Dutch High School Designs New Wireless Network

Zuyderzee College adopts digital teaching model using Cisco technology.

**EXECUTIVE SUMMARY**

| Customer Name: Zuyderzee College |
| Industry: Education                    |
| Location: The Netherlands            |
| Number of Students: 2,000             |
| Number of Teachers: 200              |

**CHALLENGE**

- Design and build reliable, large-scale wireless network infrastructure
- Create solid foundation to support transition to fully digital teaching model
- Develop infrastructure that is safe, easy to manage, and ready for future growth

**SOLUTION**

- Wireless network based on Cisco technology
- Design and realization by IT partner Xantes ICT and Cisco distributor Comstor

**RESULTS**

- Reliable and safe wireless network
- Network compatible with future versions
- Model for other schools planning wireless network projects

**Challenge**

Zuyderzee College is a high school in the Netherlands for students aged 12 and older. The school has 2,000 students and 200 teachers, spread over four locations. The school's goal is to provide modern education that meets the needs of a changing society, where modern technology is an indispensable part of everyday life, learning, and work.

To improve education using technology, the board of the Zuyderzee College decided to switch its digital teaching model to a fully digital environment. Key requirements included helping enable all students to use Apple Mac laptops in class, instead of books. The main goal was for the school to be able to provide customized education, tailored to the level and learning tempo of each child. This fully digital learning model also required a safe and reliable wireless network, able to effortlessly handle a large number of concurrent connections.

Dirk Jan Sluimers, head of IT at Zuyderzee College, says, “The traditional way of teaching involves standing in front of the class and lecturing all pupils in the same way. We wanted to have more differentiation, simply because every child is different. And the best thing for us to do is to use IT, because IT makes this possible.”

However, such a decision has consequences, especially for the required wireless network infrastructure. In 2007, the Zuyderzee College did not yet possess a centrally managed IT infrastructure. Each location had its own wired network, without WiFi access. To manage complex projects such as this, Zuyderzee College works with Xantes ICT, the school's IT partner since 2002. The company listened to the school's wishes and requirements for the new wireless network. Together with representatives from Zuyderzee College, they visited other schools that have done similar projects, to ask them about the solutions that were chosen and the results. The conclusion was clear: large-scale networks such as these require reliable and robust solutions from a leading manufacturer. And for Zuyderzee College, that means only one name: Cisco.

"We work with Xantes, mainly because we have known them for a while, and we are extremely satisfied," says Sluimers. "It is a company where people are easily accessible. There is a lot of expertise, and we know what to expect, which is very important. They help you to think through the issues involved. We listened to Xantes and decided to work with Cisco. And we were extremely pleased. In fact, now we only want Cisco."
Solution

With the final choice for Cisco made, Xantes started designing and planning the key phases of the project. Then approached Cisco distributor Comstor for technical assistance. Together, they compiled a list of technical requirements and selected the best Cisco solutions to meet these requirements.

“Comstor are the people to work with for projects such as these, because they provide added value,” says Marien Boersma, director of Xantes ICT. “They possess the knowledge that we did not have at the time. And they are ready to help us. That why for us, they stand out from other distributors.”

“A school is a dynamic environment in which large numbers of users want to access the wireless network at the same time,” says Thuur Tonnaer, managing director Comstor Benelux. “We provided Xantes with technical support and helped them with a site survey, in order to create the best possible design that is scalable, secure, and easy to manage.”

In only seven months, Xantes and Comstor designed and built the required wireless network and support infrastructure. In 2011, Zuyderzee College reached its target number of 2000 connected Mac laptops.

Sluimers says, “The benefit for the school is that all 2000 students can log on to the network simultaneously at half past eight in the morning. They can work anytime, anywhere they want, on a secured network.”

Apart from the basic network infrastructure solutions, Xantes also designed and built a management and support system based on Cisco technology, with technical features such as redundant power supplies and switches, mirroring, and automatic detection and alerts of failures and faults.

A major IT project such as this requires a substantial investment. An attractive financing option is very important to Zuyderzee College, especially at a time of increasing budget cuts. Cisco® EasyLease offers the best financing.

“In education, we are in fact always working on the future,” says Sluimers. “That is our core business. Another aspect of that future is that we will have to deal with less funding. And that means we are extremely happy with Cisco and their zero percent financing. This will greatly benefit a lot of our projects. In fact, they have become essential to do this.”

Results

Thanks to the Cisco solution delivered by Xantes ICT and Comstor, Zuyderzee College improved not only its teaching model, but also communications and collaboration within the school.

The wireless network at the Zuyderzee College is now fully operational. Every morning, about 2000 students log on almost simultaneously, without any problems. They are able to work where and when they want, over a safe, reliable, and high-performance wireless network.

For More Information

To find out more, please visit: http://www.cisco.com/go/education and http://www.cisco.com/go/wireless