



SURF

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SURFnet Best Practices

## Avans Hogeschool locations connected by Optical Private Network **Best Practice**

In 2005 Avans Hogeschool was the first university of applied sciences to have an Optical Private Network (OPN). It gives 20,000 users super fast access to their files and data.

'As soon as SURFnet6 became operational we took a 1 Gb/s OPN into operation between our locations in Breda, Tilburg and 's-Hertogenbosch,' says Hans Marcus, network manager in Breda. 'This immediately delivered great benefits. In our renovation plans we could include fewer computer rooms, because such a fast connection allowed us to centralise the servers. We could immediately discontinue a relatively expensive leased line. But the OPN's main advantage is the possibility for our staff and students to use all of their data and applications at any of the locations. Their personal desktop is loaded in no time, including their own wallpaper and all their personal settings.'

### **Law and Taxation Publications**

The Avans Hogeschool arose in 2004 from a merger between Hogeschool Brabant and Hogeschool 's-Hertogenbosch. It offers more than 40 educational programmes to about 18,000 students; 1800 staff work at its current eight locations. 'The network is used for accessing learning materials, for using special applications for certain educational programmes or for editing papers or reports with office applications,' says Hans Marcus. 'In our concept of the workstation, both staff and students can access their own desktop anywhere within the university of applied science. We started with the

implementation in 2003, but we found that it takes a lot of bandwidth. It used to take quite some time before a desktop was loaded.'

Staff of the university of applied sciences have a workstation in an open-plan office with the possibility of using a mini office for tasks that require focused concentration. This allows the university of applied science to use the available space much more efficiently. Students can use study zones and media-theques at all locations. This has its advantages as well: 'We used to have to go to the library for the Kluwer Law and Taxation Publications, for instance, but now they can be read at any workstation.'

The network is also utilised for the internal telephone traffic between the locations. Using VoIP for phone calls is much cheaper than using the public telephone network. And there are plans to extend the university of applied science's opening hours to 13 hours daily, with shifting working hours for staff. 'This requires flexibility in scheduling the use of rooms. It is all much easier to achieve with an OPN.'

### **Robust**

The lives of the network managers have become much easier since SURFnet6, states Hans Marcus. 'We had quite a complex solution for interconnecting the locations, based on SURFnet5's Virtual Private Networks. With the advent of the OPN everything has become much more transparent. There is a single network instead of three separate environments.'

We can remotely implement changes in the network at other locations. Now I hardly have to leave my desk.' It is their intention that in time data is stored in only two places that are continuously synchronised. That will require less backup facilities and makes it possible to immediately switch over to the other system in case of calamities.

Hans Marcus is very positive about SURFnet. 'The infrastructure is their property, so you deal with just the one party, which moreover is very reliable. The network is robust and excellently secured, eavesdropping or intrusion is out of the question. And on top of that, the infrastructure is targeted and designed for education and research. The SURFnet staff know exactly what we are talking about. Though Avans Hogeschool has only 1800 staff, we do have 20,000 users on the network. This means we have very different loads and questions than a normal company with as many staff. Another benefit is SURFnet's short lines of communication. In case of problems you can talk to an engineer immediately.'

### **Power outage**

Staff and students of the university of applied science have become totally used to the OPN. 'At the beginning they needed to get used to being able to work at different locations. One day there was a power outage, so the students wanted to postpone the deadline for their report. They were very disappointed to find that they could continue their work at a location a few minutes from here!'

Further information on Avans Hogeschool:

[www.avans.nl](http://www.avans.nl)



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