

## Implementing New Kafka Cluster & Enhancing Monitoring/Alerting Mechanism of BİM

Oredata and BİM collaborated to implement a new Confluent Kafka cluster and enhance monitoring and alerting mechanisms. This project aimed to optimize data flow management between BİM's branches, improve system resilience, and modernize monitoring tools to ensure greater efficiency and stability across all environments.

### The Challenge

BİM was managing inbound and outbound data from its branches through a single Kafka cluster and wanted to separate this traffic. Additionally, the monitoring tools in their environments were outdated, and the disaster recovery clusters lacked a robust monitoring structure.

### The Solution

As a solution, we created a new Confluent Kafka cluster using Ansible. A playbook was designed and implemented according to the customer's requirements. For the monitoring part with Grafana and Prometheus, we first planned the resources for the servers running these services based on growth, and then updated both applications.

### The Result

As a result, BİM's inbound and outbound traffic was successfully separated, and a second production cluster was installed. In addition to the new environment, metrics for the disaster recovery cluster also began to be collected. All three clusters could now be monitored end-to-end using the latest version of Grafana, alarm mechanisms were established across all environments, and a resilient structure was achieved.

“ By implementing new servers to separate Kafka's inbound and outbound processes, we enhanced efficiency. As a result of these processes, an increase in the data flow rate was observed and provided faster and more reliable business operations in system stability. ”

Ali Çelebi - Integration Manager



### About BİM

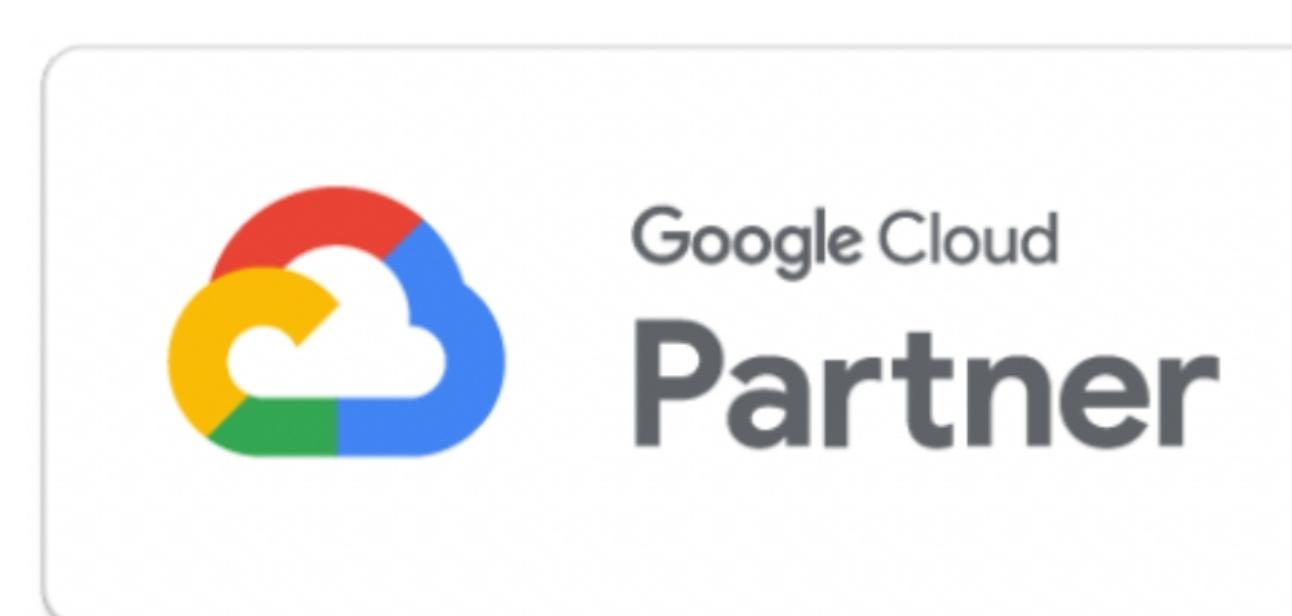
BİM Birleşik Mağazalar A.Ş., the company with the highest market share in the organized retail sector in Türkiye, began its operations with 21 stores in 1995. BİM's core principle is to offer consumers basic food items and consumer goods by combining high quality with the most affordable prices. As the pioneer of the hard-discount model in Türkiye, BİM's product portfolio includes around 900 items, aiming to provide a large range of private label products to its customers.

Vertical/Horizontal solution: Retail & Wholesale

Primary project location: Turkey



Oredata enables to perform business analysis on big data, offers comprehensive services including data integration, transformation and visualization.



### Products

Confluent Kafka

Prometheus

Grafana

Ansible