ZyXEL

Success Story

France's Opéra National du Rhin
Upgrades with Full ZyXEL Network Solution

"Under the Audio-visual & Digital Media and Marketing & Communications Forum, organized by Opéra Europa on 13 and 14 March, the Opéra National du Rhin committed itself to provide a reliable wireless Internet access to all the participants. Fifty of my counterparts were able to remain connected thanks to the Wi-Fi infrastructure in place. Once the tickets were distributed, everyone was able to connect without any assistance, which was much appreciated."

Mélanie Aron
Communications and Sponsorship Manager
Opéra National du Rhin.

Overview

Customer Name
Opéra National du Rhin.

Customer Industry
Arts and Culture

Challenges
• Provide a stable, good, secure and user-friendly Wi-Fi solution
• Solution must be affordable and easy to maintain
• Optimized and suitable for all usage Wi-Fi coverage

Solutions
• Wireless LAN Controller
• 802.11 a/b/g/n Dual-Radio Unified Access Point
• 24-port GbE Smart Managed Switch
• Wireless Access Gateway

Benefits
• Offer a comprehensive, effective and operational solution
• Centralized management of terminals
• Provide reliable and robust solution

Background

The Opéra National du Rhin owes its exemplary reputation to the specific contribution of the three participating cities: Strasbourg, Mulhouse and Colmar. The Opéra National du Rhin is a syndicate run jointly by the three cities, each boasting its own creative branch: the Opéra in Strasbourg; the Ballet of the Opéra National du Rhin, a national choreographic center since 1985 in Mulhouse; and Opéra Studio, a center for training young singers in Colmar. Backed by more than 40 years of experience, the Alsace experiment has become a model in its own right. While remaining firmly attached to its regional and European roots, the Opéra National du Rhin has become a firm favorite on the French and international lyrical scene, and in 1997 was awarded the prestigious title of "national opera house."

Challenges

At Opéra National du Rhin, management believes that reception and comfort of visitors are among its highest priorities. All the people coming to the Opéra must be able to enjoy a stable, high-performing, secure, and easily accessible connectivity. These connections need to be able to differentiate between employees accessing Wi-Fi and various contributors and guests, thus respecting the confidentiality of user information.

Moreover, Opéra Nation du Rhin had the objective of connecting several buildings via the new network — administrative premises, theater, rehearsal room and scenery workshop — thus creating a whole set of local networks offering the necessary granularity for the safety of every user.

Finally, the opera's Wi-Fi coverage was designed, set up, and optimized to fit each user's method of connecting (internal Wi-Fi access, mobiles, and tablets). The integration of wireless equipment remains a challenge given the surrounding electronic interference created by the urban environment and other competing communication equipment.

Along with mitigating of existing logistical challenges, the planned solution had to fit within the opera company's limited budget.

Solutions and Benefits

Relying on its technical knowledge and the recommendations of ZyXEL France, Pierre Hazard and his team at AsysPro planned and implemented this one-year project with the following solutions:

The network for the buildings was set up using ZyXEL fiber optic cables and managed switches in order to offer the optimal performance and stability.

WAN access is controlled by ZyXEL UTM firewalls, allowing the secure management of multiple Internet connections, safe Internet browsing through content filtering, proper allocation of bandwidth to each group of users, and future proofing for eventual VPN connections for remote sites and mobile.

To facilitate trouble-free deployment, configuration, and maintenance of the Wi-Fi network, a ZyXEL NXC2500 Wireless LAN Controller was installed. The integration of new WLAN access points is simplified by the automatic selection of channels through a regular scan of the environment and through centralized management of access settings

and security.

Wi-Fi traffic is management and the connectivity of wireless devices regardless supported frequency are ensured by the ZyXEL NWA5123-NI dual-band access points. These multiple APs blend discreetly into any environment, overcoming physical barriers and RF interference to deliver optimal coverage in all the areas.

Compliance with existing legislation requiring the provision of public Internet access is ensured by a ZyXEL wireless hotspot gateway, associated with a log storage server and multiple printers, which provide visitors with their login credentials.

"The uniformity of configuration and the perfect harmony of equipment greatly facilitated integration and allowed us to offer an ideal and evolving response to the multiple constraints of a demanding installation, such as Opéra National du Rhin." said Pierre Hazard, Technical Manager at AsysPro.

Product Used

NXC2500
Wireless LAN Controller

- Centralized management for up to 64* APs
- ZyMesh mitigates complex, inconvenient cabling Wi-Fi deployments
- Client steering enhances efficiency of wireless spectrum utilization
- Auto healing maximizes Wi-Fi service availability
- Seamless integration with external AD, LDAP, RADIUS authentication
- Best investment protection with built-in RADIUS server

* Management of 64 APs is supported with firmware version V4.10 or above

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)

GS1910-24
24-port GbE Smart Managed Switch

- Advanced Smart GbE L2 ACL switching features
- 48 Gbps non-blocking switch fabric
- Supports IPv6
- Fanless design

UAG4100
Unified Access Gateway

- IEEE 802.11 a/b/g/n dual-radio (2.4 GHz and 5 GHz) design
- Supports 200 concurrent users by default and up to 300 via license upgrade
- Integrated account generator, Web-based authentication portal and billing system
- Supports external RADIUS servers
- Per account bandwidth management
- SP350E Service Gateway Printer enables one-click account and billing generation
- SMS ticketing with ViaNett protocol support

SP350E
Service Gateway Printer

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.