[Case study]

Aiven platform **underlies over 1 million** OVO smart meters

OVO case study

Founded in 2009, OVO is the leading independent energy company in the UK, offering an unparalleled scope of digital energy services, solutions and technologies to its customers. OVO redesigned the energy experience to be fair, effortless, green and simple for all customers. Today OVO is a progressive energy company striving to deliver clean, affordable energy for everyone.

Overview

OVO have installed over 1 million smart meters in customers' homes. The smart meter data is used for a variety of insight, analytics and experience elements, including a disaggregation process that determines the energy usage of different appliances in customers homes. The applications to do this require an underlying robust and reliable data architecture.

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>
> Jon Dodkins
> Head of Technology

The challenge

Head of Technology, Jon Dodkins, explains what's needed to ensure customers have the best experience possible:

"It's vital that the reactive architecture we're building is flexible, extensible and able to scale rapidly."

OVO needed a fault-tolerant, performant messaging system that was up to the task—Apache Kafka. However, Kafka is infamously difficult to deploy and manage, which is why they decided to look for a managed provider.

Given the scope of ambition for customer service, the chosen provider also needed to offer services with which they could build a, "bespoke managed package," one that was easy to implement and reliable.

The solution

Being able to deploy a Kafka cluster in the cloud and region of OVO's choice made placing Aiven Kafka at the heart of their architecture a straightforward process.

The next logical step was to integrate tools with Aiven Kafka that allowed OVO to monitor and set alerts for essential Kafka metrics, something made possible in simply a few clicks through the Aiven metrics integration.

Aiven InfluxDB receives Kafka telemetry data and pushes it to Aiven Grafana. Because the metrics integration is a packaged solution, it also comes with premade dashboards which support OVO further.

To provide better log searchability and retention, the Aiven logs integration uses Aiven Elasticsearch to receive service logs from their Kafka testing and production environments.

The outcome

OVO's current Aiven Kafka implementation is enabling a period of scale for them as they continue to add new services. Because of Aiven's flexibility, they're also able to experiment with use cases, such as with message retention periods.

Using the Aiven platform also allows the OVO team to deploy their developer resources toward developing and maintaining their applications and business logic instead of managing software infrastructure.

OVO Energy has an ambitious mission that uses technology to help it enhance its service offering to customers, a mission that requires massive architecture. Helping to power their mission is the Aiven platform.