

CASE STUDY



OVERVIEW

St. Jozefs College in Aalst offers the city high quality secondary education to 1200 students. The school sets the goal of forming children and young people to become skilled people with hearts for each other and the world.

REQUIREMENTS

- Fast and reliable Wi-Fi access in order to offer digital learning material
- A high-performing wireless infrastructure with high capacity, both for teaching locations as the private boarding school
- Infrastructure that allows a wide range can be supported in applications and services for teachers and administrative staff
- An affordable, self-reconfiguring connectivity solution that not only meets the requirements of today, but also prepared for future use

SOLUTION

- Implementation of 20 Ruckus ZoneFlex R500 Access Point devices, supplemented with 3 Ruckus ZoneFlex access point R310 and R300 2 ZoneFlex access point devices and controlled by one ZoneDirector 1200 controller

BENEFITS

- The number of supported client devices per AP significantly increased, while the signal strength and increased wireless reliability
- The network is prepared for the demands of future years, including extending possibilities for the later future
- The possibilities for management and security for the IT administrator are greatly expanded

RUCKUS WIRELESS DELIVERS FAST AND SECURE CONNECTIONS

INTRODUCTION

In a world where we have come to expect free Wi-Fi with our coffee, we now demand it in our schools. Children need to be equipped for the future and technology is the here and now as well as the future—constantly evolving. Teachers are developing new ways to digitize their classrooms while students are developing a whole new way of learning from that of the past. The proliferation of mobile devices hitting the network are creating the failure of legacy infrastructures. Schools are searching for a network that is easy to manage, reliable and future proof.

CHALLENGE

St. Jozefs College located in Aalst, Belgium is a secondary educational boarding school serving 1200 students and 120 teachers. It's a college preparatory high school preparing its students for the next step in their educational journey. St. Jozefs' provides every student with a tablet along with several desktops for boarding students.

St. Jozefs' was facing a few different kinds of challenges. The first was a density issue. With the buildings being built in different eras, it resulted in coverage problems. There were also concerns in regards to security. The school wanted to provide different networks for students and external users, including a separate VLAN for guests. The final challenge was finding a future proof network that could handle a lot of concurrent clients without failure campus wide. St. Jozefs' leaned on partner, The Network Factory for a solution.

"There was a situation with several interconnected routers of different brands that were acquired over the years. The range of these devices was inadequate. It did manage to bring the Internet where it is needed but certainly not campus wide and campus grade. Also, we were having problems in buildings that were built as far back as the 30s resulting in transmission signal challenges," states Dirk Nys, sales manager at The Network Factory.

SOLUTION

School board member, Helmut Moortgat, ICT coordinator from St. Jozefs College, was on a mission to find a supplier that could meet the needs of St. Jozefs' requirements. During an IT event of the Flemish government, Moortgat came in contact with Wi-Fi solutions. Using proof of concept, Aerohive and Ruckus competed for the business. Ruckus won the deal based off its superior products.



“All site surveys that we do in education show that less Ruckus APs are needed in comparison to any other competing brand.”

DIRK NYS

Sales manager, The Network Factory

“Products from both were shown. At first I was happy with what I had seen at Aerohive,” Moortgat recalls. “But during a later event I met with one of The Network Factory specialists and they convinced me that Ruckus Wireless was one step better and offered a free site survey to prove it.”

At St. Jozefs’ College the proof of concept was done which showed a big difference in signal strength between the two suppliers. The results were impressive and spoke in favor of Ruckus. Where 45 Aerohive access points needed to get coverage in all the locations, there were only 25 Ruckus access points required. That makes for a big difference in costs. It convinced Moortgat and St. Jozefs College that Ruckus was reliable, fast and cost effective.

The Network Factory supplied St Jozefs College with Ruckus’ R300, R310 and R500 access points. These high performing access points provided an increase in device density and consist of a patented antenna array technology known as BeamFlex. This technology mitigates interference, provides extended range and adaptive signal steering. This allows for seamless interoperability across the campus.

Managing the access points is the Ruckus ZoneDirector 1200. The ZD1200 creates a robust and secure multimedia WLAN in a matter of minutes. It was perfect and easy to manage for St. Jozefs’ limited IT department.

“I was able to configure and deploy the access points myself with ease. After receiving the first batch, we were supported by The Network Factory who had everything configured in two days,” claims Moortgat.

The new infrastructure allowed for separate networks for staff, students and guests. Users are now experiencing a good wireless coverage and reliable connectivity. The school can now switch seamlessly to the use of new teaching methods in which mobile devices are an important tool. All the requirements were met and everyone is happy with a reliable network.

“Colleagues are impressed by the ease of use of this network. For example, the establishment of a new VLAN, add or remove users, and create guest passes is impressive. That’s hardly doable with a solution that is not focused on modern education,” concludes Moortgat.

WRAPPING UP

Partner The Network Factory shows with this implementation, that it understands the exact needs of the education industry. Currently users of the Saint Jozefs College experience a good wireless coverage and reliable connectivity. The school can now switch seamlessly to the use of new teaching methods in which mobile devices are an important tool.

Regarding safety, the school’s wish granted to be able to offer different VLAN networks to students, teachers and guests, each with an equally good connection. Despite its very isolated newest physical location, thanks to the BeamFlex technology from Ruckus users experience everywhere an adequate signal and enough speed, contributing to an optimal user experience.

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