

CASE STUDY

GLOBAL CONSUMER GOODS MANUFACTURER USES GIGABIT WIRELESS LAN AND CLEARPASS TO SUPPORT ITS DIGITALISATION PROCESS



More than 30,000 mobile devices connect to Henkel's wireless LAN each day, and with the number growing all the time, this is a never-ending source of challenges for Detlef Feistl.

"The wireless network is increasingly becoming the technical backbone of our digital strategy," says the senior system engineer and consultant in Henkel's Managed Network Service team. "It enables all of our staff worldwide to work efficiently with any device from anywhere in the world."



STANDARDISATION AND IMPROVED OPERATIONS

"Digital transformation has long been working its way into every department at Henkel," says Feistl. "The Group's senior management team expects that our markets will continue to develop very dynamically and that the increase in digitalisation will change our market environment." The Group's goal therefore is to further improve its processes by standardising and digitalising them, which in turn will improve its operational excellence.

Feistl and his six-strong team in Düsseldorf set the design and standards for the LAN and wireless LAN architectures at the company's offices around the globe. They are also responsible for operational network management in Germany and Switzerland. And these tasks are anything but straightforward. More than 80% of Henkel's 50,000 employees are based outside of Germany,

REQUIREMENTS

- A uniform, standardised and scalable wireless LAN to promote agility and accelerate digitalisation within the company
- Secure wireless LAN access for all locations worldwide
- Digital workspace support
- Internet of Things (IoT) support

SOLUTION

- 802.11ac access points
- 7200 series mobility controllers
- Aruba ClearPass for network access control
- Aruba AirWave for network management

BENEFITS

- Simple implementation of a digital workspace concept
- Simplified network access control for more than 30,000 mobile devices
- Central, efficient administration of wireless and wired devices
- Option of using ClearPass to expand secure IoT environments within manufacturing

“ With ClearPass, we now have a secure, futureproof network access solution for our increasingly mobile digital workspaces. ”

DETLEF FEISTL
SENIOR SYSTEM ENGINEER AND CONSULTANT ON
HENKEL'S MANAGED NETWORK SERVICE TEAM

which makes it one of the country's most internationally-oriented companies. Founded in 1876, Henkel is the Group behind a variety of trusted brands and technologies from around the globe, including Dial, Schwarzkopf, Syoss, Persil, Pril and Purex.

Around 3,000 Aruba access points for wireless LAN worldwide

The Group's products cover three main areas, the most profitable of which is adhesive technologies, followed by laundry, home care and beauty care. In the 2016 financial year, Henkel achieved sales of €18.7 billion and operating profit of €3.2 billion.

The company has relied on wireless LAN technology from Aruba for many years, and currently has around 3,000 of its access points and 300 mobility controllers in operation. Depending on the particular site Henkel has managed to achieve data transfer rates of up to 1 gigabyte over the air. When it comes to network management, Feistl's team uses Aruba AirWave. "Over the past five years, the importance of our wireless network has grown incredibly quickly, and so have the requirements we have of it," says Feistl.

More and more mobile devices

Over this period, the number of mobile devices authenticating in the wireless LAN has more than doubled. It has currently in excess of 30,000 devices, and growing all the time. These devices include smartphones, tablets, laptops and handheld scanners. The latter are used in the company's warehouse logistics processes. They send real-time data to the SAP system. In order to continue to provide access for this number of mobile devices, the company is constantly increasing the capacity of its access points.

"The Bring-Your-Own-Device initiative a couple of years ago was an important turning point that led us to consider installing a better network access control solution," remembers Feistl.

CLEARPASS REPLACES AGING AAA INSTALLATION

The team already had some experience of what Aruba's ClearPass solution could do. Henkel's guest network had been migrated over to it two years before. Since then, customers and partners have been able to register on a self-service portal that enables them to work and communicate wirelessly when they are at a Henkel site.

Now it was time for the next big step. The company's existing AAA network authentication, authorisation and accounting solution needed to be replaced as support for Microsoft Windows Server 2003 was being discontinued. This was the operating system Henkel's solution was running on.

"As we already had some experience with ClearPass, it was clear to us that it would be a strong contender to replace the old infrastructure," says Feistl. "It enabled us to consolidate a number of different AAA installations into a single solution platform. As ClearPass has such a wide range of functionalities and features, we can now use it to cover a variety of different services. Which means that ClearPass fits in brilliantly with the global Henkel strategy of further standardising and simplifying our business-critical processes."

Automatic user access permissions

ClearPass replaced the existing AAA system with context-dependent policies. It offers transparency, policy control and workflow automation within a single, closed solution. When creating profiles with ClearPass, all devices are classified in order to define intelligent policies that determine access to cabled and wireless networks.

Henkel can grant or refuse user access permissions automatically based on the device type, owner status or the operating system. And as ClearPass is a multi-vendor tool, Henkel can also use it to monitor switches made by other manufacturers within its cabled network. The migration project posed one big challenge for the Henkel team: they had just three months to get the ClearPass installation up and running as support for the previous solution was coming to an end.

ClearPass as standard at all sites worldwide

"We managed to carry out the migration to ClearPass almost while the system was still running, without any excessive interruptions.



Aruba's experts did a great job," says Feistl, happily. The ClearPass cluster was assembled in parallel to the existing infrastructure and the network devices were then switched over to it over the course of a few weeks.

Even the local IT managers responsible for the network infrastructures at the Henkel sites around the world were able to implement the necessary changes to the configuration in the standard ClearPass environment without issue, and without having to construct additional infrastructures.

VIRTUALLY UNINTERRUPTED WIRELESS LAN OPERATION

"We are incredibly satisfied with ClearPass. The solution is so stable that we can offer our departments virtually uninterrupted wireless LAN access, and the support we receive from Aruba is also brilliant," praises Feistl. "With ClearPass, we now have a secure, futureproof network access solution for our increasingly mobile digital workspaces."

New challenges are already on the horizon for the wireless Aruba network and ClearPass. Some of Henkel's departments are testing open space office concepts (hot-desking) whereby employees are not assigned a particular desk, but instead connect their laptop to the network at any free space they find when they arrive in the office. Skype for Business is also being introduced for internal voice and video communication, which will considerably increase the service demands on the wireless network.

ClearPass as the product of choice for the smart factory

"But I am sure that we will be able to conquer these new challenges associated with the digital workspace using Aruba's network solutions," says Feistl.

ClearPass is also set to be the product of choice for future digital production environments at Henkel. The company is already testing out some initial approaches to Industry 4.0 and the IoT. Feistl is confident: "In the smart factory, there will be many devices that will need to be protected from unauthorised access. ClearPass will definitely be our central solution for that."