



基于RocketMQ Connect构建全新数据 流转处理平台

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About Me

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RocketMQ Connect project core contributor



Agenda

- **OpenMessaging Connect Overview**
- **OpenMessaging Connect Architecture**
- **OpenMessaging Connect in practice**
- **OpenMessaging Connect Now and Future**



Concept

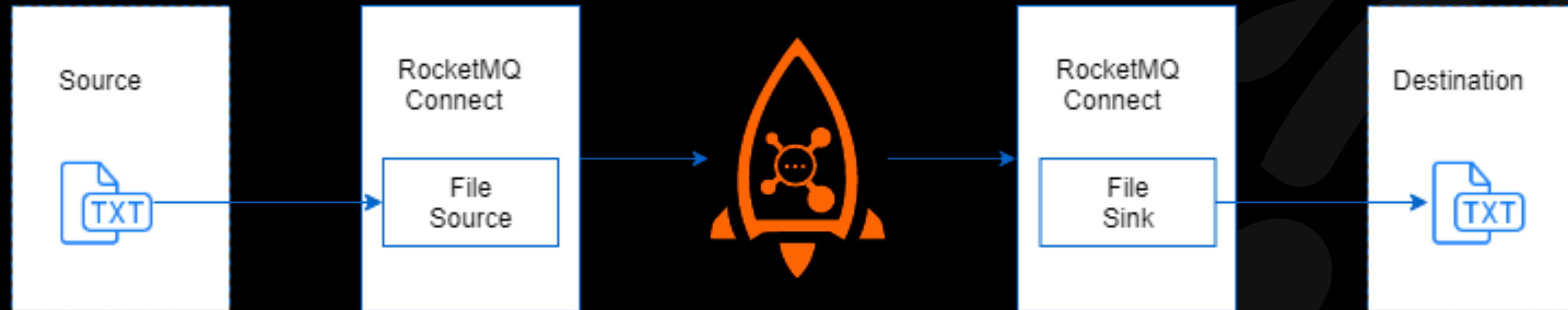
RocketMQ Connect : A simple understanding of RocketMQ Connect is the middleware that uses RocketMQ to copy data from a source data storage system to a target data store. Mainly composed of source connector, sink connector, runtime.

Source Connector: Responsible for ingesting the data from source data and sending it to RocketMQ

Sink Connector: Responsible for consuming messages from RocketMQ and writing the data to target storage

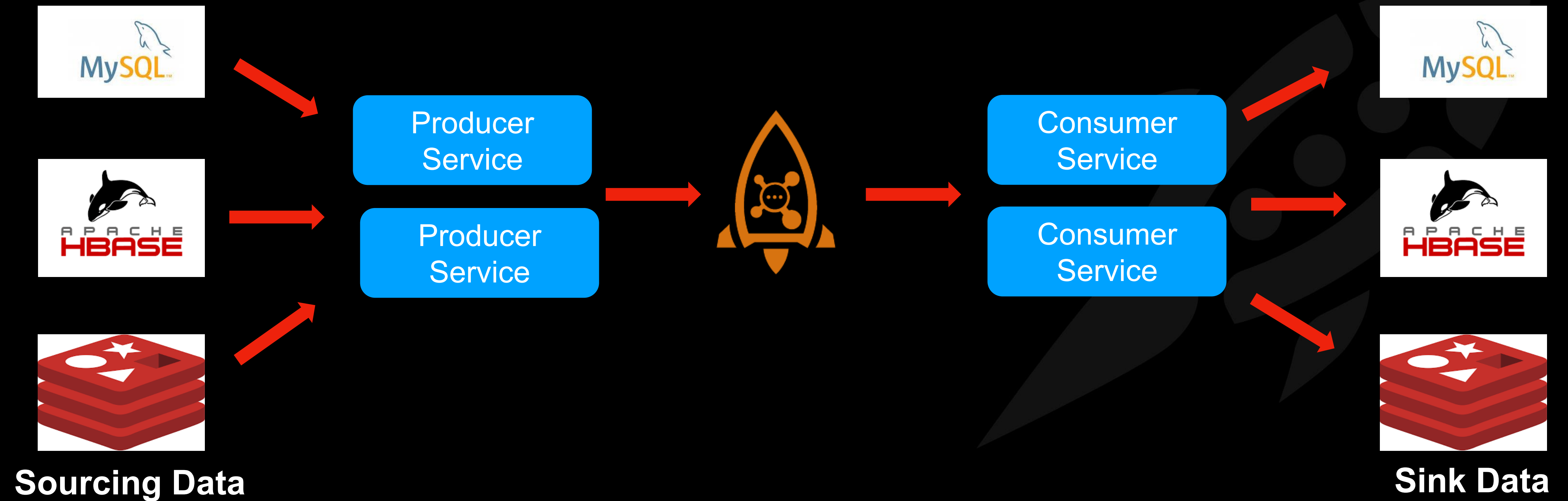
Runtime: The runtime is the source, sink connector runtime environment, responsible for loading the Connector, providing the RESTful interface, starting the connector task, service discovery between cluster nodes, configuration synchronization, consumption schedule saving, failover, load balancing, and so on.

Demo



RocketMQ Connect Overview

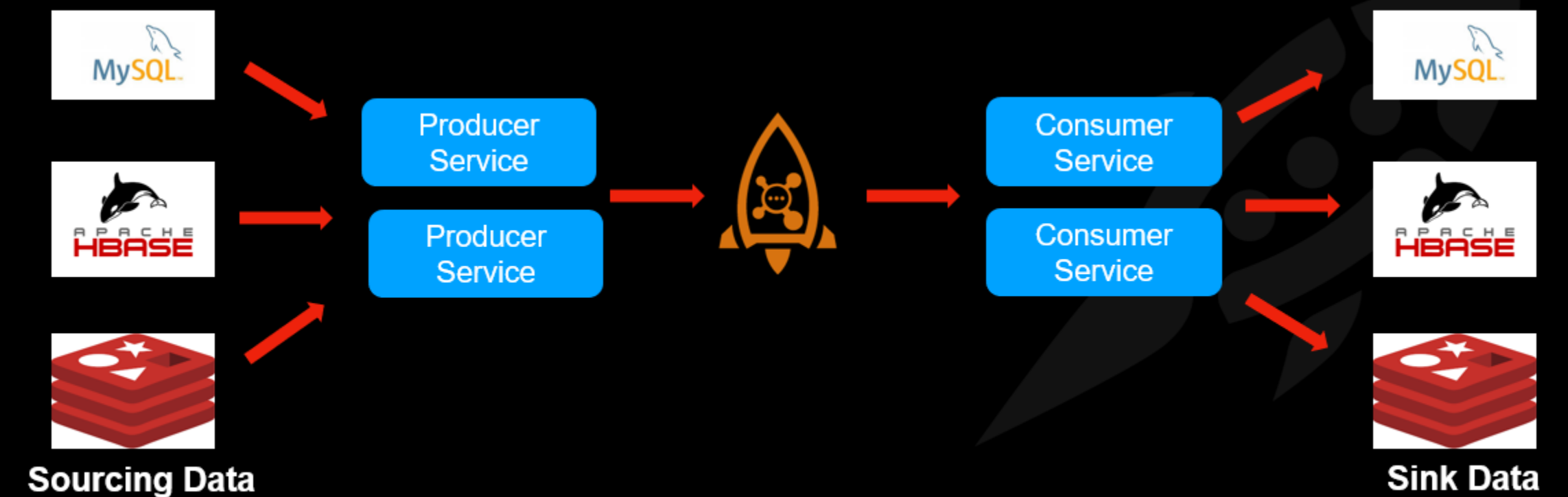
Traditional stream data process model



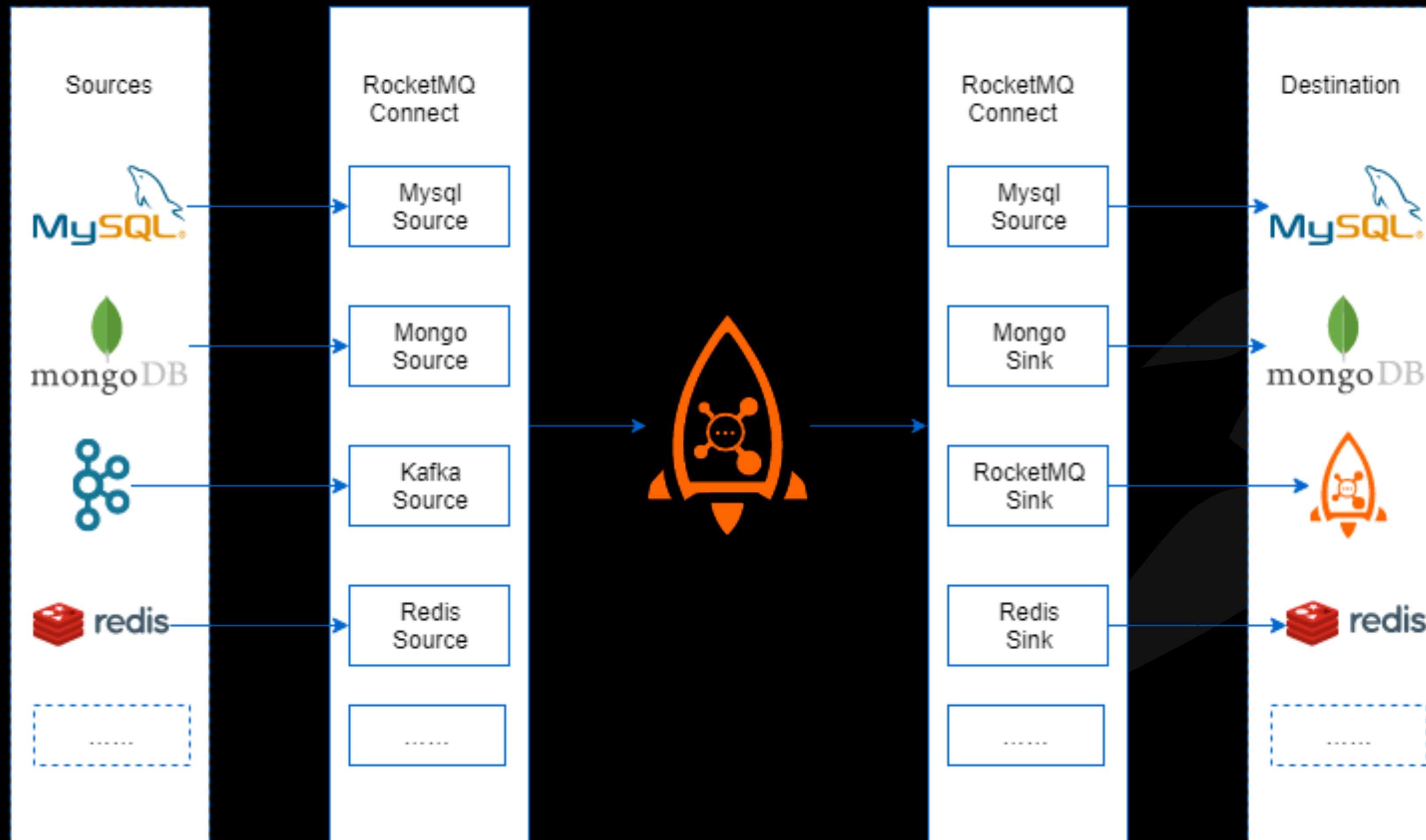
OpenMessaging Connect Overview

Challenge

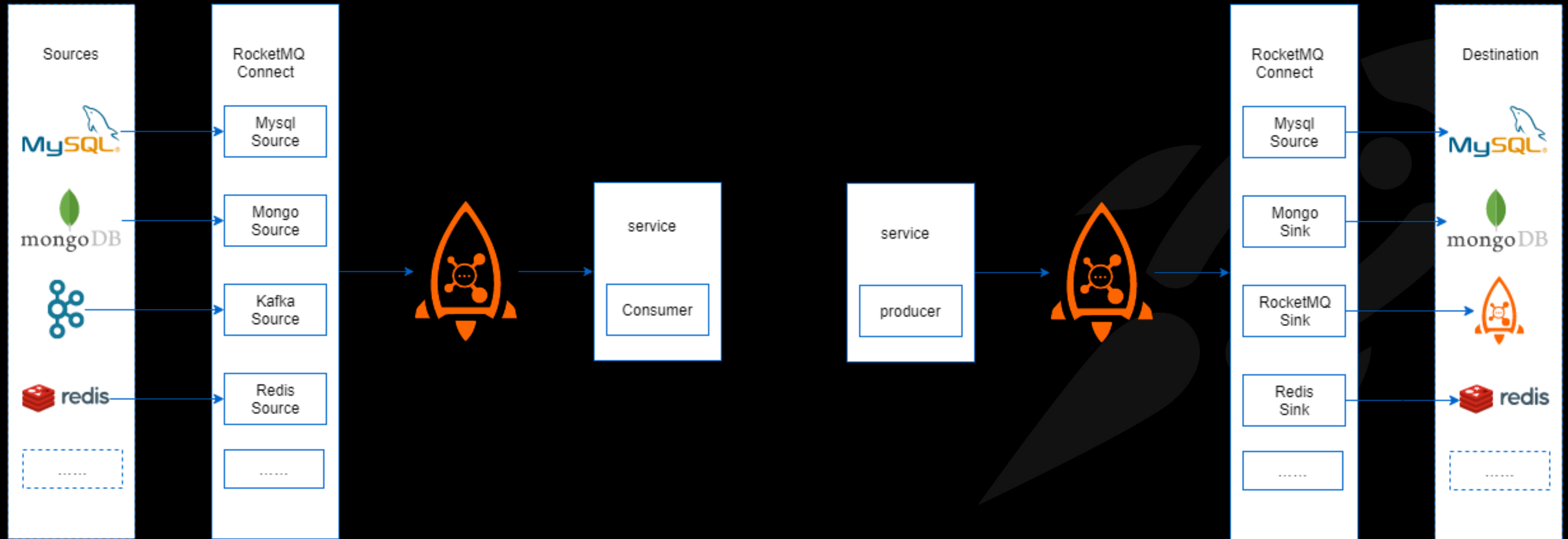
- How to copy data between so many different sources
- Efficiency
- High Availability, failover
- Scalability



OpenMessaging Connect Overview



OpenMessaging Connect Overview



OpenMessaging Connect Overview

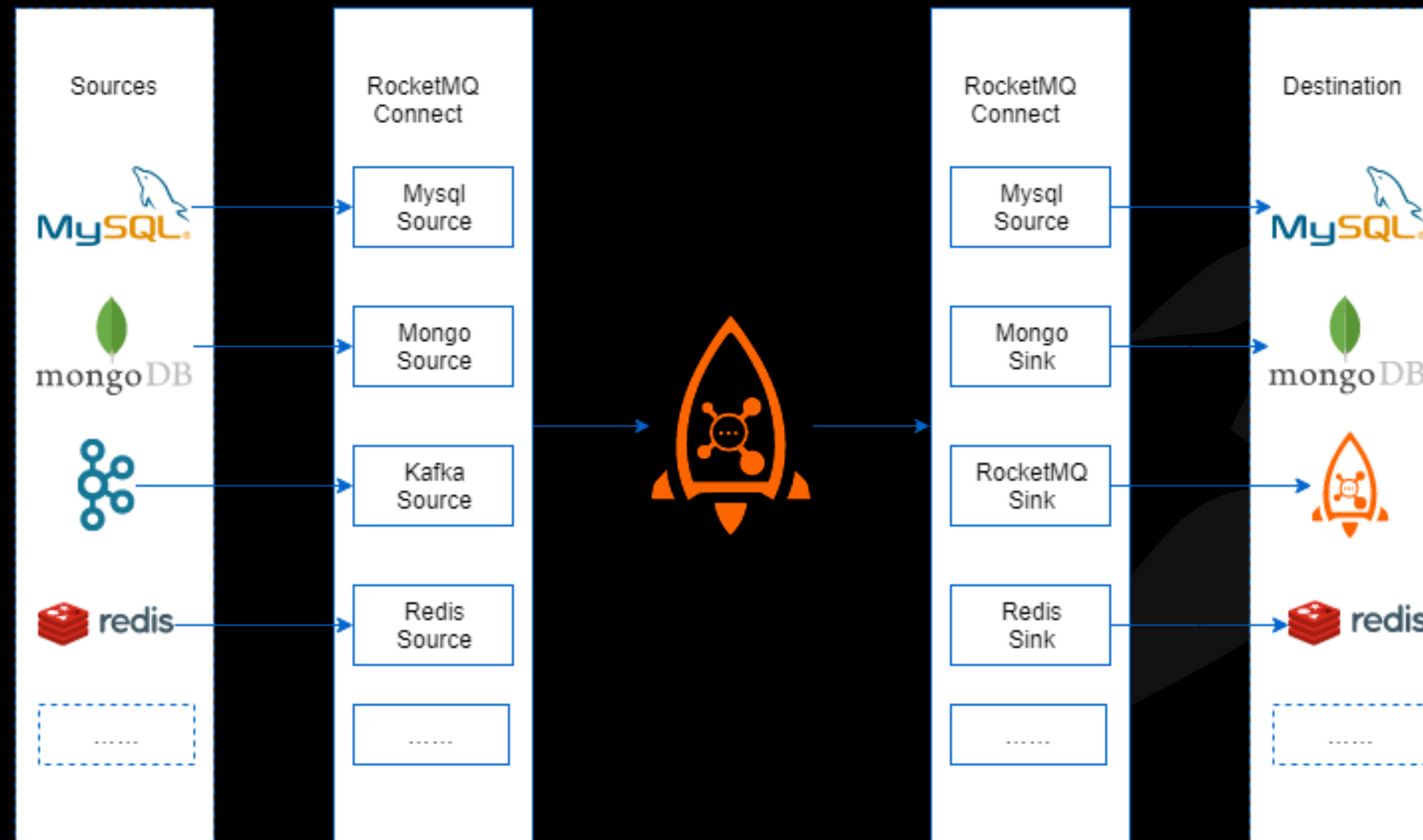
Benefits of Messaging Connect

- **Focus on data copying**
- **Scales to application**
- **Accessible connector API**
- **Streaming and batch**
- **Easy cluster management**



OpenMessaging Connect Overview

What's Messaging Connect

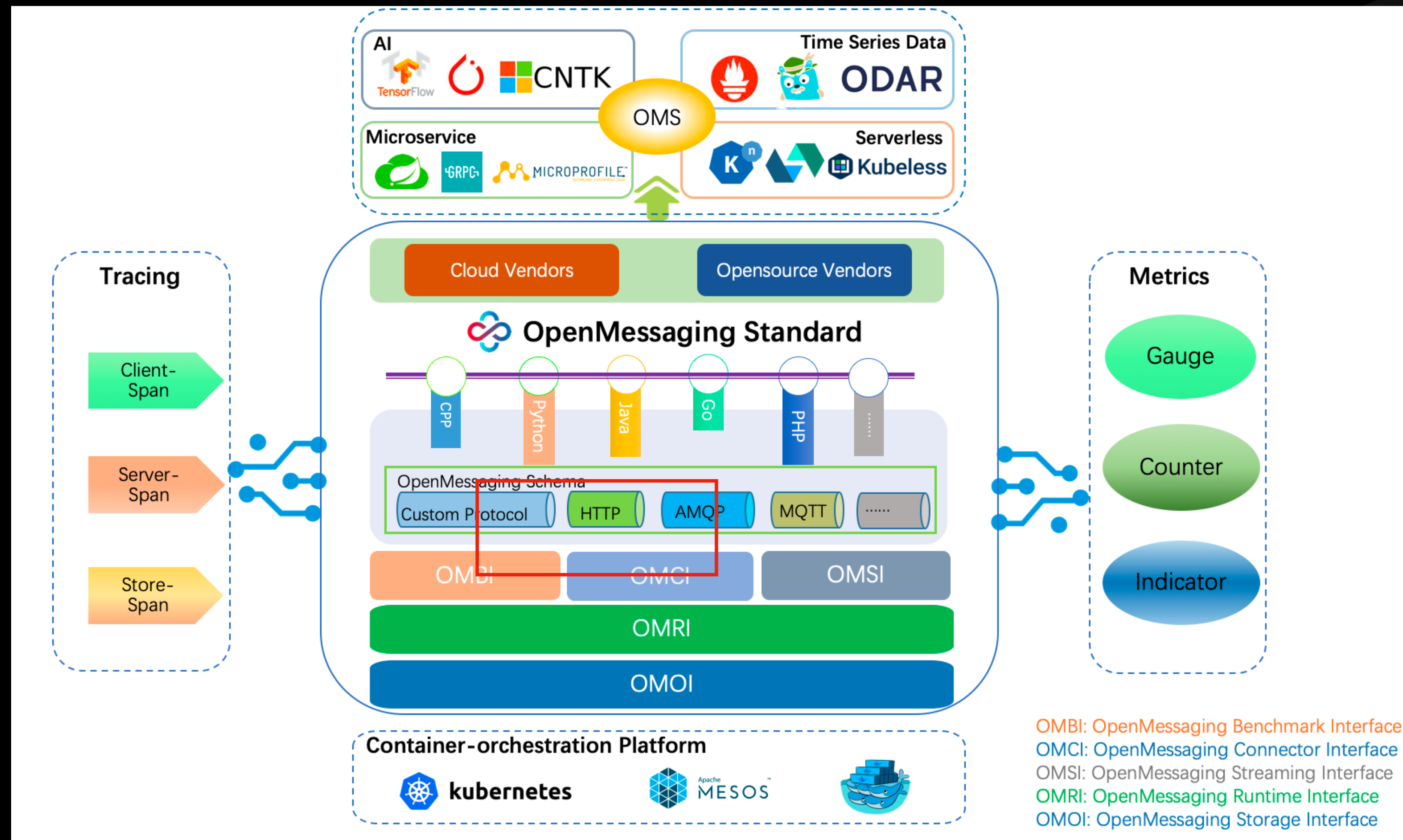


Messaging Connect is a distributed, scalable, fault-tolerant service designed to reliably stream data between messaging middleware and other data system.

OpenMessaging Connect Overview

What's OpenMessaging Connect

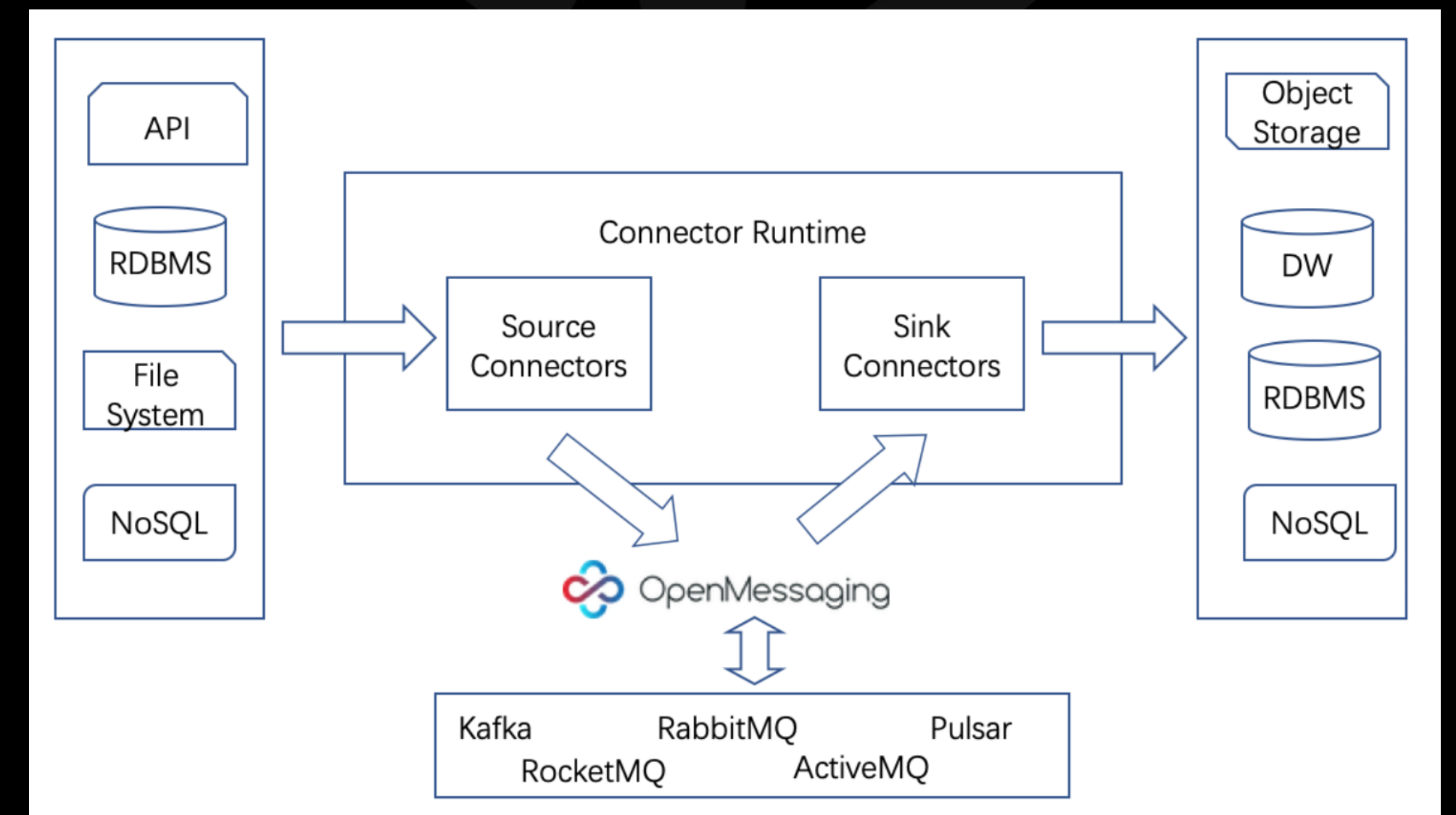
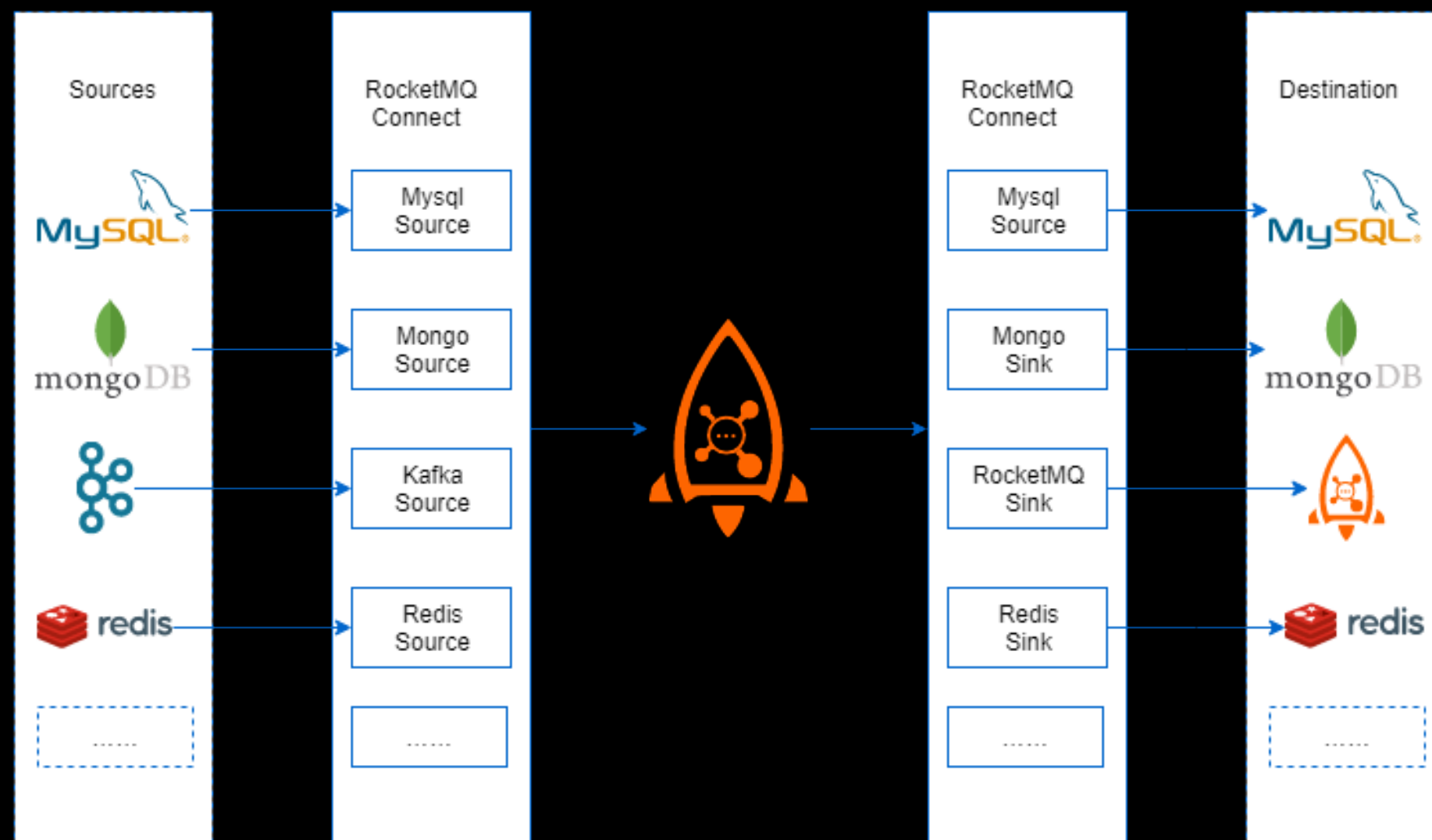
OpenMessaging Connect is a standard for messaging middleware.



OpenMessaging Connect Overview

Relationship of OpenMessaging Connect and RocketMQ

- OpenMessaging Connect is a connect standard for messaging middleware.
- Runtime based on RocketMQ provide the ability of steaming data between other data system with Apache RocketMQ



OpenMessaging Connect Architecture

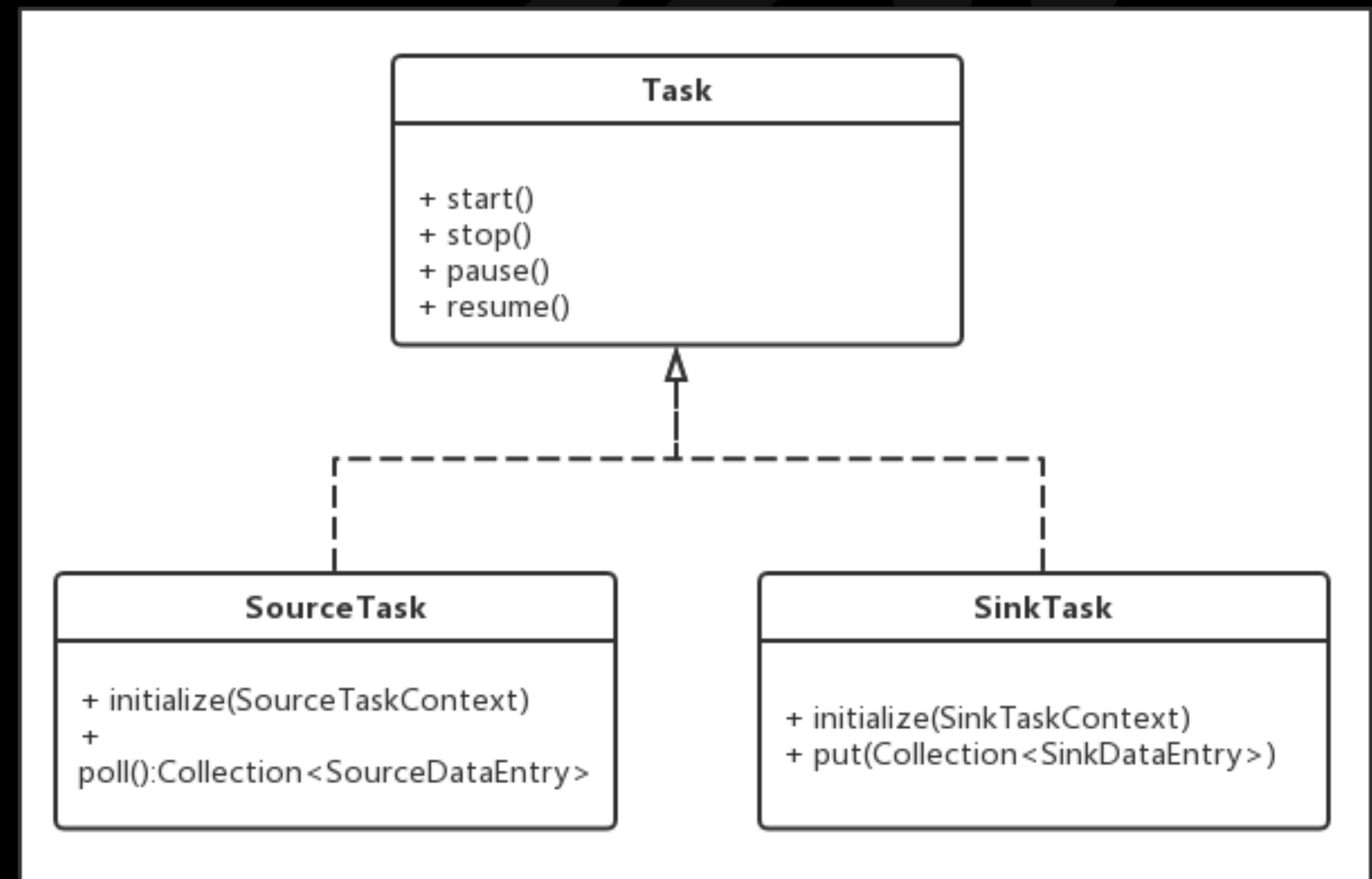
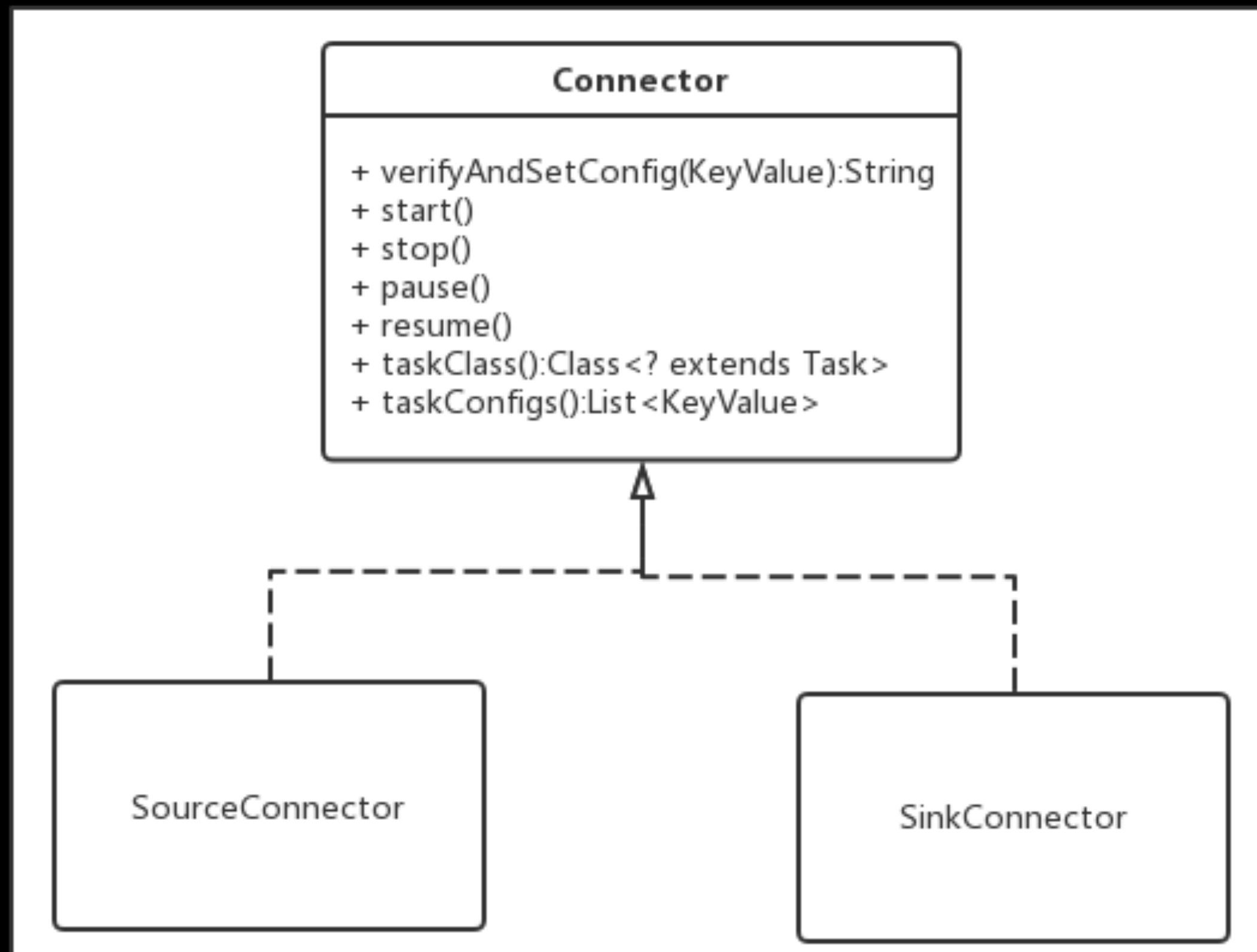
- **Connect Model**
- **Worker Model**
- **Connect Runtime**



OpenMessaging Connect Architecture

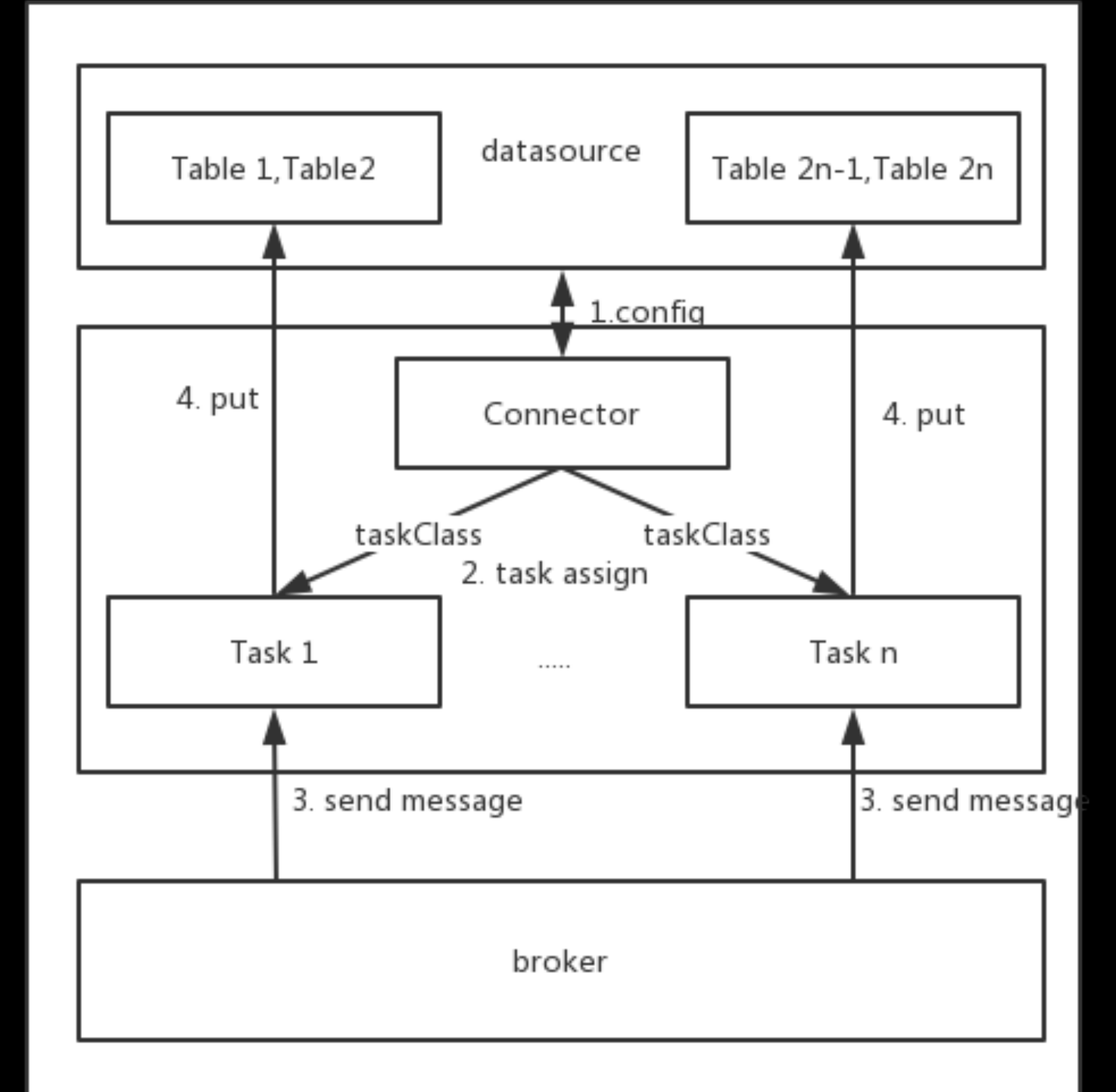
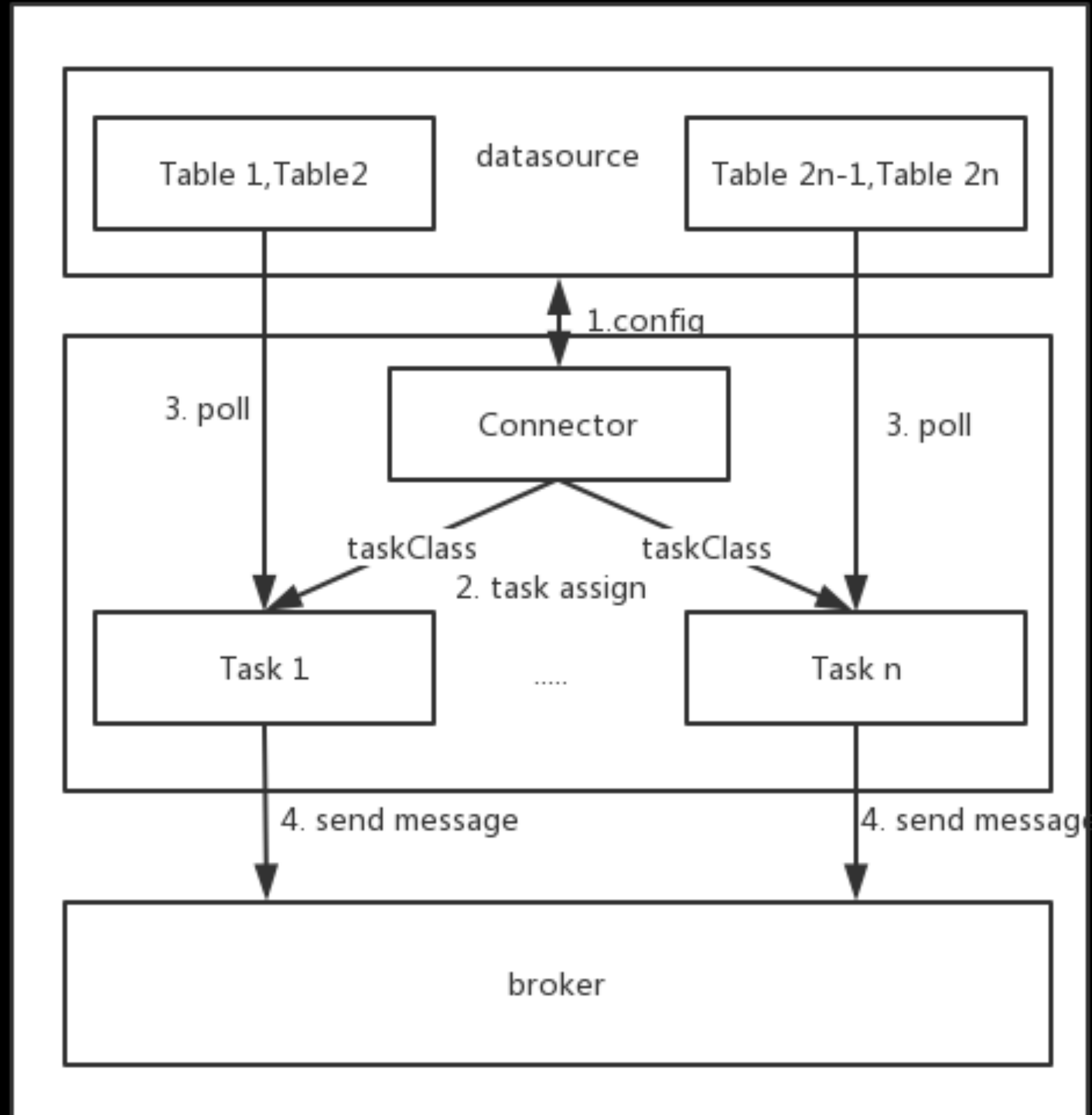
Connect Model

- **Connector:** defines how developers create connector plugins which import and export data from another data systems.
- **Two key components: connector, task**



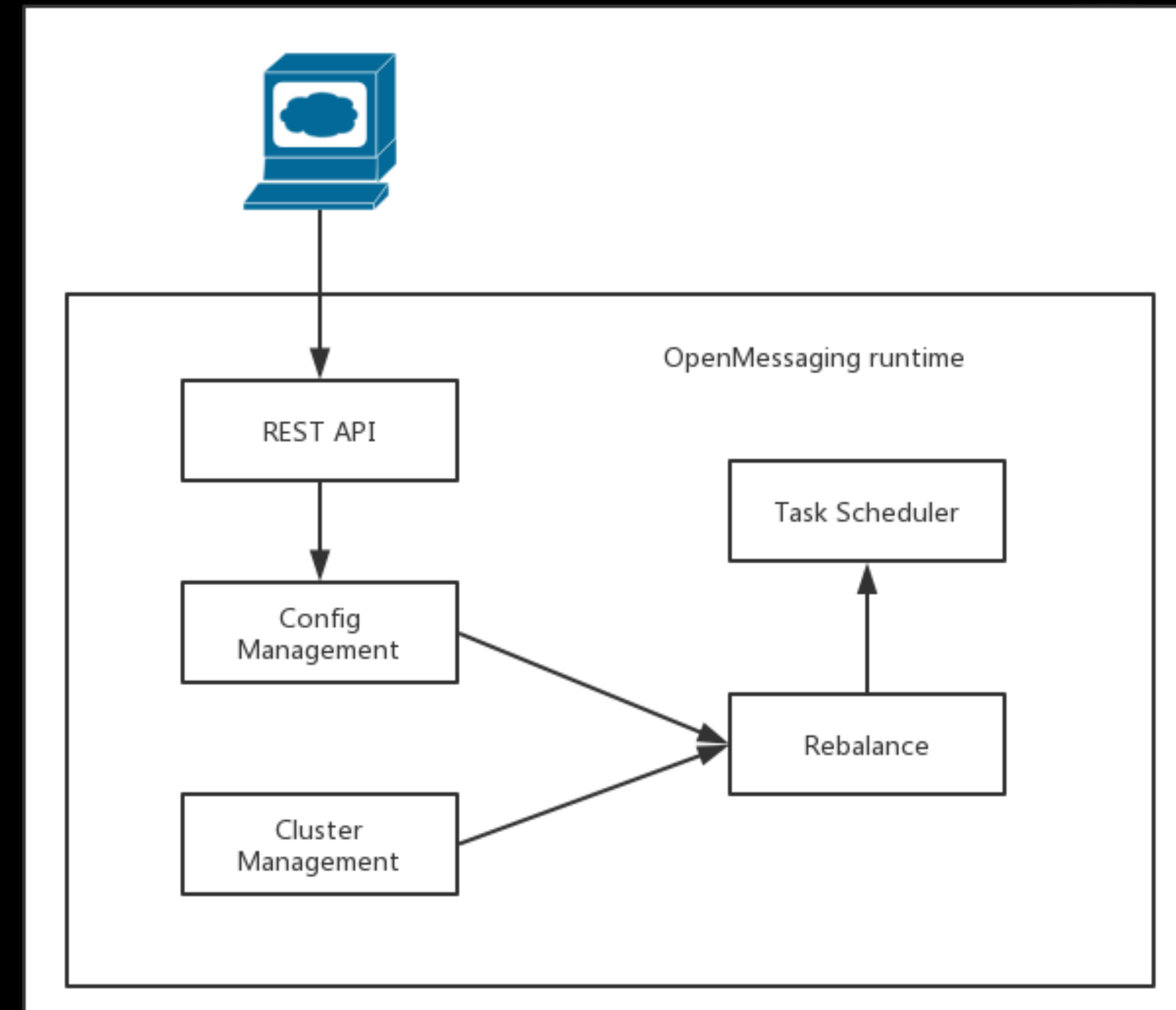
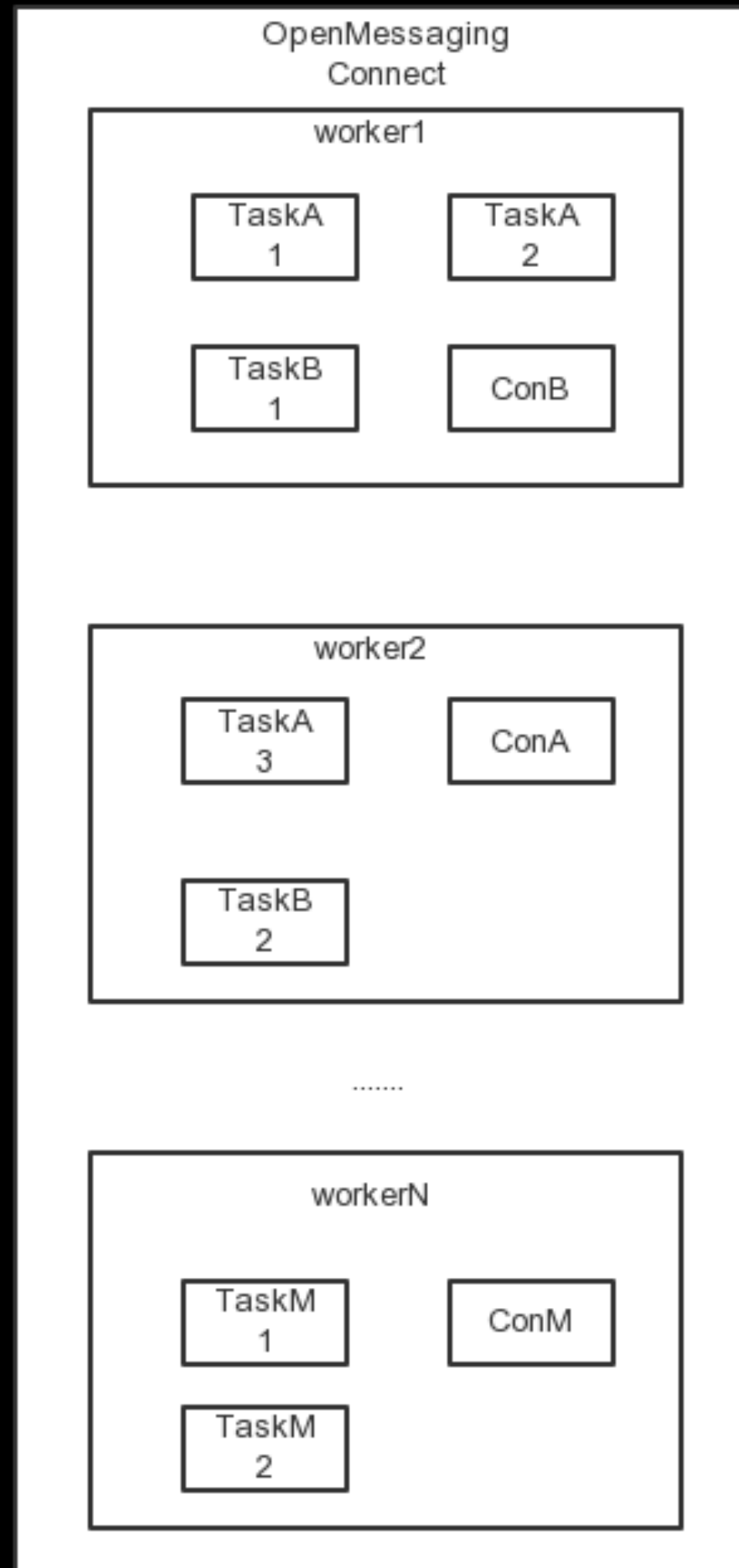
OpenMessaging Connect Architecture

Connect Model



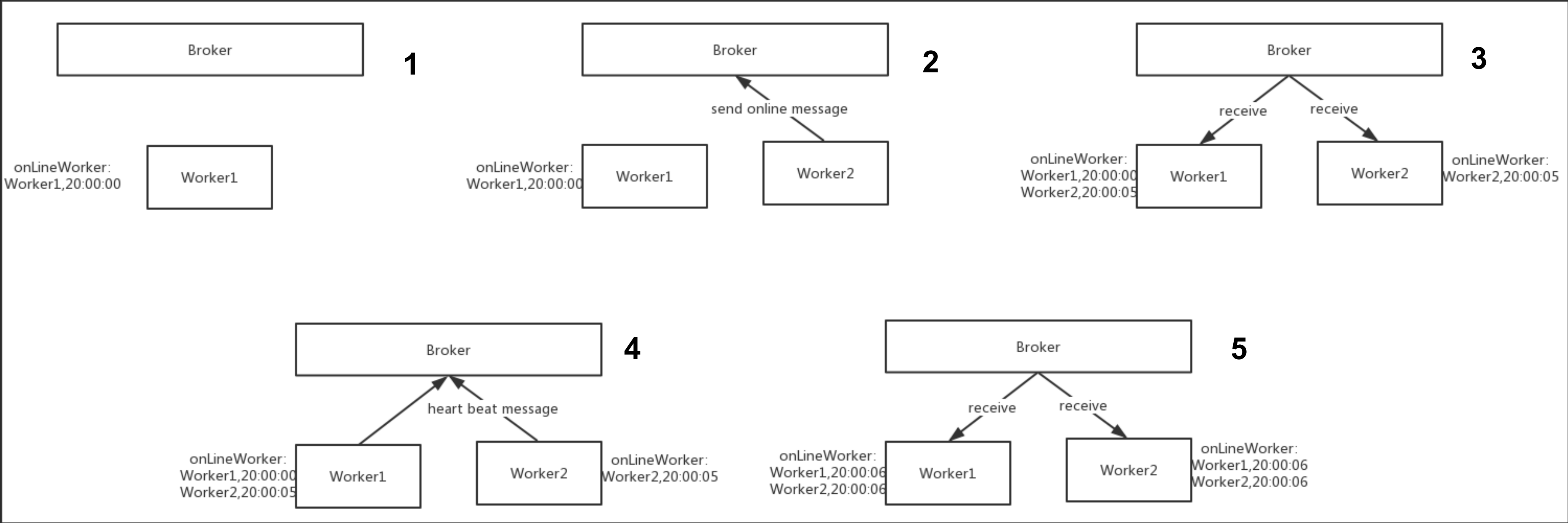
OpenMessaging Connect Architecture

Worker Model



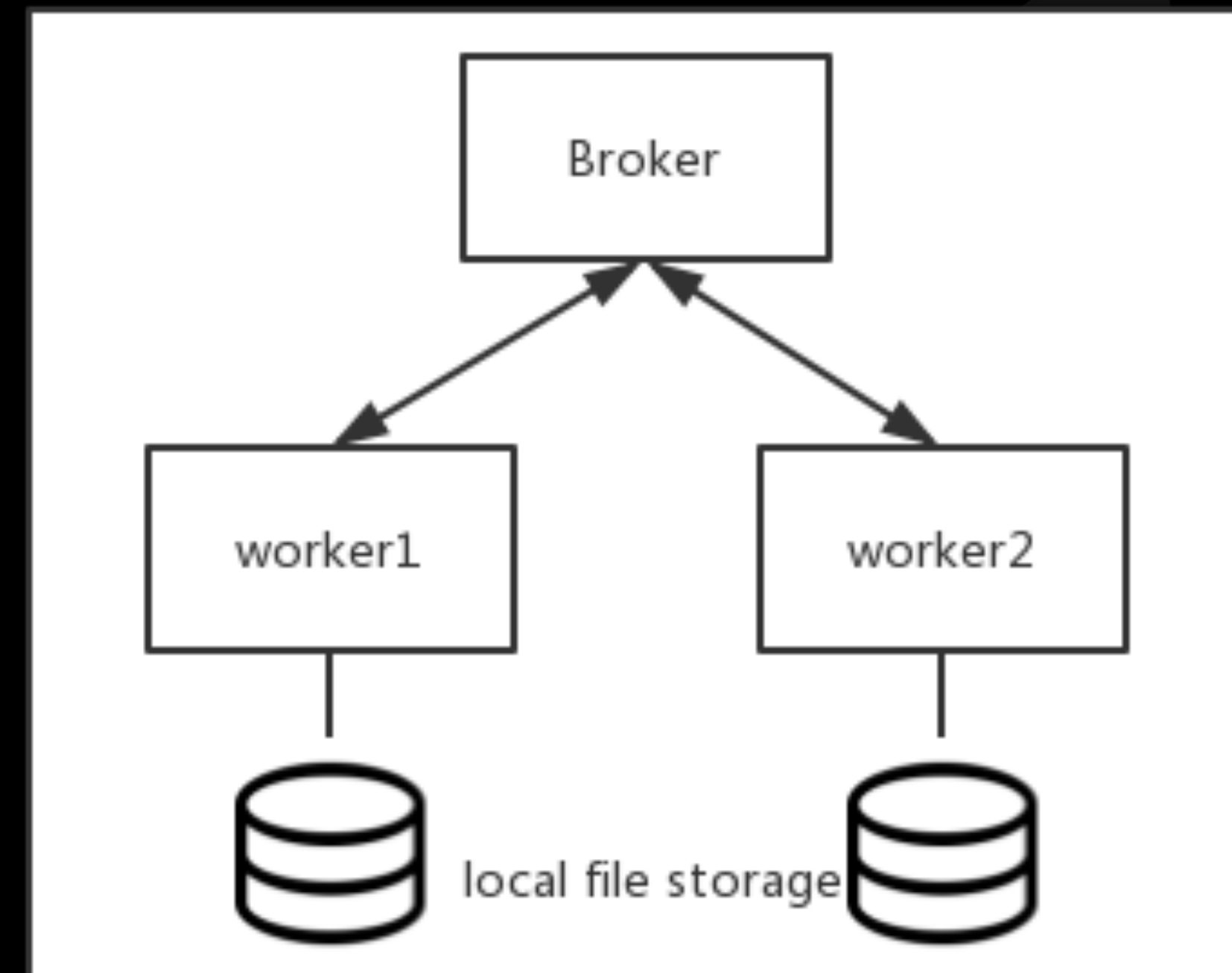
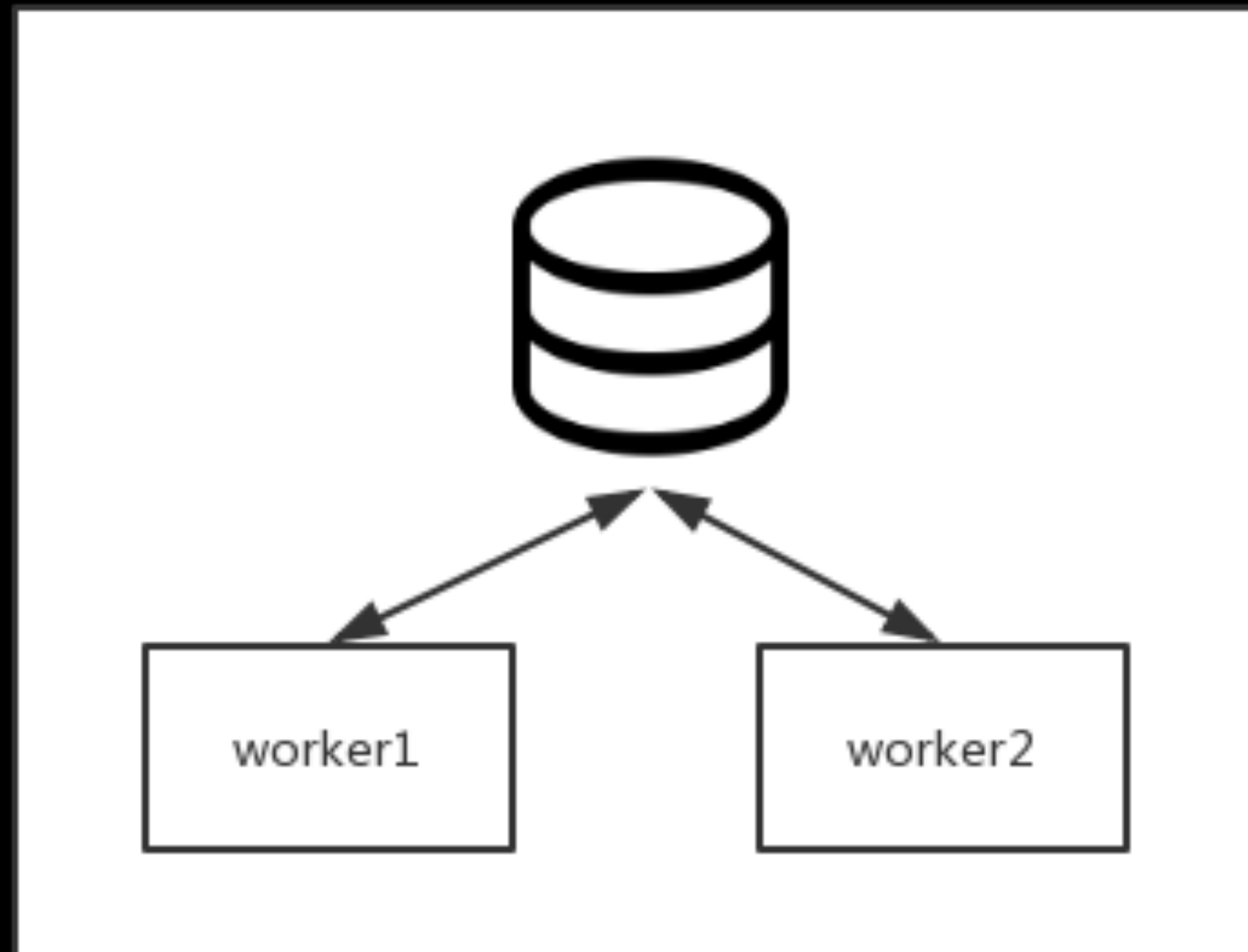
OpenMessaging Connect Architecture

Connect Runtime



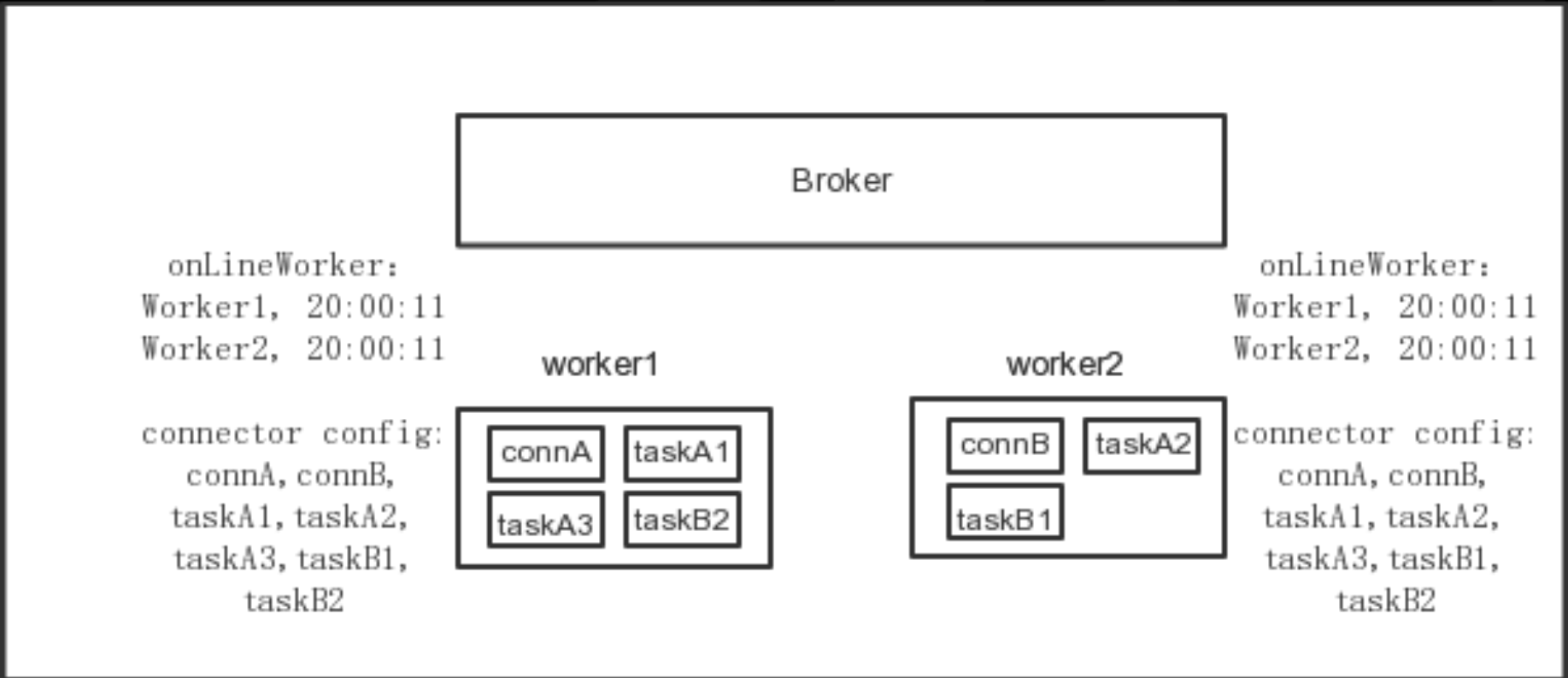
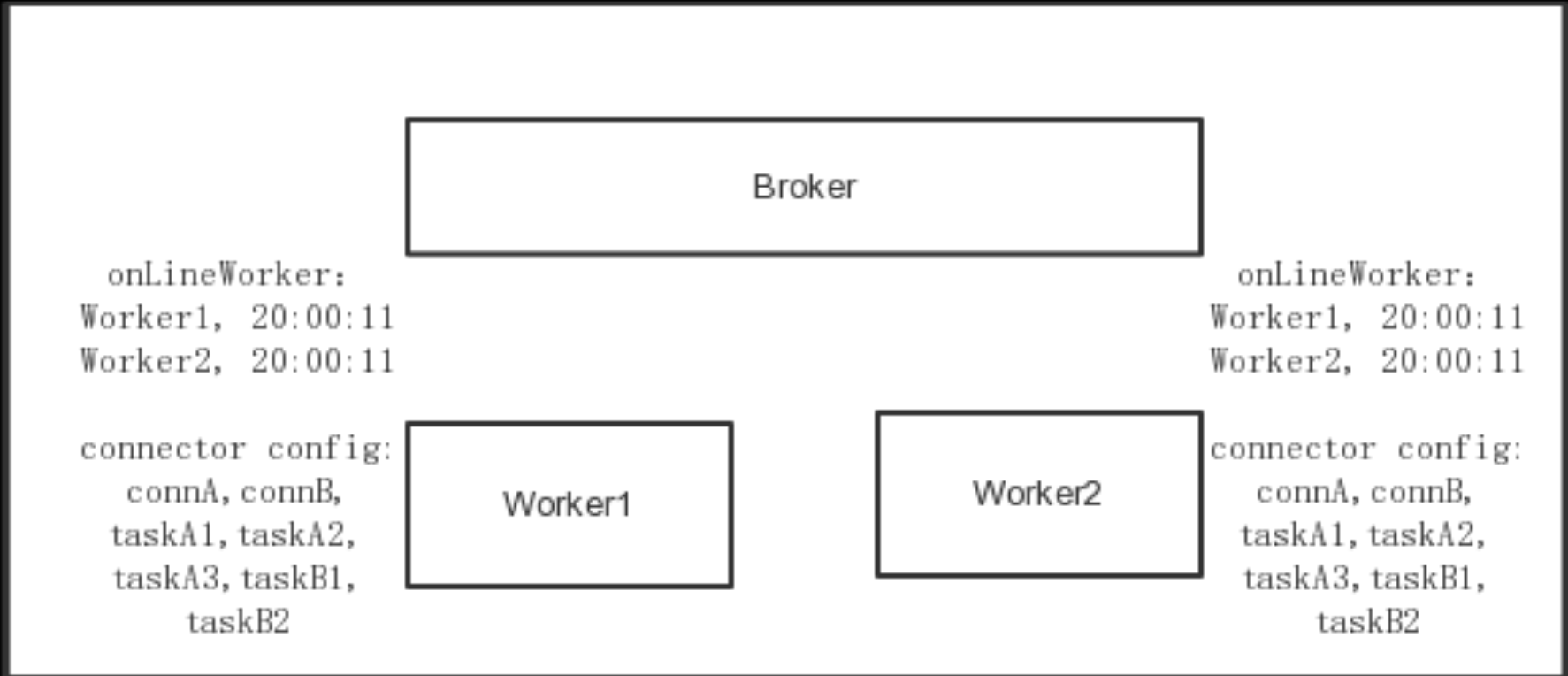
OpenMessaging Connect Architecture

Config Management



OpenMessaging Connect Architecture

Rebalance and Failover



OpenMessaging Connect Architecture

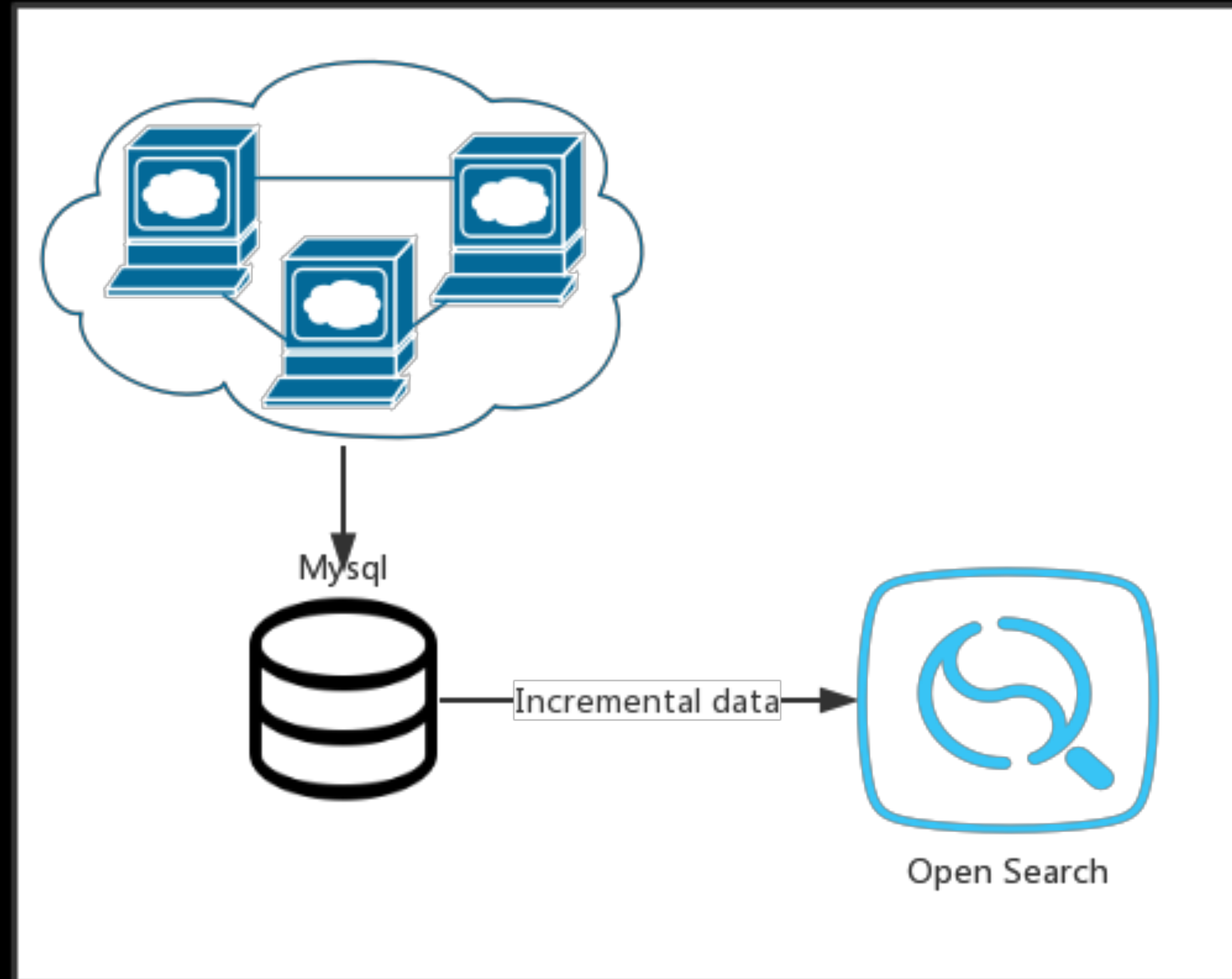
REST API

- **POST /connectors/{connector name}**
- **GET /connectors/{connector name}/config**
- **GET /connectors/{connector name}/status**
- **POST /connectors/{connector name}/stop**



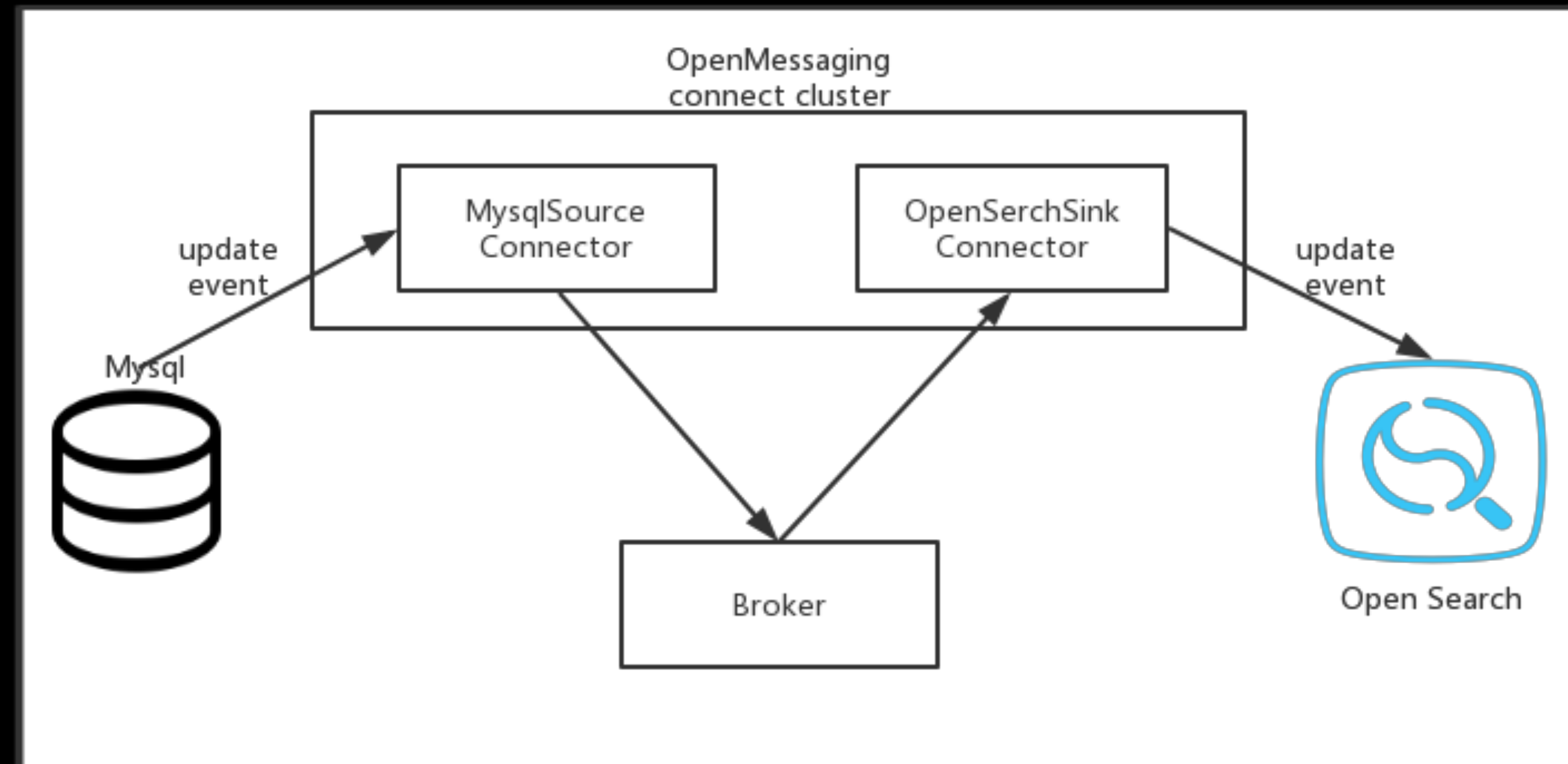
OpenMessaging connect in Practice

MySQL connector



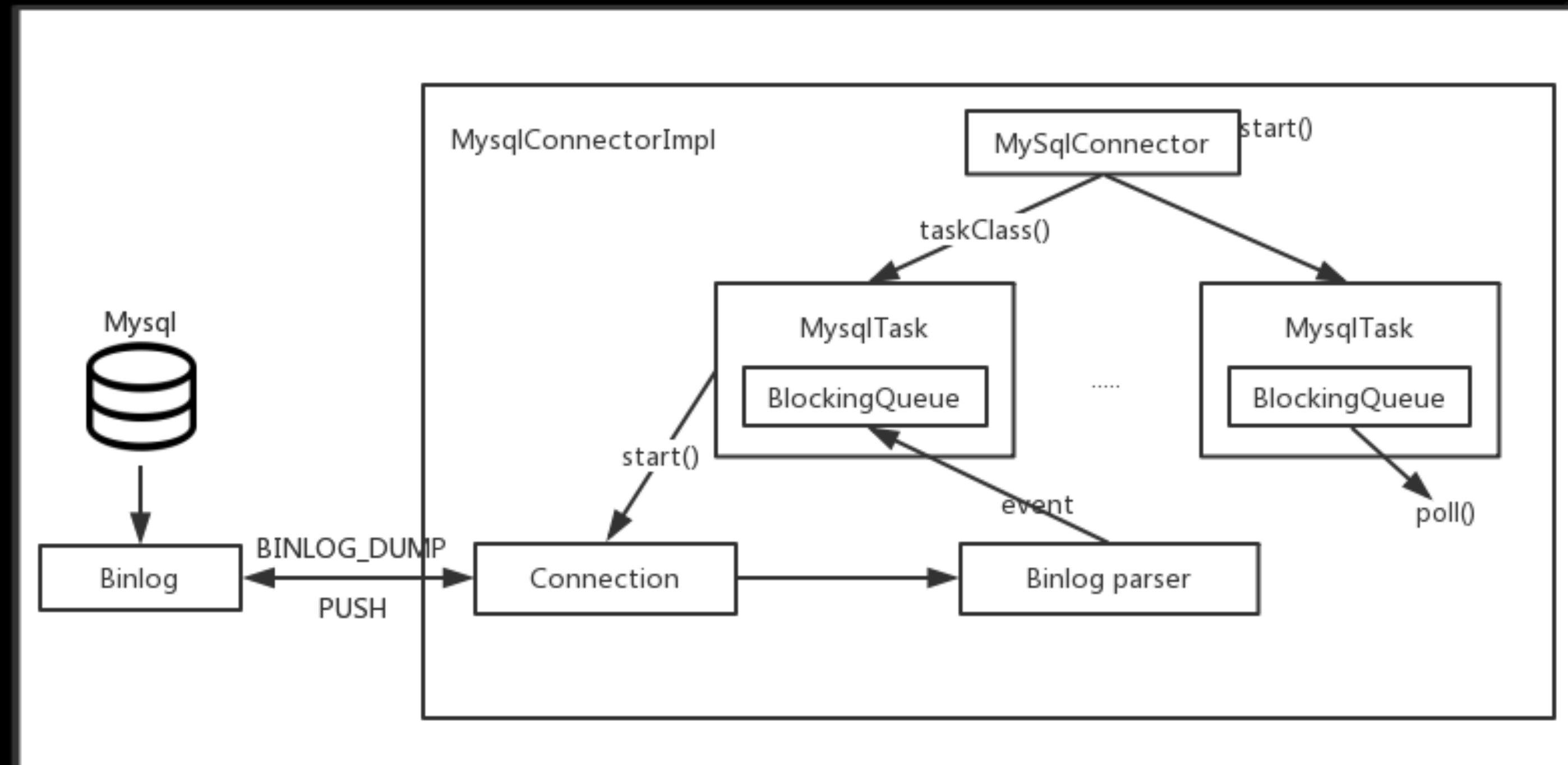
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MySQL connector



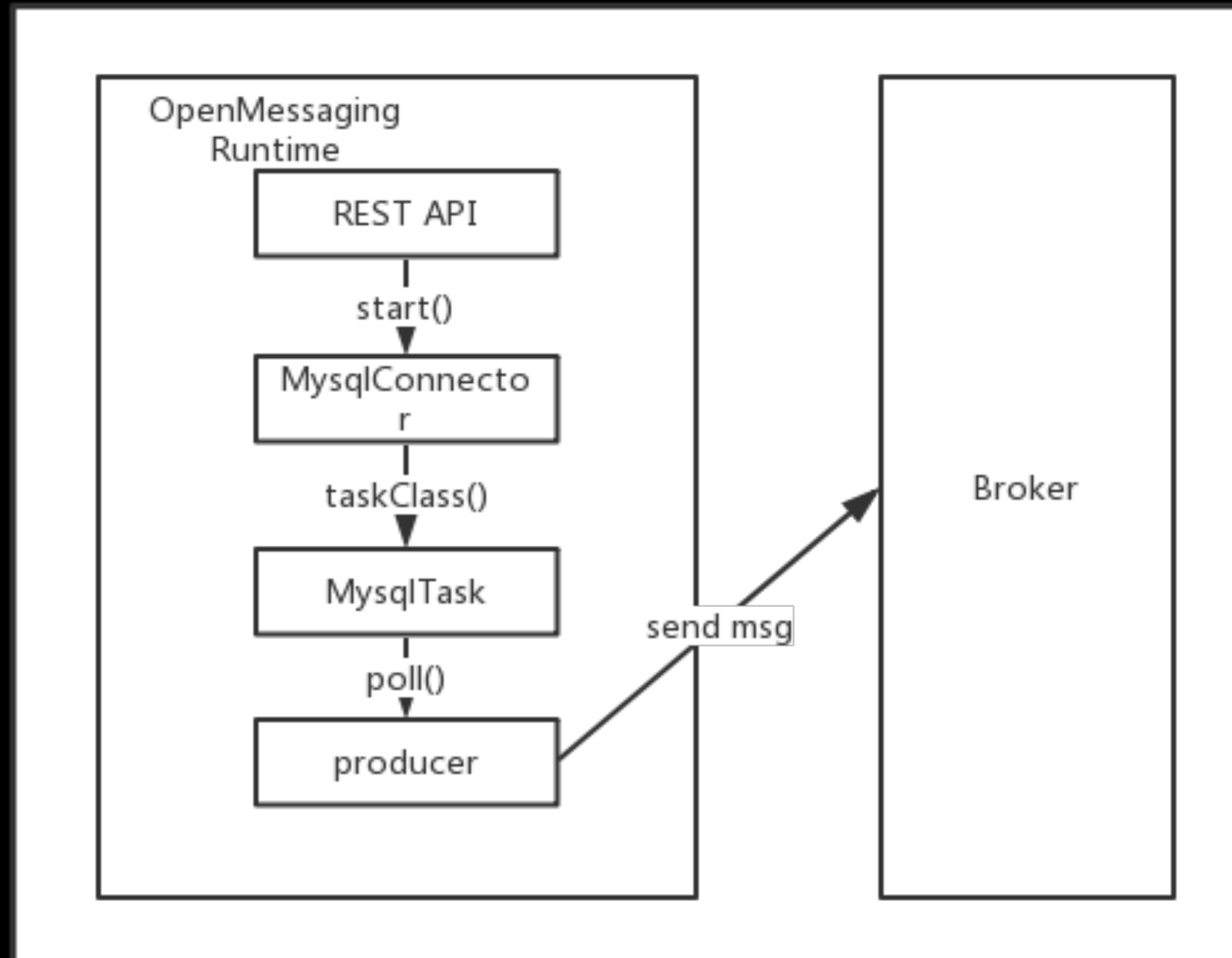
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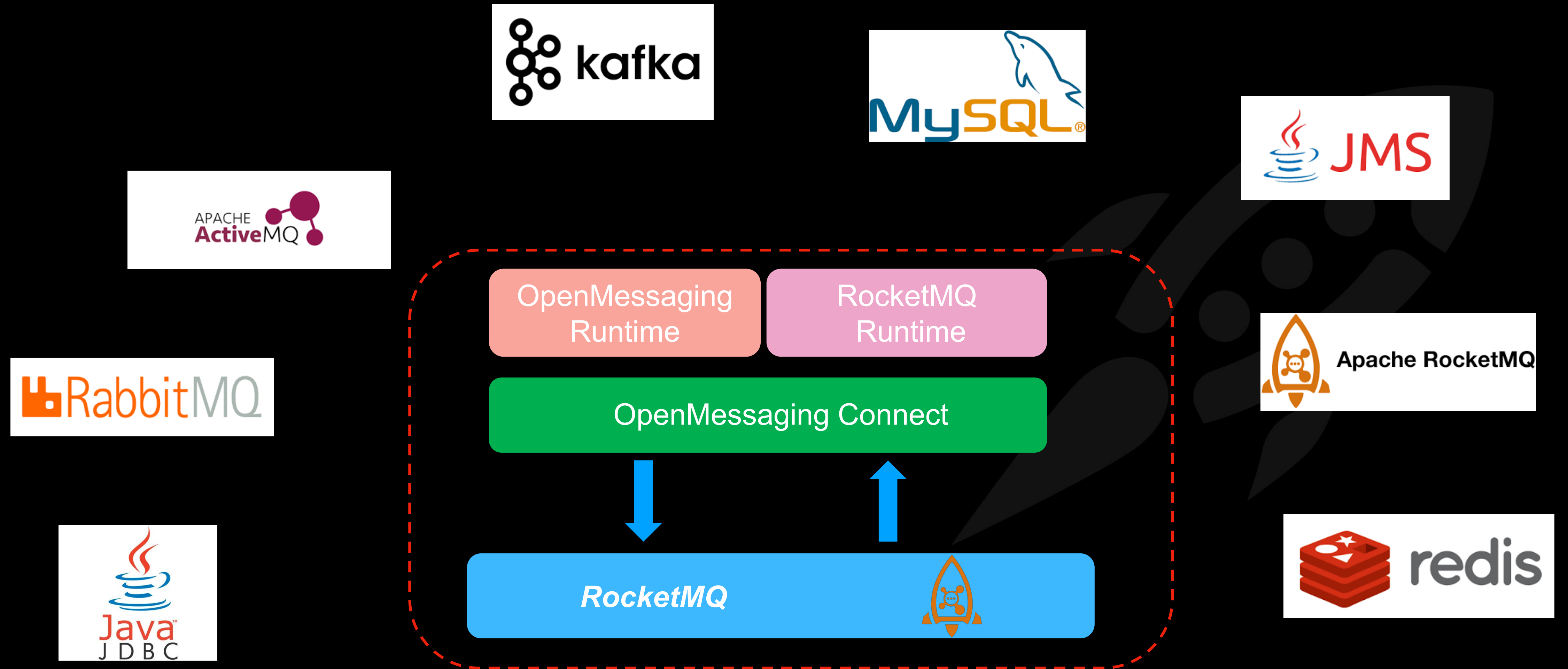


OpenMessaging connect in Practice

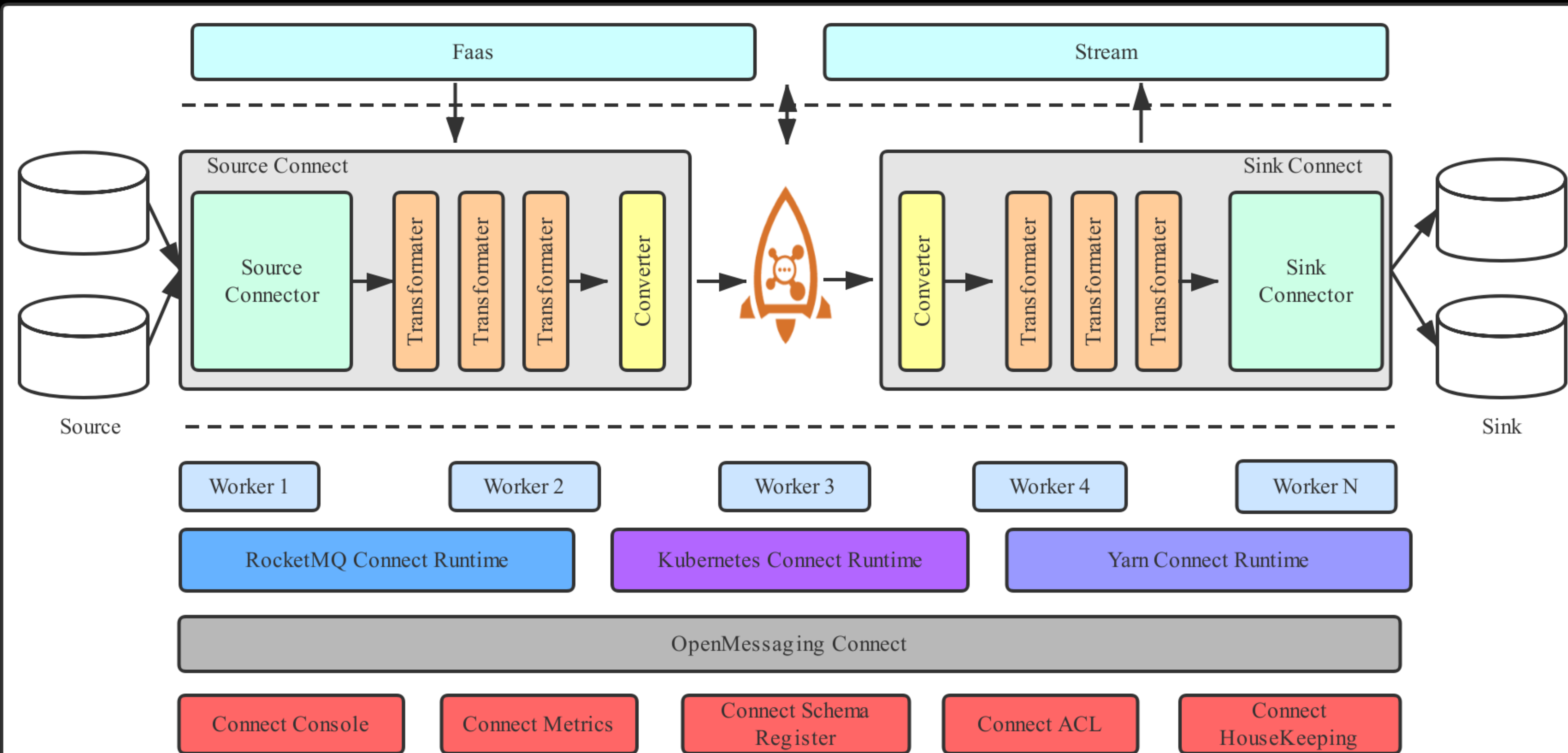
MySQL connector



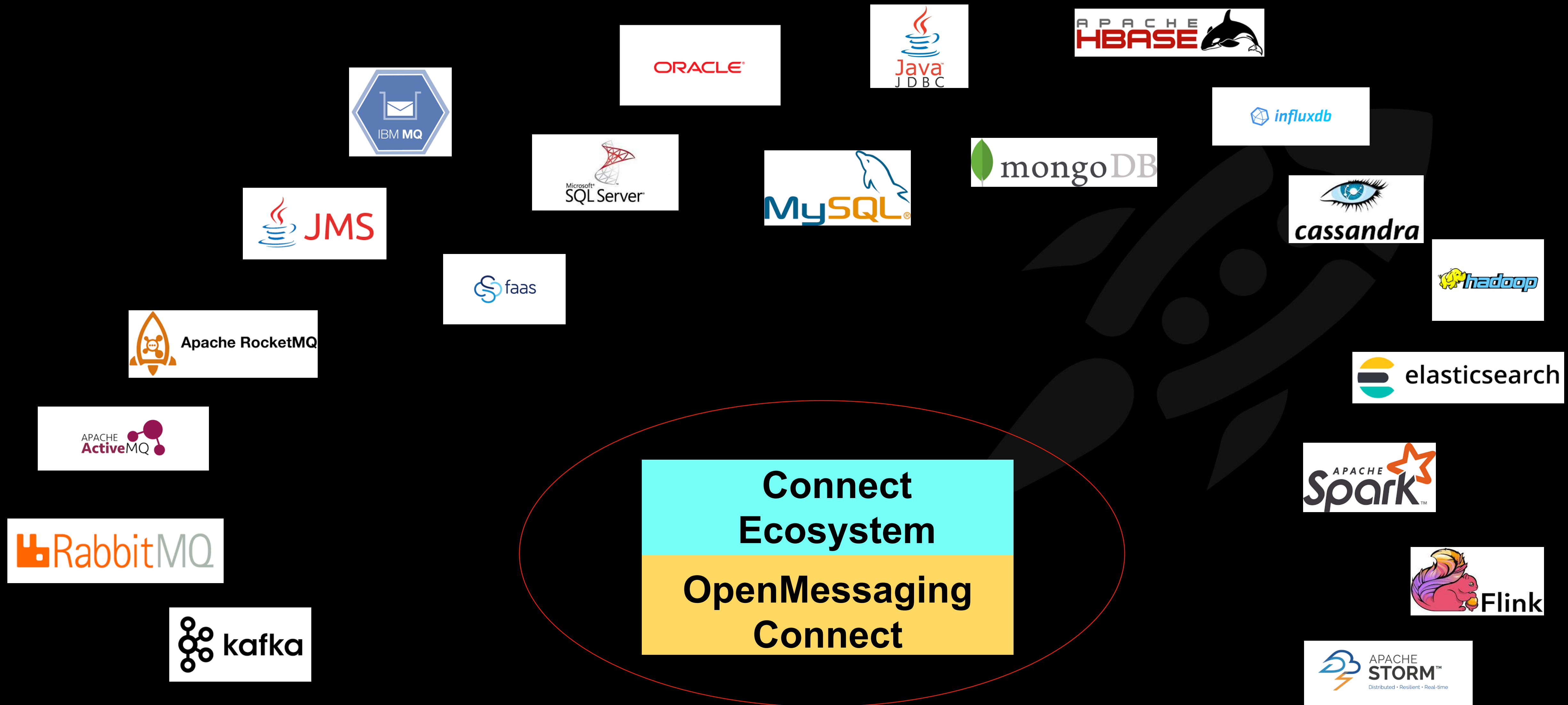
OpenMessaging Connect Now and Future



OpenMessaging Connect Now and Future



OpenMessaging Connect Now and Future





Thank you