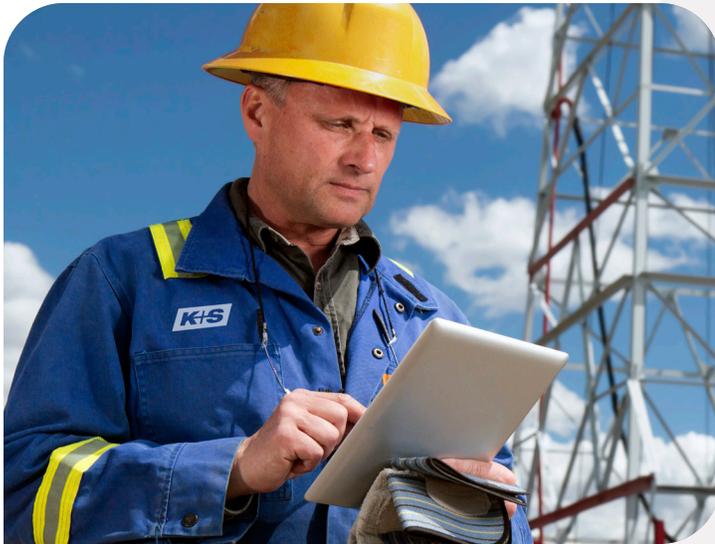


Creating a platform to boost productivity and enable Industry 4.0



The customer:

An independent minerals company operating globally

K+S is an independent, customer-focused minerals company with a commitment to sustainability. It supplies the agriculture, industry, consumer and communities markets, enabling farmers to provide nutrition for the world, providing solutions to keep industry operating, improving daily life for consumers and ensuring transport safety in the winter. More than 10,000 employees continually meet the growing demand for mineral products which are regionally sourced across two continents.

The challenge:

Remote locations and a centralised IT system

K+S works in a variety of locations, some of which are very remote. Providing connectivity in these places can be a challenge, but is essential because the company's data centre environment, hosting business-critical applications such as SAP ERP, is mostly in Europe.

Head of IT Platform and Operations at K+S, Christian Biegel, said: "The truck-loading processes at our plants, for example, are dependent on our central European IT systems. So if the roundtrip times are too long, the plant's production is affected."

Similarly, the explosives needed for mining must be carefully monitored throughout their lifecycle to meet EU regulations. The apps that handle this vital tracking and tracing are held in the company's central data centres in Europe, so this is also reliant on good network performance.

Recent inorganic growth had led to a patchwork of different IT providers worldwide. This made the network difficult and time-consuming to manage, with no overall transparency and visibility. Problems were often difficult to tackle as there was no single point of responsibility.

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— Christian Biegel,
Head of IT Platform and Operations,
K+S



Variable latency across parts of the network was affecting application performance. As K+S began to move more applications to the cloud, its infrastructure was becoming a barrier, so it needed to create a stronger foundation for its future IT and business plans.

“We decided we needed to find a single global partner for our worldwide Wide Area network, to create one area of accountability and avoid ‘finger-pointing’ between different providers if there were problems with network-to-network connectivity,” said Christian. “At the same time this would support our aim to unify our various IT organisations into one single entity.”

The solution:

A global, high-performance Adaptive Network

Lumen provides a scalable, high-bandwidth Adaptive Networking solution that flexibly supports K+S’s critical apps and data. This includes fully managed MPLS VPN services over 200+ sites across EMEA, North America, LATAM and APAC, along with additional Dedicated Internet Access. For smaller sites in some regions, broadband services and Adaptive Network Security provide secure connectivity.

Lumen also provides regional data centre services, while Application Performance Management offers application insight and visibility. Managed Riverbed appliances in some locations help to ensure maximum network and application performance, along with other project management and professional services.

“We chose to work with Lumen for our global network mainly because it provided the best match for our requirements, in terms of service levels, availability and geographical coverage,” said Christian. “Our US colleagues had also historically a very good experience with Lumen.”

The benefits:

Better performance for future digitisation, cloud and greater operational efficiency

Underpinning the journey to Industry 4.0

Like many other organisations in the sector, K+S is looking forward to a future with greater digitisation, as process automation, IoT-enabled devices and accelerated data transfer provide more efficiency, visibility and control of the industrial value chain.

“We have already started a pilot project to enable components that monitor the current status of mining machinery and pass this information to the central systems,” said Christian. “Ultimately this will provide us with a better view of the health of our machinery and will allow us to begin predictive maintenance programmes, helping to improve our productivity and efficiency. And for this, we need the stable, high-performance WAN platform that Lumen provides.”

Better cloud performance for better business

“Having a single, high-performance global network has had a very positive impact on latency

and round-trip times, which have improved significantly since we have been working with Lumen,” said Christian. “With the new architecture, we have many more local internet breakouts which means our cloud services, such as Office 365, run much faster than they did in the past and our staff can be more productive. The new high-performance internet access, smaller roundtrip times and services such as the Riverbed appliances in some plants mean that the business can consume these essential services in a faster and much more effective way.”

Visibility, control and stable global coverage

Greater visibility and control of network traffic, along with a single provider, allows for better traffic management and faster and more effective troubleshooting.

Lumen’s global coverage has also been a benefit for K+S. “Lumen’s ability to provide stable, high-quality services at all of our worldwide locations, even the remote ones, is a big advantage,” said Christian.