CUSTOMER STORY

A FUTURE-PROOF NETWORK

Computacenter converts network components to dual stack for BMW Group

SERVICES
- Core IT Infrastructure
- Design & Build Services
- Integration & Migration Services

USER EXPERIENCE
- Enhanced agility and mobility
- Improved user satisfaction
- Improved access to information

BUSINESS IMPACT
- Boosts business agility
- Strengthens competitive advantage

OBJECTIVE

The BMW Group is expanding its worldwide network to include the new internet protocol v6 (IPv6). This is essential for the company due to the constantly growing demand for IP addresses, which can only be met with the new contingent of IPv6 addresses. Other developments, such as Industry 4.0 and the internet of things, were also key factors driving the BMW Group to adopt this new technology. Millions of vehicles are to be equipped with IPv6 addresses in order to implement innovative new features and enhance the company's competitive position.

SOLUTION

Computacenter implemented the worldwide rollout of dual stack on BMW's network components in accordance with the company's specifications. To do this, the IT service provider developed a software solution to not only automate and accelerate the rollout process but also ensure a consistently high quality. The project was led and completed to BMW Group's schedule by Computacenter's central project management office.

OUTCOME

With the transition to dual stack complete, BMW Group is no longer limited in terms of allocating new IP addresses, resulting in a future-proof solution. Computacenter's comprehensive expertise in network technology ensured a smooth rollout across all of the company's international locations, with minimum impact on day-to-day operations.

OBJECTIVE

Getting the infrastructure right

As part of its IPv6 infrastructure project, BMW Group decided to introduce the v6 internet protocol across its entire network infrastructure, with an estimated rollout phase of two years. Computacenter configured several thousand components worldwide, including LAN switches, WLAN components, firewalls, VPN gateways and content switches, to internet proxies.

The project was implemented across several hundred locations worldwide and comprised components made by a range of different manufacturers. While the main changes were successfully implemented remotely, accessibility and redundancy tests were carried out on site at selected locations once the changes had been deployed.

The company wanted to work with a service provider, from project planning and management through to consulting services for implementing addressing model in accordance with BMW Group's standards. This also included working with WAN and internet service providers for the appropriate conversion of WAN and internet connections to IPv6.

> With this new solution, BMW Group now has virtually unlimited scope in terms of the number of IP addresses it is able to allocate, giving the company the flexibility to adapt to future requirements.
>
> **Stefan Balster,**
> **Account Manager, Computacenter**

SOLUTION

Centralised conversion with on-site tests

The BMW Group selected Computacenter as main contractor for the project due to its expertise in the field of IPv6 technology, including experience in the rollout process. Computacenter was also able to draw upon its knowledge of BMW Group's network infrastructure and specific requirements though working with the company on other projects.

Thanks to software provided by Computacenter, it was possible to automatically check whether the hardware or software of individual network components already supported IPv6 and identify which components required a hardware replacement or software update. A toolbox was also used to carry out the dual stack configurations semi-automatically, as well as to partially automate the rollout process.

Computacenter set up a central project management office in Munich to efficiently coordinate the rollout worldwide. Specially trained network experts were able to remotely implement most changes from Germany and Computacenter conducted on-site tests at selected locations worldwide (Germany, USA, China, Spain, Sweden) in order to test the critical infrastructure.

Computacenter provided a comprehensive approach and range of services throughout the project, ranging from design of the IPv6 addressing model and test scenarios to full project management, including third party management, and reporting.

OUTCOME

A stronger relationship built on long-term collaboration

With Computacenter, BMW Group has found a partner who has come to know and truly understand the requirements of the car manufacturer as a result of many years of working together. By taking on this worldwide conversion project, Computacenter was able to relieve BMW Group of a substantial burden.

Following the successful completion of the project, Computacenter handed over management of the new infrastructure to the car manufacturer. It now has one of the most advanced networks in the industry and will be able to meet volume requirements for IP address requirements in future.

ABOUT BMW GROUP

The BMW Group is a leading German car and motorcycle manufacturer based in Munich. The company's range of products includes the entire BMW car and motorcycle brands as well as Mini and Rolls-Royce. With an annual turnover of 94.2 billion euros and approximately 125,000 employees, the BMW Group is one of the largest companies in Germany. The group's annual production of 2.36 million vehicles in 2016 made BMW the 15th largest car manufacturer in the world.

MORE INFORMATION

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