

CASE STUDY

SECTOR

Manufacturing

SERVICE

SD-WAN

Cloud Firewalls

KSB **+ GTT**

ACCELERATING DIGITAL TRANSFORMATION





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HEINZ WACKERMANN HEAD OF IT INFRASTRUCTURE AND OPERATIONS AT KSB

KSB MODERNIZES ITS IT INFRASTRUCTURE FOR CONNECTED MANUFACTURING WITH GTT

KSB SE & Co. KGaA, headquartered in Frankenthal, Germany, is a leading manufacturer of pumps, valves and associated services with annual sales of more than 2.2 billion euros.

For more than 150 years, its pioneering products and services have helped customers drive innovation in their industries using KSB's reliable solutions for transporting and controlling water, chemicals and other fluids. From its multi-award-winning business innovation laboratory to foundries and sales offices, KSB and its subsidiaries has sites around the world, including in India, Brazil and China.

Previously, the IT infrastructure supporting KSB's business was largely particular to each site, meaning routine maintenance and business-wide changes or upgrades required a high degree of inefficient tailoring. The established MPLS network connecting all of KSB's sites lacked the flexibility needed to support its evolving IT infrastructure requirements and growing business supply chain and partner ecosystem.

To ensure a network fit for the company's digital transformation, KSB chose to deploy managed SD-WAN from GTT. The GTT solution has delivered a bandwidth increase of 600% across the KSB network. In addition, GTT provides a managed firewall service, which was individually adapted to KSB's security needs. Today, the company's IT infrastructure and network are well poised for the future opportunities of the Industrial Internet of Things.

A network for global manufacturing and supply chains

The KSB Group has around 190 sites and more than 15,000 employees working worldwide. As KSB is a data-driven business, its employees rely on being able to collaborate across disciplines, creating groundbreaking services and production methods by leveraging pooled data and cutting-edge insights from fields as varied as hydraulics, materials technology, machine learning and artificial intelligence. Increasingly, new opportunities and business gains also depend on integration with KSB's supply chain. Across Germany alone, the company works with a network of 30 service centers and 80 authorized service partners.

“Our manufacturing and supply chains are becoming increasingly globalized, and we need a stable IT infrastructure at all locations. That's why we decided to modernize our network structure,” comments Heinz Wackermann, head of IT infrastructure and operations at KSB. “During the RFP process for this project, it was very important to us to find an objective service provider, experienced in network technologies. We looked for a global, competent partner to consult with and accompany us on our journey as we moved to using new, innovative SD-WAN technology across our network.”

It was important for KSB to have a one-stop-shop solution provided by a trustworthy company that has the necessary expertise to connect sites all over the world. KSB chose GTT because of its international expertise and its comprehensive and flexible service offering. In addition to internet service, the Tier 1

provider offers a full range of cloud network services to meet all the requirements of running a modern IT infrastructure. Furthermore, GTT has proven experience in implementing an array of top-ranked SD-WAN technologies and sourcing best-fit regional connectivity around the world through the hundreds of local access providers it partners with.

Greater flexibility and security

The onboarding phase for KSB's switch from the previous MPLS network to the new SD-WAN platform began in September 2019. Over the next few months, GTT worked with KSB to develop a custom-fit solution to deploy SD-WAN across its sites. It was essential to build an agile and future-proof infrastructure that could grow in line with the company's requirements.

This initial phase was timed around the start of the COVID-19 pandemic, when many companies had to transform their digital processes entirely and switch to remote access in a very short time. KSB responded to the challenge and launched a pilot project together with GTT in June 2020 to provide 250 of its users with a secure and reliable remote workplace. With the help of integrated

two-factor authentication, the greatest possible security and a simple end-user experience were ensured for KSB employees. Within three months, the new solution was rolled out and operational. After a test phase, the prototype was scaled to the entire company size for all its sites.

The next step was to implement new security measures. At some locations, KSB cooperates with other companies in the form of joint ventures, and needs to control and secure access to its network. For this reason, the new infrastructure uses a managed firewall service from GTT. The security solution has been seamlessly integrated into the company's network, making it easy to add additional security measures or make changes. Combined with the underlying SD-WAN technology, the firewall service enables additional policy control options such as intrusion prevention, antivirus, application control, web filtering and sandbox executions. This feature also allows KSB subsidiaries to connect with each other within the necessary security parameters.



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Internationally networked sites and global service

In the meantime, the new SD-WAN-based network infrastructure has been implemented for almost all of the company's sites, with the remaining subsidiaries to follow by the end of 2021. With the GTT managed service, KSB can now access a much more flexible network platform — a decisive advantage for the pump manufacturer. "With our new managed SD-WAN network solution from GTT, we have more options to connect our sites the way we need to. Everything can now be controlled in a much more granular way," explains Wackermann. "SD-WAN technology gives us the flexibility and transparency we need to collaborate in an agile way at an international level and work with the technologies and platforms we want to leverage. For example, we use our tools to better integrate locally

recorded machine or warehouse data into our central ERP system."

This modern IT infrastructure supports not only the global group's internal communications and data flows, but also the company's own production processes. For instance, this applies to logistical processes with international aspects, such as the custom pump and valve solutions KSB delivers to its customers. For these, bespoke components are manufactured in different KSB plants and then assembled into the final product at a central location. The overall processing of these complicated special orders is now simpler and faster thanks to the new infrastructure. Shorter response and delivery times also increase plant availability for maintenance and repair orders for KSB customers.

THE CONNECTED FUTURE

Based on the successful implementation of the project and the reliable connectivity service from GTT, KSB is already planning further cooperation projects.

“The future of manufacturing relies on us being ever more connected, and working with our new, secure and flexible network from GTT is already opening up exciting opportunities for KSB and our customers,” Wackermann shares. GTT has proven itself to be the consultative partner we set out to find for our connectivity needs. We look forward to continuing to work with GTT to adapt and drive new advantages and benefits for our business, customers and partners through technology and innovation.”

“We are pleased to be able to partner with KSB on its way into the digital future,” shares Mark de Haan, senior vice president, GTT DACH & Benelux at GTT.

“We are here to support the company in an advisory capacity as well as in a tangible way with our global footprint and SD-WAN expertise. The requirements for smart factories and the Industrial Internet of Things are changing continuously, and we can expect numerous exciting innovations here.

ABOUT GTT

GTT is a managed network and security services provider to global organizations. We design and deliver solutions that leverage advanced cloud, networking and security technologies.

We complement our solutions with a suite of professional services and exceptional support teams in local markets around the world. We serve thousands of national and multinational companies with a portfolio that includes SD-WAN, security, Internet, voice and other connectivity options. Our services are uniquely enabled by our top-ranked, global, Tier 1 IP backbone, which spans more than 260 cities on six continents.

The company culture is built on a customer-first service experience reinforced by our commitment to operational excellence and continuous improvement in our business, environmental, social and governance practices.



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