



Product Used

- P-791R
G.SHDSL.bis router
- ZyWALL 35
Stateful Packet Inspection Firewall
- NSA-220
Network Storage Appliance
- ES-2024A
Layer 2 Ethernet Switch
- G-4100_v2
802.11g Business WLAN Access Point

About Solutio ApS

Solutio ApS is an IT-company which is specialised in operation and support of servers, network equipment and external services for small- or medium-sized businesses.

The company does not focus on specific industries but on basic solutions and on delivering the platform and the services the industry-solutions depend on.

Solutio is a Microsoft Certified Partner, Microsoft Small Business Specialist and ZyXEL Gold Partner – all titles which demand a thorough education and documented results.

Solutio is located in Silkeborg and the customers are usually situated in the Central Jutland, South Jutland and Copenhagen.

See more on www.solutio.dk



Fordi IT er mere end teknik

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 undergone many transformations in the fast-paced networking industry. Today, ZyXEL is one of the few companies in the world capable of offering complete networking solutions of Telco, SME/Enterprise, and Digital Home for a wide range of deployment scenarios. Telco solutions include wired and wireless access network equipments, networking customer premises equipments, and Carrier Switches. SME and Enterprise solutions include Unified Security Gateway, LAN Switches, WLAN, and IP telephony. Digital Home solutions include network connectivity devices and multimedia solutions. The company has 3200 employees and distributors in 70 countries, reaching more than 150 regional markets. The ZyXEL Communications Corp. includes 33 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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Overview

Customer:

FDF scouts' Outdoor Centre Sletten near Silkeborg

Industry:

National youth organisation

Challenge:

- To unite separate buildings in a large area with high efficiency cabled network through existing copper telephone cables
- To create an effective wireless network on a geographically large area with possibility of printing personal logon to the visitors on the thermal printer

Solution:

- ZyXEL G.SHDSL bis routers back-to-back for establishment of Ethernet network through existing copper telephone cables to houses and cabins
- ZyXEL wireless access points linked with ZyXEL VSG-1200 Vantage Gateway and thermal printers for effective administration of wireless clients with prints of personal access logons. Several places effective outdoor and indoor antennas are used to increase the range of the network.

Customer Advantages:

Now there is an effective and stabile network between buildings and camp sites on a geographically large area. The network enables the possibility of remote control of lighting and heat through the CTS system. The wireless network is highly effective in buildings and on camp sites and the individual visitor has a personal logon which brings the possibility of billing of network use.



Peter Jeppesen

Centre Manager for FDF Outdoor Centre Sletten

Customer Story

FDF Outdoor Centre Sletten

By using ZyXEL's xDSL-broadband modems, the FDF scouts' Outdoor Centre Sletten by the lakes of Silkeborg now offers FDF scouts or other guests access to a wireless network on the great natural resort with house, cabins and camp sites.

What does the customer say?

"The scouts of today, demand more than singing by the camp fire and exciting activities – they also want the opportunity to get online. Here they solve assignments together, but also wishes to have the possibility of following their friends through the social networks, email and instant messaging. We have around 50,000 sleeping guests each year and we can tell that the demands to facilities and service have grown the last couple of years.

Today, the geographically large area is bound together through xDSL-broadband modems and existing copper cables. Near cabins and camp sites there are wireless access points with effective antennas that provide good coverage and the access to the wireless network is controlled through registration and print of passwords on parallel printers." – Peter Jeppesen, Centre Manager for FDF Outdoor Centre Sletten.

The challenge

The FDF Outdoor Centre Sletten covers a geographically very large and beautiful natural resort in the forests in Central Jutland. There has been a phone connection for a long time between the centre office Applefarm and the many cabins and camp sites via copper cables but an increasing demand for access to information from both FDF and the internet, necessitated that an effective datanetwork was established.

FDF scouts' and other guests' need for network access from notebooks and smartphones further demanded wireless network access. At all the connectivity points there had to be established farreaching wireless access points accompanied by weatherproof antennas. To keep track of the access to the network and gain the possibility of charging for network access, FDF Outdoor Centre Sletten wanted to be able to register the users and print out passwords for personal access to the wireless network.

Finally, the entire network had to be connected to the internet through a firewall and an xDSL-router, there was a need for a number of Fast Ethernet switches for wired connections and they wanted a possibility for easy and fast backup of important data.



The solution

With counselling and technical support from the it-company Solutio ApS in Silkeborg, FDF Outdoor Centre Sletten chose to establish the connections between the centre office Applefarm and the locations in the area through ZyXEL Prestige 791R xDSL-routers, which was connected in couples through existing copper cables.

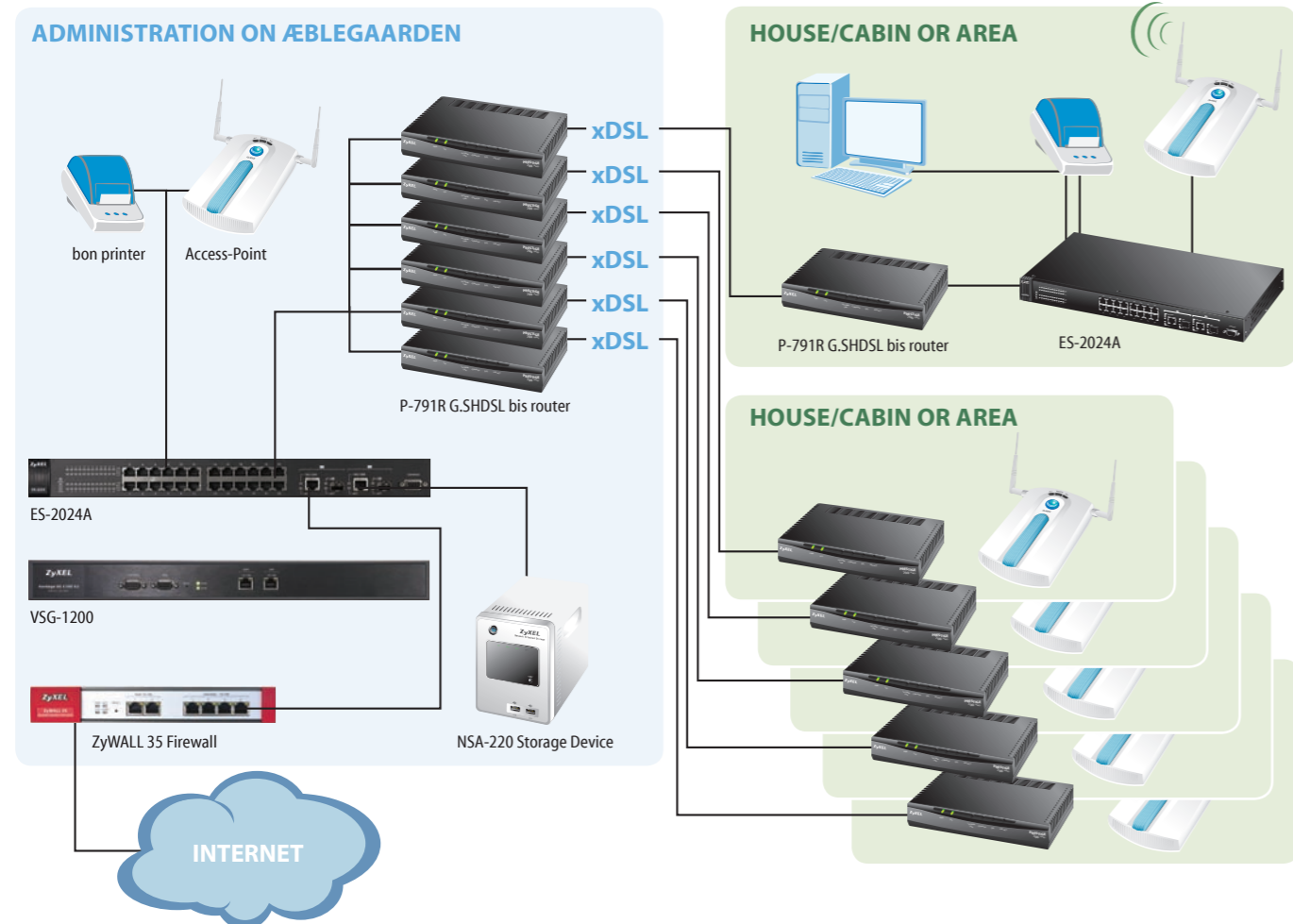
Further, ZyXEL ZyAIR G-3000H Business Wireless Access Points designed to work together with ZyXEL VSG-1200 Vantage Service Gateway and ZyXEL thermal printers were installed on the locations. This gateway handles the access to the wireless network in a way that with the same login name printed for the user on the thermal printer, the user gains access to wireless network on the entire area. Wireless access points of the types ZyXEL NWA-3100 and NWA-3500 have also been installed. Radio coverage has in multiple places been increased by installing ZyXEL EXT-108 outdoor antennas and EXR-105 indoor antennas which provides a larger coverage area.

At the centre office Applefarm all the connections from xDSL-routers are united in a ZyXEL ES-2024 switch which through a ZyXEL ZyWALL 35 Firewall and ADSL connections is connected to the internet.

To secure simple backup, a ZyXEL NSA-220 NAS unit (Network Attached Storage) was installed. The NAS automatically mirrors important data which is then transferred to a geographically remote location for extra security.



The network is now effective and stabil enough to be used - on top of supplying internet access – for management and control of electricity and ventilation in houses and cabins throughout the area. The management is centralised in a system which gives the possibility to check whether everything runs as it is supposed to. You can also turn off the lights or heat through the network, if staying guests have forgotten to do so. The camp management does not even have to be in the area because all control can be made from anywhere the customer wants through the VPN connection to the centres network.



About the FDF Outdoor Centre Sletten

The most beautiful camp area in Denmark is owned by the national voluntary boy- and girlscout association (FDF).

The centre's many buildings and open areas are rented out to associations, schools, institutions, companies and others who wish to make good use of the area's many possibilities. It is not rented to private people.

For the local population and tourists, Sletten is a great asset. The centre wants to greet everyone who wants to go for a walk, have a nice time with the family and the picnic basket or in other ways wants to enjoy the nature.

FDF Outdoor Centre Sletten is with the many possibilities of an active life outdoors the ideal place for scouts and school camps – whether it is courses, summer camps or true nature experiences.

See more on: <http://www.fdf.dk/sletten>



Peter Jeppesen Centerchef for FDF Friluftscener Sletten