ZyXEL

Success Story

Carnegie Telephone Helps Local Hospital Go Wireless with ZyXEL's Dual-Purpose WiFi Solution, USA

"Our wireless network deployment with ZyXEL devices worked flawlessly offering seamless coverage to the hospital's staff, patients and guests. And we had great support from ZyXEL engineers throughout the deployment."

"ZyXEL solution came out ahead of a major competitor by hundreds of dollars."

James Powers
Carnegie Telephone, USA

Overview

Customer Name
Carnegie Tri-County Municipal Hospital

Customer Industry
Internet and hosting services

Challenges
• Secure, manageable and economical WLAN solution

Solutions
• USG100, ES-3124PWR, NWA3160-N

Benefits
• One-Stop-Shop for all networking equipment
• APs with essential business features yet easy to deploy & set-up
• Dual-purpose APs with built-in controllers
• Switches, Firewall/VPNs and APs all have similar user interface for quick deployment
• Right features at very economical price— beats the competition

Challenges

Carnegie Tri-County Municipal Hospital wants to have a managed solution that meets these requirements:
• High performance wireless network that could be segmented in to three mutually isolated networks—one for employees, one for patients and their families and the last for equipment like scanners, printers and other Wi-Fi enabled medical equipment.
• The network had to be easily and remotely manageable by Carnegie, ensuring quick deployment and trouble shooting for maximum uptime
• Implementation on a limited budget for capital investment

Background

Carnegie Tri-County Municipal Hospital, a 21-bed facility in rural Oklahoma, was experiencing growing demand for wireless networking from their staff and patients. The hospital, which houses several clinics, offices and offers a variety of outpatient services, would benefit from a mobile WiFi network improving staff productivity and patient experience. They formulated a plan to upgrade their existing network with enhanced wireless access throughout the facility, as well as increase security and simplify management.

Solutions and Benefits

Carnegie Telephone is a state-of-art telecommunications company that has been serving the local community of Oklahoma since 1903. It is been on the forefront of offering digital communications, HDTV and fibre broadband in the community and has been looked upon as a trusted source for technology advice and solutions.

In order to meet Carnegie Tri-County Municipal Hospital's demands, Carnegie Telephone required a security appliance with features including Content Filtering, as well as Ethernet switches and high performance wireless Access Points (APs).

In the product selection for the Carnegie Tri-County Municipal Hospital's wireless network, Carnegie Telephone chose ZyXEL's NWA3160-N 802.11n wireless APs. These APs had all the important enterprise features like multiple SSIDs and VLAN support to build multiple virtual wireless networks for the hospital. But the real kicker was a built-in controller that could be used to control up to 24 other NWA3000-series APs from ZyXEL. Therefore Carnegie Telephone could deploy several APs with one assigned as controller, and all the rest as managed clients. This set-up offered unique advantages including:

- No need to configure all the APs individually as the controller pushed configuration information to all the managed APs.
- The same technique will work for future upgrades and configuration changes
- Dynamic channel selection eliminates the labor-intensive channel planning process, simplifying deployment
- Easy guest network set-up, authentication and management anywhere on the network
- Better security since authentication and access policies are enforced from a single point

The NWA3160-N APs could be powered over Ethernet (PoE) so they could be conveniently installed anywhere without requiring a power outlet. Finally, these APs turned out to be hundreds of dollars less than competition, enabling Carnegie Telephone to meet the hospital's budget requirements.

Carnegie hospital's two-story building has been "wired" or wirelessly networked by Carnegie Telephone using a complete ZyXEL solution. The installation was relatively simple and network has been humming without a hitch since it was turned on. The hospital management is pleased with the performance boost they have received from the new network, staff and patients are now able to access the Internet wirelessly, and Carnegie Telephone is pleased to have a satisfied customer.

Products Used

NWA3160-N
802.11n Unified Pro AP

- Higher bandwidth and superior performance with 802.11n
- 3-in-1 hybrid AP WLAN including AP controller mode, managed AP mode and standalone AP mode
- Brand new centralized graphic management interface for up to 24 WLAN APs
- Backup redundancy supported to provide reliable connection services
- Secured tunnels for communication between controller and managed AP to prevent leaking of configurations
- Enterprise-class AP functionalities with comprehensive configuration interfaces.
- Built with Low Smoke, Zero Halogen (LSOH) materials for plenum rating for UL 2043 support
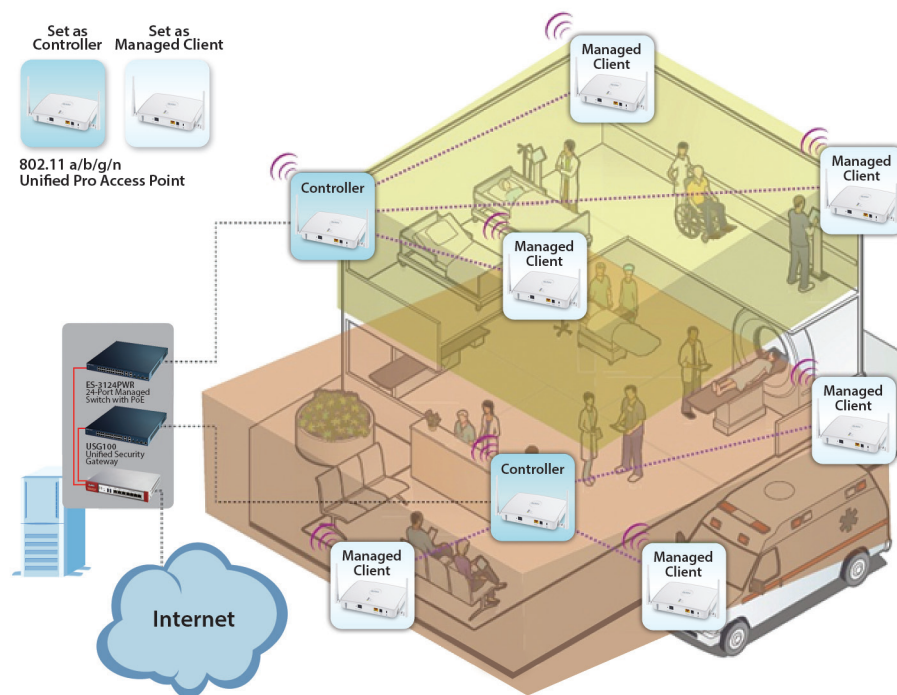
USG100
Unified Security Gateway

- Robust security without sacrificing performance
- Comprehensive support to IPv6
- Robust hybrid VPN (IPSec/SSL/2TP)
- Zero-configuration remote access with EASY VPN
- Supports L2TP VPN on mobile devices (iPhone and Android phones)
- ICSA Firewall, IPSec certification
- Content filter stops malware and Web threats
- Powerful Email security
- Non-stop Internet access with multiple WAN and 3G backups

ZyXEL

ES-3124PWR
24-Port Managed Switch with PoE

- Premium edge switch for service provider and enterprise network
- Robust and high-availability system design
- Intelligent QoS for multi-service optimization
- Complete, multi-Layer protection
- Convenient, hassle-free network management

Diagram

Set as Controller   Set as Managed Client

802.11 a/b/g/n
Unified Pro Access Point

Controller

Managed Client

Managed Client

Managed Client

Managed Client

Managed Client

Managed Client

Managed Client

Controller

ES-3124PWR
24-Port Managed Switch with PoE

USG100
Unified Security Gateway

Internet

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 and WLAN. 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.