



Success Story

Swiss Hotel Four Points by Sheraton Sihlcity Upgrades to ZyXEL's Multimedia WLAN Solution

Overview

Customer Name

The Four Points by Sheraton Sihlcity
Zürich

Customer Industry

Hospitality

Challenges

- Provide stable high-performance wireless service for guests
- Ability to handle large number of clients in seminar facilities
- Solution must be able to stream media to in-room entertainment service

Solutions

- Business Wireless LAN Controller
- 802.11 a/b/g/n Dual-Radio Unified Access Point
- Wireless N Business WLAN Managed Access Point
- Smart Managed PoE+ Gigabit Ethernet Switch
- L3 Managed stackable Gigabit Ethernet Switch

Benefits

- Provide enhanced coverage and high quality network to guests
- Solution can handle the demands of multiple clients and provide bandwidth for streaming media.
- Offer simple management and security solution
- Allow management to provide tiered service packages to better meet customer needs.

Background

The Four Points by Sheraton Sihlcity Zürich is a business and seminar hotel in the heart of art and culture district of Zurich, Switzerland. Located on the grounds of the old Sihl paper mill, the Four Points Sheraton Zurich Sihlcity comprises parts of the former mill, representing

a perfect symbiosis of the nostalgic industrial history and modern architecture. The central city hotel offers 132 guest rooms and suites, 8 meeting rooms for up to 150 participants, and provides super-modern facilities for the wellbeing of its guests.

Challenges

Mobile clients' demand for wireless systems in hotel facilities has increased significantly in recent years. In addition, user behavior has also changed. Before, guest users would just check their e-mail or surf the Internet, but today there are a wide range of applications available. In order to connect to services — YouTube, Skype and Wilmaa (local Swiss video streaming service) — and enjoy optimal performance, the composition of a wireless network must be carefully planned and implemented.

In addition to guest rooms, The Four Points by Sheraton offers seminar

and conference facilities. A large number of users concentrated in a restricted space accessing the Internet concurrently increases the burden on the WLAN system and can negatively impact both network performance and stability.

The hotel also offers guests a modern entertainment system in each room with interactive TV and the option to stream multimedia content directly from a mobile device to the TV screen, which requires adequate bandwidth from any planned solution.

Solutions and Benefits

Planning and connecting the conference rooms

To determine the exact number of access points (APs) required and their suitable placement, Swisspro, the local IT partner conducted a wireless gauging survey of the venue. In collaboration with a system engineer, a test system was set up in the laboratory to test all the required functions and identify potential problem areas prior to deployment. The general rule of thumb is that in cases where greater demands are placed on each AP, a maximum of ten concurrent users can be serviced at one time. For example, a single AP in a large conference area cannot properly service all users, therefore a total of 8 NWA5123-NI dual-band APs were installed. Dual-band offers the advantage of having 2 APs integrated into a single housing, so technically a total of 16 APs were integrated in this part of the hotel. This allows 100 to 150 users to simultaneously connect to the Internet.

In-room entertainment systems

In their rooms, guests at the Four Points by Sheraton have the option to stream their own content, such as videos, music, and photos from

their mobile devices directly to their room's TV. To set up, guests can download the Samsung app All Share, which is free of charge for all current platforms. To ensure that each guest can only use his or her own TV for this service, a separate SSID (room number) is assigned to each room. In addition, the content to be displayed must first be confirmed on the TV. To ensure that all guests benefit from an optimal connection, a separate AP has been installed in each room. That adds up to approximately 170 APs and 130 SSIDs. This configuration has been optimized with the ZyXEL NXC5200 Wireless LAN Controller.

To better meet customer needs

At Four Points, like all Sheraton Hotels, the venue introduced a ticketing solution. When checking in, guests can choose from several tiered options. He or she can enjoy the Internet all day for free on a reduced bandwidth, or if more bandwidth is required, purchase an upgrade for a certain period of time. ZyXEL WLAN Solution allows management to provide tiered service packages to better meet customer needs.

Product Used



NXC5200 Business Wireless LAN Controller

- Centralized WLAN management and auto provisioning
- Manages up to 240 APs with granular access control
- Advanced RF management for optimized Wi-Fi performance
- Secured wireless edge with IDP, anti-virus and firewall
- Flexible traffic forwarding with tunnel and distributed modes
- Comprehensive guest network management features
- User-centric management solution for BYOD trend



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)



NWA5160N Wireless N Business WLAN Managed Access Point

- IEEE 802.11a/g/n support
- 3 * 3 MIMO dual-band antenna embedded
- Plenum Rating Enclosure and non-invasive design to the environment
- 100/1000Mbps Ethernet interface & standard 802.3af PoE source supported



GS1910 Series (GS1910-24HP/48HP) Smart Managed PoE+ Gigabit Ethernet Switch

- Advanced Smart GbE L2 ACL switching features
- 48/ 104 Gbps non-blocking switch fabric
- IEEE 802.3at Power over Ethernet Plus Supports IPv6



XGS-4728F L3 Managed stackable Gigabit Ethernet Switch

- IPv4/IPv6 Routing
- L3 advanced routing protocols, OSPF, DVMRP, VRRP and ECMP
- Optional modular 10 Gigabit Ethernet support
- Multilayer-aware (L2/L3/L4) ACL for security protection and traffic optimization
- Guest VLAN
- IGMP Snooping v1, v2, v3, MVR
- sFlow, CPU protection
- RSTP, MSTP, MRSTP, VRRP

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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