ZyXEL

Overview

Customer Name
- British International School Bratislava

Customer Industry
- Educative Sector

Challenge
High-Queality and Secure Wi-Fi connectivity for students, teachers, staff members, as well as the members of the public who visit the school, coupled with the simplest possible network management.

Solution
- NXC5200
- GS-1500-24P
- NWA-5160

Benefits
- Secure, high-quality network available all over the school premises
- Simple installation
- Convenient use: the possibility to move around with a connected device without losing the connection
- Minimal maintenance and management requirements

Success Story

Modern and Secure Wi-Fi Network for the British International School Bratislava

Introduction

"The project's aim has been to achieve wireless connectivity for all portable devices around the school, coupled with the simplest possible network management. We have chosen the solution from ZyXEL precisely for its centralized management feature. After deployment, we were pleasantly surprised by the wide range of options that the NXC5200 offers to the administrator. We are more than satisfied with the overall solution. We are also highly satisfied with the assistance from ZyXEL Slovakia who were really helpful on several occasions, even helping us with the initial configuration."
Ing. Alexander Kopcok | System Administrator

"We have chosen ZyXEL not just because of the NXC5200 controller, which combines all the features we need, but by deploying the controller together with access points, we have been able to create a centrally managed system.
Ing. Jaroslav Hamráček | Managing Director of UIT

Challenge

The management's main requirement was for the school to have a fast, high-quality and, above all, secure Wi-Fi network. The students, teachers and other staff members, as well as the members of the public who visit the school, need access to the Internet. So there are multiple roles when using the system. Although everyone connects to the same network, different users need to have different rights. Visitors are only allowed on the Internet, while students may access a defined section of the school's network, with another defined section being accessible to teachers. The same network can then be used by IT staff to configure the school's servers or change network settings. A great emphasis has been placed on high security throughout the implementation. Potential hackers must go off with their tail between their legs and a student's virus-infected laptop must not put the network or other users at risk. And all this with the least possible changes to the building systems and, naturally, without the need to look after the infrastructure in any substantial manner.

According to the requirements, the network needed to be available in all parts of the school with a sufficient signal quality all over the premises.Cutting-edge devices as well as legacy notebooks needed to be supported.

Implementation

ZyXEL has a unified solution for this type of Wi-Fi network deployments. The NXC5200 controller can manage up to 240 autonomous access points with all of the APs being configured centrally from a single point. Supporting the most up-to-date encryption algorithms, it also includes a high-performance firewall. The system even offers web-based authentication to fully meet the school's requirements.

Summary

The installation of both the controller and the individual access points was fast and smooth. Thanks to the Power over Ethernet (PoE) feature, a single cable was sufficient to connect each AP, minimizing the installation costs. The whole school area is now covered by a high-quality wireless signal with maximum security throughout the network.

Benefits

- Secure, high-quality network available to all users all over the school premises
- Simple installation: the access point is only connected to an Ethernet cable that also powers it (removing the need for power adaptors and sockets and reducing the overall power consumption)
- Convenient use: the possibility to move around with a connected device without losing or interrupting the connection (the roaming feature)
- Minimal maintenance and management requirements

About British International School

The British International School Bratislava is a prestigious school for pupils and students from 2 through 18 years of age. Its aim is not only to offer a high-level of education but also to unlock the potential of young people that often remains untapped in more conventional schools. The students achieve top-notch results not just academically but also as contributors to the community. The teaching follows the curriculum of England that has been adapted to the international environment. Upon graduating, the students are able to apply to universities and colleges, including those in the United Kingdom and other countries. The school not only provides young people with education but also values their creativity, kindness and both team-based and individual work.

The Nord Anglia Education group, which includes the school in Bratislava, was founded in 1972. It currently operates 12 premium quality schools, attended by over 6000 students of more than 80 nationalities.
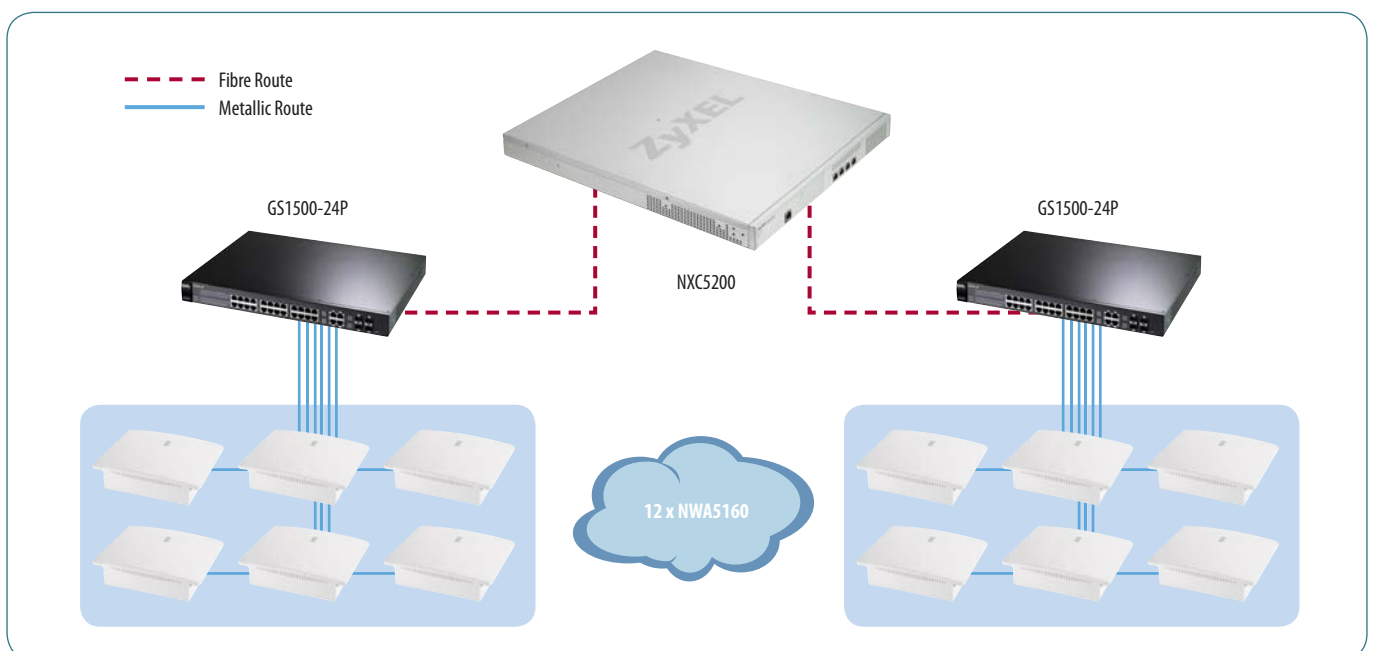
Do You Know ZyXEL?

• The world's number one supplier of ADSL routers
• The world's number one supplier of firewalls and VPN gateways for small and medium-sized businesses (SMB)
• Europe's number one supplier of WLAN wireless devices
• The world's number one supplier of VDSL devices

Unlike many other networking equipment vendors, ZyXEL relies on its own research and development teams when developing new solutions. Technical support for all ZyXEL products is provided by the company's own team based in the Czech Republic.

Become a ZyXEL certified partner. Every vendor of networking solutions has the opportunity to sign up to the ZySTAR partner program. Qualified partners will receive training on ZyXEL products and, having been certified, will benefit from business advantages and a high-quality support directly from ZyXEL for all of our solutions.

ZyXEL
Premium Solution
Partner
★ ★

ZyXEL
Solution
Partner
★

ZyXEL
Authorised
Partner

www.zyxel.com/europe/partner

Product Used

NXC5200 controller — 1x

A controller for wireless networks. Up to 240 APs can be connected to the component, which then manages and configures all of them. It supports roaming between individual APs, performs user authentication and encrypts transmissions (WPA2, WPA, WEP, 802.1x). All in all, it manages the entire wireless part of the network.

NWA5160N access point — 12x

The access point to which wireless devices connect. Featuring a 3x3 antenna configuration (with Wi-Fi data rates of up to 300Mbps), it supports Wi-Fi at both the 2,4GHz and 5GHz radio bands (802.11a/g/n). Equipped with a Gigabit LAN interface, this AP can also be powered over Ethernet.

GS1500-24P switch — 2x

A high-performance switch to which the individual APs have been connected. This enterprise-class switch stands out with its simple configuration and a wide range of advanced features, such as QoS and aggregation. It also enables network monitoring and analysis. Its ability to power the APs was another reason behind its choice.

www.zyxel.cz

About ZyXEL Communications

ZyXEL is the world's largest DSL router provider. A specialist in broadband Internet access and comprehensive networking and security solutions, ZyXEL's product portfolio incorporates the WAN, LAN, xDSL, firewall, wireless LAN, VoIP and router technologies. With headquarters located in Taiwan the company offers its products in more than 150 countries on five continents. Founded in 2004, ZyXEL's Czech subsidiary is responsible for the Czech, Slovak and Polish markets. The decision to open the Czech office was a logical move in the company's development, responding to a growing demand for ZyXEL's value added solutions and products.