

CASE STUDY

ROC Friese Poort reduces telephony costs with voice over Wi-Fi and increases campus security with wireless surveillance cameras.



ROC Friese Poort provides vocational education for more than 13,000 young people and adults. In addition, companies and institutions are also offered a broad range of long-term courses and various training options, both on an individual and group basis. All the activities are provided from locations in Leeuwarden, Dokkum, Drachten, Sneek and Emmeloord. Personal attention, quality, customisation and strong regional ties are the most important values of ROC Friese Poort. Each location is supported by a number of central services. Gerrit Haakma is the head of the central ICT service. With the aid of Trapeze WLANs, his staff has implemented a flexible, scalable infrastructure for several communication applications.

work which can be used anywhere is naturally essential for this. After an extensive selection process, in 2006 we decided on WLANs from Trapeze Networks and since that time we have expanded their use even further. As well as the ease of scalability and the capacity for central management, financial aspects also played a role in our decision. The most similar competitor was nearly twice as expensive! After the initial implementation for Internet access and data communications, our WLANs are now also being used for telephony, preventive camera surveillance and in the near future possibly also for location purposes".

"The result is better than expected as we are already doing more with the WLANs than we originally planned."

— Gerrit Haakma,
Head of ICT Policy at ROC Friese Poort

Open, reliable learning environment

Based on its Christian background, ROC Friese Poort provides education and training with a contemporary slant. The educational centre aims to be a meeting place where students from all cultures feel at home. "Flexible education demands the flexible use of learning aids, and the computer is certainly one we could no longer do without", says Haakma. "For this reason, a few years ago we decided to encourage the use of laptops amongst our students. A net-

Four locations, multiple applications

ROC Friese Poort has a wireless network of WLANs spread across four locations and interconnected by means of a Gigabit fibre-optic VPN. The WLAN consists of four MX-200R Mobility Exchanges and around 300 Mobility Points, which are managed centrally from Leeuwarden by means of Trapeze's Ringmaster software. "In addition, we also have a cabled network of around 4,000 desktop computers and nearly 1,000 IP phones", continues Haakma. "The use of laptops means that savings are possible over the coming years as fewer desktop

ROC FRIESE POORT:

- Since 1994, it has been the merged educational centre for Christian secondary vocational education in Friesland
- Centrally managed organisation consisting of 4 partly autonomous locations with centralised services
- Educational centre for more than 13,000 students, with 1,300 employees

WIRELESS LAN NEEDS

- Flexible and scalable infrastructure for several communication applications
- Support for laptops, telephones and PDAs
- Savings on communication costs via VoWLAN
- Central authentication and network management

SOLUTION

- Trapeze WLANs implemented by TWS Technologies
- Four MX-200R Mobility Exchanges, one at each of the four main locations
- Around 300 Mobility Points spread across seven buildings
- RingMaster management software

RESULTS

- A ROC-wide wireless network for data, telephony and camera surveillance
- Cost savings through the use of laptops and IP telephony roaming
- Innovation options for location-based applications

Friese Poort (continued)

computers are required. Although we are now able to communicate far more cheaply using the fixed IP phones by calling via our own network, the WLAN gives us even more options for the future. This is because in the long term everyone will only have one handset for making both internal and external calls without interruption, with the communication taking place via Wi-Fi to the greatest possible extent, and as little as possible via the GSM network. Our initial tests of the convergence between fixed and mobile telephony (FMC) using several Nokia Wi-Fi phones are promising. Our Trapeze WLANs 'roam' the calls from both fixed IP phones and the Wi-Fi handsets very well".

Better than expected results

After the phased implementation, ROC Friese Poort now has WLANs almost everywhere, so that all the students (but also the employees) are able to communicate, learn and work in a very flexible manner. "When selecting and implementing these kinds of infrastructural investments, the expectations are often high", says Haakma. "In order to reduce the risks, at the time we also carried out an extensive reference visit to the NHTV in Breda, which had similar needs to us and had already been working with Trapeze WLANs for some time. Not only did they give us their objective opinion of the benefits, they also alerted us to

potential pitfalls. Partly as a result of this, our result is better than expected as we are already doing more with the WLANs than we originally planned. Through the further development of Wi-Fi, however, we are constantly discovering new applications, including those based on location. This is because a wireless network can also be used to automatically detect the Wi-Fi equipment and tags in service. Using the Ringmaster software, we are able to see on a central basis whether Wi-Fi equipment is being used in a particular room or area, and whether this is our own equipment or thirdparty equipment. Furthermore, in the future location-based applications may be able to help trace expensive equipment and provide the current presence system with additional information. In brief, the Trapeze WLANs are an important resource as they allow us to remain innovative".

"The most similar competitor was nearly twice as expensive!"

— Gerrit Haakma,
Head of ICT Policy at ROC Friese Poort
