

The Meridiaan College is gearing up for Bring Your Own Device (BYOD)



Meridiaan College:

Founded in 1995 as a merger of all the Catholic comprehensive schools for secondary education in Amersfoort, the Netherlands, the Meridiaan College accommodates 3,500 students spread over 5 locations. The school is made up of the Nieuwe Eemland, 't Hooghe Landt, VakCollege Amersfoort and Mavo Muurhuizen. Collectively, the schools offer a complete package for secondary education, from preparatory middle-level vocational education (VMBO) to grammar school. Along with the students, the College also accommodates approximately 450 teachers and educational support staff.

Education is changing. Inevitably and very quickly, laptops, tablets and other devices are being integrated into the daily curriculum. Students are increasingly bringing their own laptops to school. This transition places an additional load on the network of the schools involved. Meridiaan College in Amersfoort wants to anticipate this development and even try to be a step ahead of it, which is possible because bringing your own equipment is still relatively rare in the world of secondary education. To date, schools have frequently used their own laptops as they are simple to integrate into the school network. It is another story when the students themselves start bringing their own laptops or tablets. How do you ensure that your network remains secure, and how do you retain control over what users are doing on the Internet?

Danny Vosman, head of ICT at the Meridiaan College, decided to take action early on. The Meridiaan College already had a wireless network at its five locations, but this network was not able to cope with the growth in demand, so he went looking for a new solution. He ended up contacting TWS technologies B.V., a system integrator that was approached for advice based on the demand, the package of requirements, and the budget available to the College. Based on this data, TWS suggested two different solutions and, after both companies had made their presentations, the choice was LANCOM Systems.

The German network supplier then delivered a total of 214 dual-wireless access points (type L-322agn), one WLC-4100 WLAN controller (with additional licenses) and the LANCOM Large Scale Monitoring (LSM) software for the central monitoring of all 5 locations. Because each classroom was to be included into the network by means of a new access point, the implementation generally took place in the holiday periods. This approach limited the disruptions to the lessons.

Ready for the future

After the implementation of the LANCOM system, Meridiaan College is now able to provide various types of network access via the wireless network using a number of VLANs. Students and staff can each work on their own



Meridiaan College
 Postbus 637
 3800 AP Amersfoort
 Tel.: +31 (0) 033-4613253
 E-Mail: info@meridiaan-college.nl
 Web: www.meridiaan-college.nl

- Components used:**
- 1 x WLAN Controller LANCOM WLC 4100
 - 214 x WLAN Access Point LANCOM L-322agn dual Wireless
 - 1 x LANCOM Large Scale Monitor



TWS technologies B.V.
 Koppelstraat 24
 7391 AK Twello
 Tel.: +31 (0) 088-5702400
 Fax: +31 (0) 088-5702499
 E-Mail: info@twswireless.com
 Web: www.twswireless.com

network, and the Meridiaan College is able to monitor how the users – especially the students – are using the network.

From one central network and one server park, the five locations of the Meridiaan College are provided with network access via VPN connections. There are three VLANs active in the network at each location; one for the students, one for the teachers, and one more for guests. With these VLANs, the school is able to monitor what the students are doing on the network, they can ensure that they are not accessing undesirable sites, and that the network is used as much as possible for school activities. The guest network is implemented by a publicspot module supplied by LANCOM Systems.



According to Vosman: “With the guest network, we hope to gain a better understanding of how many guests are actually using the network. We expect an increase in the near future because many visitors bring along their iPads, for example, and use them during meetings. With our new network, we can respond to this demand while restricting access to the school’s own network, which is in a separate VLAN.”

He sees the Large Scale Monitor (LSM) as one of the biggest advantages with LANCOM. „I was not expecting it, but the monitoring system from LANCOM has turned out to be very useful in practice. It is well organized and makes it easy for us to see what is happening on the network. The monitoring interface is extremely well organized, which makes it easy to perform troubleshooting by ourselves and to find a solution quickly. We work with limited manpower and several locations, so it is nice to have an easy way of managing the system.”

“The implementation of the new network is progressing smoothly. The only ‘problems’ have been with the authorization of the various VLANs. Because teachers sometimes shuttle back and forth between the various sites, we had to think of a construction whereby each VLAN can be recognized separately per location instead of per user group. The Meridiaan College has been supported in this by LANCOM and TWS. On a number of occasions someone came along to help us with the installation and configuration of the products and, even now, there is a service desk available for any questions and problems.”

All in all, the Meridiaan College feels that these changes to its infrastructure have made it ready for the future. Vosman: “The expectation is that BYOD will bring about significant changes in secondary education. With the implementation of the LANCOM network, we have anticipated these changes and hope to ensure that our network can cope. We want to offer our students and staff the best possible facilities.”