The Technical University of Denmark is the biggest Sun Ray cluster in Northern Europe. Using thin clients has meant that 10,000 students and staff at the University now have virtual work places.

These virtual work places have made it possible to link up with the University network from absolutely any computer in the world. To carry on working while away, users only need a USB stick that has ThinLinc client software on it. The desktop on whatever computer happens to be used appears just as the user usually sees it.

"I use the solution every day. I'm completely dependent on the freedom that the solution provides," says Bernd Dammann, project coordinator and university lecturer at the Technical University of Denmark.

What was needed

The Technical University of Denmark, with 7,000 students and 3,000 staff, was looking for a solution where the user could seamlessly link up to the University network from any Internet café.

There was also a desire to avoid the headache of making backups and to hand over full responsibility for this to the University’s network department so that it could be dealt with centrally.

The solution

Using Cendio's ThinLinc software, each PC has become a virtual work place. ThinLinc links thin clients to a central server.

By concentrating the computing resources on a central server and providing the staff with terminals, i.e. simple receivers, it has been possible to centralise all applications on the server.

This has meant that only the screen contents is sent between the computers, as opposed to full processing operations. The need for a powerful network has been eliminated.

The system has also improved security in terms of University confidential information, since, as printed pages, the screen images are of no value at all to hackers.

Cendio's ThinLinc is based on open protocols and runs on Linux, Solaris and Windows Terminal Services platforms, as well as others, and this has meant that there can be a mix of applications from different platforms.

ThinLinc was therefore the best solution for the University's many Sun Solaris servers and has also proved a good addition to the Sun Ray terminal system together with a link to Windows applications via Windows Terminal Services. Its security and graphics features were also important parameters.

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Bernd Dammann
Project coordinator and university lecturer
Technical University of Denmark
**The benefit**

For students and staff at the University the solution has brought them complete freedom to be able to work from home or from any computer they happen to choose.

"The call-up solution has been incredibly popular among students and staff," says Bernd Dammann. "The number of users of the solution has doubled over the last five months."

User administration has been dramatically reduced due to updates and backups being dealt with at a central location. It is now easier for the University to manage and monitor its computer infrastructure.

**The Technical University of Denmark’s Thin Client Solution has resulted in:**

- 10,000 students and staff being provided with virtual work places
- Users being able to link up to the University network from absolutely any computer
- When away, only having to take a USB memory stick with the client software on it with you
- Being able to continue working using the same interface just like from a home office
- All backup being dealt with from a central location
- Simple monitoring of the university machines