

CASE STUDY



GERMANY



MANUFACTURING

CREATING A MODERN HEADQUARTERS AND PAVING THE WAY FOR THE DIGITISATION OF NUMEROUS WORKING PROCESSES

Enabling mobility and efficient collaboration using cloud-native resources for more than 40 employees, meant that QSN required a business-class wireless architecture. However, to ensure the integrity and security of its clients' information and communications, as well as continuity of service, QSN needed a resilient, highly available and managed connectivity service which allowed the company to focus on its clients' projects and value-driven experiences.



The opening of a new company headquarters is often seen as an opportunity to send a message. How does the company see itself? What image does it want to portray?

Like many other companies, TOMRA Collection Solutions is undergoing something of a digital transformation. A world-leading provider of recycling solutions, TOMRA wanted to create an open, modern and flexible workspace at its German headquarters in Langenfeld. Its teams would have access to the latest productivity tools, mobility would be standard. The building would be a platform for modern, digital ways of working.

It was an opportunity to make change a reality for the company's employees, says Stefan Simon, Senior IT Manager at TOMRA.

ENCOURAGING NEW WAYS OF WORKING

The office in Langenfeld would accommodate the 200 sales and administration staff who support all of TOMRA's reverse vending machine customers in central and eastern Europe. The network infrastructure in the existing building, comprising seven- to ten-year-old switches, was no longer sufficient for modern requirements.

"We are very heavily cloud-oriented," says Simon. "Plus, the walls in the new building were designed to be very thick, so mobile network coverage is very poor. A high-density Wi-Fi network was very important for us."

Despite being years in the planning, adds Simon, the project had some challenging deadlines. He wanted to have the network constructed within four weeks. "It was important to us that all of the equipment be fast and simple to configure."



REQUIREMENTS

- Ensuring wireless connectivity for all employees throughout the 5,000 m² building
- Enabling the company to integrate cloud-based productivity tools
- Creating a solution that would be ready for use within four weeks

SOLUTION

- 802.11ac Aruba Wi-Fi indoor and outdoor APs
- Mobility Controller
- Aruba Campus Core and Edge switches
- ClearPass Policy Manager
- AirWave Network Management

OUTCOMES

- Encourages collaboration by providing seamless mobility across the entire building
- Accelerates the digital transformation of the company and eliminates paper-based processes
- Increases security with clearer detection of users and usage
- Reduces time spent managing network tasks

BROAD RANGE OF SOLUTIONS AND AN OPEN APPROACH

It was clear from an early stage that TOMRA wanted to use Aruba solutions in the new building, not least because its systems were already in use at its Norwegian headquarters. As a market leader, Aruba offers a range of technology to suit any requirement, explains Simon. "We chose an outstanding manufacturer."

The Aruba solution is based on Aruba 2540 Campus Edge Switches which provide the required LAN ports and POE connectivity for the access points. An Aruba 7020 Mobility Controller manages and coordinates 30 AP-345 high-density access points and two AP-367 outdoor APs. Network access controls and security are managed and controlled via ClearPass Policy Manager, whilst AirWave is used for network monitoring and administration. Coverage is provided in every corner of the 5,000 m² building.

The network infrastructure can be adapted and scaled easily to cope with growing employee numbers. Simon simply has to add further switches and ports. The two fully



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redundant Aruba 5412R Campus distribution switches are used for the two wings of the H-shaped building, arranged in a virtual cluster. If one switch fails, the other can be used as a backup to ensure connectivity between the two wings. The zero-touch provisioning (ZTP) capability of the LAN and WLAN architecture means that additional components can be added easily and standard configurations can be pushed and automated across elements with similar roles and network profiles.

Simon explains that despite the breadth of Aruba's portfolio, the open architecture still has certain benefits. “We have a homogenous network, we don't need to interact with other manufacturers. But we like that we have the opportunity to expand the system with components from third party providers if this were to become necessary in the future.”

Mobile working to promote collaboration

When it came to designing the building, TOMRA wanted to create open rooms that encourage interaction. It decided against fixed workspaces in favour of hot desking. The Aruba solution enables the teams to work from anywhere, connect their laptops wherever they are in the building, and enjoy consistent performance and connectivity. TOMRA provides its staff with the tools but how they use them is up to them.

“We wanted our employees to be able to exchange ideas within flexible teams and to use spontaneous meetings in open spaces to discuss concepts. This means our teams cannot be subject to technical obstacles,” says Simon. “They have to be able to get online anywhere and access the data they need immediately.”

Each employee has a laptop, while each workstation has a docking station, two monitors and a LAN connection.

Simon says that many employees simply connect wirelessly. There are a number of communal spaces and quiet meeting rooms across the building. Staff can choose where and how they want to work.

The company has also installed a new cloud-based telephone system. Telephony is now based on VoIP and employees take their phone connection wherever they go via a web or mobile app. Simon adds that the strength of the network means that people do not experience lag or broken conversations, and that functionalities such as Wi-Fi calling can be used anywhere in the building without performance issues.

As well as the new network, TOMRA has also digitised more than 30,000 paper documents, which are now accessed via Microsoft SharePoint. This accelerates working processes and simplifies business transactions, says Simon. It is also tangible evidence of the company moving toward a digital transformation. “Employees can see that we have become digital in a relatively short space of time.”



A completely modern architecture

The new building hits all the targets that the company had set, employees are taking advantage of the new opportunities, and working processes have been optimised as the necessary coverage, availability and bandwidth is now available. The head office is embedded in a high-performance network.

Together with Aruba and Brinkmann, Aruba's local partner, TOMRA planned the building to ensure that there were no dead zones. The 30 Aruba access points are managed via the Aruba 7030 controller, which centralises all management functions. This in turn improves capacity utilisation, security and the roaming capabilities of the clients. The controller can also support dynamic segmentation, which



TOMRA plans to utilise going forward by potentially segregating the office LAN.

“The design and installation process went very smoothly and to schedule,” says Simon. “The network is stable and problem-free. The configuration process was very quick and did not involve much work from our side.

“We now have super-fast and stable Wi-Fi in every last corner, and a completely modern infrastructure.”



SECURE, SIMPLE TO MANAGE AND WITH MORE PROACTIVE SUPPORT

The network is also easy to manage. Simon chose to use ClearPass to segment the networks and manage the various VLANs and SSIDs, which means that guest Wi-Fi access is kept separate from staff access in an intelligent and automated way. This in turn simplifies network access and ensures network security going forward. TOMRA is working

increasingly closely with its customers and collects data from their locations via the reverse vending machine platforms it operates for them. ClearPass ensures that there is no “bleeding” between different customers’ datasets.

The IT team has complete transparency (and traceability) as to who is logging in and what devices they are using.

“With ClearPass, we now have a secure and forward-looking solution,” says Simon. The use of AirWave, he continues, saves on administration time and helps his seven-strong team to take on a more committed support role. By proactively monitoring the connected systems, the team can detect where support is required.

“We look at the administration console and are impressed by the reach of the Wi-Fi network,” says Simon. “Aruba’s management solutions have reduced our workload significantly.”

CONTINUAL IMPROVEMENTS IN THE USER EXPERIENCE

The new office is seen as a test environment for further innovations. With a flexible, powerful network, Simon envisages that the next phase will see further innovations tested there. The priority, he adds, is concentrating on the user experience.

“We know that we can further automate and optimise how we manage the network, but our goal is to make our employees happier and more productive and to take a big step towards digitisation. We now have a platform on which to test new ideas.”