

A network learns digital lessons

The Collegium Josephinum Bonn brings the existing school network into the digital age

The Collegium Josephinum Bonn (CoJoBo) was founded in 1880 and is a state-recognised Catholic school in the independent sponsorship of the Redemptorist Order. The boys-only school offers its students the opportunity to take the Abitur depending on their individual capabilities, either directly through the grammar school or through the secondary school with the subsequent upper school level.

The CoJoBo philosophy is based on the Christian image of man on a holistic personal journey. Educational performance is as important as personal well-being and good social coexistence. The use of modern technologies is very important to the teachers. To be able to use iPads in class in the future, the aging school network would have to be modernised and expanded, so they asked for advice and support from the specialists from Infradata GmbH.

The challenge

The first attempt to use some of the iPads showed that the existing WLAN was completely overloaded. Since a large number would be used simultaneously in the future, it quickly became clear that the WLAN had to be significantly enhanced in order to be able to work with the iPads at all. Michael Wirtz, teacher of mathematics, computer science and sport at the CoJoBo secondary school, took up the topic together with two colleagues and went looking for a solution.

"First of all we did our own research on the internet to find out how the WLAN could be improved. I knew pretty early on that purchasing additional Cisco access points would solve our problem. Using information

from the Cisco website, I identified and contacted some partners who could help us, including Infradata," says Michael Wirtz. "Because of the fast and competent response and the high technical competence, we decided to work with Infradata GmbH in September 2020."

A particular challenge was to structure the costs for the network modernisation in such a way that the remaining budget from the funding program 'Gute Schule 2020' (with which the state of North Rhine-Westphalia supports digitisation in schools) would be used up by the end of the year. Any additional costs would then be covered in 2021 using the federal government's digital pact.

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Steffen Freystedt, Account Manager at Infradata

The solution

Infradata immediately set up a web session to discuss the project and clarify any technical questions. "When it comes to Cisco products, we always partner with Westcon-Comstor. We have had very good experiences with both the sales and technical managers there. We don't have to send emails back and forth or even get tickets and wait days for feedback. One phone call is all it takes and a short time later the technical and sales specialists we need are available," says Steffen Freystedt, Account Manager at Infradata.

And it was the same this time, Michael Wirtz reports, "Christian Haupt, Inside Sales Manager at Westcon-Comstor, joined the web session, in addition to Steffen Freystedt and Andreas Schad, Technical Consulting, Infradata. In a very short time we discussed how we would achieve our goal, what the individual project steps were, when to deliver and how to pay.

In addition, after the conversation, we knew which safety precautions to pay attention to and how we would implement them in the course of the project," says Michael Wirtz happily and adds: "We felt well advised, both by Westcon-Comstor regarding the modernisation of the network and Infradata regarding the expected network load and the existing cabling."

First the cables and switches in the existing network were carefully examined, with only a few having to be replaced. However, the built-in switches did not have the required Power-over-Ethernet functionality and therefore did have to be replaced. Only standard end-user devices

had been previously installed for the WLAN, which did not allow simultaneous access by 30 iPads, so the expansion of the WLAN was given top priority.

"Our existing firewall should continue to work in the short term, but the service for it would soon expire anyway, so we were advised to retrofit a new firewall including umbrella licences. We will apply for the funds for this from another funding pool," says Michael Wirtz. "We really felt that both Infradata and Westcon-Comstor understood what we needed and gave us the correct advice."

A total of 50 Cisco access points with built-in controllers were integrated into the network, one in each classroom in the secondary school and one in every second classroom in the grammar school. In the future, every room in the grammar school will be supplied with its own access point.

Outcome

After the successful pre-installation and configuration of the access points, the only other step was to install them in the rooms and then the children could start using the iPads. "The teachers can use a booking system to order and use entire class sets for their lessons. The network is now designed so that all students can log in quickly and at the same time to use the iPads. The teacher also uses an iPad and can project content onto the wall via Apple TV and a projector. We are now prepared for modern learning in the digital age, and we are looking forward to it", sums up Michael Wirtz.

%Infradata

Partner: Infradata GmbH

Partner level: Cisco Select Partner

Selected Cisco products:

- Cisco Embedded Wireless Controller on C9130AX Access Points
- SNTC-NO RMA Cisco Embedded Wireless Controller on C9
- Wireless Cisco DNA On-Prem Essential, Term, PROMO Lic
- Wireless Cisco DNA On-Prem Essential 5Y Term, PROMO Trk Lic

Architectures: Networking, Security

Sector: Education