ZYXEL

Success Story

Indian Engineering College Makes the Grade with Wired and Wireless Solution

INDUSTRY
Education

CUSTOMER
BBSBEC

REGION
India

SOLUTIONS
Wire and Wireless Solution

Overview

Challenges

- Solution must offer premium products at a reasonable price
- Deliver product in the shortest time possible
- Solution provider must have a local sales and service presence
- Good P2P ratio
- New equipment must be compatible with existing hardware

Solutions

- 802.11 b/g/n Long Range PoE Access Point

Benefits

- Excellent return on investment
- Prompted delivery and deployment
- Solution integrates seamlessly with legacy system
- Dependable customer support

"Baba Banda Singh Bahadur Engineering College, Fatehgarh Sahib chose Zyxel solutions for the implementation of a new wireless network mainly due to the reputation of their wireless access points for performance and the excellent support from the local Zyxel team. The price-to-performance ratio of the device in comparison with other brands also played an vital role in the selection of the Zyxel brand."

Mr. Jatinder Singh Saini
Assistant Professor, Dept. of CSE & IT, BBSBEC

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Background

Established in 1993, Baba Banda Singh Bahadur Engineering College (BBSBEC) is one the oldest and most respected engineering colleges in northern India. Located in the sacred city of Fatehgarh Sahib, the college has come to epitomize excellence in technical education. With over 3500 students and faculty over 100 acres of campus, BBSBEC offers a unique learning environment. It was the first college in the University to earn the honor of having NBA (National Board of Accreditation) accredited B.Tech programs.

Challenges

Prior to the project, the customer faced numerous difficulties caused by the network's existing access points. Frequent malfunctions left the school's faculty and students without wireless service, which was creating daily headaches for the campus' IT staff. The outdated AP's provided inadequate coverage and limited the number of users that could connect. The existing APs also lacked the appropriate security features. Service outages and poor performance led the college staff to seek out a solution.

Solutions and Benefits

After an initial survey of the college's networking needs, Zyxel partners suggested Wi-Fi AP models that fit the customers budgetary and performance requirements. The NWA1100-NH 802.11 b/g/n Long Range PoE Access Point was deemed to be best suited to the situation.

Following a demo of the NWA1100-NH and a 15-day test run of the network upgrade, the college's IT team was extremely satisfied and happy with the model. It fulfilled their long-range networking requirements, and they were impressed with the product's security features.

The Zyxel APs significantly improved overall performance of the WIFI network on campus. The solution significantly improved wireless coverage due to the AP's high-power output. Enhanced security features help the network administrators manage network performance and usage.
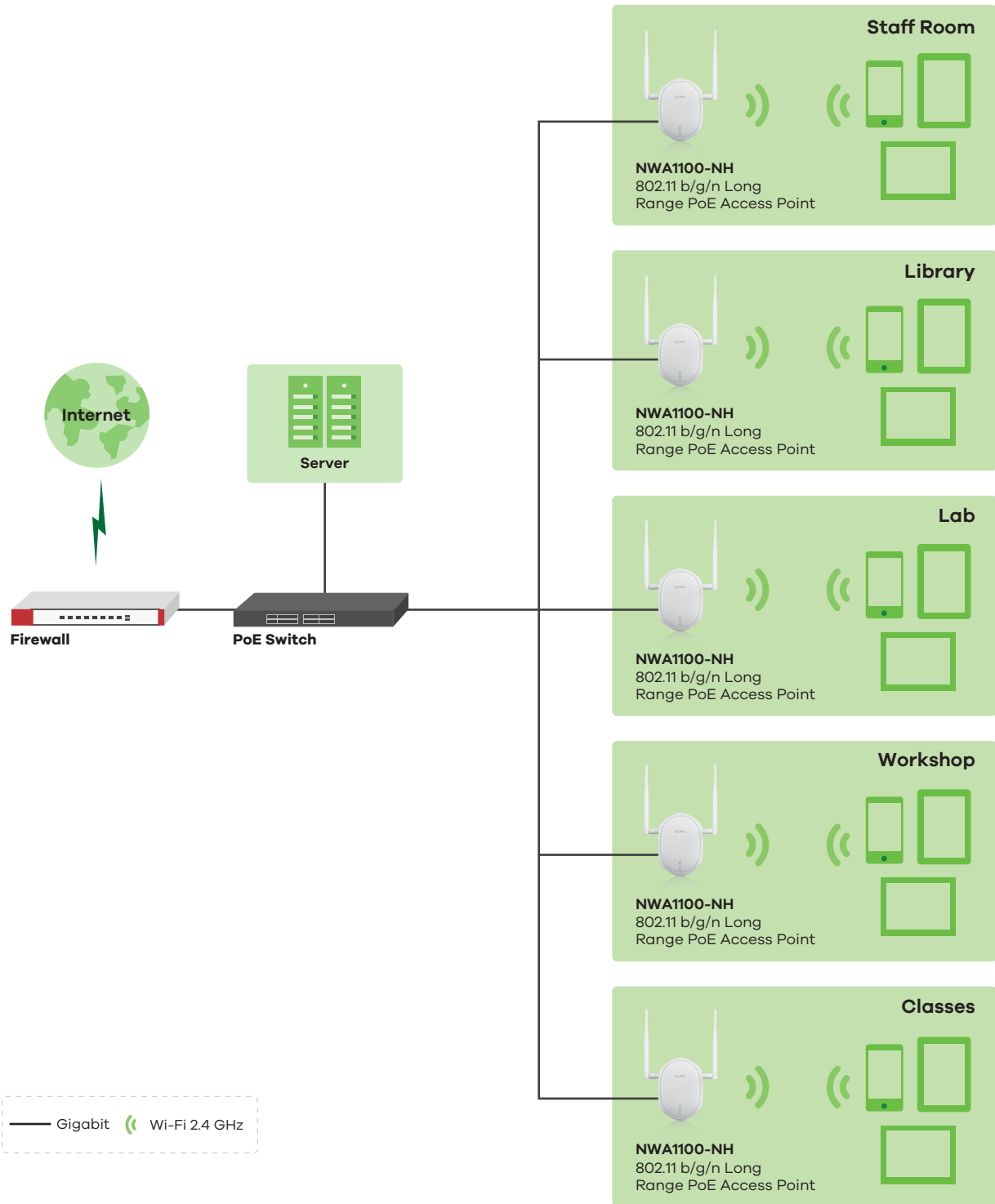
Products Used

NWA1100-NH • 802.11 b/g/n Long Range PoE Access Point

- High output power of up to 28 dBm delivers extended coverage
- 2 external antennas with high 5 dBi gain optimized for mobile devices
- Fast 802.11n Wi-Fi with speed up to 300 Mbps improves transmission of large files or videos
- Easy deployment via client mode or repeater AP and IEEE 802.3af PoE support
- ZON Utility and ZAC minimize repetitive configuration processes and efforts
- Certified WPA2 Enterprise, access control management and user traffic control for strict network protection

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Diagram

Staff Room

NWA1100-NH
802.11 b/g/n Long
Range PoE Access Point

Library

NWA1100-NH
802.11 b/g/n Long
Range PoE Access Point

Lab

NWA1100-NH
802.11 b/g/n Long
Range PoE Access Point

Workshop

NWA1100-NH
802.11 b/g/n Long
Range PoE Access Point

Classes

NWA1100-NH
802.11 b/g/n Long
Range PoE Access Point

Internet

Server

Firewall

PoE Switch

— Gigabit ((• Wi-Fi 2.4 GHz

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.