Client profile
The BMW Group, with 31 production and assembly facilities as well as a global sales network, is the world’s leading manufacturer of premium automobiles and motorcycles, and provider of premium financial and mobility services. The group includes brands such as BMW, MINI, Rolls-Royce and BMW Motorrad. In 2023, the company delivered more than 2.5 million vehicles. It operates 31 production sites in 15 countries and has around 150,000 employees worldwide.

Why NTT DATA?
• Expertise in managed infrastructure and network services
• Able to accommodate client-specific requirements
• Close cooperation with in-house IT teams while driving operational independence

"NTT DATA plays an important role within the BMW Group and has become one of our largest infrastructure service providers. Witnessing the company expertly navigate our network and server infrastructure, ensuring reliable operations, is truly impressive. NTT DATA not only offers us opportunities to optimize routine tasks but their experts regularly give us excellent ideas and suggest improvements, providing real added value.

BMW Group

Business need
• A partner to manage and operate the BMW Group’s global network
• Support a cloud-first strategy, while supporting existing on-premises infrastructure
• Highly stable and reliable network and compute environment

Solution
• Managed enterprise networks
• Infrastructure as a Service
• Automation solutions
• Advanced analytics

Outcomes
• Enhanced operational stability
• Deployment of 85% of all servers automated
• Automation enables 99% accuracy in diagnosing network errors
• Improved service quality
• Ongoing innovation
Business need

Partnering for a cloud-ready, global network

As a global company, the BMW Group relies on smoothly functioning IT infrastructure managed by various service providers. These providers handle day-to-day operations, ensuring high service quality and enabling BMW’s internal IT team to concentrate on strategic IT and transformation projects. Faced with increasingly demanding requirements and a shift in focus toward service processes, the BMW Group sought a new partner to operate their global network. This network connects the BMW Group’s sites to the cloud, suppliers and dealers worldwide through nearly 1,000 WAN connections, in addition to managing approximately 30,000 server systems at the BMW Group’s data centers and colocation providers.

The goal was to identify a business partner capable of meeting the rigorous standards for service quality and adhering to the BMW Group’s stringent process standards. The selected IT service provider needed to demonstrate high competence in technology, delivering services independently without relying heavily on internal IT teams. Moreover, the BMW Group follows a cloud-first strategy, and their new partner had to actively support this approach for the server environment.

The service provider and solution had to align with the BMW Group’s requirements as an automobile producer as well as the requests of the internal IT team. In addition, the network had to be highly stable and reliable as any disruptions to their supply chain have significant financial implications. Ultimately, the BMW Group chose NTT DATA as their partner for both the network and server environment.

Solution

Network automation enables intelligent decision-making

To ensure consistently high service quality, it’s crucial that processes are managed using proven methods. Facing the challenge of aligning high-quality technical service outcomes with stringent process discipline in the BMW Group’s network operations, NTT DATA developed various automation solutions. These solutions, rooted in the core components of a managed service (process definition, standard operating instructions, and process control), address tasks such as resolving network incidents, adjusting firewall rules, and deploying both physical and virtual servers.

Our automation solutions provide technicians with essential information for problem-solving, specific decision support and instructions for ongoing processes. We meticulously monitor service process instances, offering context-related information to assist employees and ensure compliance with process specifications. The orchestration of operations involves combining pertinent data from customer-specific sources, known as SmartOps.

This approach allows NTT DATA to efficiently handle high workloads, such as numerous firewall requests from external partners or setting up a substantial number of new servers for a project. Importantly, this is achieved without compromising service quality or delaying other activities.

Our technical expertise in network monitoring allows us to deliver a deeper, context-related analysis of BMW’s systems compared to standard procedures. This enables the collection and evaluation of more information, contributing to predicting error causes with almost 99% accuracy during the automatic pre-analysis of tickets. This significantly reduces the time technicians spend processing requests and minimizes manual labor.

Similar success is observed in server management, with the establishment of new standard servers automated up to 85%. Consequently, the BMW Group can now deploy new systems, virtually at the touch of a button.
Ensuring a reliable network and server infrastructure is crucial for us. So, relying on highly experienced and competent IT service providers is nonnegotiable. NTT DATA fits the bill perfectly. Their commitment to delivering quality service and adherence to our stringent process specifications is invaluable. We needed someone who could manage even the most challenging tasks, taking the burden off our internal IT teams and freeing up resources for other critical IT projects.

Outcomes

Network and infrastructure that contributes to innovation
Our partnership gives the BMW Group the peace of mind that their mission-critical network and server infrastructure is in good hands. Across 40,000 network devices, 260,000 ports and 30,000 servers, we have exceeded service quality expectations, enhanced operational stability, and have contributed to ongoing innovation.

Improved service quality
Leveraging automation improves the efficiency of network operations, freeing technicians from repetitive tasks. With more time for knowledge-building and skill acquisition, technicians can deepen their understanding of the BMW Group's systems, continually improving service quality.

On-premises data center with cloud-like efficiency
New servers can be deployed immediately in the BMW Group's data centers, creating an on-premises infrastructure that feels almost as dynamic as the cloud. This agility significantly reduces lead times, especially when new systems are required for projects or application testing. This is an important step forward in the BMW Group's cloud-first strategy.

Innovations in network and server infrastructure
Innovative solutions for standard tasks enhance service quality in highly repetitive processes. Working together with the BMW Group enables us to explore new areas, such as cloud network management and server cloud management, building on a foundation of very high operational stability.