



Success Story

Zyxel Serves Up a Tasty Solution for Swiss Catering Company



SMB



Würmli
Catering



REGION

Switzerland



SOLUTIONS

Zyxel
VoIP
solution

Overview

Challenges

- Create comprehensive business network connecting users and key equipment
- Solution had to provide wireless connectivity
- Solution had to provide multiple fail safes to prevent loss of service
- Create stable network environment for VoIP connections

Benefits

- Easily centralized management
- Multiple backups to prevent service loss
- Stable and secure VoIP infrastructure
- Adequate bandwidth for multiple VoIP channels

Solutions

- Unified Security Gateway
- 24-port Gigabit L2+ Switch
- 48-port Gigabit L2 PoE Switch
- LTE Indoor Router/IAD
- Wireless LAN Controller
- 802.11ac Dual Radio Smart Antenna 2x2 Access Point

Background

Würmli Catering offers a broad range of food catering services from creating simple appetizers to taking on large-scale events with a seven-meter-long grill trailer.

For more than 10 years, Würmli has been organizing exclusive events in the Winterthur, Frauenfeld, and Zurich areas of Switzerland. Due to their rapid growth providing catering services for internationally renowned companies such as AXA Winterthur, Credit Suisse, and UBS, it was necessary to expand operations to a new headquarters in Gundetswil in 2015.



Challenges

To provide comprehensive connectivity for this large facility, Zyxel solution partner planned a modern infrastructure that could meet the particularly high demands of a network utilizing VoIP. Not only would conventional clients and printers be integrated into the network, but also a variety of meat-processing machinery. The entire building—including cooling rooms—would be connected via Wi-Fi network.



Solutions and Benefits

From the beginning, there was little doubt that the project would require a VoIP solution. In the end, it was decided that a cloud-based telephone system from Zurich-based specialist for IP telephony e-fon AG would completely replace the conventional system.

Despite the advantages VoIP offers, the high requirements for such a network must also be carefully considered. The most important factor is operational redundancy. Should the gateway fail, telephony would cease to work. In the event that the ISP breaks down, the company could no longer be reached nor could outgoing phone calls be made. Additionally, cloud-driven software applications result in heavy dependence on the Internet access at large. It was therefore necessary that this project put a strong focus on redundancy, calling for the deployment of two Zyxel USG110 firewalls operating in high-availability mode.

If one USG fails, another would automatically take over. In addition, several backup service providers utilizing different media would be connected. To prevent a major loss of service — such as a case in which the Internet via fixed line fails — a Zyxel LTE3301 indoor LTE gateway was added to provide LTE connectivity. The core switch has also been made highly available by deploying two stacked XGS3700 L2+ switches.

A misconfigured gateway is frequently the source of problems for VoIP set-ups. For this reason, Zyxel local business partner Studerus chose to work closely with the provider partners. In a workshop with system engineers from e-fon AG and Studerus, the necessary settings for the USG were discussed, elaborated on, and tested. Thanks to this effort, e-fon was able to certify the Zyxel USG. Now, smooth and stable operation of a VoIP solution is easily achievable.

Products Used

USG110 • Unified Security Gateway



- High-performance, high-value Next Generation Firewall (NGFW) for small and medium-sized businesses
- Complete network protection with firewall, anti-virus, antispam, content filtering, IDP, next-generation application intelligence and SSL inspection
- Robust SSL, IPSec and L2TP over IPSec VPN connectivity and VPN high availability (HA)
- Built-in WLAN controller for centralized AP management and effortless WLAN scalability of up to 34 APs
- Enhanced clean Web connections with newly Content Filtering 2.0

XGS3700-24 • 24-port Gigabit L2+ Switch



- Full Layer 2 feature set with Layer 3 features including static routing, policy-based routing, VRRP and ECMP support
- Four (4) 10GbE SFP+ uplink flexibility
- 24 ports of Gigabit Ethernet desktop connectivity
- Hot-swappable power supply module
- Internal redundant power supply design

GS2210-48HP • 48-port Gigabit L2 PoE Switch



- Fully managed Layer 2 switching solution
- Complies with IEEE 802.3af PoE and 802.3at PoE Plus with 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

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

LTE3301 • LTE Indoor Router



- 3GPP release 9 category 4 with data rates of up to 150/50 Mbps (DL/UL)
- Supports single- (LTE) or multiple-mode (LTE/3G/2G)
- Multiple-band is supported and varied in different countries
- Supports bridge or router mode

WAC6502D-S • 802.11ac Dual Radio Smart Antenna 2x2 Access Point



- ZyXel smart antenna with more than 700 optimized antenna patterns provides breakthrough performance anywhere
- Ideal for high-density and interference-laden indoor environments
- Advanced IEEE 802.11ac offers up to 1.1Gbps combined data rates
- Industry-leading Rx sensitivity as low as -102 dBm
- AP Flex™, DCS and tool-less bracket design streamline deployment
- ZyXel One Network is supported

About ZyXel Communications

Focused on innovation and customer-centricity, ZyXel Communications has been connecting people to the Internet for nearly 30 years. Our ability to adapt and innovate with networking technology places us at the forefront of creating connectivity for telcos and service providers, business and home users. ZyXel is building the networks of tomorrow, unlocking potential, and meeting the needs of the modern workplace — powering people at work, life, and play. ZyXel, Your Networking Ally.

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