[Case study]

Aiven platform underlies over 1 million OVO smart meters

Overview

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

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

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Jon Kodkins
Head of Technology

The challenge

Head of Technology, Jon Dodkins, explains what is needed to provide customers with 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, high-performing messaging system that was up to the task—in other words, Apache Kafka. However, Kafka is infamously difficult to deploy and manage, so they decided to look for a managed provider.

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

Uses: Kafka, Elasticsearch, PostgreSQL, Redis, InfluxDB & Grafana **Cloud:** GCP
Industry: Energy **Year founded:** 2009 **Company size:** Over 1000 employees

The solution

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

The next logical step was to integrate tools with Aiven for Kafka that allowed OVO to monitor and set alerts for essential Kafka metrics. This was simple to do, needing only 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 log integration uses Aiven Elasticsearch to receive service logs from their Kafka testing and production environments.

The outcome

OVO's current Aiven for Kafka implementation is enabling a period of upscaling for them as they continue to add new services. Because of Aiven's flexibility, they're also able to experiment with use cases like 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 them enhance their service offering to customers, a mission that requires massive architecture. Helping to power their mission is the Aiven platform.