

More resilient cloud infrastructure solution thanks to Trustsoft



Aevi's mission is to build a more open world, where anyone, anywhere, can take or make any kind of payment. Open. Device-agnostic. Solution-independent. Aevi's cloud-based platform lets payments and transaction data flow across all channels and consumer touchpoints. As the in-person payments expert, Aevi connects digital and in-person channels, orchestrates checkout flows, and sets transactions data-free. Today, the award-winning FinTech Aevi operates across Europe, Australia and the US with offices in London, Prague and Paderborn.

Setting payments free

Database migration assessment and POC replatformization

Aevi currently runs multiple database instances, in various staging environments and regions - all using Oracle EE licensing. There are two types of databases - mission-critical transactional database and less-critical support database. The transactional databases have an extreme requirement for availability, minimum lag time and durability of data. The support database on the other hand needs to be cross-regionally replicated because it utilizes a synchronization mechanism that needs to be migrated to a cloud as well. Therefore, any cloud solution must take these requirements into account and propose two very different strategies.

What we did

The Trustsoft team assessed the current on-prem database layer and designed and tested the new AWS cloud-based solution that would cover all requirements and would be stable and ready to support any future Aevi's ventures. The databases are crucial components of the Aevi's mission-critical systems that are frequently subjected to highly variable heavy workloads (up to 1000 requests per second). Our solution reflects a special need for a speedy, scalable, and resilient architecture that is capable of cross-regional backup, data synchronisation and disaster recovery. In order to bring Aevi's customers the best connectivity with minimal lag times, the solution we proposed is now deployed in European, the North American and Asian AWS regions. Our team also proposed various metrics and KPIs to thoroughly test the proposed solution. In cooperation with the client, we built a POC (proof-of-concept) environment into the production on-prem environment in AWS and made sure that it can handle presumed traffic. During this phase of the POC, our team also re-platformed the critical database into the open-source PostgreSQL and also re-platformed the supporting database for Oracle SE licensing. The total value of savings from changing licenses is \$ 1.5 million per year.

Before



- LIMITED POSSIBILITY OF INNOVATION
- DEMANDING USER SUPPORT PROCESS
- DATA BACKUP PROBLEMS
- LARGE FINANCIAL COSTS

Now



- SAVING \$ 1.5 MILLION A YEAR
- UNLIMITED POSSIBILITY OF INNOVATION
- EASIER USER SUPPORT PROCESS
- AUTOMATIC BACKUP AND DISASTER RECOVERY
- SYSTEM STABILITY DURING HIGH DEMAND AND PEAKS


ORACLE


AWS DMS



Amazon Aurora



AWS CloudWatch

CASE STUDY

EPH – More resilient cloud infrastructure



EPH is a Czech energy group that operates comprehensive energy services (lignite mining, energy production, gas and electricity supply and storage) throughout Europe. It currently employs almost 25,000 people and includes more than 70 companies. EPH operates top services for its clients, but this requires a great system that connects all companies, facilitates the management of requirements and data, and also brings maximum security both in terms of cyber security and within the GDPR.

Assignment

The main task was to unify the fragmented approach to the management and use of the AWS environment of all companies in the EPH group and compliance with the security of individual AWS accounts.

Opacity and the complicated determination of total operating costs were also problems. Thus, there was a need for a centralized approach, consolidation of invoicing, and ensuring standardization of security throughout the organization using global security rules - Guardrails.

Solution

We designed and implemented a solution based on the organization of AWS accounts, which enables consolidated invoicing along with easy access to up to date information on expenses for the entire group. In addition, they can be easily filtered for individual companies and you can go down to the smallest detail.

Using AWS Quick Sight, we created a BI layer that provides dashboards with clear information filtered by criticality and recipient status. Using the AWS Control Tower, our team has also designed and built a secure and standardized environment that makes it easy to set up new AWS accounts in accordance with EPH's global security policies.

We have enabled a centralized view of spending and, thanks to the consolidation of payments, the acquisition of corporate discounts at AWS, which applies to all companies.

Before



- THE INDIVIDUAL AWS ACCOUNTS WERE NOT LINKED
- A DIFFERENT INFRASTRUCTURE IN EACH ACCOUNT
- INABILITY TO MONITOR COSTS CENTRALLY
- ACCESS PROBLEMS
- SECURITY DID NOT MEET EPH REQUIREMENTS

Now



- INVOLVEMENT OF AWS ARCHITECTS IN THE FURTHER GROWTH OF INFRASTRUCTURE
- INTRODUCTION OF AWS PROGRAM FOR CLOUD MIGRATION
- OBTAINING A CORPORATE CONTRACT WITH AWS AND ENTITLEMENT TO DISCOUNTS
- CENTRALIZED AWS ACCOUNT THAT LINKS ACCOUNTS
- STANDARDIZED INFRASTRUCTURE
- EASY FILTERING AND ACCESS TO DATA AND DOCUMENTS
- EASY TO SET UP NEW ACCOUNTS
- AWS SERVES AS AN ALTERNATIVE ENVIRONMENT TO AZURE - VENDOR LOCK REMOVED

