



AllCloud SaaS Builders Program in Action

A Secure Migration via SaaSification to AWS Marketplace

About customer:

Medium-sized companies and corporations rely on the standard software of the Munich solution provider Can Do to plan their projects and portfolios. With Can Do, they always have the right employees at their disposal. The app-based solution checks in parallel whether sufficient capacities are available and whether these employees have the required skills. Can Do's AI supports users in handling complex planning situations and simulates future projects in real time.

Background:

Can Do wanted to migrate its current on premise solution to a SaaS offering to be sold as an enterprise-grade business application on the AWS Marketplace.

The deciding factor for Can Do in choosing AllCloud as its AWS partner was its years of AWS experiences but even more so its expertise in security including its status as an AWS Security Competency Partner.

Due to customer demand to provide customized features at a faster pace, AllCloud's scope of work not only included the secure migration of Can Do's SaaS offering atop the AWS Marketplace but also the demand for Continuous Integration and Continuous Delivery (CI/CD) which would streamline the AWS deployments through DevOps automation and orchestration tools.

Challenges:

Security

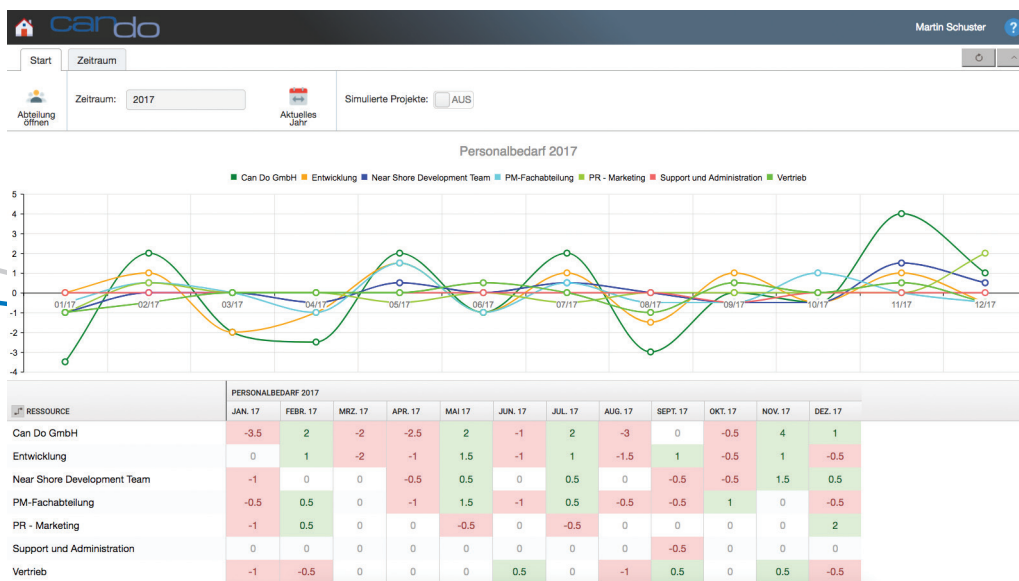
Can Do's software relies heavily on personal data and employee skills. It was absolutely imperative that this information be secured at the highest standard to ensure it wouldn't be stolen or get lost.

Multi-tenancy

Another mandatory aspect in the success of deploying Can Do's SaaS offering to AWS was the issue of multi-tenancy. They wanted to use their software with very minimal changes but also needed to prepare it for its new architecture and environment.

Database

The Database technology uses multi-tenant mysql and there were challenges related to making the application's upgrade mechanism able to update the DB schema in the process as well as to properly scale the DB in order to accommodate a growing number of customers with various traffic demands in the shortest amount of time.



Solutions:

Together with Can Do, AllCloud discussed the use case in depth, and provided a detailed architecture and workplan which included several phases. For each phase a detailed statement of work was issued, explained, discussed and agreed upon with Can Do. In addition, AllCloud calculated an AWS cost estimation based on Can Do's business plan.

To address Can Do's strict security needs, AllCloud deployed its homegrown AWS Enterprise Landing Zone, which is a secure and automated framework based on AWS best practices and years of AllCloud experience with cloud deployments. The Landing Zone setup supports quick and easy migration of resources to AWS.

The multi-tenancy was achieved using AWS Elastic Container Service and running each customer's application as a task with dedicated containers per client under a shared load balancer and routing the traffic based on HOST header. The ECS cluster scales automatically based on the CPU and memory reservation. This architecture configuration enables different client workloads on the same cluster as they can be provisioned with different reservations.

For Can Do's database, AllCloud recommended AWS Aurora Serverless which scales automatically based on the actual demand derived from the number of tenants and client activity.

The entire infrastructure was built using code, as automation was necessary in order to speed-up provisioning of new environments for the influx of new Marketplace customers.

Benefits:

Because Can Do is meeting market demands at a very quick rate, it is essential that their new SaaS offering performs optimally at all times, as well as that they are able to continually support their customers worldwide. Can Do's SaaS solution is achieving this and is available worldwide via the AWS Marketplace, opening up a whole new revenue channel and at the same time providing special customized features (i.e. build-in JIRA interface) at a faster rate of innovations.

Today Can Do is able to:

- Deploy new customers in one click
- Update to the application in one click
- Remove existing customers in one click

"We are convinced that our listing on the AWS Marketplace was an important step towards the rapid deployment of our software," comments **Jens Steinbicker, Managing Director of Can Do GmbH.**

"Companies worldwide can access our project and resource management apps, test and purchase them user-based, easily and in a highly secured environment thanks to AllCloud's expertise in helping Can Do transform to a SaaS-based business."

Summary:

Being one of the first enterprise-grade business applications within the AWS Marketplace helped to win new customers worldwide and created a new revenue channel for Can Do. AllCloud's AWS Enterprise Landing Zone and expertise around SaaS deployments provided Can Do with the ability to offer its customers a way to easily trial services and use their software in a highly-secured environment.
