



Overview

Sector

Education

Customer

Paramedic Institute, Mechelen, in Belgium

Solution

NXC5200 Wireless Bundling Deployment

Overview

Paramedic Institute in Mechelen, Belgium, has been a specialized training school for professional care-givers/paramedics for over half a century. With around 500 students, 100 staff members and over 65 classrooms in operation and foreseeing that wireless connection will be in strong need for all fellows, the school decided to enhance its network infrastructure. Given the constraints on resources and schedules, the project was still completed satisfactorily to give its IT services a strong performance boost to make campus facility users happy.

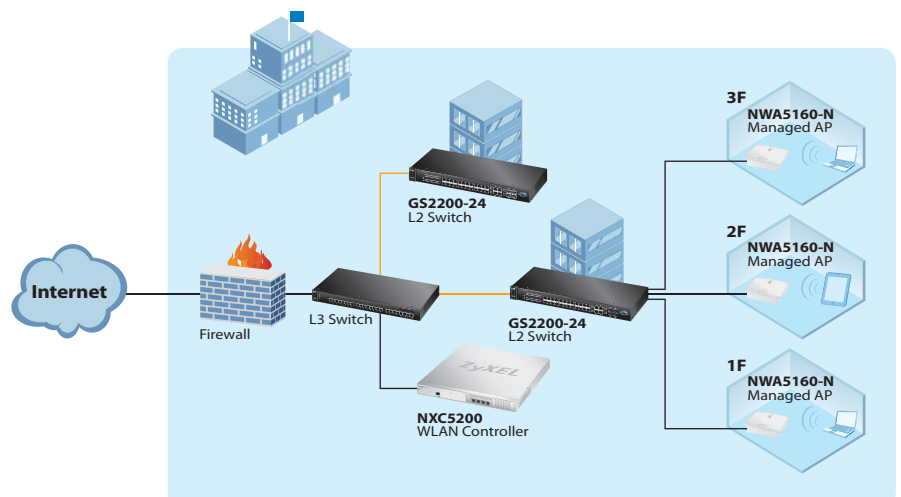
Challenge

As in many other schools, the organic growth of diversified networks over the past few years made a comprehensive, structured makeover necessary. To prepare for the movement triggered by advanced mobile technology, the school started to consider making the learning experience smoother and ubiquitously accessible through taking advantage of the modern technology for students with laptops, tablets or other WiFi-enabled devices demanding wireless connectivity.

The school consists of three separate three-story buildings with each floor connected to the same floor of the next building, however the layout has created a considerably large network span within the campus. The makeover required six kilometers of network cable and one kilometer of fibre cable to be installed within 14 days when the school was closed for holidays. The fibre was laid out from a central cabinet to six distribution points, from where the UTP CAT-6 cables reach out to each classroom as well as 21 WLAN Access Points.

Solution

ZyXEL provided a bundled solution containing a ZyXEL NXC5200 Wireless Controller and 21 sets of NWA5160-N Access Points (AP). The NXC5200 Wireless Controller offers the option to serve both the administrative department and students with different VLANs, in which priorities and bandwidth can be managed while the Access Points provide extensive wireless coverage to students and teachers as well. The installation has been successful: it not only fulfills the current needs, but also reserves the expandability for the future when more applications and users emerge.



Success Story

Considering the demographic scale and time constraints, ZyXEL collaborated with a competent Belgium partner to conduct lab tests to ensure the connections would function as expected before the physical installation of twelve GS2200 Layer-2 Gigabit Switches, a NXC5200 controller and 21 sets of NWA5160-N APs finally took place. The installation process of NXC5200 controller was straightforward, and adding the Access Points was true plug-and-play. Everything, including VLANs, was configured, connected, tested, labeled and documented. The customer was astonished when the completed installation worked flawlessly right after the power was switched on.

In addition, the NXC5200 provides real-time functions such as roaming, authentication and load balancing to bring benefits such as centralized configuration regardless of the number of available managed access points as long as an IP network is available.

Why ZyXEL

Simplified installation and deployment

The centralized administrative functions can simplify network management tasks significantly as the managed access points were installed at suitable locations for desirable WLAN reception, while accessibility in areas with weaker signal or lower data speed can be enhanced with additional managed access points. The ZyXEL NXC5200 is fully compliant with the CAPWAP (Control and Provisioning of Wireless Access Points) standard for faster deployments of massive WLAN connectivity that cause only minimal changes to the existing infrastructure.

11n performance to meet increasing bandwidth requirements

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Products Used



ZyXEL NXC5200
Wireless Business Controller



ZyXEL NWA5160-N
Managed Wireless N Business Access Point



ZyXEL GS2200-24
Intelligent Layer 2 Gigabit Switch

About ZyXEL Communications

ZyXEL Communications Corp., founded in 1989 and headquartered in Taiwan, is the leading provider of complete broadband access solutions. As one of the early modem manufacturers, ZyXEL has undergone many transformations in the fast-paced networking industry. Today, ZyXEL is one of the few companies in the world capable of offering complete networking solutions of Telco, SME/Enterprise, and Digital Home for a wide range of deployment scenarios. Telco solutions include wired and wireless access network equipments, networking customer premises equipments, and Carrier Switches. SME and Enterprise solutions include Unified Security Gateway, LAN Switches, WLAN, and IP telephony. Digital Home solutions include network connectivity devices and multimedia solutions.

The company has 3200 employees and distributors in 70 countries, reaching more than 150 regional markets. The ZyXEL Communications Corp. includes 33 subsidiaries and sales offices and two research and development centers worldwide. For more information, visit the company's Website, <http://www.zyxel.com>.

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