

CUSTOMER: TTS KNOWLEDGE PRODUCTS GMBH

## tecRacer creates AWS multi-account environment for tts GmbH

With more than 350 employees at 13 locations, tts GmbH supports national and international clients in their digital transformation. In its three business units “digital adoption solutions”, “learning architects” and “digital HR experts”, it develops customized solutions for its customers. tts supports people in the process of change with new forms of learning and technologies so that companies can achieve sustainable added value and competitive advantages. tts launched its first Amazon Web Services (AWS) account back in 2013. tts has now commissioned tecRacer as a Premier Tier Services Partner in the Amazon Partner Network (APN) to set up a managed and completely restructured AWS Multi Account environment.

### What was missing: Structure, central administration, security and compliance

The previous system had reached its limits: There was no centralized governance of the AWS environment. Accounts were configured and named individually and inconsistently, and customers worked in various accounts. The effort involved in onboarding and offboarding employees was high because there was no traceable and automated user management. In some cases, there were several customer systems in one. There were limits to the AWS Identity and Access Management (IAM) roles in complex authorization management. In addition, the security risk increased as many applications were running in one account. The infrastructure costs were unnecessarily high due to multiple AWS network resources such as AWS NAT gateways. There were neither notifications from AWS in the event of an incident, nor centralized reporting on security incidents, because the AWS environment was not included in tts’ Information Security Management System (ISMS).



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### New sophisticated structure: centralized, simplified and standardized

First, tecRacer created a naming concept for account structures and a landing zone concept based on AWS Control Tower. tts benefited from tecRacer’s extensive experience in similar projects. User management was centralized, simplified and standardized via AWS IAM Identity Center and the dialog-based Microsoft Azure Active Directory (AD) service. tecRacer restructured the accounts within the AWS organization, which significantly reduced the effort involved in onboarding and offboarding. Authorizations can be better controlled and manual administrative tasks have been reduced. The accounts in the projects were restructured according to the “one account per customer” principle: Each customer should have their software in their own AWS account.



### Network concept for a secure AWS environment at lower costs

At the same time, investments were made in the security of the AWS environment. compliance features have also been centralized. This significantly reduces the extent to which an environment is compromised. The new structure not only led to an optimization, but also reduced the costs of the infrastructure compared to the previous operation. The centralized network concept costs are significantly reduced because fewer IPv4 addresses, NAT gateways and load balancers are in use. tecRacer designed and implemented an AWS Identity and Access Management concept as well as the entire network concept. By adapting the AWS landscape to the ISMS concept of tts, notifications are sent to the ISMS and dashboards and reports are set up in AWS. The Security features such as GuardDuty and Security Hub can be used under the governance of the AWS Control Tower.

### Targeted use of AWS tools

The AWS Control Tower was used to set up and manage the AWS Multi Account environment in order to deploy applications quickly and easily. For cloud development, tecRacer used the AWS Cloud Development Kit (CDK) with TypeScript as an infrastructure as code tool. Security and compliance are ensured by using the AWS Security Hub. AWS security checks are automated and security alerts are centralized. The configuration tool AWS Config continuously assesses, checks and evaluates the configurations and relationships of all resources. Internet access has also been centralized. The new network concept now also enables the creation of a concept image.

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**Contact person at the customer:**

André Wolf, Head of Cloud Service Center | Lead Software Architect, Heidelberg :

*"With our new central AWS environment, we benefit from tecRacer's many years of experience in several ways: the sophisticated new network structure is particularly secure thanks to greater control. And at reduced costs!"*



**Project goals**

- Establishment of a managed and structured AWS multi-account environment
- Centralization of security and compliance features for an upcoming ISO recertification
- Centralization of user management via SSO and Microsoft Azure AD
- Structuring of the AWS accounts

**Project duration**

June to September 2023

**Project services from tecRacer**

- Design of a landing zone concept based on AWS Control Tower
- Design and implementation of an Identity and Access Management concept
- Design and implementation of a new network concept
- Activation of AWS security and compliance services
- Reduction of infrastructure costs

**About tecRacer**

tecRacer, based in Hanover and with eight other locations in Duisburg, Hamburg, Frankfurt, Munich, Mannheim, Vienna, Geneva, Zurich, and Lisbon, offers AWS (Amazon Web Services) consulting, training, managed services, and project management from a single source - seamlessly integrated across the entire cloud lifecycle - from strategy to implementation and operation.

The strategy remains the clear focus on Amazon Web Services. Here, tecRacer has been recognized as a leader in the ISG Provider Lens 2022 AWS Ecosystem Report for the third time in a row. And the focus on AWS proves tecRacer right: Since 2019, tecRacer has received the "AWS Consulting Partner of the Year DACH" award three times in a row. The owner-managed company, which has been recognized as a top employer for SMEs, now has more than 150 permanent employees, has trained more than 12,000 participants in AWS, and has already successfully implemented hundreds of AWS consulting projects.

You can find more information at [www.tecracer.com](http://www.tecracer.com) or contact us at [sales@tecracer.com](mailto:sales@tecracer.com).

