

## Success Story: Biolux Technology GmbH



**Biolux Technology GmbH was founded in 2020 by Marcel C. Pordes and Herbert Lohner. In 2021, the company acquired the assets for OrthoPulse®, the leading product for accelerating tooth movement in orthodontic treatment.**

### **Project Challenge**

Biolux Technology approached tecRacer Austria GmbH (formerly KaWa commerce) with the goal of relocating their IT infrastructure — hosted on Windows servers — to Europe. This was intended to speed up data processing and retrieval for requests primarily from Europe and the USA, reducing latency. Personal data was to be processed within the EU in compliance with GDPR. Additionally, managed web hosting services were requested.

### **Solution**

A joint AWS Well-Architected Review revealed several opportunities to improve speed, security, and cost efficiency.

To reduce data retrieval latency, moving the server infrastructure to a closer location was the clear solution. We first migrated existing AWS resources from Singapore to Frankfurt. Locally installed MSSQL databases were also migrated to AWS RDS MSSQL.

The Django applications, previously hosted on outdated Windows servers with high licensing costs, were migrated to a containerized Linux environment and now run on AWS ECS Fargate.

For faster and simpler infrastructure provisioning and deployment, we used the AWS Copilot CLI. We also replaced RabbitMQ with AWS SQS, a fully managed AWS service, and replaced the Twilio communication service with AWS-native services for email (Amazon SES) and SMS (Amazon SNS) — with AWS taking care of availability and security.

Finally, AWS CloudFront was set up as the CDN and SSL termination layer.

Biolux received a comprehensive AWS full-service package from tecRacer — starting with the initial Well-Architected Review, through AWS Cloud Migration and optimizations, to the final AWS Managed Webhosting setup. This reduced operating and infrastructure costs, improved performance, and maintained the scalability and flexibility needed for future initiatives.

## Customer Contact:

### Statement von Herbert Lohner, Managing Director/COO

*"Working with tecRacer has been a very positive and efficient experience for us as a small company! A well-structured project with a clear timeline that is actually met is exactly what you hope for — and exactly what you get with tecRacer. Add to that great people and a collaborative partnership from day one! Thank you! The next projects are already in the pipeline."*

## Services Delivered by tecRacer:

- AWS Well Architected Review
- AWS Cloud Migration to Europe
- AWS Optimizations
- AWS Managed Webhosting

## Technologies Used:

- Amazon CloudFront
- Amazon CloudWatch
- Amazon Elastic Container Registry (ECR)
- Amazon Relational Database Service (RDS)
- Amazon Route 53
- Amazon Simple Email Service (SES)
- Amazon Simple Notification Service (SNS)
- Amazon Simple Queue Service (SQS)
- Amazon Simple Storage Service (S3)
- Amazon Virtual Private Cloud (VPC)
- Application Load Balancer (ALB)
- AWS CloudFormation
- AWS Copilot
- AWS Fargate
- AWS Identity and Access Management
- AWS Tools And SDKs
- Bitbucket
- Django
- Docker
- GitHub

## About tecRacer

tecRacer is on its way to becoming Europe's leading AWS Thought Leader. Working closely with AWS, tecRacer helps organizations leverage cloud innovation, generative AI, and digital sovereignty as competitive advantages — without compromising on security or regulatory responsibility.

Founded in 2006, the company employs around 120 people across Germany, Austria, and Switzerland. As an AWS Premier Tier Services Partner and Advanced Tier Training Partner, tecRacer guides organizations from their first cloud idea through to 24/7 operation of their cloud environments.

Learn more about our team, our values, and what drives us at [www.tecracer.com](http://www.tecracer.com) or get in touch at [sales@tecracer.com](mailto:sales@tecracer.com).

