

CASE STUDY



GERMANY



TRANSPORTATION

UNIFIED SD-BRANCH NETWORK ARCHITECTURE UNDERPINS DIGITAL INNOVATION TO STREAMLINE JUST-IN-TIME LOGISTICS FOR GLOBAL GIANT

Standardise wired and wireless infrastructure to improve network reliability, strengthen security and facilitate the adoption of IoT and mobility innovation across global logistics ecosystem.



Schnellecke Logistics works with some of the world's biggest automotive makers. Its logistics management sits at the heart of global supply chains, a critical component in just-in-time production.

"Data analytics, artificial intelligence and machine learning will drive the next evolution of logistics," says Karsten Keil, Vice President Group IT & Digitization, Schnellecke Logistics. "The future will involve supply chain networks, with deeper integration between all parties. The big challenge for us is not to implement the technology but to enable agility throughout the organisation."

ESTABLISHING A CONSISTENT NETWORK EXPERIENCE

Aruba provides the high level of network standardisation to enable the agility Schnellecke needs. The new platform establishes a unified architecture across Schnellecke's global operations – 71 sites around the world and more than two million square metres of floor space.

"In broad terms, the business wants to develop a cloud-first strategy," says Markus Werner, Network Project Manager, Schnellecke. "Aruba delivers a cloud-managed and cloud-native architecture."

STANDARDISING GLOBAL EXPECTATIONS

The engagement with Aruba establishes network consistency across Schnellecke's global operations. With country operations previously managing their own networks, Werner says the willingness by all to embrace the Aruba approach has been pleasing.

"In a global business with local operations there are always differences of opinion. The acceptance of Aruba has been extremely high. We had sites in Germany, Poland and Slovakia online within days."



REQUIREMENTS

- Centralise management of high-performance Wi-Fi across 13 countries worldwide
- Support adoption of digital innovation around mobility and IoT
- Establish consistent network security and reliability

SOLUTION

- Aruba CX Core Switches
- Aruba Access Switches
- Wi-Fi 6 Unified Indoor Access Points
- Unified Outdoor Access Points
- Aruba Gateways for DC and Branch
- Aruba Central Cloud Management Platform
- ClearPass Policy Manager
- SD-Branch Architecture
- Dynamic Segmentation

OUTCOMES

- Standardises global network architecture to drive efficiency and reliability
- Cuts network provisioning times from days to hours and enables zero-touch deployments across the globe
- Strengthens security with single-pane visibility and managed policies
- Establishes high-quality infrastructure to manage integration of new IoT and mobility

There are now agreed network architecture templates within Aruba Central for small, medium and large profile deployments, or high- and low-priority production sites. This makes Schnellecke faster and more certain of its network operations and simplifies the task of integrating new acquisitions.

"We only have to clone the template and apply it locally through Central," Werner explains. "We have the same switches in the access layer, the same in the server environment."



“The network availability, along with cloud services, gives us the performance we need. We can increase the reliability of our systems and the accuracy of our forecasts.”

KARSTEN KEIL

Vice President Group IT & Digitization

STRENGTHENING SECURITY AND BUSINESS CONTINUITY

Understandably, global supply chains are a hugely attractive target for cybercriminals.

“The Aruba architecture gives us the same level of security whether we are in Germany or Mexico. Any weakness would undermine our digital strategy,” says Keil.

It also strengthens business continuity. Schnellecke now has a standardised management platform and global visibility. It has a more proactive stance on network maintenance. “Above all, the network is more reliable. And a reliable network is vital to our systems and our business,” he says.

SIMPLIFIED MANAGEMENT AND DYNAMIC SEGMENTATION

The new network architecture that Schnellecke has rolled out is based on a highly available cluster of Aruba CX 8320 Switches which provides server and storage connectivity for the corporate workloads.

Campus and other location wired and wireless access are provided through Aruba 2930 and 2540 switches. High-density Wi-Fi 6 connectivity is delivered in all locations with Aruba Unified Access Points. The architecture is based on an Aruba SD-Branch design, where each location is con-

nected via Aruba Gateways which are terminated on central Headend Gateways and VPN Concentrator in different DC sites.

Remote management and orchestration, as well as zero-touch roll-out of network configurations are ensured via Aruba Central. In order to simplify management and the assignment of users and devices to appropriate VLANs, Clear-Pass Policy Manager will enable Schnellecke to implement end-to-end tunnelling and Dynamic Segmentation which will deliver a zero-trust approach to profiling, authenticating and connecting known entities to the network.

Software-defined approach to service delivery

For Schnellecke, the cost of overhauling its MPLS connections and contracts in order to modernise the company's capabilities and services would have been prohibitive. It would have made it far too costly to remotely configure each location to fit into the well-defined site categories and to provide respective service levels. Importantly, the team needed the ability to evolve and adjust SLAs over time and as required. For this, Werner needed more visibility and granular control over the network and a more flexible architecture.

“The SD-Branch architecture has proven to be core to our strategy to become provider-independent and to achieve significant cost savings,” Werner explains. “Our experience has been seamless. The platform is running without any glitch or outages. It is just humming along smoothly and works as we expected it to.”

SIMPLIFYING THE ADOPTION OF NEW TECHNOLOGY

The Aruba Edge Services Platform (ESP), will be foundational for Schnellecke's continued evolution, says Keil: “Our aim is to adopt technology from the market, whether start-ups or mature, and to create new value for our customers through integration into our existing solution architecture. The open and standards-based architecture means the practical aspects of this adoption are not a problem. Our challenge is to drive change throughout the organisation.”

The company already uses driverless vehicles in its warehouses, along with smart controlled picking by voice, sensors, smart glasses and radars. More robotics and more autonomous vehicles will feature in the future. Humans won't disappear from the warehouse floor, says Keil, but algorithms may help inform smarter working patterns. Aruba, he continues, simplifies the task of onboarding new





innovation by allowing the business to drag and drop new applications, with automatic configuration.

Supply chain networks will become smarter when every link in the chain captures data, and then this data is analysed. It means Schnellecke will be more efficient in its use of warehouse space because it won't need to hold stock for as long and transport will spend less time idle. Just-in-time deliveries will be even more prompt.

"Unexpected events show supply chains to be fragile. AI will enable us to factor in different contingencies," says Keil. "Ultimately, logistics is a price-driven business. The more efficient we are, the lower our costs."

UNDERPINNING CONTINUED BUSINESS GROWTH

The network also establishes a platform for continued business growth. In the early 1990s, the business employed 1,500 people and generated revenues of \$100m; today there are 17,000 staff and \$0.8 billion revenues. Schnellecke Logistics has operations in 13 countries but there remains room to grow.



The Aruba architecture makes it easier for Schnellecke to ramp up new services or add new sites.

"The network availability, along with cloud services, gives us the performance we need. We can increase the reliability of our systems and the accuracy of our forecasts. I think we're well placed to have more opportunities than threats in the future," concludes Keil.