



Success Story

Zyxel Switching Solution Brings Smart Tech to Kiev Metro



Government



CUSTOMER

Kiev Metro



COUNTRY

Ukraine



SOLUTIONS

Zyxel
Switching
Solution

Overview

Challenges

- Develop and build a helpful guidance system for metro passengers
- Install fail-safe switches that can handle temperature changes and extreme vibrations
- Provide easy management system to oversee large-scale deployment

Results

- Real-time ETA system keeps passengers informed of schedule changes and estimated arrival
- Browser-based setup wizard and Zyxel ONE Network utility deliver ultimate network control
- Meticulous design and rich feature set for durability and reliability

Solution

- Zyxel Switching Solution

“The passenger sees the train’s current location, how many stations remain, and total travel time. The new information system makes it easy to track your journey—as long as you don’t fall asleep! Many thanks to Zyxel and our Ukrainian MTI distributor for helping with the testing and deployment.”

Oleg Khavruk
Director, Trans-Media

Background

The Kiev Metro is a rail transit system that has been meeting the city's transportation needs since 1960. The vital service currently operates along three lines with 52 stations, moving more than a million locals and tourists each day. Recently, their administration has spearheaded a number of digitization projects designed to ready the aging system for the future while enhancing passenger

experience. One ongoing project involves the effort to improve wayfinding, a relatively new term referring to the developing field of navigational assistance. To this end, the Kiev Metro decided to create a virtual guidance system for its riders—a daunting effort that would require hard work, patience, and a bit of outside help from Zyxel.

Challenges

The metro administrators had discovered that during peak times, when trains were packed with commuters, wayfinding took a hit. This was particularly true for tourists who were unfamiliar with the transit network and city layout. By setting up a comprehensive guidance system that could impart station information, estimated travel time, and other useful details about the journey, the admin intended to make the rider experience more efficient and minimize the rush-hour frenzy. While spending

over a year in the testing stage, they searched for hardware that could do the following: work non-stop without fail, withstand constant vibrations, and handle abrupt temperature changes. This was especially important for their switches; if one went down, every connected device would go down with it. After exhaustively probing products from four different brands, Zyxel's **GS1900 Series 10-port gigabit smart managed switch** was the last one standing.

Solutions and Benefits

The virtual guidance system is currently a work in progress, but the finished installations have already proven to be wildly popular among travelers. 50 specialists from Trans-Media, a local IT company, were enlisted to plan and administer deployment. Ultimately, a total of 500 Zyxel **GS1900 series** switches will be installed to provide the trains with powerful connectivity and an array of configuration, management, and troubleshooting features.

A primary selling point of the **GS1900 series** is its incredible deployment versatility. The multiple mounting options allow for simple installation in any kind of environment—subway cars included. By taking advantage of Zyxel's easy, browser-based setup wizard, getting the network up and running is a breeze. Additionally, all the deployed

switches are conveniently represented within the Zyxel ONE Network utility. The unified, intuitive installation tool can discover and configure Zyxel switches, WLAN, and network gateways, allowing users to easily manage everything from a single platform. Lastly, the intelligent PoE design of **GS1900-10HP** maximizes power budget to support more APs, VoIP phones, and IP cameras.

Now, thanks to Zyxel's state-of-the-art tech, residents and visitors alike can zip across the beautiful, history-rich city by way of a revamped, intelligent metro. "You don't even need to take off your headphones," said Oleg Khavruk, director of Trans-Media. "Just pay attention to the information panel [and you'll get where you need to go]."

Products Used

GS1900-10HP • 10-port Gigabit Smart Managed Switch



- Intuitive, browser-based switch management, with quick and easy set up wizard
- Advanced network error prevention features (loop protection, dual images, storm control, DoS, and SSL)
- Fanless design
- Green Ethernet IEEE 802.3az support and intelligent Zyxel green features
- IEEE 802.3at PoE plus support with a max of 30W per port (77W total budget)

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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