Success Story

Historic Italian Museum Upgrades Visitor Services with ZyXEL Hybrid Solution

Overview

Customer Name
Uffizi Gallery

Customer Industry
Art and Culture

Challenges
- Create wired and wireless infrastructure for large historic building
- Have minimal visual impact on setting
- Provide continuous connectivity for wireless apps across 13,000 metres^2 space
- Solution must be secure and reliable
- Solution should be future proof for later expansion

Solutions
- 802.11 a/b/g/n Unified Access Points
- Wireless LAN Controller
- GbE L2 Switch
- Unified Security Gateway

Benefits
- A more enjoyable and educational user experience for visitors
- Cost savings for museum management
- Easy to manage and maintain
- APs set up easily with little impact on venue
- Firewall provides safe and secure network experience
- Complete coverage over large 400-year-old building

Challenges

The museum required a hybrid wired and wireless networking infrastructure to support a new mobile apps project aimed at replacing an older obsolete audio-guides system. Visitors could now download the museum apps on their smartphones or tablets and be guided along the vast halls of the museum, getting information on artworks through video and audio multimedia content. This new project would enhance the visitor experience, simplify management for the museum, and reduce costs.

Background

The Uffizi Gallery in Florence was founded in 1581 and is probably Italy's most famous museum — certainly one of the best known internationally — receiving approximately two million visitors per year. The building houses within its nearly13,000 metres^2 one of the most impressive art collections in the world. The gallery's permanent collections includes the Medici collection, as well as works by Leonardo Da Vinci and Michelangelo, and many other masterpieces spanning the 12th to the 18th centuries, and particularly the Italian Renaissance.

Solutions and Benefits

In February, 2015 the Uffizi Gallery had a full ZyXEL wireless solution installed. Products included 70 NWA5123-NI Unified Access Points, which were chosen for their internal antenna and easy installation with minimal impact on the design of the halls. These are controlled by a NXC5500 Wireless LAN Controller. Because of the large dimensions of the building, many APs had to be reached via fiber cables, so a switching infrastructure comprised of a mixture of GS3712F and GS2210-48HP GbE L2 switches with PoE was deployed. A USG1900 Unified Security Gateway was also installed as a firewall to provide network security.

The multimedia content provided by the new apps has created a more enjoyable, educational and convenient museum experience for visitors. The museum can reduce management and maintenance costs by eliminating obsolete audio-guides. It is now easier for the museum to prepare content for temporary exhibitions. In the future, the wireless network can be extended easily to the bar, restaurant and external areas of the gallery.

Product Used

NWA5123-NI
802.11 a/b/g/n Dual-Radio Unified Access Point

- Ceiling and wall mountable
- Plenum rated housing
- 2-in-1 standalone/managed AP design
- CAPWAP management supported
- 2.4 GHz and 5 GHz concurrent dual-band
- High-performance RF technology: Tx Beamforming and Rx Maximum Likelihood Demodulation (MLD)

USG1900
Unified Security Gateway

- High-performance, high-value Next Generation Firewall (NGFW) for medium-sized businesses and campuses
- Anti-malware protection with firewall, anti-virus, anti-spam, content filtering, IDP, next-generation application intelligence and SSL inspection
- Robust SSL, IPSec and L2TP over IPSec VPN connectivity and VPN high availability (HA)
- Unified security policy streamlines the configuration and management effortsBuilt-in WLAN controller for centralized AP management and effortless WLAN scalability of up to 18 APs

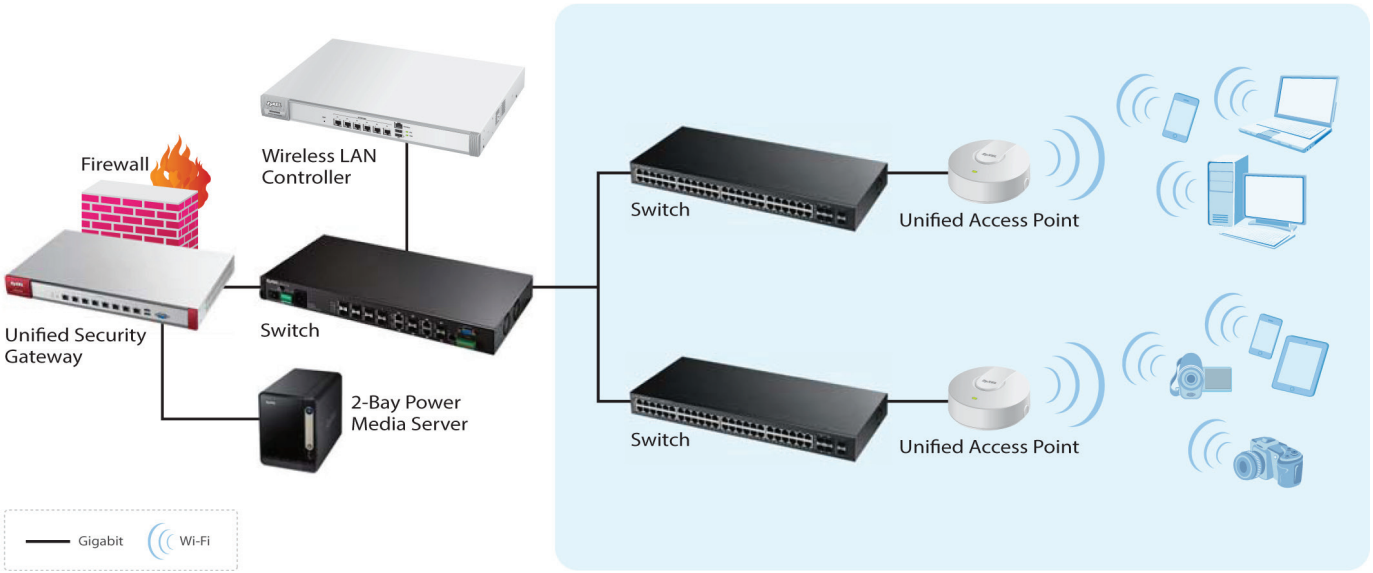
GS2210-48HP
48-port GbE L2 Switch

- Fully managed Layer 2 switching solution
- GbE RJ-45 and GbE SFP connectivity
- Complies with IEEE 802.3af PoE and 802.3at PoE Plus
- High 375 W power budget
- L2 multicast, IGMP snooping, MVR and voice VLAN for convergence
- Enhanced network protection with IP source guard, DHCP snooping, ARP inspection, CPU protection
- L2, L3 and L4 filtering, MAC freeze, port isolation, guest VLAN for improved isolation and access control
- Future-proofed with IPv6 support
- Supports ZON Utility and ZyXEL One Network inter-device features for easier, more efficient setup and management

NXC5500
Wireless LAN Controller

- Centralized WLAN management and auto provisioning
- Manages up to 512 APs with granular access control
- ZyMesh simplifies complex, inconvenient cabling Wi-Fi Deployments
- Comprehensive features for WLAN performance optimization and always-on Wi-Fi connectivity
- Wireless LAN performance optimization via dynamic channel selection and load balancing

Diagram



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 gone through transformations in the fast-paced networking industry. Delivering cutting-edge communications innovations to more than 400,000 businesses and more than 100 million consumers throughout the world, today ZyXEL is one of the few companies in the world capable of offering complete networking solutions for Telcos, small to medium-sized businesses, and digital home users for a wide range of deployment scenarios. Telco solutions include Central Office Equipment, Customer Premise Equipment, Wired and Wireless Access Network Devices, and Carrier Switches. SMB and Enterprise solutions include Unified Security Gateways, LAN Switches, WLAN, and IP Telephony. Digital Home solutions include Network Connectivity Devices and Multimedia Solutions.

The company has 1000 employees and distributors in 70 countries, reaching more than 150 regional markets. The ZyXEL Communications Corp. includes 35 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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