, which would include the introduction of low-voltage networks. One of the main goals of the project was to turn the venerable building into a modern hotel with all the technological conveniences today's travelers expect. The hotel installed a video surveillance system, digital televisions, smart home systems, and control center for managing all these systems. The local network structure required a centralized control unit to provide a backbone to connect with low-current

systems like video surveillance, television and WiFi devices. Additionally, management wanted to establish WiFi roaming to deliver stable wireless signals to all rooms.

Adding to the complexity of the project, the network equipment could only be installed after all other construction work was completed. Pavel Semichev, project manager from system integrator Unix, said that the builders once asked them to move a wiring closet that was fully installed. This task increase the difficulty of meeting the installation deadline.

Solutions and Benefits

Unix project manager Pavel Semichev indicated that ease of installation and maintenance as well as reliability are the primary requirements when choosing network equipment for a small and historic hotel like the Military Minister's Mansion. Having extensive experience working with Zyxel, Unix selected a Zyxel solution to meet all customer's requirements while adhering to the deployment schedule. After completing the complex and demanded stage of laying cable throughout the historic building, it took no more than one month and 10 Unix specialists to finish deploying the remaining network infrastructure.

The completed system comprised one **ZyWALL USG40 Unified Security Gateway**, **NXC2500 Wireless LAN Controller** and **WAC6500 Series 802.11ac Dual Radio Smart Antenna 3x3 Access Point** units, coupled with Zyxel's managed switches.

The USG40 Unified Security Gateway features simplified management that eliminates the need for complex and time-consuming configuration settings. The integrated WLAN controller with Zyxel AP Controller technology enables a centralized management of wireless devices. The installation of the NXC2500 Wireless LAN Controller also gave the hotel the ability to manage access points centrally to ensure optimized wireless performance throughout the hotel.

The WAC6500 series APs were selected for their innovative smart antenna design, which can provide dynamic signal patterns to deliver a smooth and uninterrupted wireless access experience for guests and network administrators in high-density environments or when using bandwidth-intensive applications like video streaming.

The Zyxel XGS3700, XGS2210 and GS1920 managed switches power up and coordinate peripheral devices, such as wireless access points and the video surveillance system. The switches support a Virtual Local Area Network (VLAN) that separates the physical network and assigns devices to different groups. With VLAN, a device cannot communicate directly with devices that are not in the same group. This enhances security and prioritizes network traffic to use bandwidth more efficiently.

Thanks to Zyxel's top-notch network infrastructure and management, the Military Minister's Mansion has been transformed into a modern hotel that is in step with the times. The hotel's management can centrally control connected devices in an easy and secure way. Guests can enjoy seamless connectivity, browsing webpages of nearby scenic sites or checking their emails effortlessly from anywhere in the hotel.

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

XGS3700 Series • 24/48-port GbE L2+ Switch with 10GbE Uplink



- Physical stacking up to 8 units and 384 Gigabit ports
- Four 10GbE SFP+ uplink flexibility
- Internal and hot-swappable power supply design
- PoE model supports IEEE 802.3at with high PoE power budget up to 1000W

XGS2210 Series • 24/48-port GbE L2 Switch with 10GbE Uplink



- Physical stacking up to 2 units and 96 Gigabit ports
- Gigabit connectivity plus four (4) SFP+ ports
VLAN communication through access switch by static routing feature
- Supports sFlow that analyzes client behavior
- PoE models comply with IEEE 802.3at PoE Plus with high power budget

Products Used

GS1920v2 Series • 8/24/48-port GbE Smart Managed Switch



- Up and running in minutes — supports NebulaFlex Technology to shift between standalone and License Free Nebula cloud flexibly
- Standalone: Easy management and setup with web-based GUI
- Nebula Cloud: Nebula allows simple deployment with agile network management
- Smart fan design offers silent operations in your office
- PoE models comply with IEEE 802.3at PoE Plus with high power budget

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 streamlined 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

WAC6500 Series • 802.11ac Dual Radio Smart Antenna 3x3 Access Point



- Zyxel smart antenna with over 700 optimized antenna patterns for breakthrough performance anywhere
- Ideal for high-density and interference-laden indoor environments
- Advanced IEEE 802.11ac offers combined data rates of up to 1.75 Gbps
- Industry-leading Rx sensitivity as low as -102 dBm
- NebulaFlex Pro allows users to switch among standalone, on-premises controller managed or intuitive Nebula cloud managed modes as needed

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.

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