

ZyXEL



Summary

Customer Name
Carnegie Telephone

Customer Industry
Internet and hosting services

Challenge
Secure, manageable and economical WLAN solution for a local hospital – Carnegie Tri-Country Municipal Hospital

Solution
Carnegie Telephone used ZyXEL APs with built-in WLAN controllers for the hospital's wireless network. This controller based solution was sophisticated yet easy to deploy and economical.

Benefits of ZyXEL Solution

- 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

Success Story

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

Challenge

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. So they formulated a plan to upgrade their existing network with enhanced wireless access throughout the facility, as well as increase security and simplify management.

They approached Carnegie Telephone, their telephone service provider, with the goal of obtaining a managed solution that met 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

Solution

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 fiber 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). Carnegie Telephone realized they could source all these products from a single vendor partner – ZyXEL.



Wireless Access Points with Controllers – A Winning Solution

In their product selection for the Carnegie Tri-County Municipal Hospital's wireless network, Carnegie Telephone discovered 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.

“ZyXEL solution came out ahead of a major competitor by hundreds of dollars.”
James Powers of Carnegie Telephone

Network Layout

Carnegie Telephone installed ZyXEL's USG100 UTM Security Gateway at the edge, ES3124PWR managed Ethernet switches with PoE, and a combination of NWA3160-N and NWA3163-N APs for the hospital's wireless network.

ZyXEL Advantages

• One-Stop-Shop

By sourcing end-to-end equipment from a single vendor, Carnegie Telephone is able to maintain uniform product quality resulting in better service and experience for the hospital.

• Uniform Management & User Interface

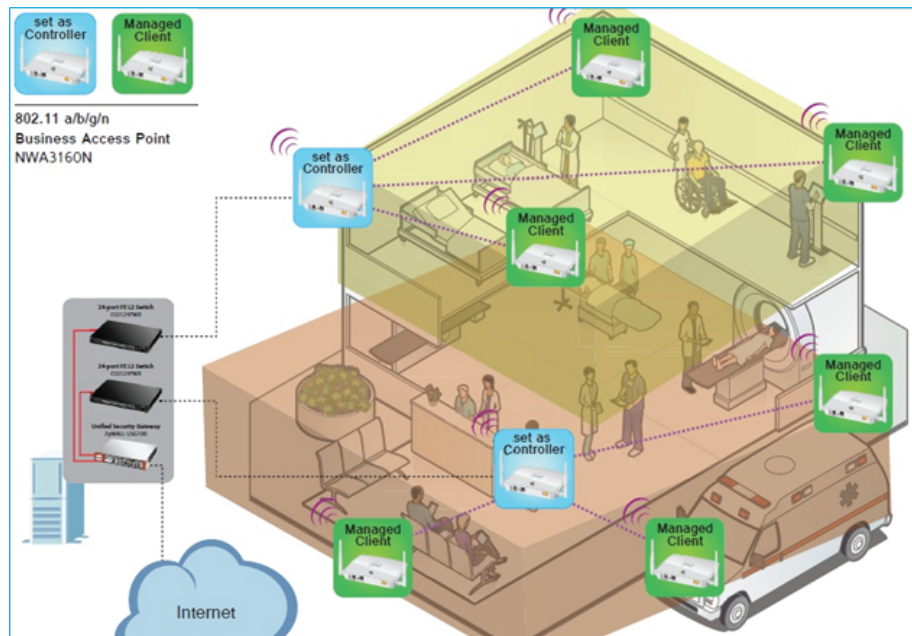
Since the entire solution is sourced from ZyXEL, all the equipment shares the similar user and management interface making deployment quick and maintenance easy.

• Excellent Technical Support

Carnegie Telephone had access to a domestic team of expert engineers who were responsive and helpful during the pre-sales and deployment phase of the project.

• Outstanding Value

ZyXEL products like the NWA3100 series APs with built-in controllers offered all the essential enterprise features at a much lower price point than the competition, helping Carnegie Telephone meet their subscriber's stringent budget requirements.





Conclusions

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.

“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.”
James Powers of Carnegie Telephone

Featured Products

USG100 Comprehensive Security Device	ES3124PWR 24-Port Managed Switch with PoE	NWA3160N 802.11n Access Point
<ul style="list-style-type: none">• High throughput Firewall• IPSec and SSL VPN• Subscription based Content Filtering, AV and IDP service• 3G backup	<ul style="list-style-type: none">• Policy-based QoS• VLAN Stacking• IGMP snooping for IPTV• Comprehensive management features	<ul style="list-style-type: none">• Dual frequency Band operation• Built-in WLAN controller – can manage 24 APs• Multiple SSID• PoE support and Plenum rated

Carnegie Telephone

Carnegie Telephone Company has been an innovator in telephone and communications services since 1903. They have been in the forefront of offering digital communications, HDTV and fiber broadband in the community and have been looked upon as a trusted source for technology advice and solutions. They are also a premier reseller of networking equipment and business phone systems.

ZyXEL Communications

ZyXEL, a pioneer in networking industry for over two decades, is leading the connected home revolution with a complete portfolio of fiber and DSL broadband gateways, home connectivity and entertainment solutions and smart home devices. ZyXEL also offers a complete range of networking solutions including Ethernet switches, Firewall / VPN devices and wireless equipment for small-to-midsize businesses. Based out of Anaheim, CA, ZyXEL offers our customers unmatched sales and domestic technical support.