HIGH PERFORMANCE NETWORK ESTABLISHES FIRST-CLASS WI-FI TO ACCELERATE DIGITAL LEARNING ACROSS 14 SCHOOLS IN THE NETHERLANDS

Creating a fully managed, open and secure wired and wireless access across 22 locations – delivered as a Network-as-a-Service (NaaS).
The last year has shone a light on digital learning. There is an acceptance that students need access to devices, that they can study independently and that digital lesson plans should be a part of every teacher’s skill set.

The Netherlands is racing to standardise connectivity across all schools. The country wants to create a learning environment that is mobile-first, with ubiquitous Wi-Fi.

“Access to Wi-Fi has become simpler,” says Clemens Linderhof, IT Manager, Quadraam. “We want an environment where students can bring their own devices.”

**CREATING A BLENDED LEARNING ENVIRONMENT**

Quadraam manages 14 secondary schools across 22 locations in the Arnhem area of the central Netherlands. In total, more than 13,000 students attend its schools, along with 1,600 staff. The largest has 1,400 students; the smallest, just 150.

“Devices are not our goal. We know learning will be a blended environment, some digital, some physical. We need to make sure our schools are equipped to balance these demands,” says Linderhof.

Quadraam must do this against a backdrop of reduced onsite expertise and greater pressure on budgets. The focus for staff should be the teacher or student experience, not managing network hardware or resolving network glitches.

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**REQUIREMENTS**

- Upgrade wireless network across 14 schools and 22 locations
- Understand network usage to inform management and set policies
- Reduce network management burden

**SOLUTION**

- Managed Network Services by Aruba MSP Partner Wentzo
- Aruba Indoor APs, including Wi-Fi 6 Certified
- Aruba 2940M Switch Series
- Aruba User Experience Insight
- Aruba Central for cloud-based network management

**OUTCOMES**

- Reduces total cost of ownership (TCO) of network management
- Establishes clear SLAs on response, incident management and resolution
- Reveals network usage in granular detail
- Provides scale to accommodate growth in Wi-Fi devices and users
- Allows the flexibility to adapt licensing within the service contract

“Our previous environment was working fine but coming to end of life,” says Linderhof. “We wanted to rethink how we manage the network. I don’t want our time spent chasing tickets or managing upgrades.”

**ESTABLISHING AN OPEN NETWORK**

The Netherlands allows local school managers to determine their own IT choices but has created a framework of approved suppliers. SIVON acts as a cooperative of 3,900 Dutch schools and has agreed a suitable range of ICT products and services for its members. This includes two managed service providers capable of delivering Wi-Fi-as-a-service.

“One of those is Wentzo,” says Linderhof. “A well-known name in the Netherlands and long-standing Aruba Plati-
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— Clemens Linderhof, IT Manager, Quadraam

The network upgrade is being deployed in phases. Wentzo is managing the roll-out, conducted out of term time, and following a blueprint with core components no matter the size of location. The deployment started in early 2021 and all 22 locations should be online by the end of the year.

**LEANING ON SERVICE EXPERTISE**

The entire Quadraam estate is managed by Wentzo on Aruba Central. Quadraam is one of a number of school boards Wentzo has under management; with 1,200 access points and 150 switches. Quadraam is also one of the largest.

The service contract provides a degree of flexibility, Quadraam plans to close a number of locations, consolidating some schools to larger, single sites. The Wentzo contract allows Quadraam to move its hardware between sites.

“We're currently working with ten school boards under the SIVON framework, with 6,000 access points under management, all on Aruba Central. The multi-tenancy on Central is critical for us,” says Klaas-Jan van Roekel, Commercial Director, Wentzo. “Our service teams can see the exact status of every access point or switch at every customer, in a couple of clicks.”

Van Roekel says the trend for managed services is picking up as customers recognise the need to focus resources on their core business and the appeal of consumption-based costs.

“We know the education market,” he says. “We know the particular challenges with bandwidth, device management and security. For us, the advantage of Aruba is that it provides an end-to-end suite of products, from hardware to management.”

For customers, van Roekel continues, an MSP can be as involved as required: “We’re working alongside Quadraam to examine the insights from Aruba UXI. They’re keen to get involved and see the parameters of the tools. Other customers might hand this over to us entirely.”

num partner, its offer included Wi-Fi 6 and User Experience sensors, which I thought were important. Those are features we will need in the future.”

The Aruba solution managed by Wentzo includes Aruba AP-505 and AP-515 Wi-Fi 6 access points, User Experience Insight Sensors in each school and Aruba 2930 access switch series. Wentzo has delivered Wi-Fi-as-a-service since 2012.

“It gives us an open network, with simple Wi-Fi connectivity and the ability to integrate with old legacy servers and storage. There are more devices connecting to the network today than ten years ago and we know more will be coming,” says Linderhof. “And we can take advantage of Wentzo’s expertise serving customers in the education sector.”
REMOVING THE MANAGEMENT BURDEN
Quadraam is now able to provide eduroam services for its schools, meaning visiting staff, students or suppliers can find secure network access. Linderhof says network access is almost without restriction, with students able to browse freely out of lesson times.

“We can block the nastier sites and if there is an issue we can trace the problem,” he says.

The engagement with Wentzo will save Quadraam man hours, improve network uptime and remove an operational burden, says Linderhof: “Every hour saved on upgrades, on chasing issues, is money saved. There is clear benefit in terms of total cost of ownership.”

Despite the size of a typical Quadraam school, and the fact most teachers and students will connect two devices to the network, there is no skilled network engineer on site. When needed, Quadraam now knows it can lean on Wentzo for expert help.

“If we have IT staff on site, it is to help people with getting the most out of their equipment, not fixing network issues,” Linderhof explains. “We outsourced our IT services in 2010. Those days are over.”