

OGE is heading for the cloud



„With GAS-X, we have moved our first major business-critical core application to the cloud and are benefiting from the advantages that the cloud offers. Thanks to Sopra Steria, the cloud transformation was completed quickly, successfully and on time & budget.“



Ralf Werner,

Head of IT-Management,
Open Grid Europe GmbH

OGE, one of Europe's leading transmission system operators, is moving to the cloud. Sopra Steria supports the journey, running the processes for energy calculation, allocation and billing in its own cloud solution.

Strategic arguments for cloud computing

Open Grid Europe (OGE) is one of the leading transmission system operators in Europe and one of the biggest gas grid operators in Germany. The company is continually working on improving its processes and is spearheading the technological evolution in the market. To increase efficiency in IT operations, the transmission system operator decided to make the switch to cloud computing for as many of its processes as possible. As one of the first big steps, the GAS-X application was moved to GX@Cloud, including all the components for energy calculation, allocation and billing. GX@Cloud is a Sopra Steria cloud solution hosted by Amazon Web Services (AWS). As a result, OGE now enjoys all the benefits of a cloud environment, including enormous flexibility and unrivalled infrastructure availability. At the same time, the gas grid operator relies on the expertise of Sopra Steria's consultants and thus benefits from the advantages of a one-stop solution.

Key points



- 24/7 processes:
All IT processes of the core application ensure an hourly rhythm for calculations. GX@Cloud easily fulfils this major requirement.



- Simple migration:
GAS-X is integrated into OGE's IT landscape via various interfaces. The connected systems did not need to be adjusted.



- Huge data volume:
The database contained multiple terabytes of data. That data was moved to the cloud with minimal downtime – no data was lost or corrupted.



- Focus on core business:
The service and governance processes that were previously carried out by OGE's internal IT and hosting provider are now handled by Sopra Steria on its own cloud platform.

Challenge

These days, it is not much of a challenge to move several terabytes of data from an important production application to the cloud. However, this changes if the application must be available for calculations every hour – as is the case with OGE. Such a high-availability mode does not allow for prolonged downtimes. In addition, tens of thousands of calculations are performed every hour, the results and documentation logs of which generate more than 100 gigabytes of new data every day.

The challenge was therefore to minimise the downtime required for the cloud migration to ensure that OGE could serve the market processes again as quickly as possible. Additionally, the database had to be replicated to the cloud during ongoing operations. This required a tailor-made solution. The cloud provider's standard resources could not handle the volumes in the required timeframe.

Our solution

Sopra Steria provided the entire GAS-X application with identical versions in the cloud. GAS-X was already fully prepared for cloud operation. The software is based on web technologies, provides a front-end based on HTML/Javascript and web services for communication. The Sopra Steria specialists also built a dedicated, scaling replication solution based on the database software. This solution can handle enormous

amounts of data without affecting operations. After the data replication was completed, Sopra Steria switched the interfaces to new service addresses. Acceptance of the cloud solution was performed as a "last look" by OGE's expert users.

Since the move, OGE has been using GAS-X in the cloud – operated by Sopra Steria – without any technical interruption.

How we worked together

The project team consisted of OGE and Sopra Steria staff, who were supported by experts from the cloud provider and the previous hosting partner. Migrating a system of this magnitude and operational frequency on the fly required maximum commitment and close coordination. All tasks besides transition had to take a back seat.

The deep involvement of all parties, the trust in the team, the agile approach and the focus on the key points minimal downtime and data replication were the decisive factors in keeping the project on schedule and within budget.

The effects of the Corona pandemic and the associated remote activity of all participants were cushioned by absolute professionalism – without any disadvantages in the project and without any influence on the results.

Results and benefits

OGE now enjoys all the benefits of a state-of-the-art cloud computing environment. Since the migration, the gas grid operator can rely on software and services from a one-stop provider. The company benefits from seamless operation of its GAS-X solution and highly efficient incident handling. Expert users and IT managers work more efficiently because now there is only one contact person and clear responsibility through one supplier.

gas-x¹®

About Sopra Steria

As a leading European management and technology consulting company with 46,000 employees in 25 countries, Sopra Steria supports its clients in driving the digital transformation and achieving concrete and sustainable results. Sopra Steria offers comprehensive end-to-end solutions including consulting, digitalisation and software development that make large companies and government agencies more competitive and efficient – based on in-depth industry expertise, innovative technologies and a collaborative approach. The company puts people at the centre of its activities to take advantage of the vast potential of digital technologies and creating a positive future for its customers.

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