

CASE STUDY



GERMANY



MANUFACTURING

# ENGINEERING SPECIALIST HANDS OFF NETWORK SERVICE MANAGEMENT TO ACCELERATE INNOVATION



Global engineering specialist outsources network management to redirect resources to core innovation.



Manz AG is a German engineering company. It specialises in making the machines that run global production lines for some of the world's biggest manufacturers. The Manz brand promise is 'engineering tomorrow's production'. Its goal is to identify a process opportunity, test the prototype and deliver to customers a fully-integrated solution.

"We need to collect machine data, learn from it and then use it to help our customers," says Martin Link, Vice President of IT Services, Manz AG.

### SECURING A CONNECTED PRODUCTION BASE

Engineering is built on precision. Manz wants an exact record of the performance of its machines, historic and in real-time. This will enable the company's designers and engineers to develop improvements and innovate. The capture and transfer of production data tightens the link between Manz and its customers.

"It is critical that our connections are secure and clearly defined," says Link.

The business has grown to include production sites in China, Hungary, Italy and Slovakia. Some sites were green-field while others were added through acquisitions. Martin Link saw an opportunity to redefine the increasingly mission-critical network, defining standards, establishing consistency, instilling global visibility and optimising operations.

"My target is to outsource as many non-core workloads as possible. Our focus should be on the business software, not network operations," he says. "Manz does not need the best network experts in Germany. We just need our



### REQUIREMENTS

- Establish a managed service for global network
- Segment network access to strengthen security
- Reduce operational burden on in-house team

### SOLUTION

- Aruba Indoor APs, including Wi-Fi 6 Certified
- Aruba CX 8400 Switch Series
- Aruba 2930M and 3810 Switch Series
- ClearPass for network access control
- Aruba Central cloud-based management in new locations

### OUTCOMES

- Provides modern network architecture across five-year service contract
- Delivers global consistency across network performance and policy
- Ensures device- or role-based access to the network, strengthening security
- Establishes a future-ready network infrastructure capable of supporting Industry 4.0 initiatives

network to be secure, run reliably and deliver the best user experiences everywhere. Our effort is on the initial network architecture and desired outcomes."

### OUTSOURCING THE NETWORK AS A MANAGED SERVICE

The solution is a private cloud delivered as a managed service by Aruba partner, Pronexon, an IT network and infrastructure service provider based close to Manz's Reutlingen head office.

"This is a complete renovation of IT," says Link. "It creates a network, infrastructure and data centre operation that is ready for a growing business."

It includes automated network access control (NAC) orchestrated via Aruba ClearPass. This creates a unified security posture across Manz's wired and wireless network, integrated with the Manz Active Directory. In addition, there are Aruba CX 8325 series Core Switches, Wi-Fi 6 AP-515 Unified Access Points and Aruba 2930F series Access Switches. The infrastructure is leased by Manz, with a monthly service fee



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**MARTIN LINK**

Vice President of IT Services, Manz AG

for a predefined number of hours and flexibility for variations in consumption needs. There is an annual review in place of the number of hours spent and the service activity. To manage and monitor the environment, Pronexon relies on Aruba Central as the cloud-native supervision, management and service delivery platform.

Martin Link has worked with Aruba previously but says the engagement was partner-led: “We knew that working with Pronexon meant working with Aruba. We have a deep relationship with Pronexon – it was very important to us that the company partnered with a leading technology provider and that it has the know-how and expertise to use that technology to create and deliver a complete outsourcing solution based on our specific needs.”

**Removing complexity to improve response times**

This is a service contract, says Link, but it is also a commercial relationship. If it is agreed that service level agreements (SLAs) will be met, then cost has to become a factor.

“Cost is important,” he says. “A good cost tells me the partner is comfortable with the technology, the management platform is straightforward and that changes can be made quickly. Slow response times suggest unnecessary complexity.”

“Hardware costs can be roughly similar, which makes the service management fee more important. I could see Pronexon’s calculated hours, working with the Aruba platform, was enabling far greater efficiency.”

**Ensuring global management consistency**

The engagement establishes a five-year global service contract, starting in Germany and rolling out to Europe and Asia. This relieves Manz of its network operations burden, with no need to manage physical servers, storage or networks, allowing the business to redirect resource to innovation projects.

“Pronexon doesn’t have people in all parts of the world but the Aruba platform enables the company to oversee and manage the configurations from Germany,” says Link. “ClearPass will be deployed onsite in all locations.”

The real work, he continues, is defining the different network segments and creating the rules for who and what can connect. Today, Manz works from more than 50 different VLANs.

“This will change as users’ demands evolve,” says Link.

“There will be new buildings, new subsidiaries and new software demands. Aruba ClearPass will provide the flexibility and consistency in enforcing role-based access policies. It will allow us to grow into smart and automated segmentation.”

**DELIVERING THE SECURITY AND RELIABILITY TO POWER GLOBAL PRODUCTION**

The speed of the network was never the main priority, Link says: “To me, the most important thing is stability. This is why factories have always favoured wired instead of wireless connections. Downtime can be extremely disruptive and expensive. We don’t need our production line machines and robots to be connected to Wi-Fi but we know that we have an enterprise grade WLAN now, consistent in security and performance with our LAN.

“We have full redundancy – all switches in all buildings are connected to the core switches. We have two different





1Gbit lines from two different buildings and two different core switches going to our data centres. The network is always available.”

It is also more secure. The open Aruba architecture allows the integration of WatchGuard Technologies Next Gen Firewall Appliances in Hungary, Italy, Slovakia and German locations. All critical network traffic passes through the firewalls.

### ACCELERATING THE ADOPTION OF INDUSTRY 4.0

The new network enables Manz to accelerate its adoption of Industry 4.0 innovation. Manz is a key player in the European Union’s future battery technology project, developing its lithium-ion battery Factory of the Future.

This factory, part financed by EU funds, will feature automated machinery, robotic transport and digital twins. It will track energy usage, recycling rates and gather the data to inform AI modelling.

“There will be lots of communication between the factory and different stakeholders,” says Link. “Segmentation means we can connect to the machines when we need but the machines cannot connect to us.”



### REFINING SERVICE EXPECTATIONS

The new Wi-Fi 6 infrastructure paves the way for future discussions around the adoption of Aruba Central and SD-WAN architecture. This promises to further simplify remote management and lower operational costs.

For Martin Link, these details are the responsibility of Pronexon and, for Manz, service is everything. “This is where more and more companies are going,” Link adds. “They are less interested in the infrastructure as they are paying for a service. What is most important is meeting the SLAs but being comfortable that the service provider has struck the right technology partnerships.”