Logistics

Goldenore
DATA - DRIVEN ARCHITECTS

Strengthening Privacy Protection Through Secure Data Anonymization at a Leading International Parcel Delivery Company

Customer

Our client is a European delivery network with international reach and one of the leaders in parcel services, handling domestic and international shipments. It is one of the most recognizable delivery companies in Poland, performing all types of courier shipments, both standard and dedicated.

Business challenge

The client needed a solution to anonymize customers' personal data to meet data protection regulations and ensure information security. The goal was also to ensure the confidentiality of customer data in the context of the organization's analysis and testing of new IT system functionalities.

Solution

- A solution integrated with Apache Kafka systems was implemented, using a multi-threaded Java application (with horizontal scaling capabilities) and with HA standards.
- A Redis cache was used to store key-value pairs, ensuring fast performance and access to data, as well as the ability to recover data in case of failure. At the same time, ensured no collisions in anonymized values.
- Nested structures such as lists and multi-level maps have been supported, with the ability to defining custom business rules.
- It has been made possible to load any dictionaries for anonymization, such as names, surnames or company names, etc., allowing for flexible customization.
- Uniqueness and repetitive mapping has been ensured, ensuring that each unique string input is consistently anonymized into a specific value according to the rules of mapping.
- A mode for masking individual values in a message has been enabled.

Results

- High performance of anonymization processes - up to 80,000 messages per second.
- Real-time data anonymization without affecting system performance.
- Full containerization of the solution, which allows for instant deployment and flexible parameterization of the application.
- Guarantee of personal data protection in accordance with international privacy standards.
- The risk of personal data leakage was minimized.
- High scalability of the solution allowed its effective use in the growing client infrastructures.

What our clients say about us:

Goldenore always tries to fulfill the entrusted tasks and are open to possible changes in priorities during the project. In critical moments, Goldenore dedicates additional resources to meet the project schedule.

Tomasz Kędziora
IT Infrastructure & Security Director at PLAY, the largest mobile network in Poland.

Why Goldenore?

2013
founded

+100
active clients

5
countries

+50
skilled professionals

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