Cloud migration: Microservices to the max

NTT DATA takes charge of the migration of the current architecture of microservices of a German automobile manufacturer making use of Amazon Web Services (AWS). In this way the DevOps experts improve the scalability and flexibility at the same noticeably reducing operational costs.

The challenge

An internationally operating German car company so far runs its microservices architecture on its own servers, i.e. "On-Premises". The environment based on Kubernetes has offered a stable solution. But the constant creation of new applications and a growing architecture require the continual growth and maintenance of the IT infrastructure. Managing it locally drives up operational costs, slows down the scalability of microservices and prevents flexible adaptation of the necessary resources according to usage. An alternative solution is needed that reduces costs by making it possible to pay only for the server capacity required at the time. Additionally, the new solution should have greater scalability.

"Through our ample experience in the cloud and services we have brought this driver of innovation in mobility much closer to its goal of digital transformation."
The solution

NTT DATA experts conducted a thorough review of the enterprise and application architecture in close collaboration with the customer. Based on the results, the project team as a whole decided to use the Amazon Web Services (AWS) cloud platform from now on. NTT DATA’s DevOps specialists then select the required AWS cloud technologies, define the migration roadmap, implement the infrastructure (e.g., cluster and databases), adapt the applications for connection to the AWS resources via SQS and S3, and define the CI/CD processes. In addition, the team will install important supervision and alarm features through CloudWatch and Lambda.

The benefits

By moving to the AWS Cloud and commissioning NTT DATA’s Managed Services, the primary goal of reducing operating costs for servers, storage space and more is quickly achieved. In this way, the automotive manufacturer can reduce costs in this area in total by approximately 55% compared to the local environments before migration. Additionally, costs are also reduced though the development and more rapid implementation of features. At the same time, the new environment enables the rapid scaling and even dynamic autoscaling thanks to ECS Fargate.

All this with a multiplication of the computational resources that were available in the On-Premises environment.

“Thanks to NTT DATA and the AWS cloud, applications have a noticeably more reliable availability and better scalability. As well as this, we are already saving at least half of operating costs.”

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About NTT DATA
NTT DATA – part of NTT Group – a Trusted Global Innovator of IT solutions and businesses with its head office in Tokyo. We support our customers in their transformation through consulting, industry solutions, Business Process Services, IT modernization and Managed Services. With NTT DATA, customers and society in general can advance with confidence towards the digital future. We work towards the long-term success of our customers and combine our international presence with advising local customers in more than 50 countries.

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