



# Whoami

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# Agenda

- From monolith to micro-services
- From API to Message Broker
- Anatomy of Kafka (What, Why & How )
- Zookeeper
- Kafka use cases

## My Internet Banking

User  
service

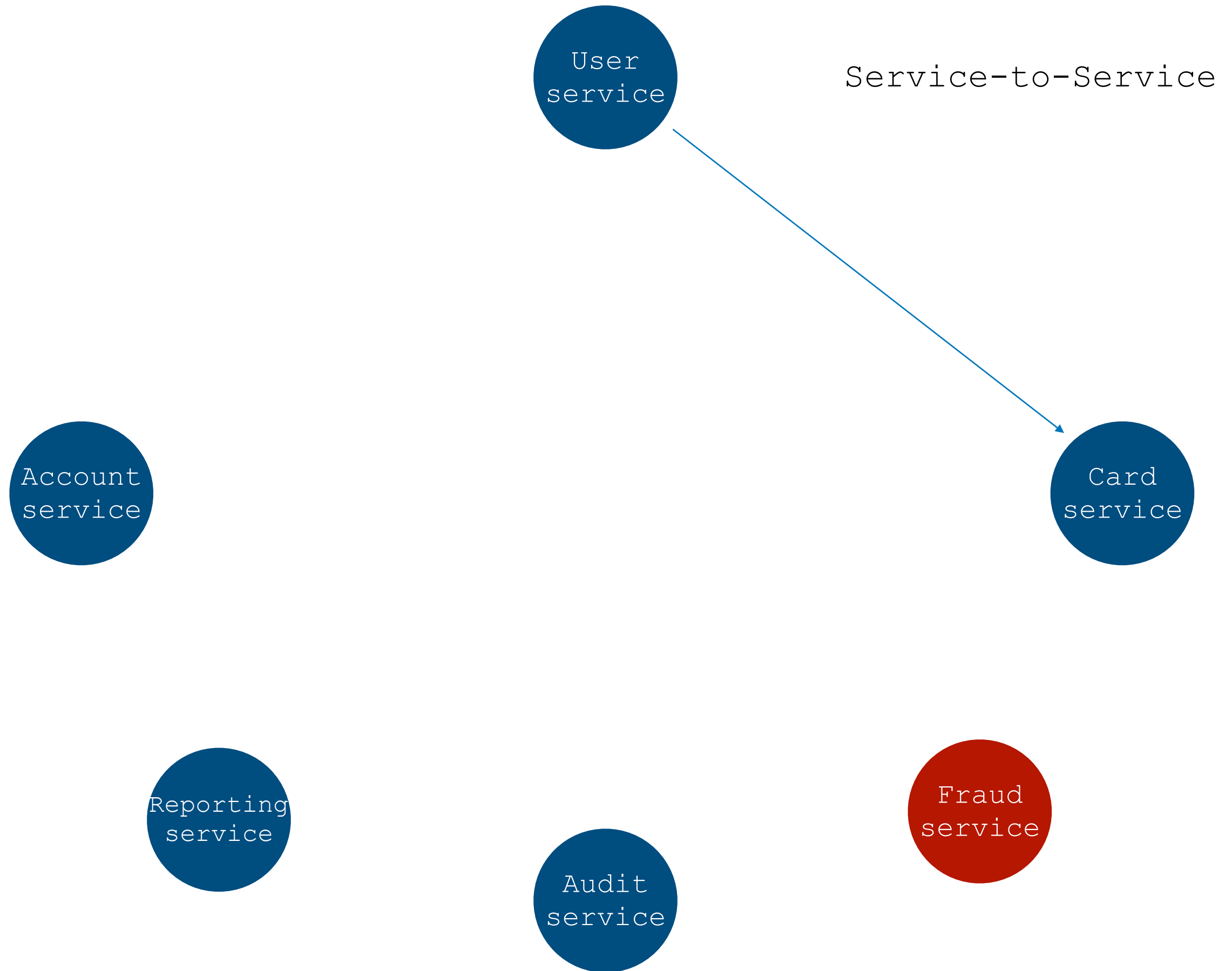
Account  
service

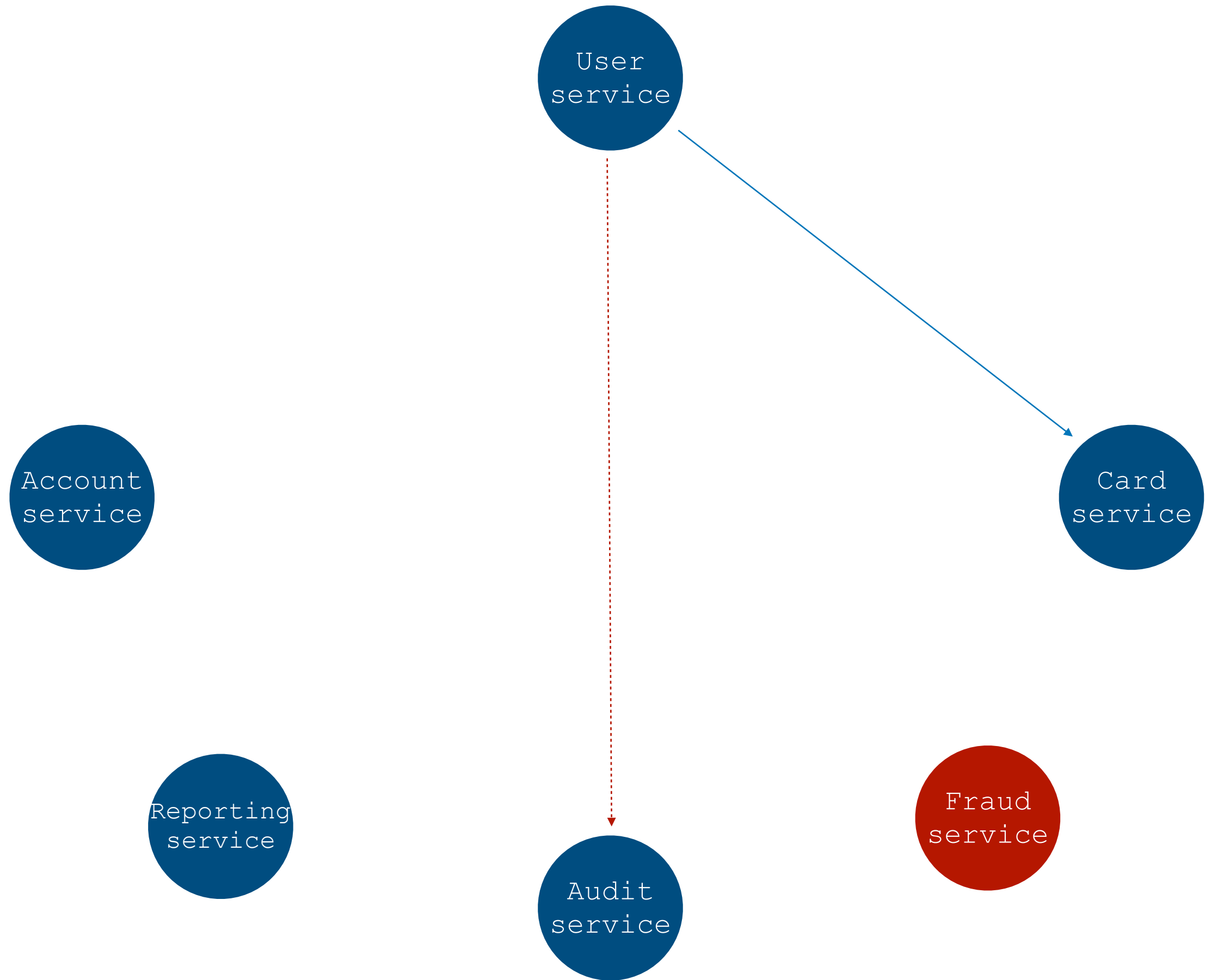
Card  
service

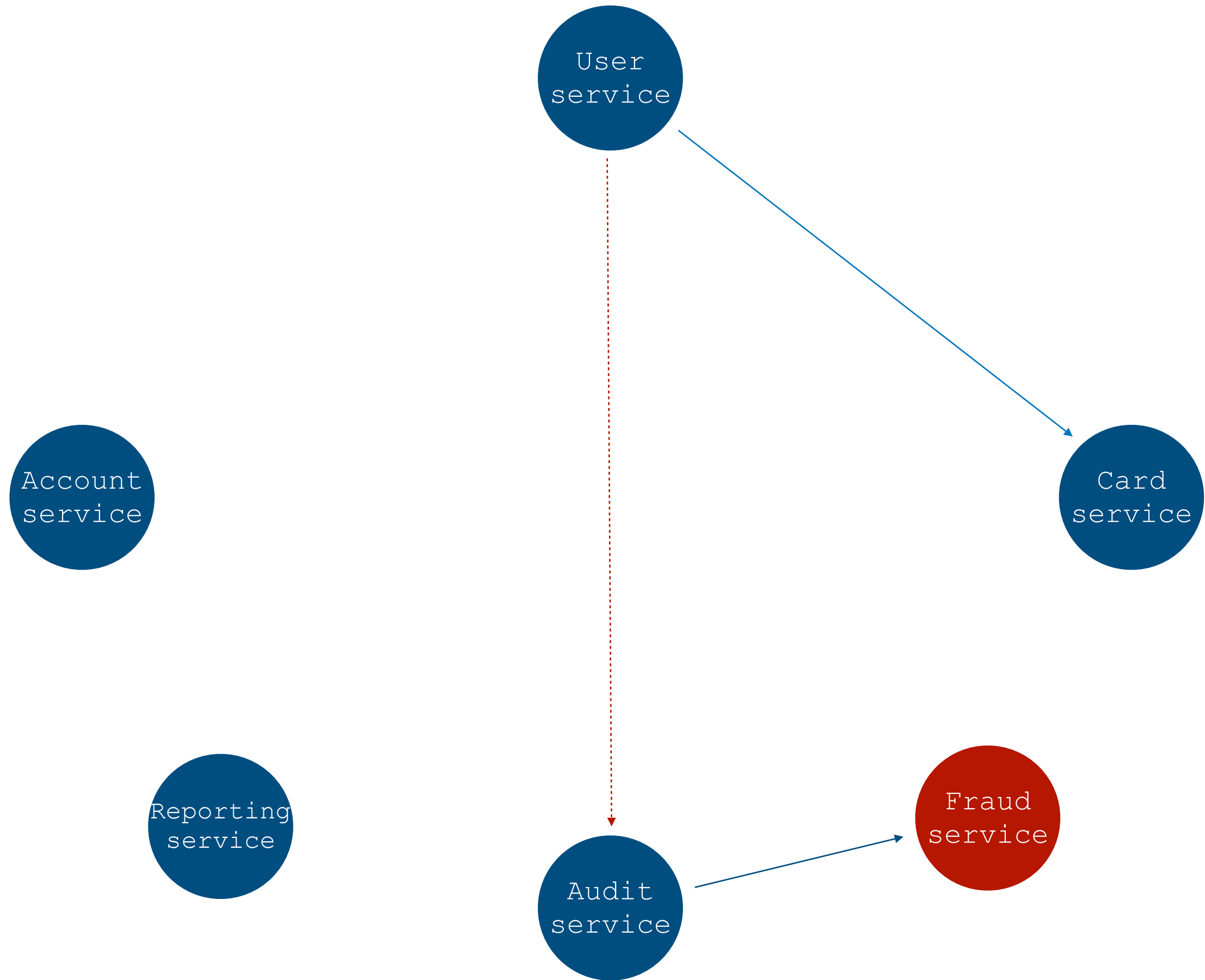
Reporting  
service

Audit  
service

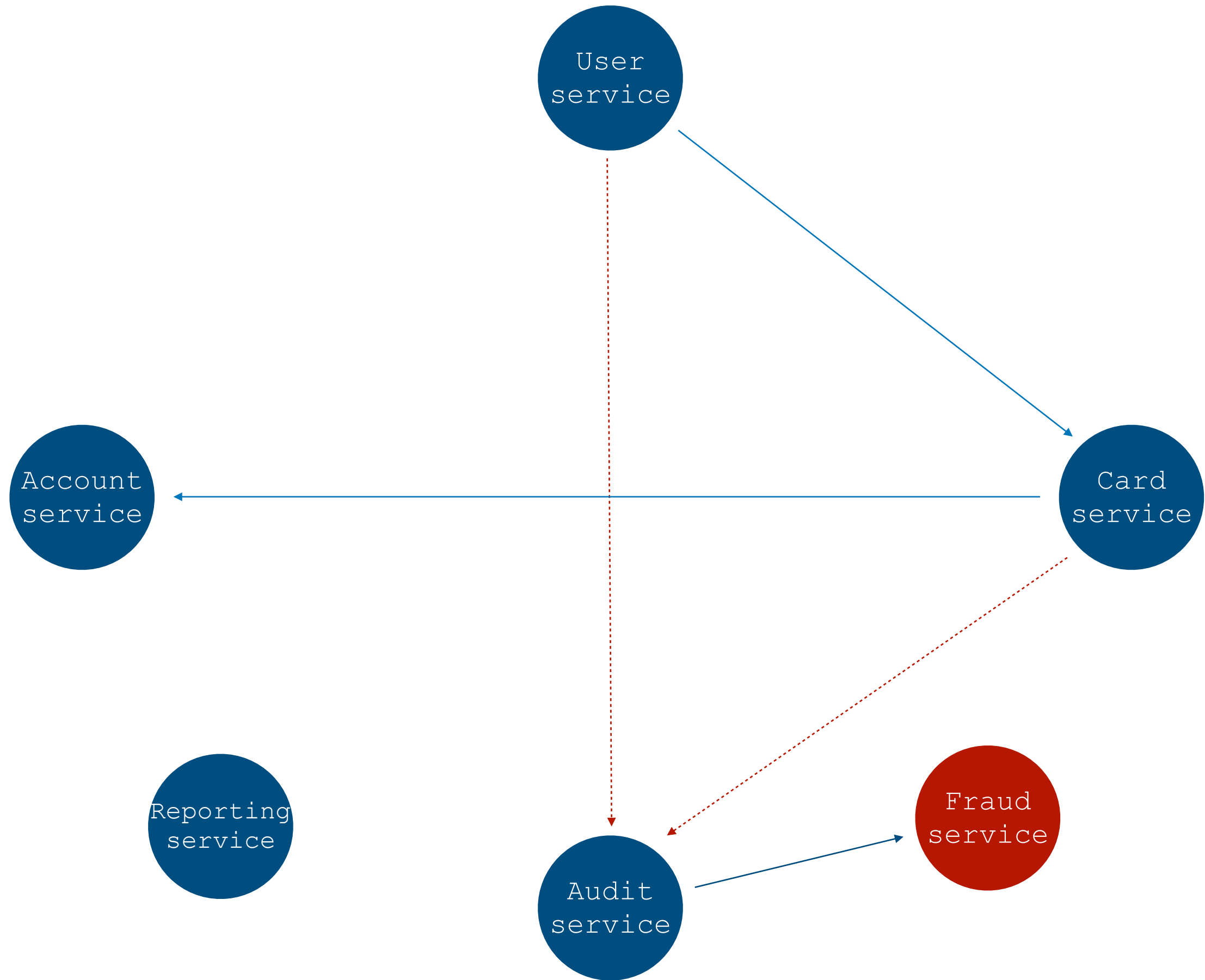
Fraud  
service

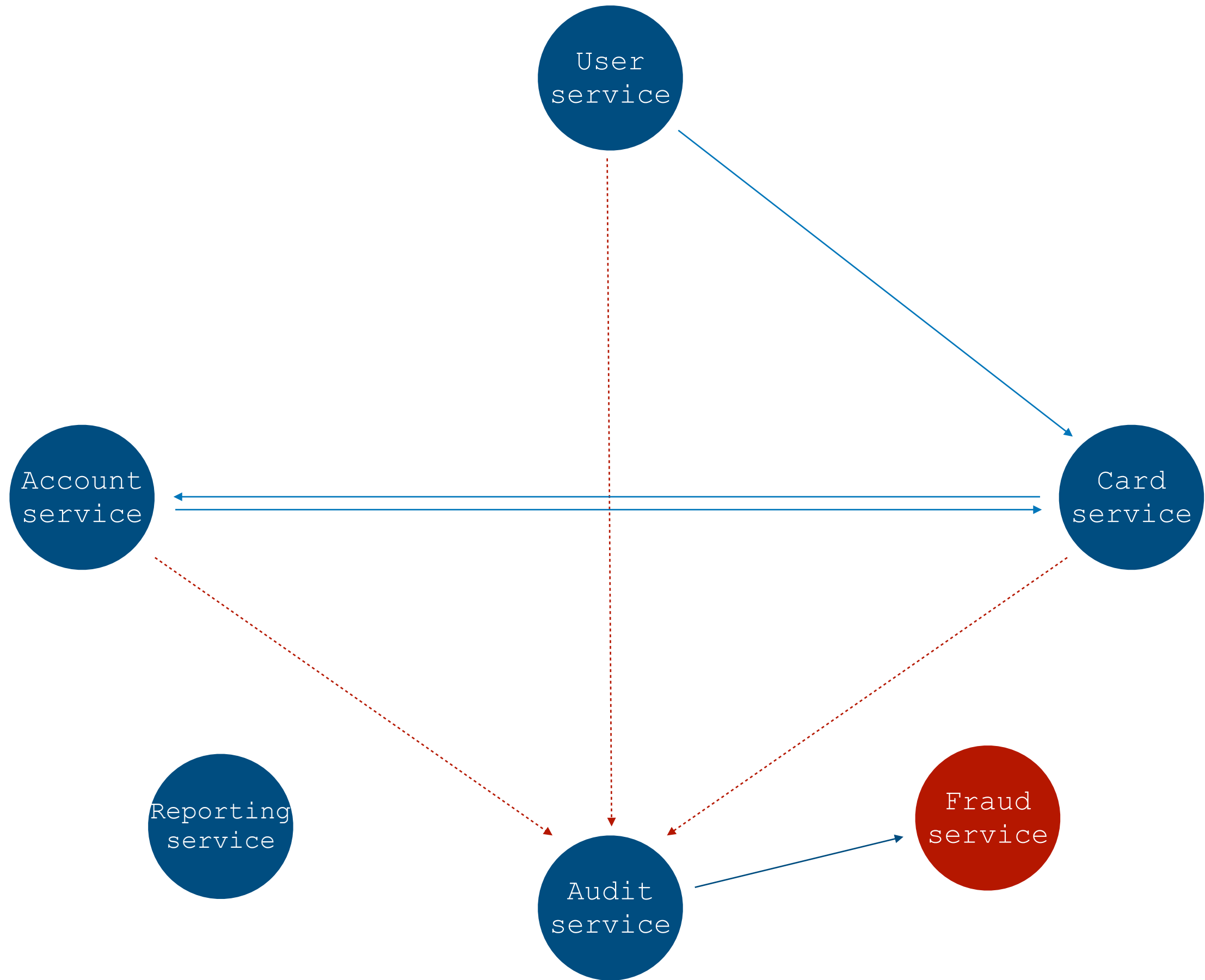


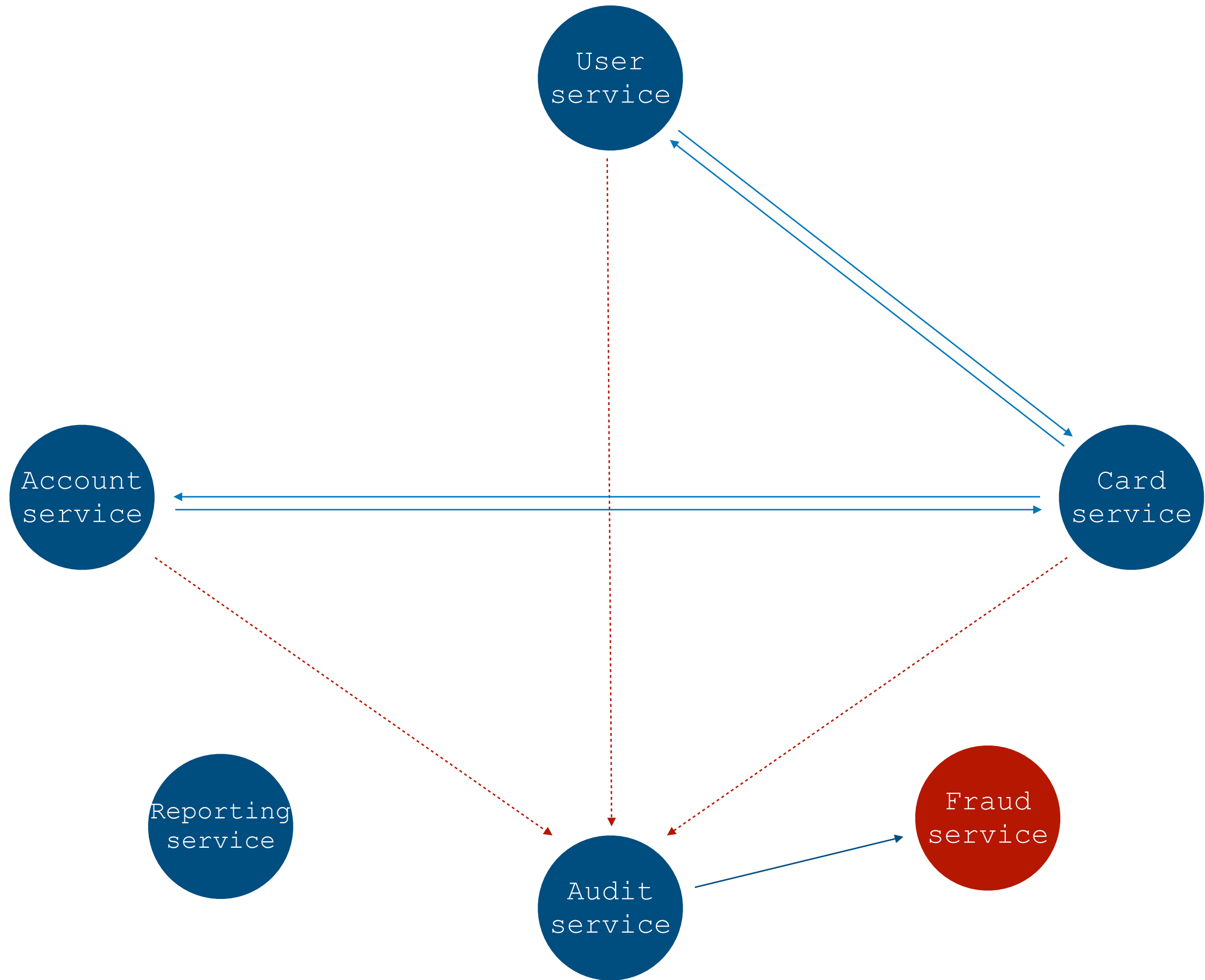


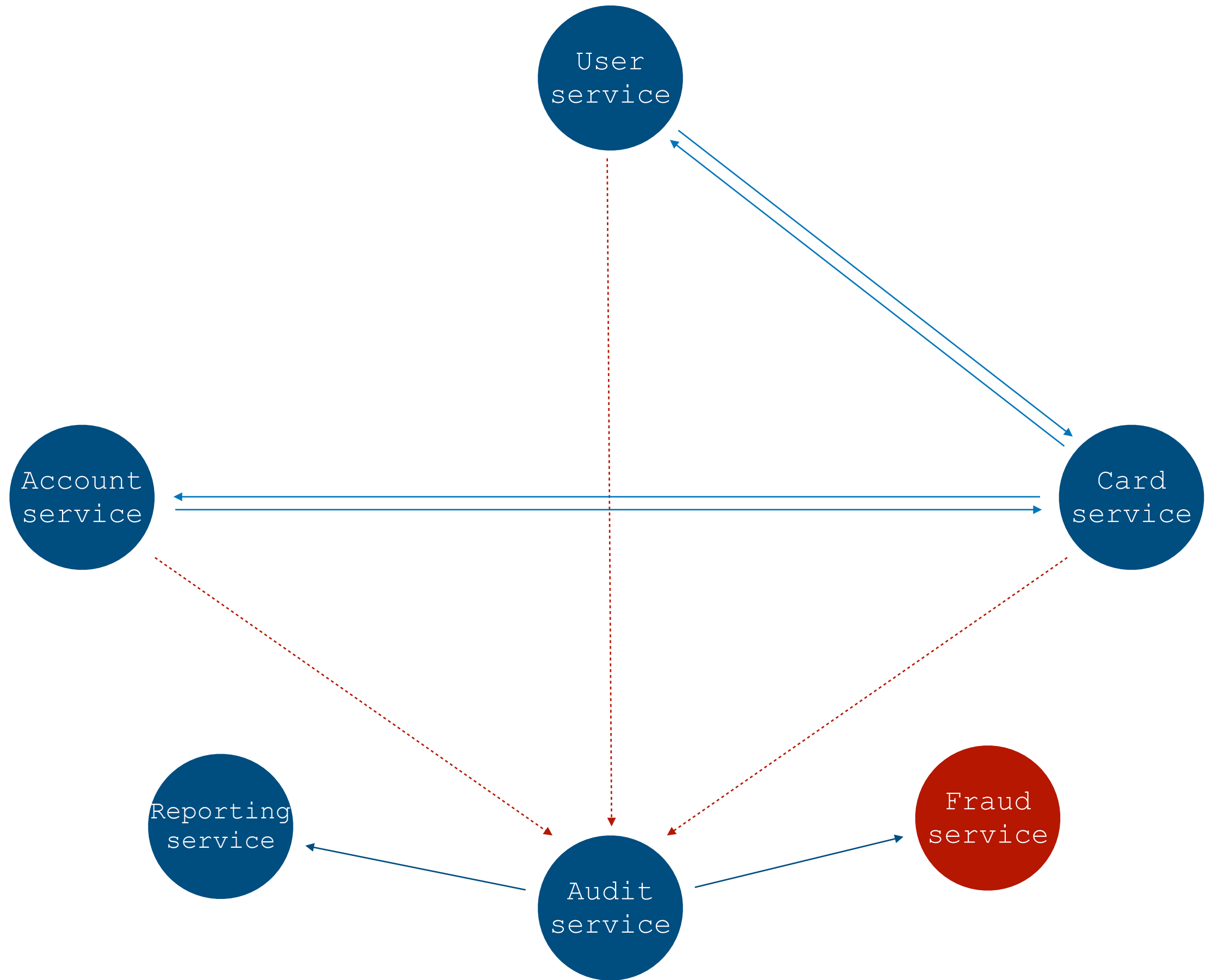


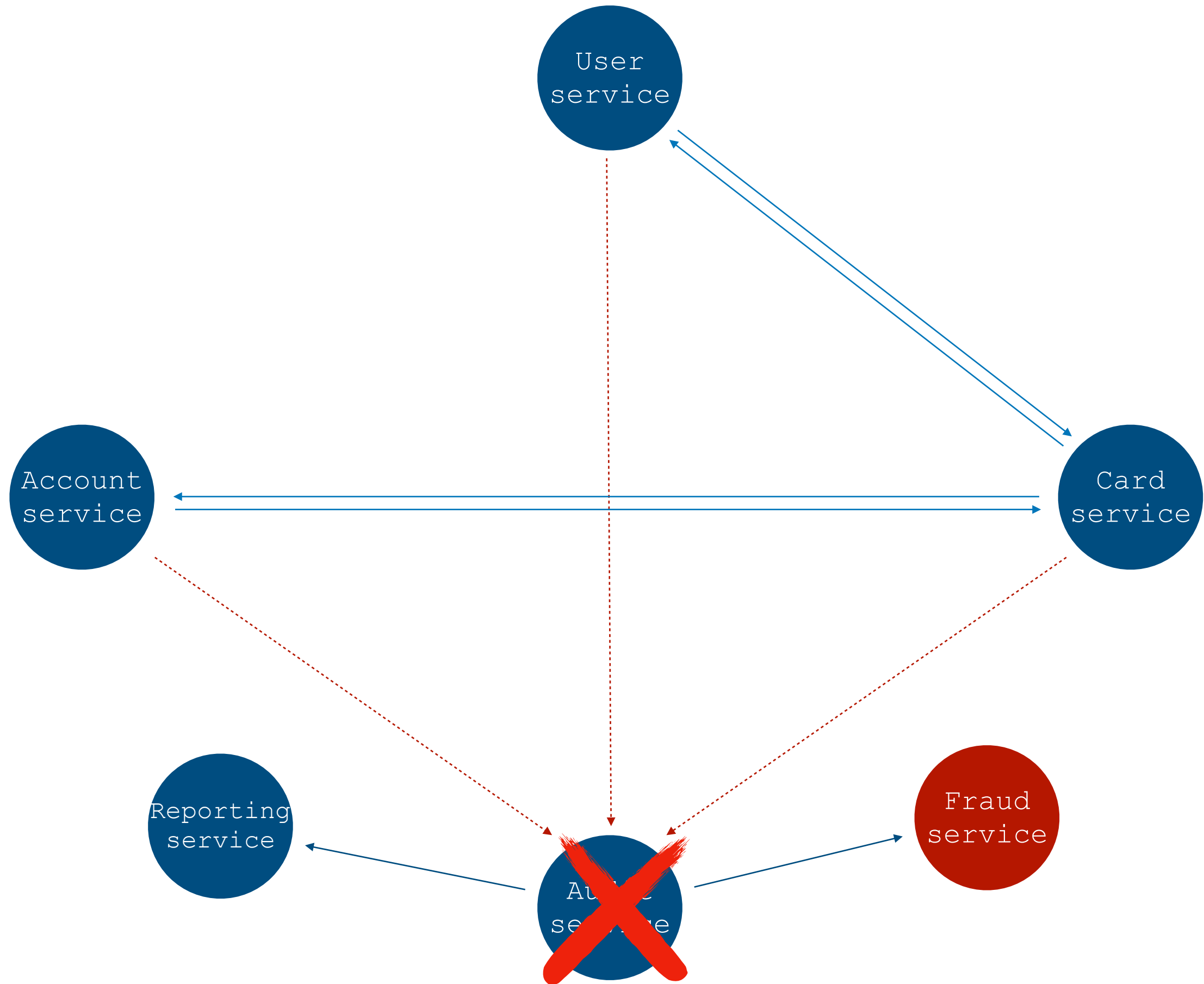


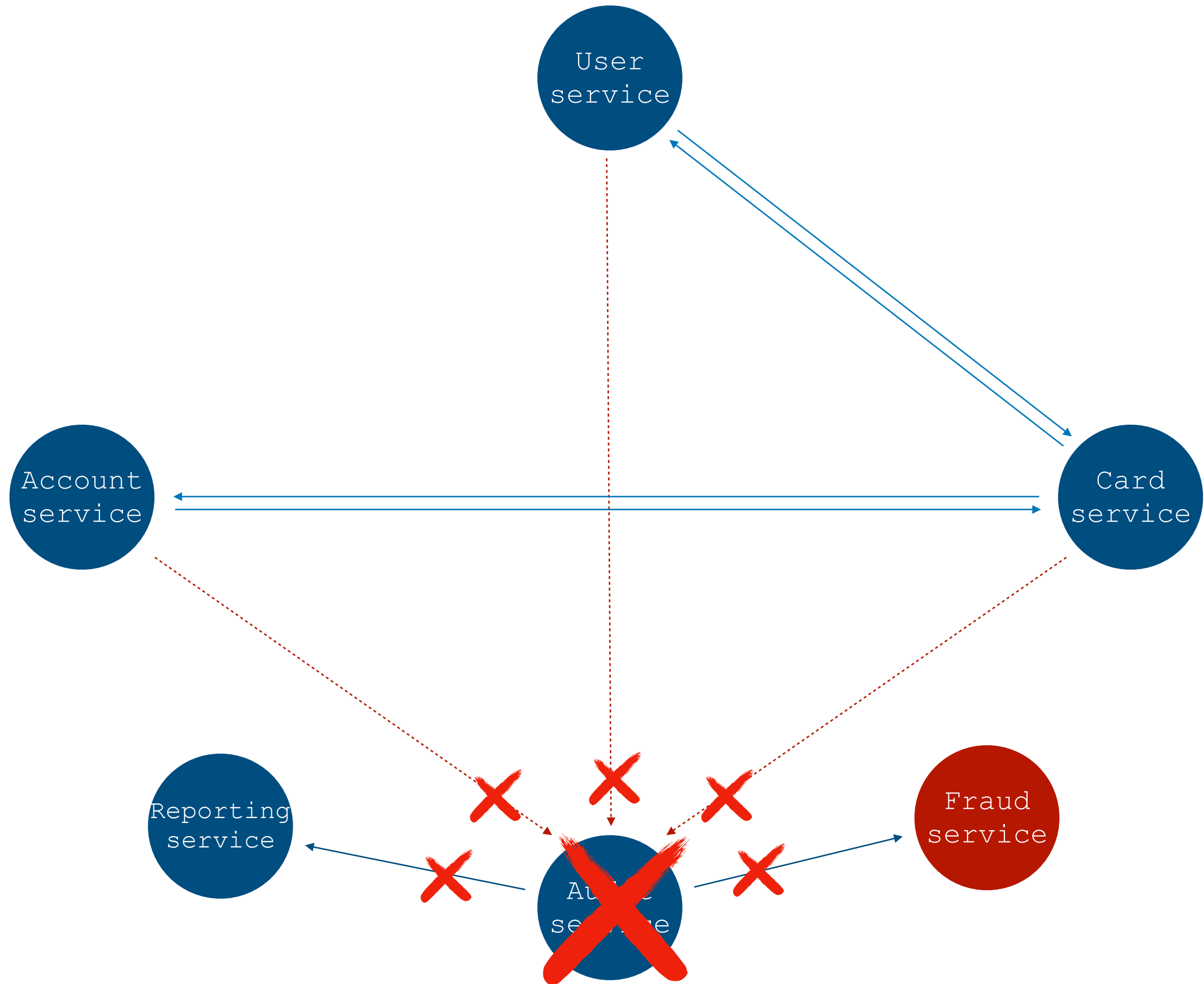


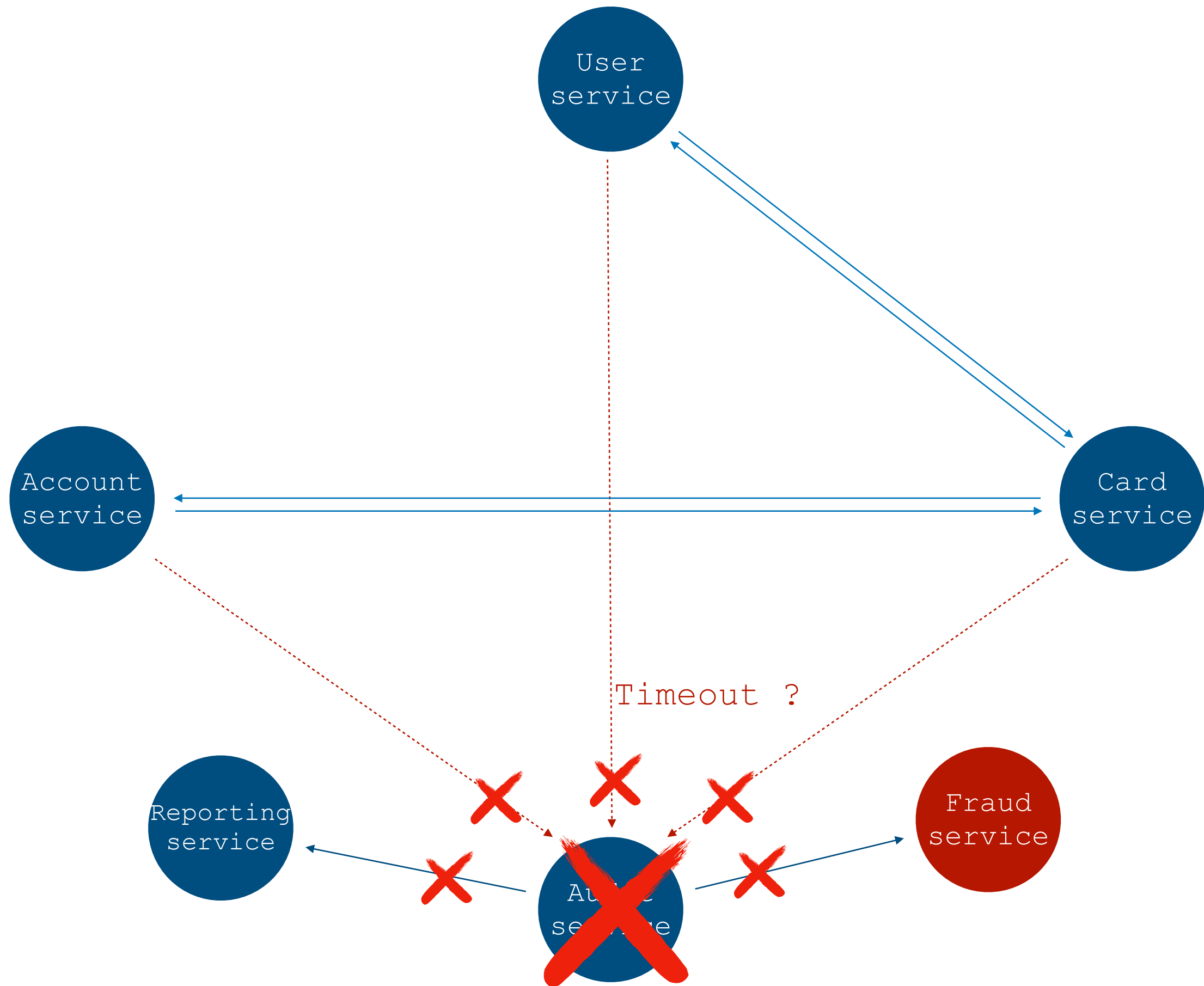


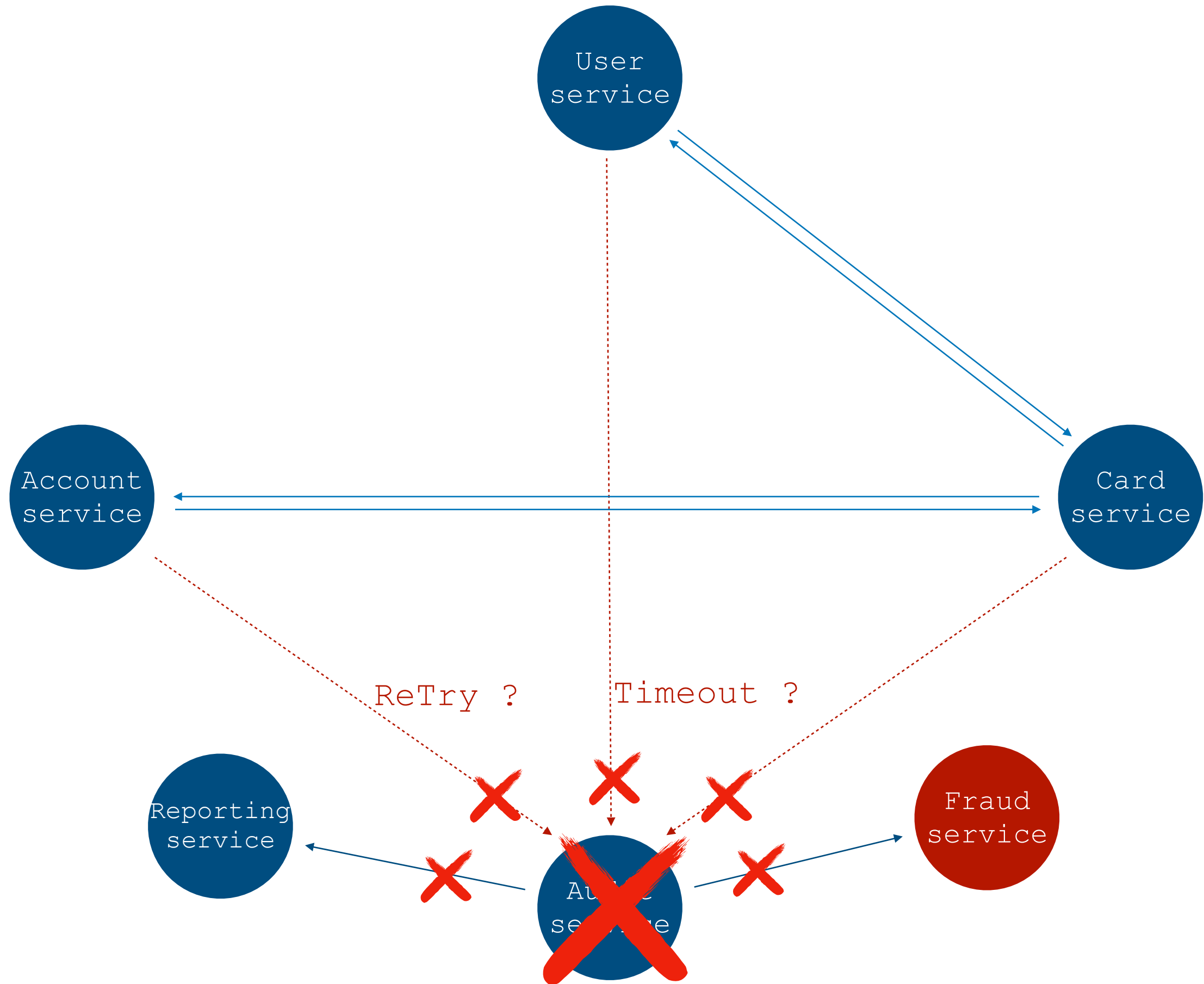




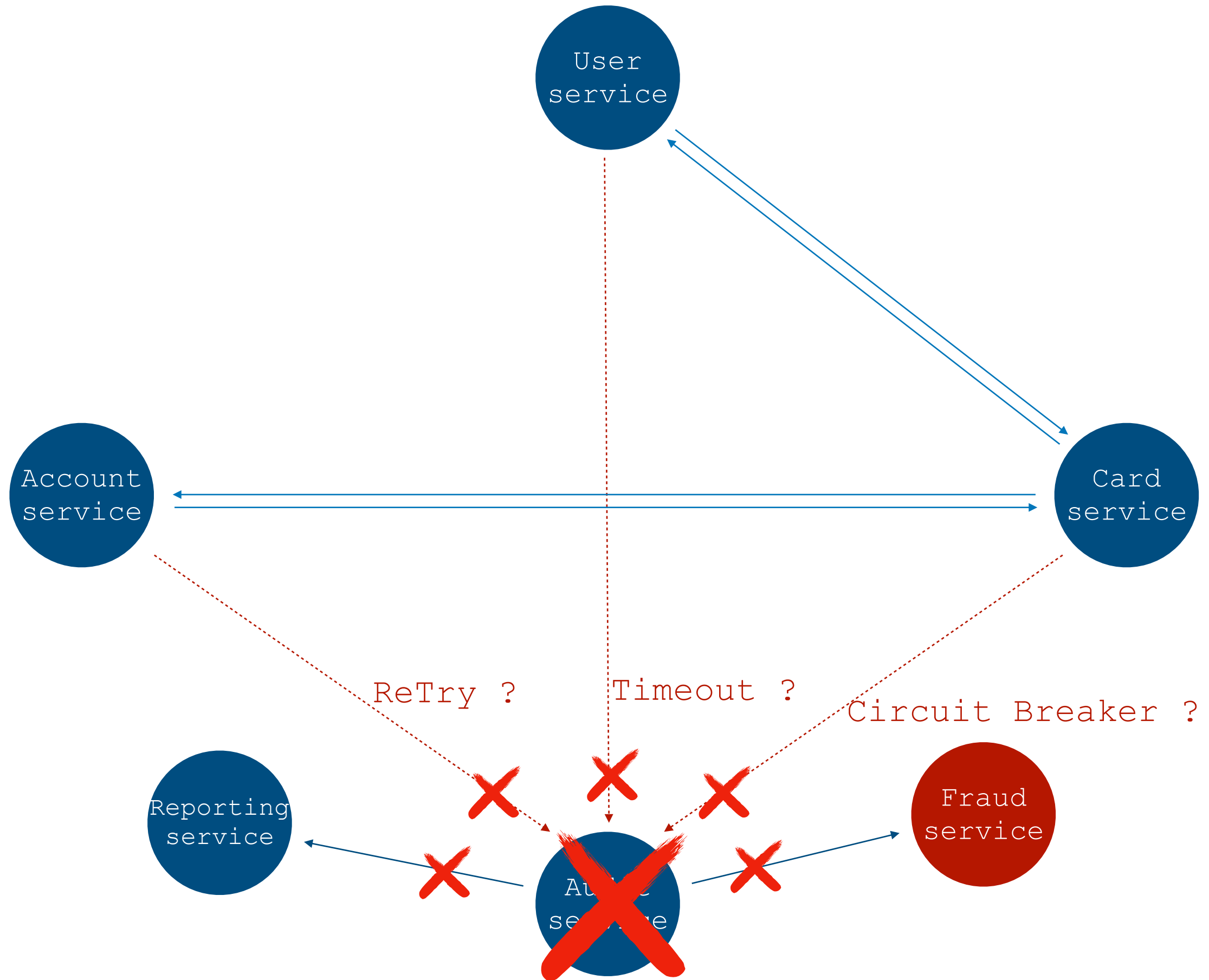


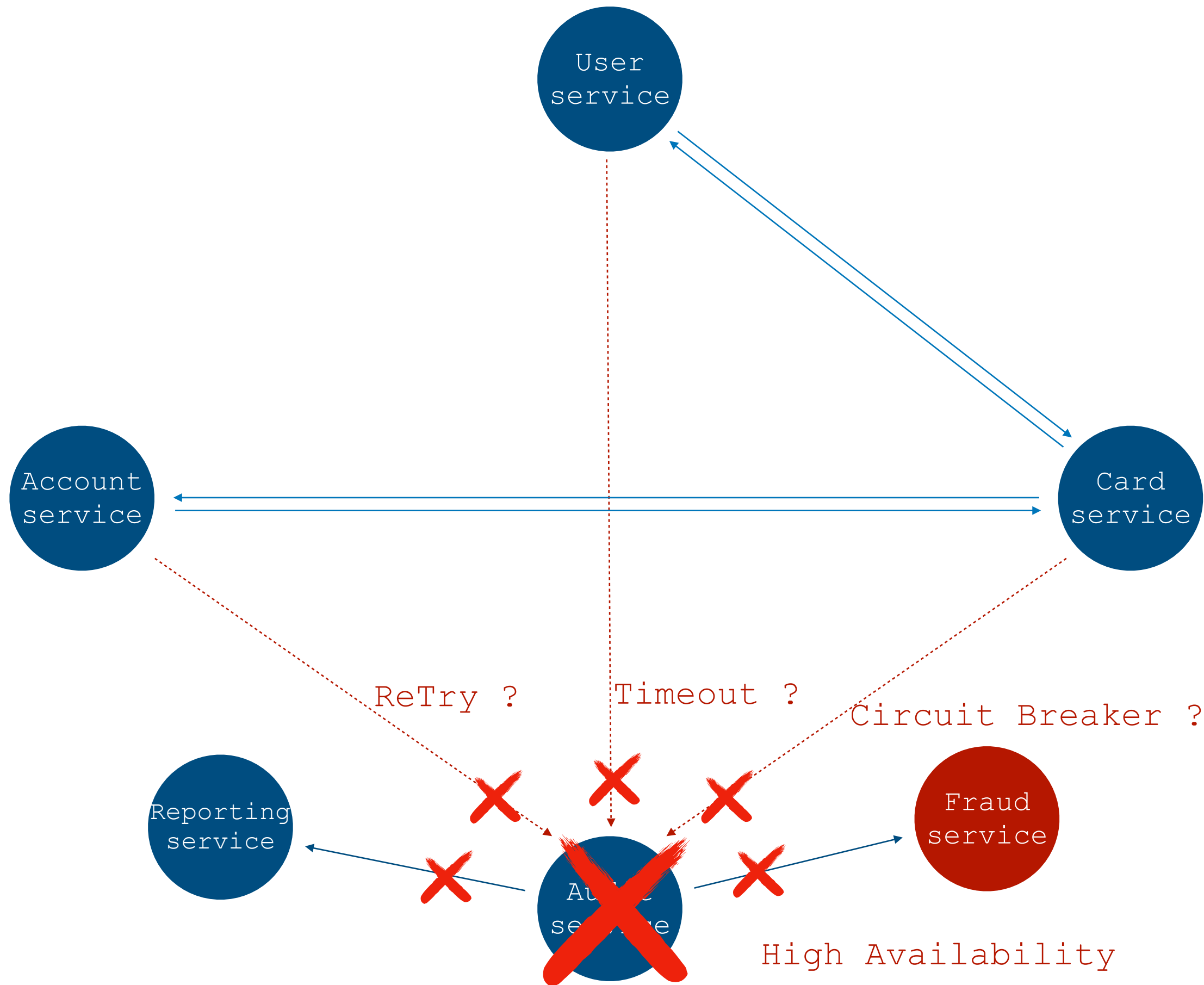


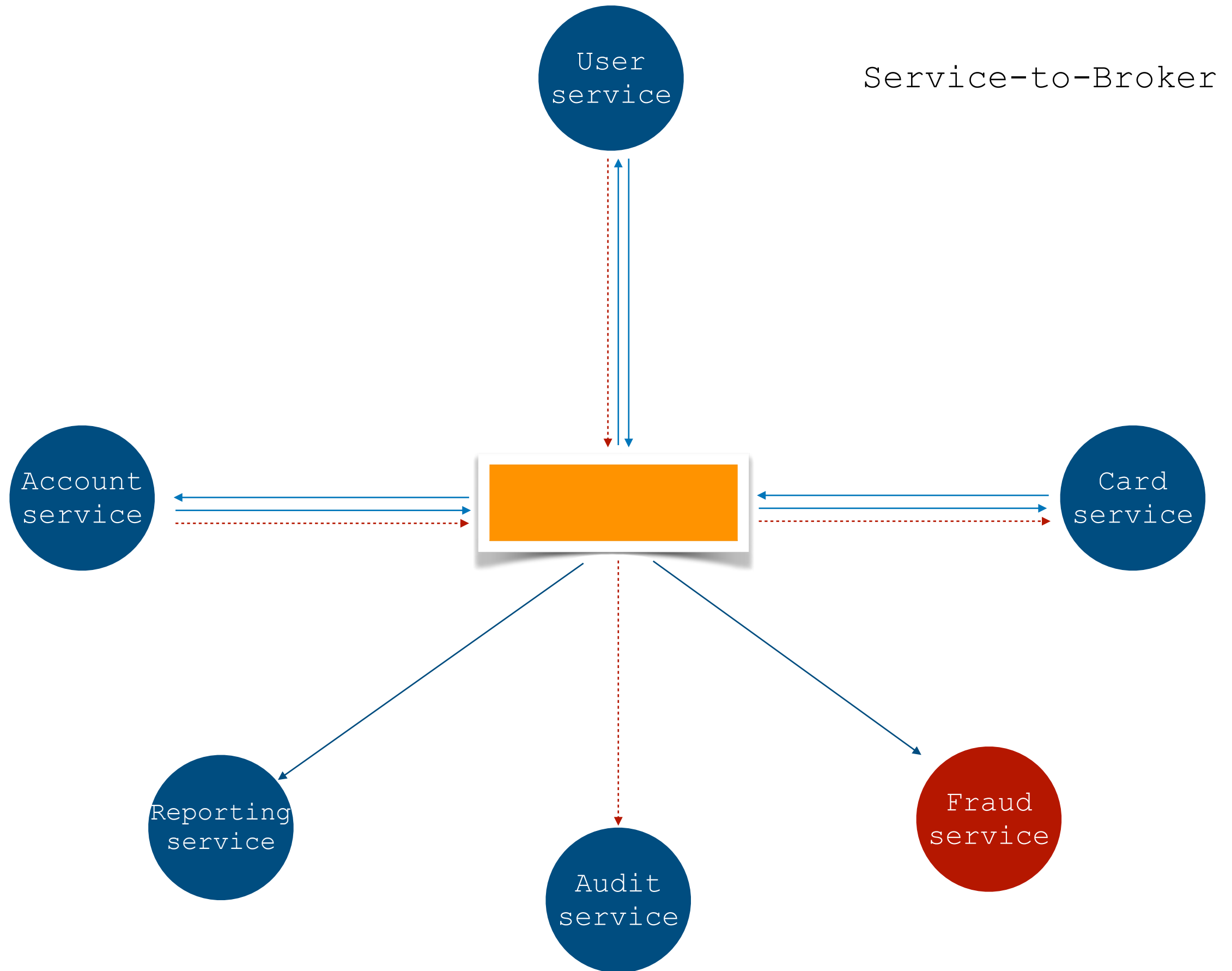


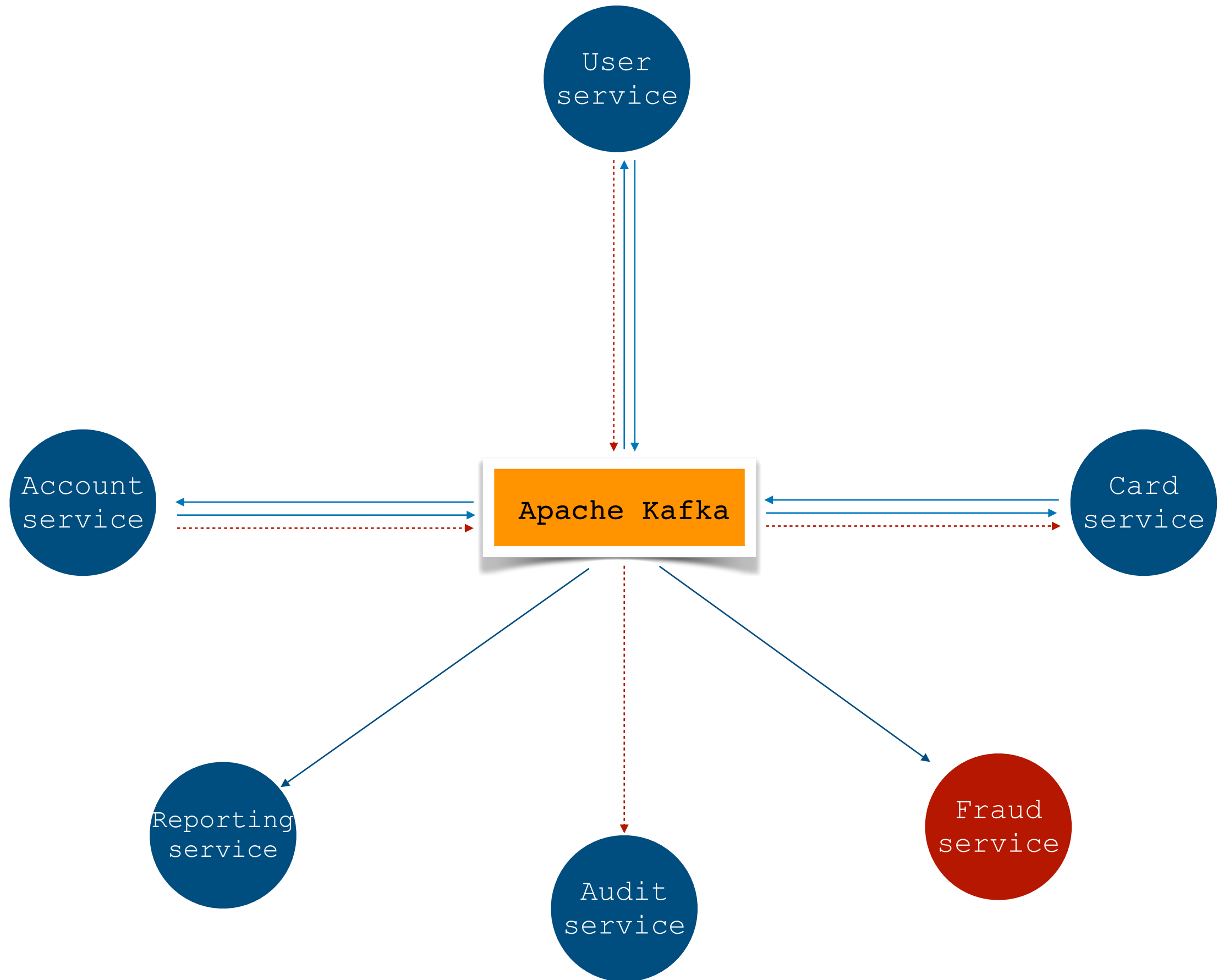




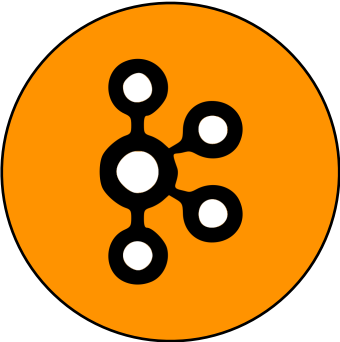






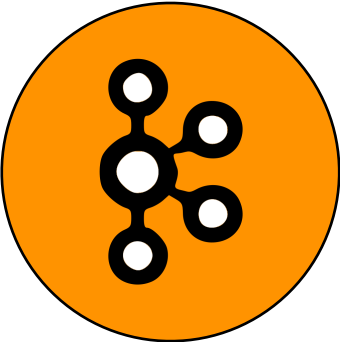


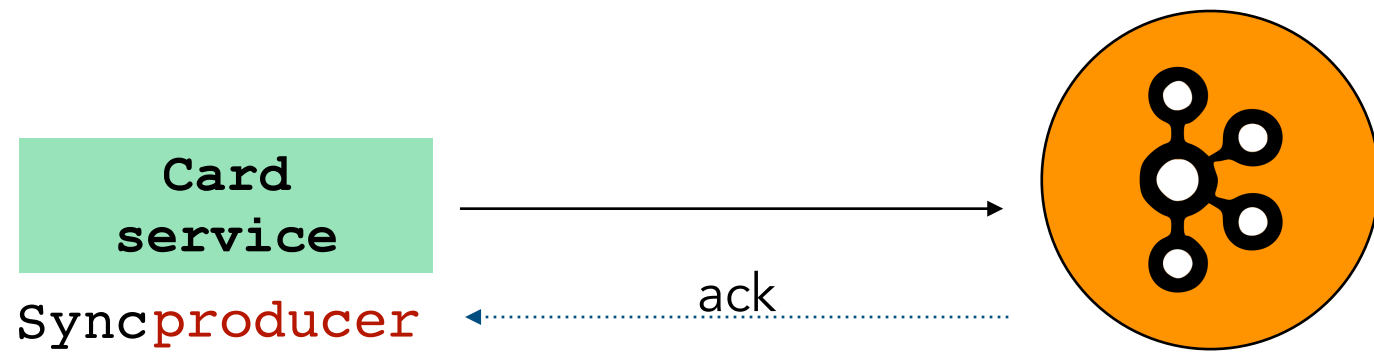
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service

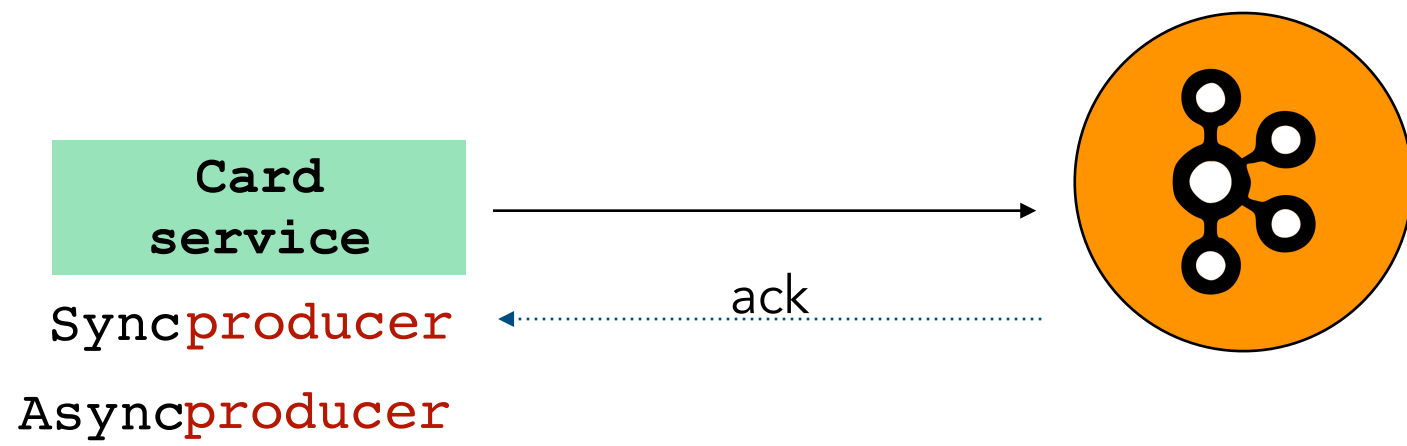


Card  
service

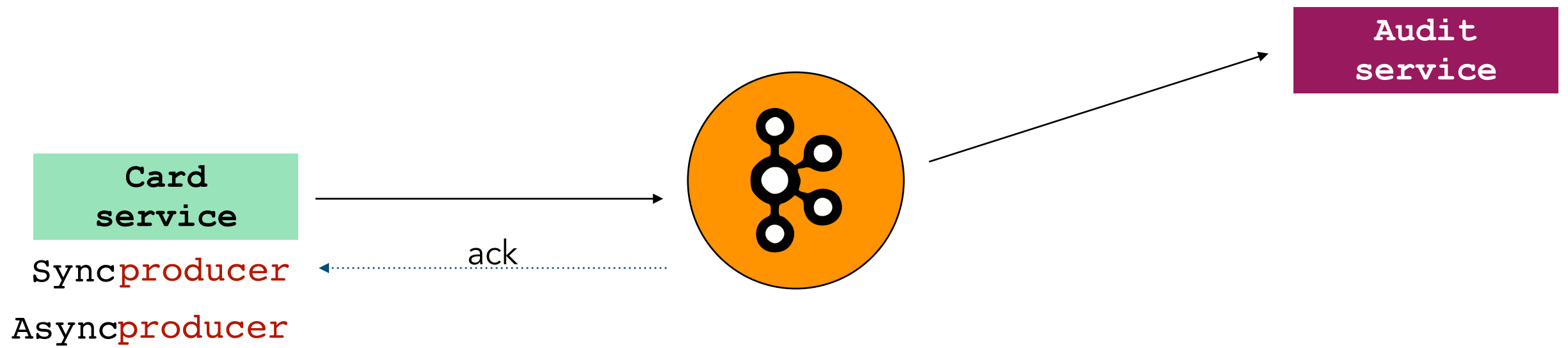
producer

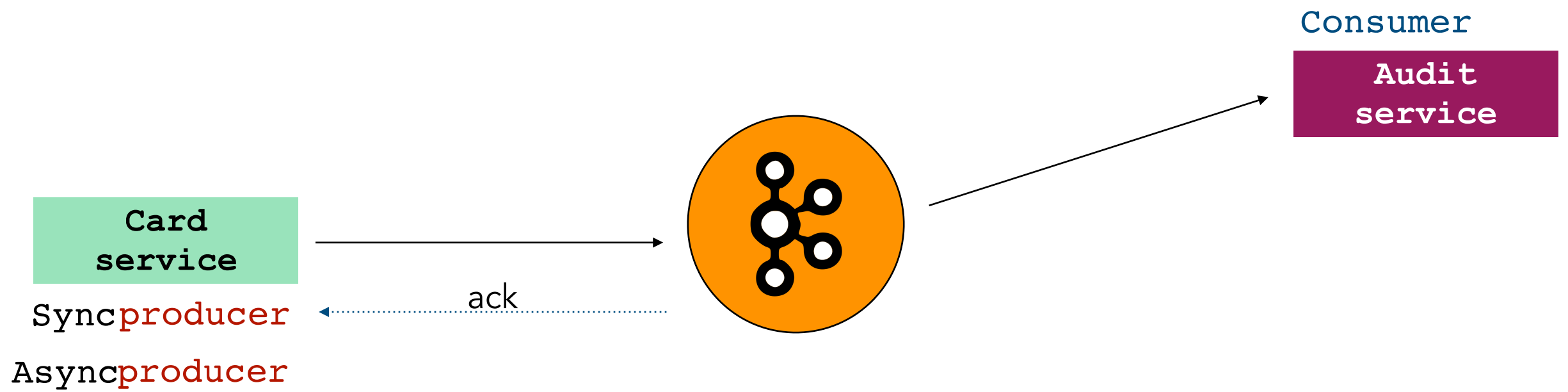


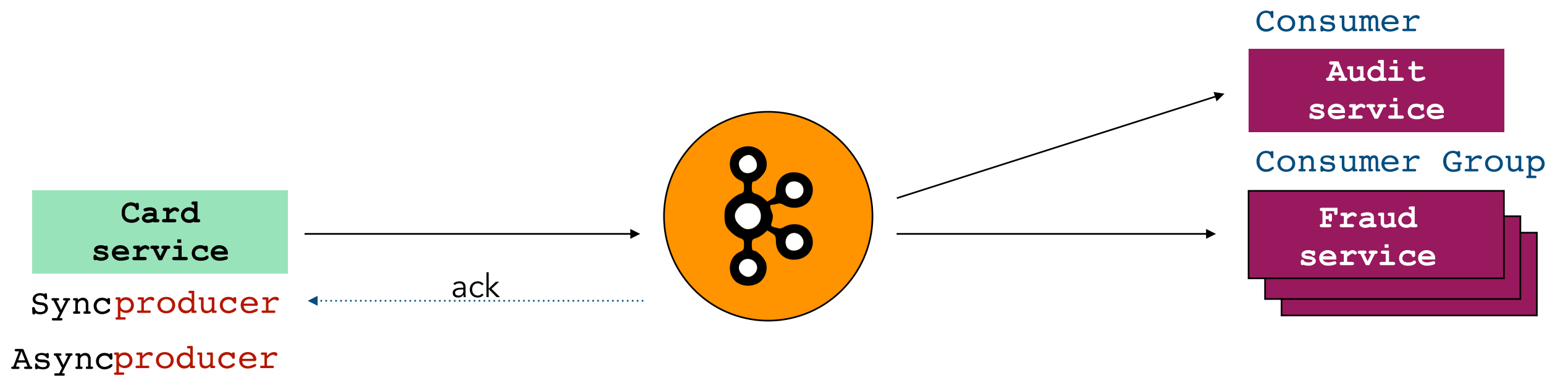


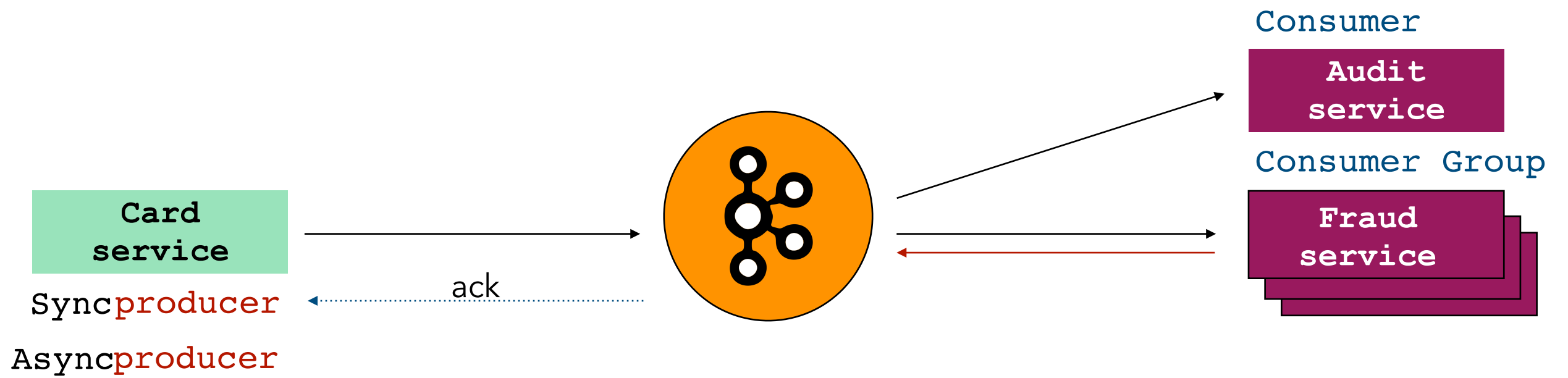


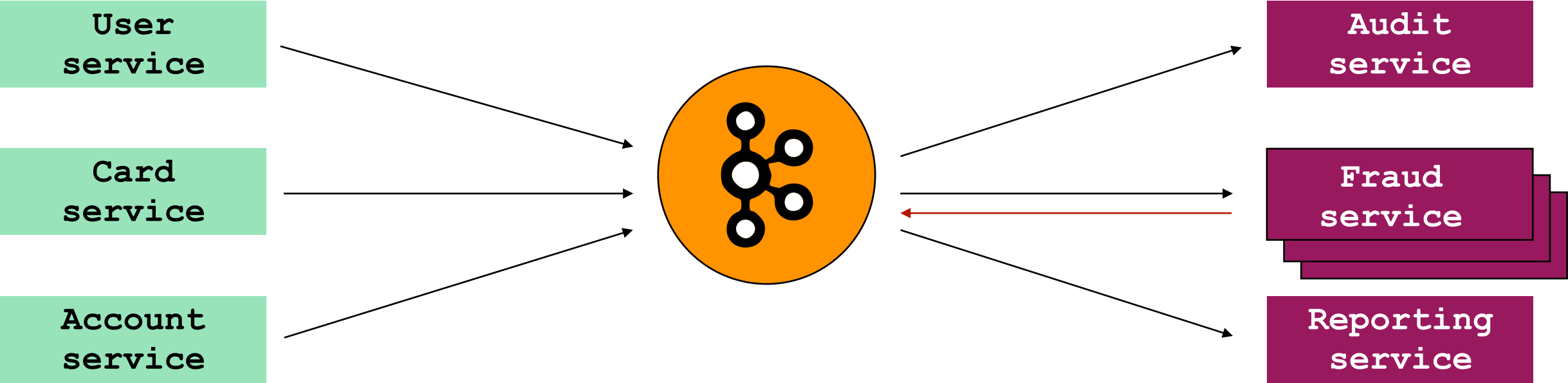


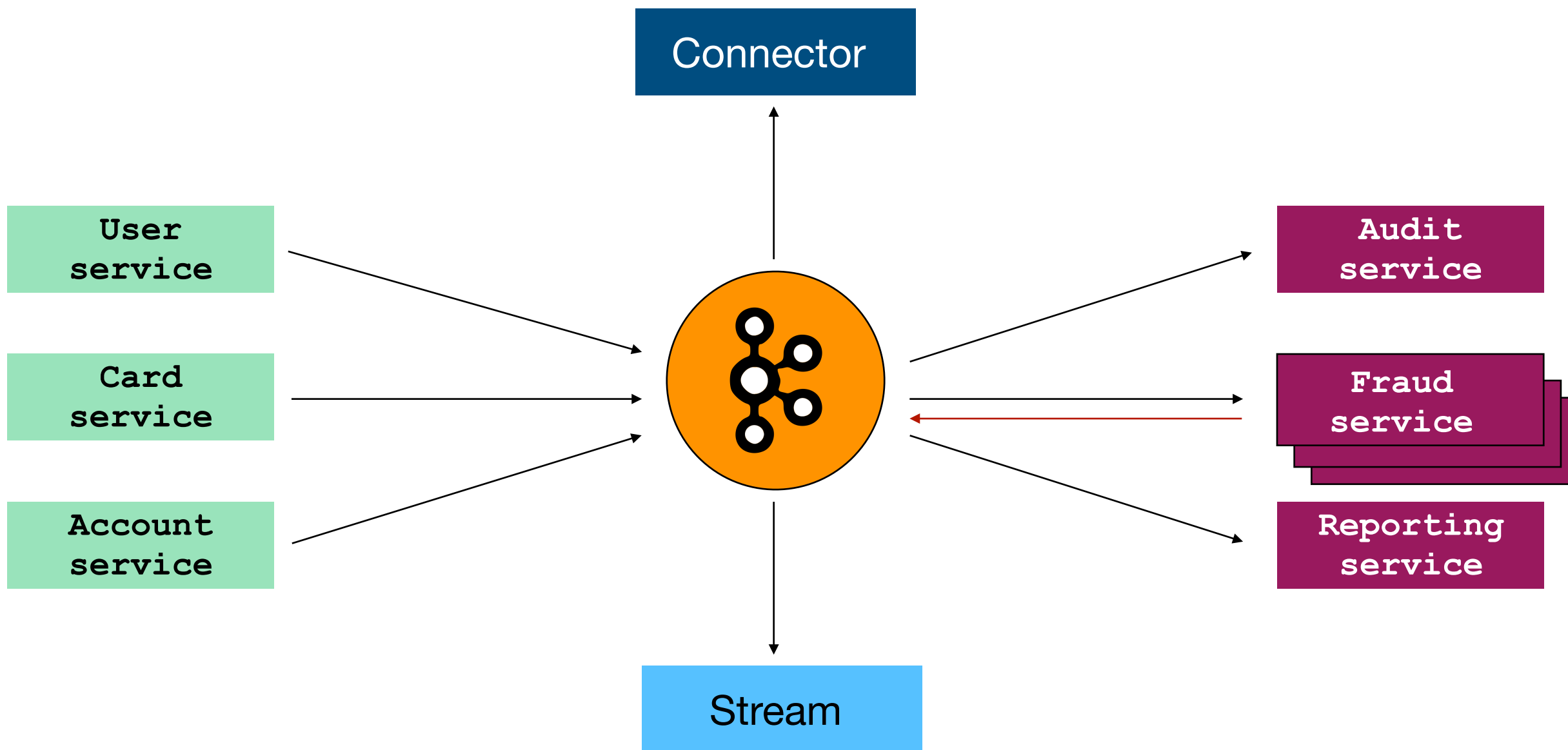


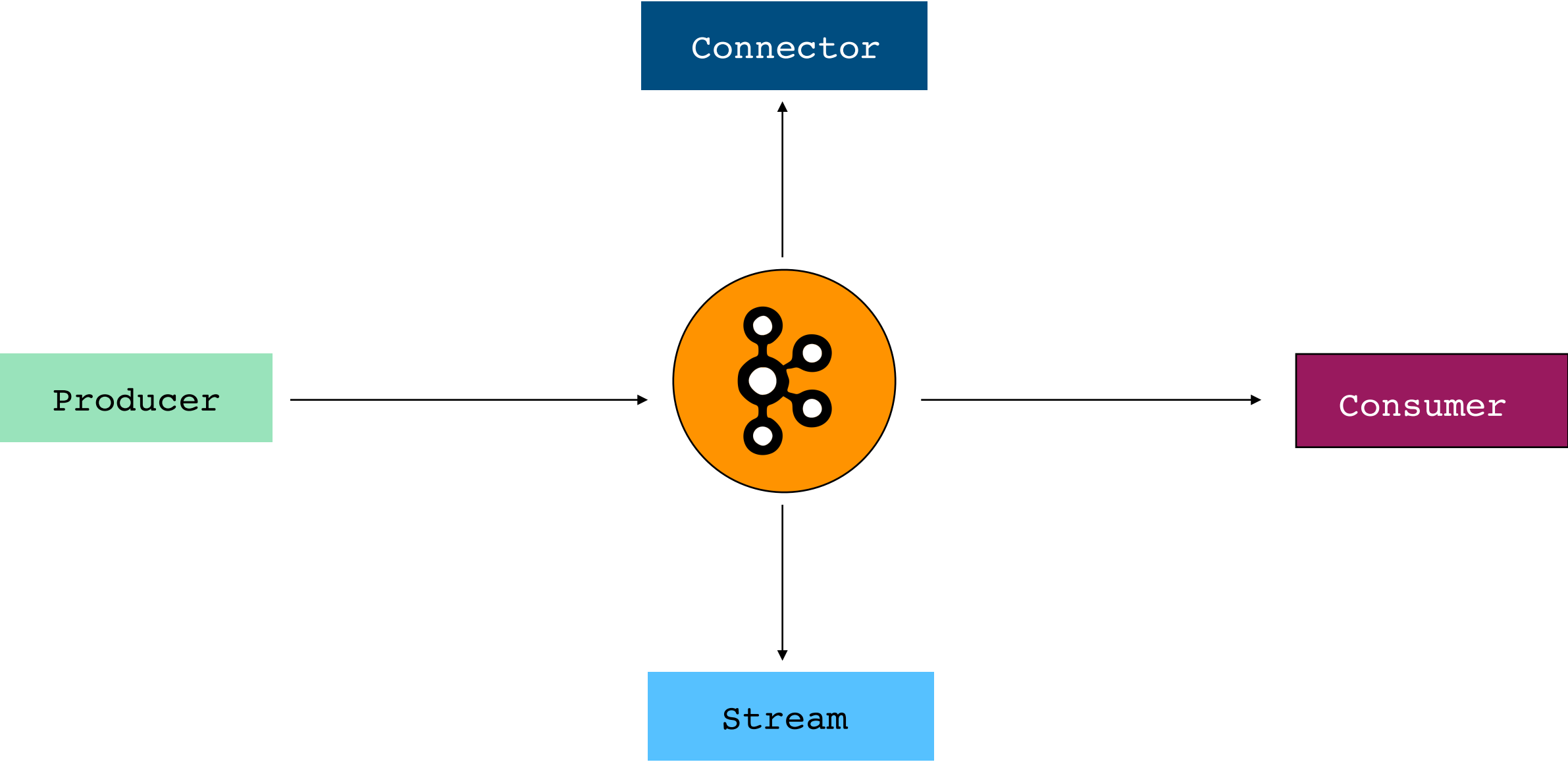


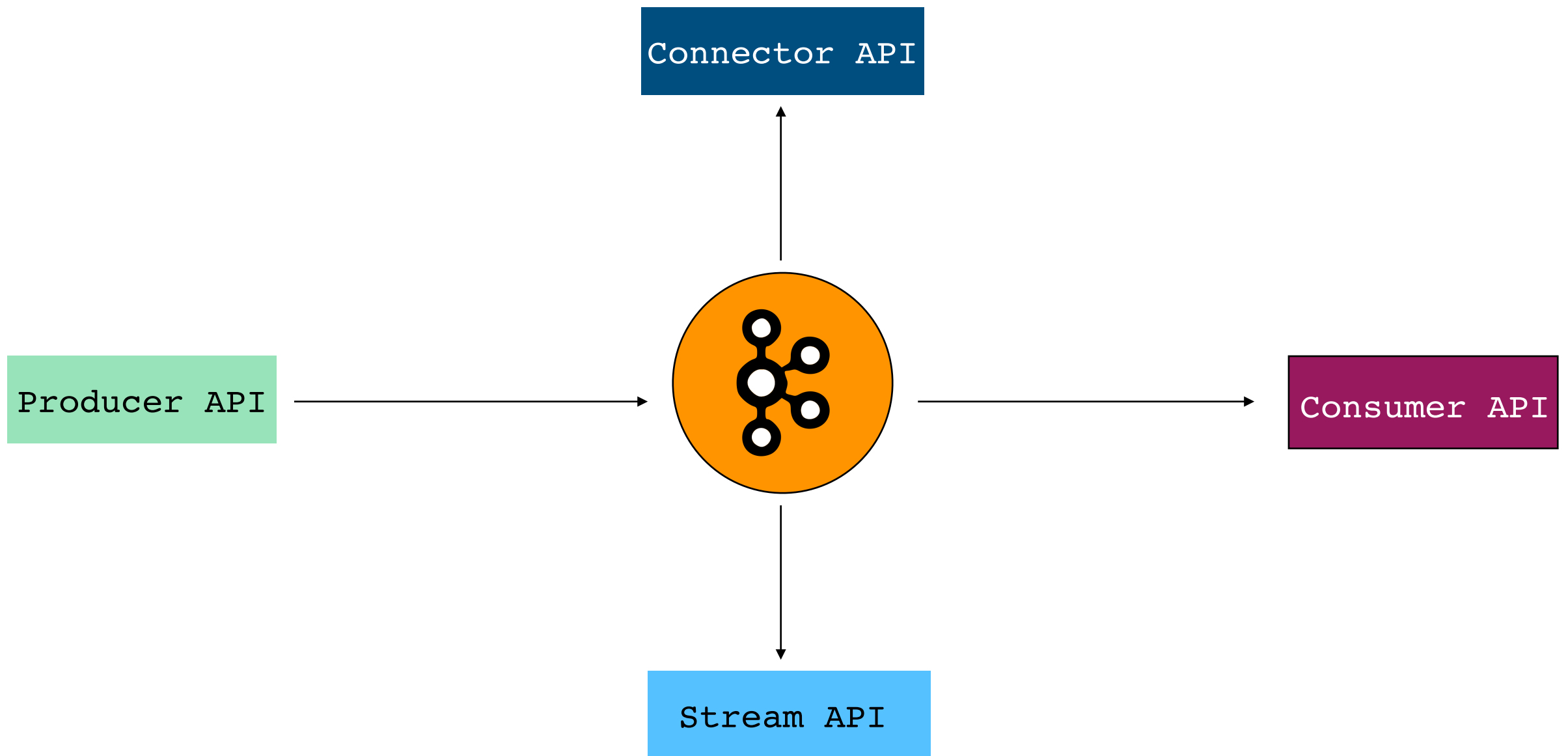






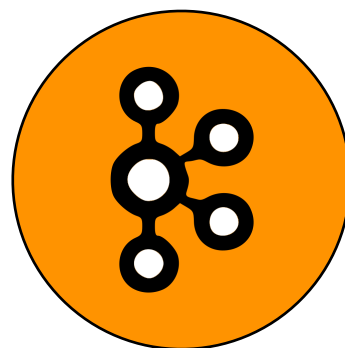




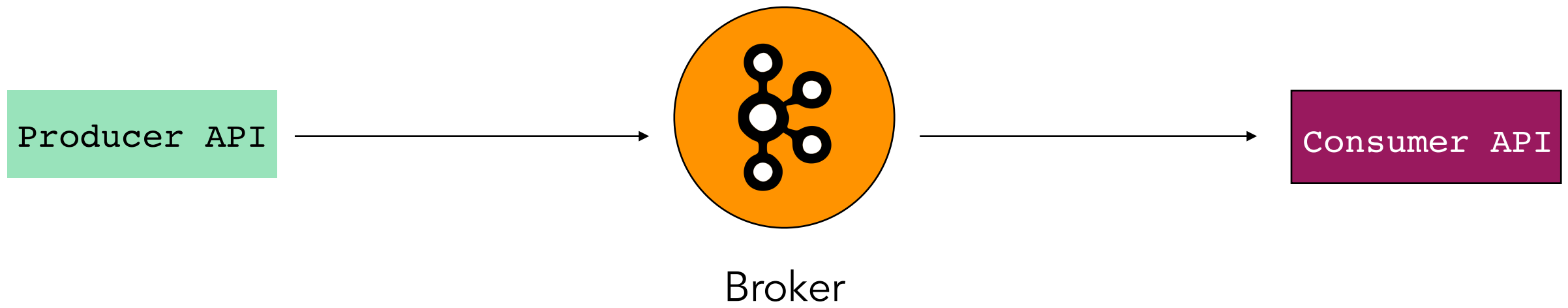


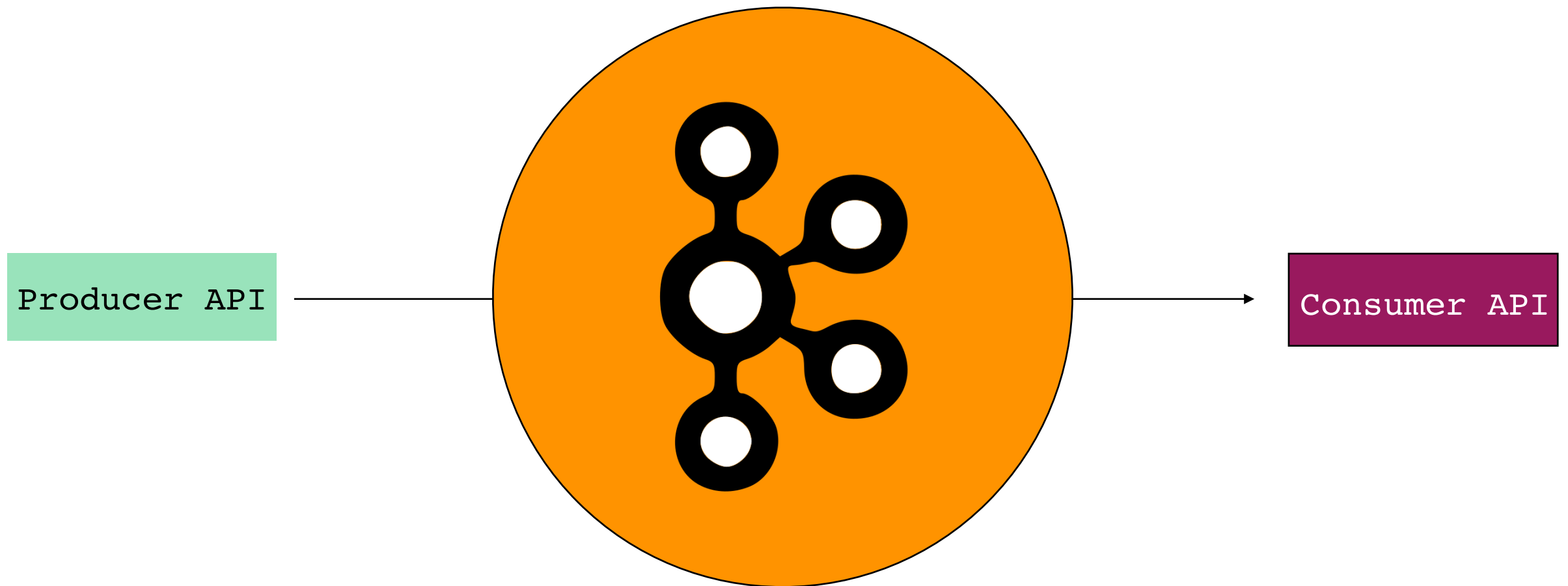


Producer API



Consumer API





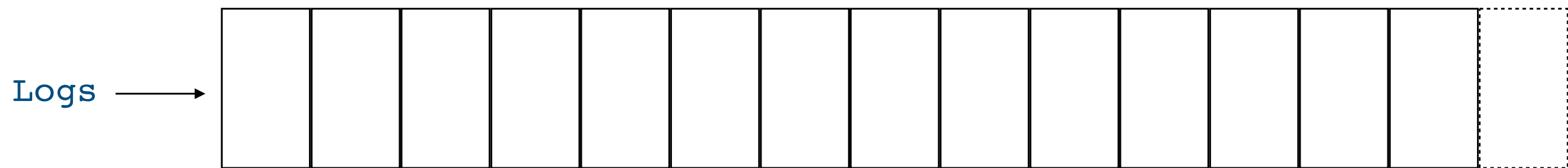
# Topics

topic	topic	topic
topic	topic	topic
topic	topic	topic
topic	topic	topic

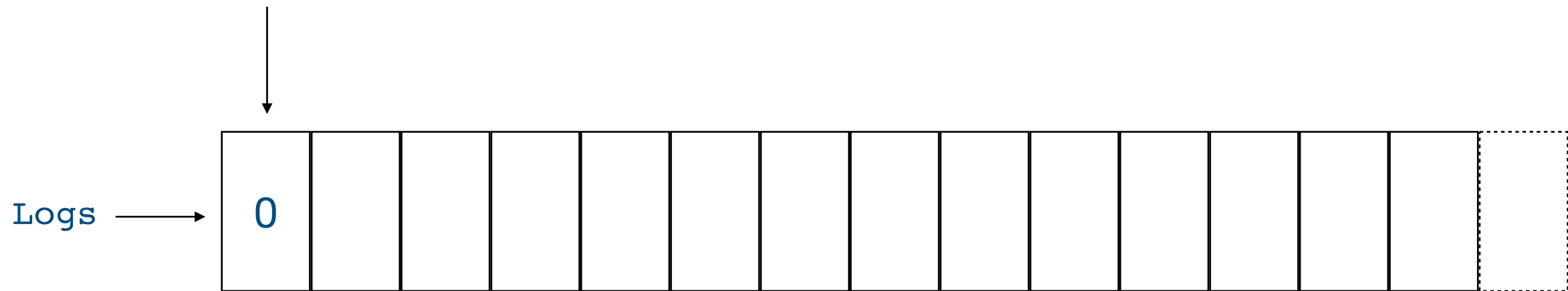
# Topics

Messages	Alerts	Signups
topic	topic	topic
topic	topic	topic
topic	topic	topic

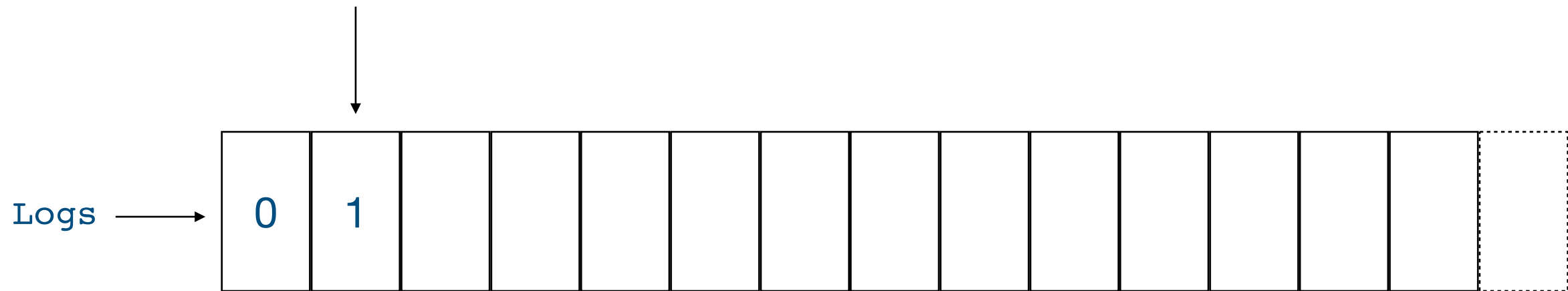
# Topics & partitions



# Topics & partitions

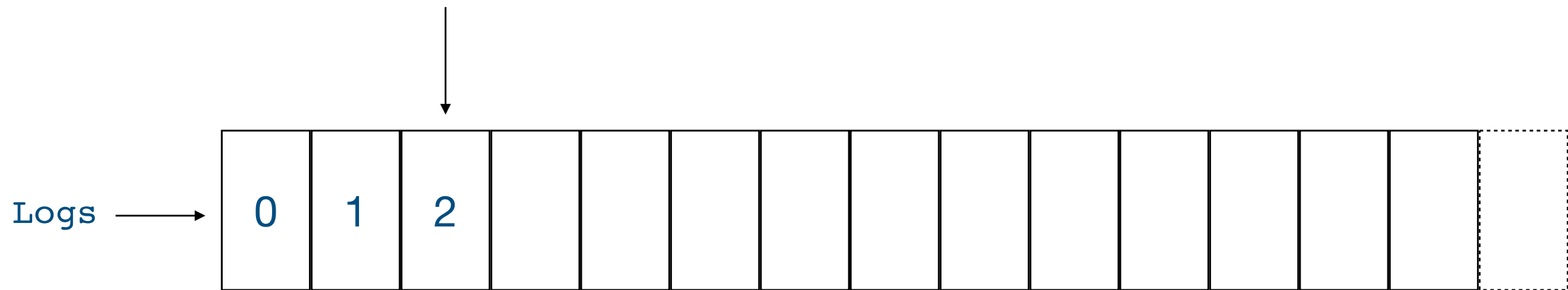


# Topics & partitions

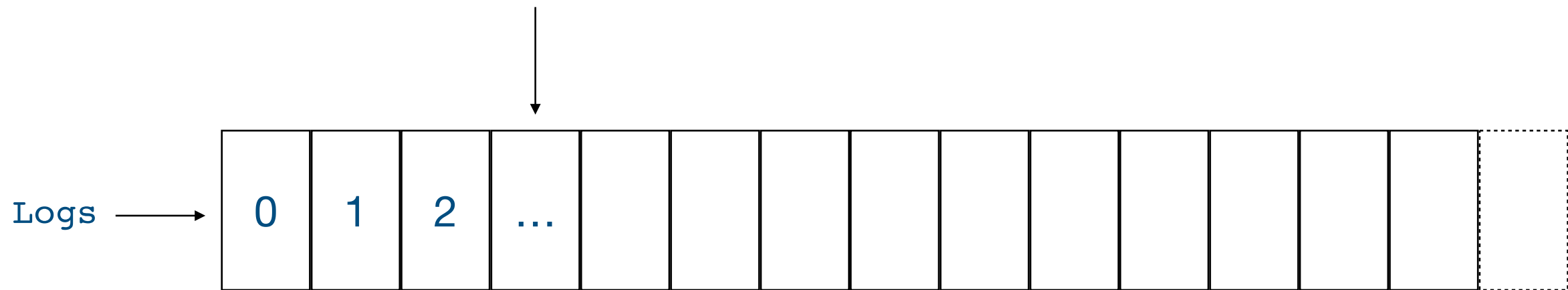




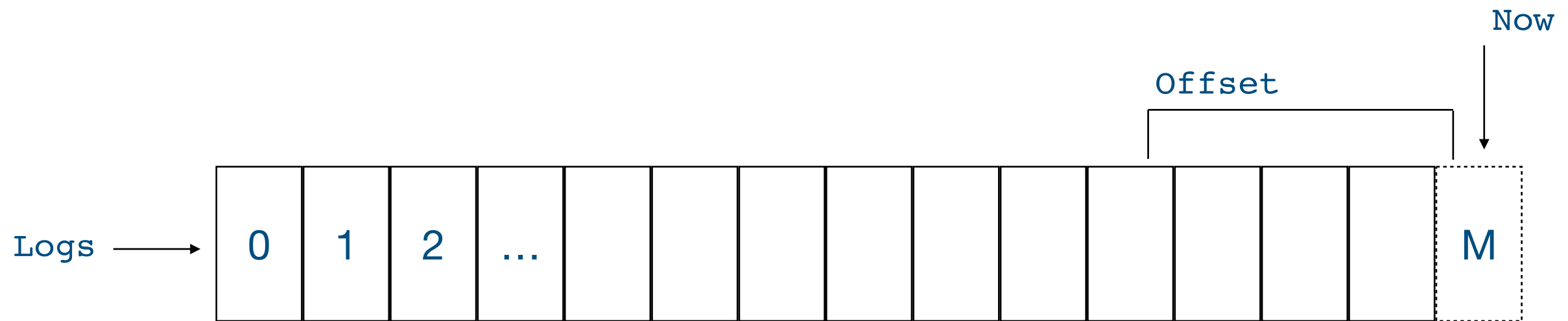
# Topics & partitions



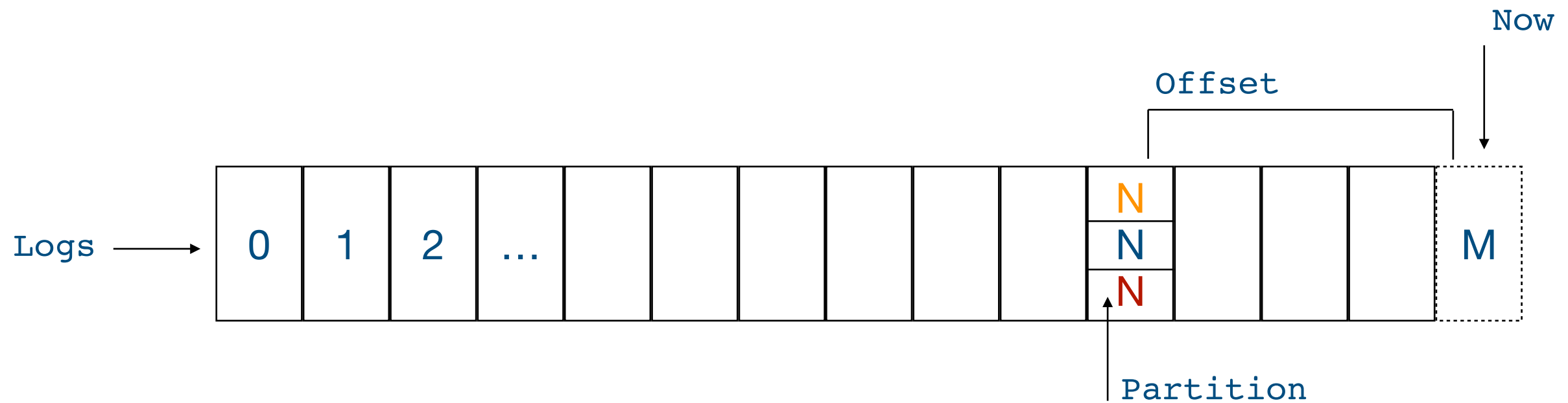
# Topics & partitions



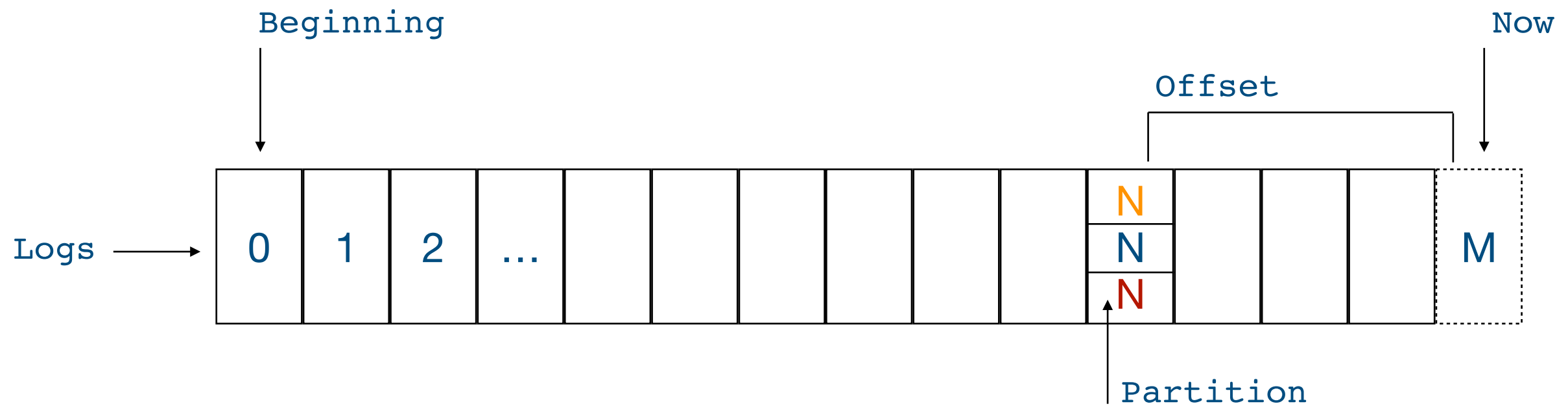
# Topics & partitions



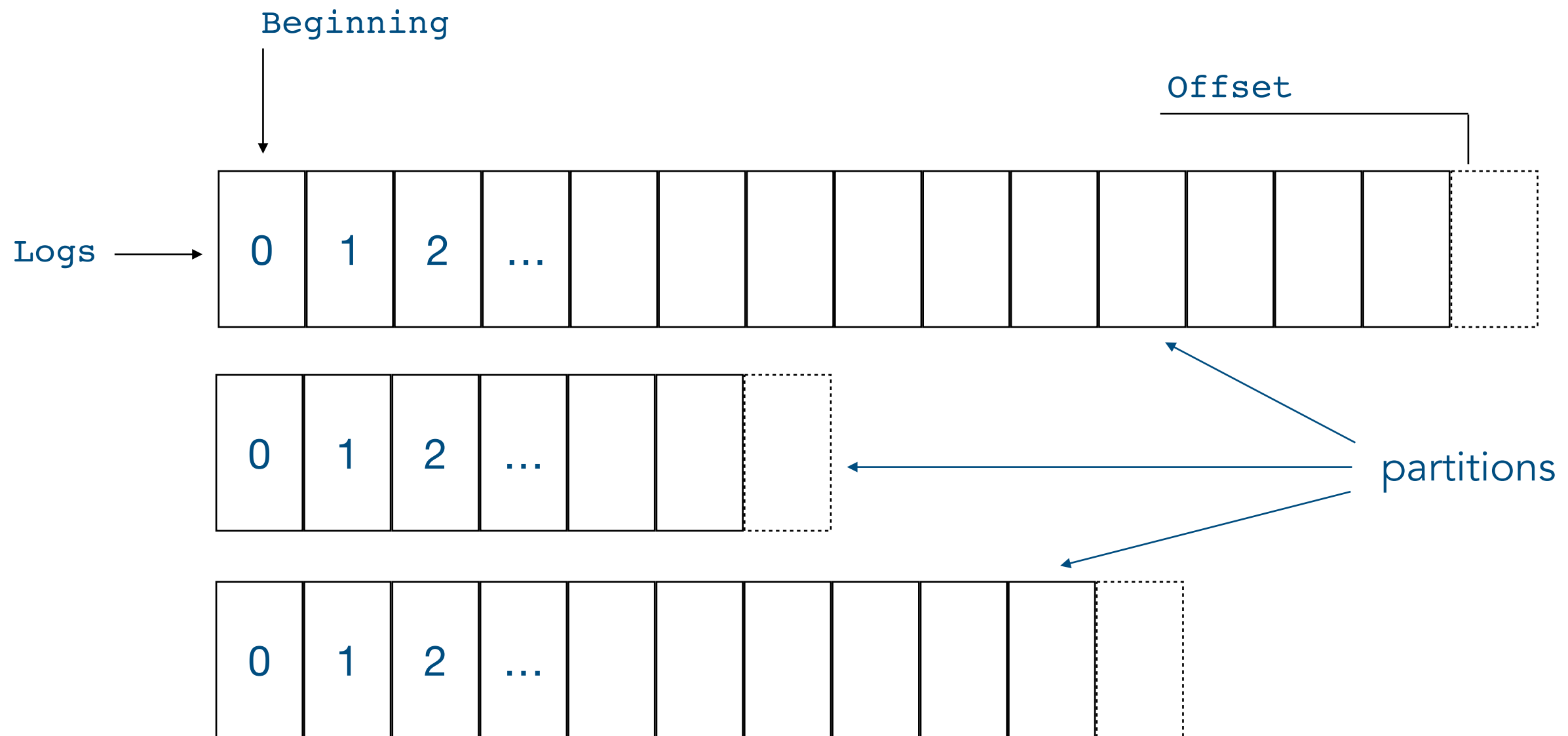
# Topics & partitions

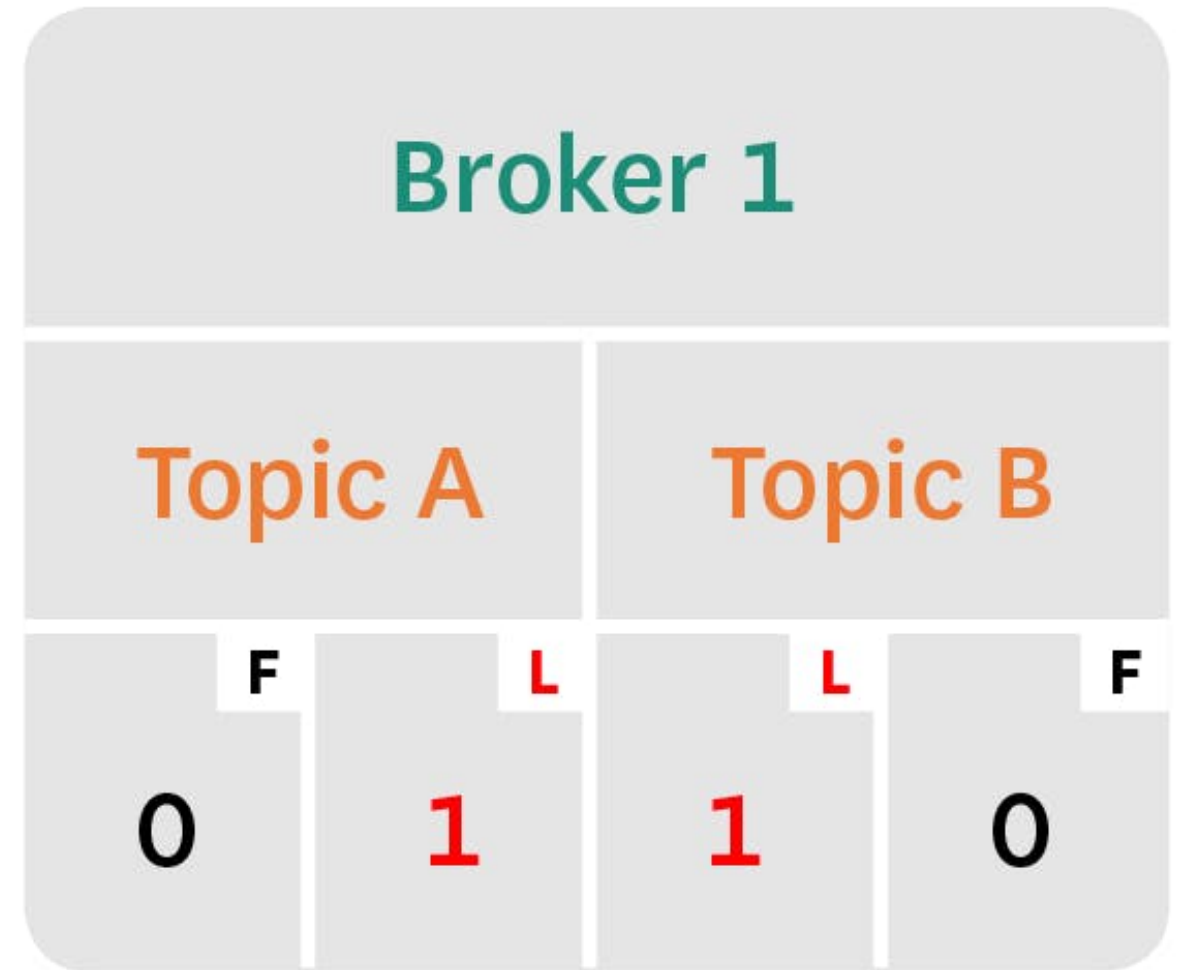
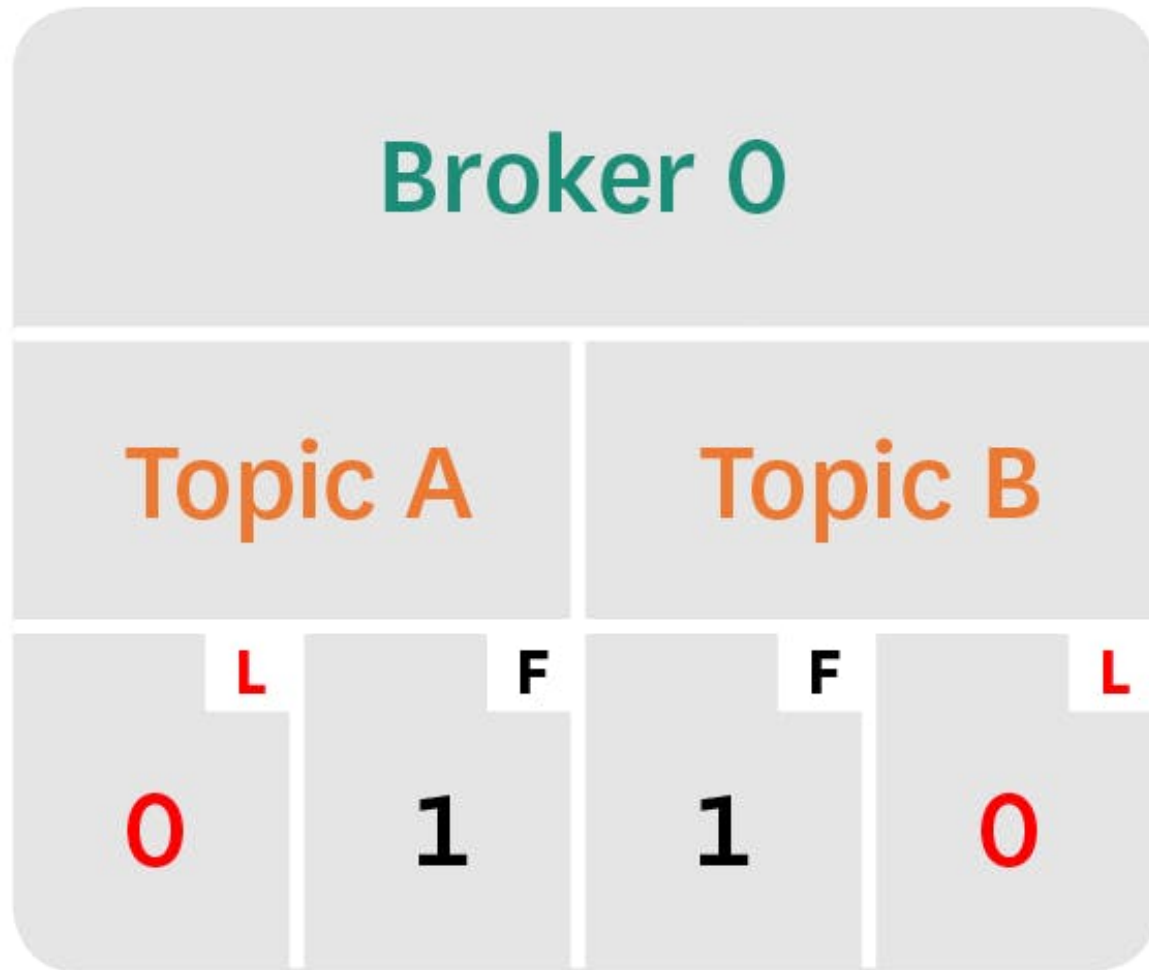


# Topics & partitions



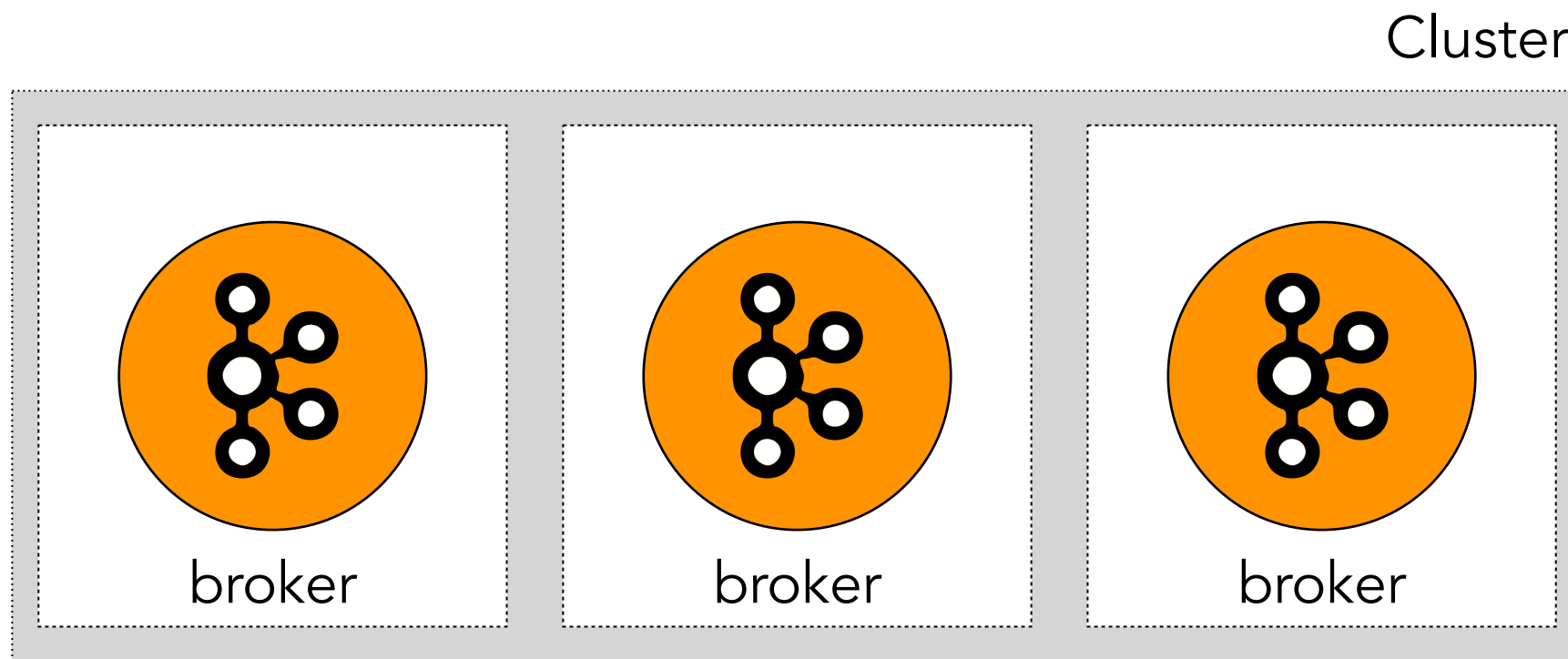
# Topics & partitions





L Leader      F Follower

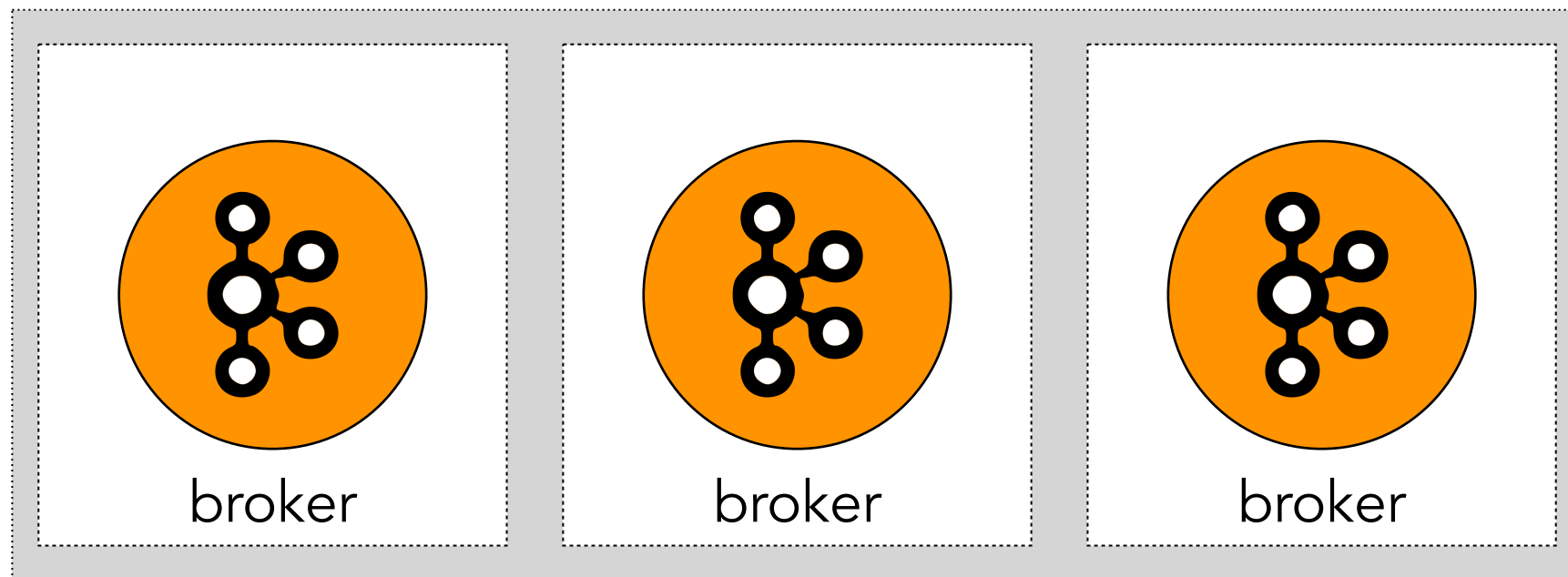
# Kafka cluster





# Kafka cluster

Cluster

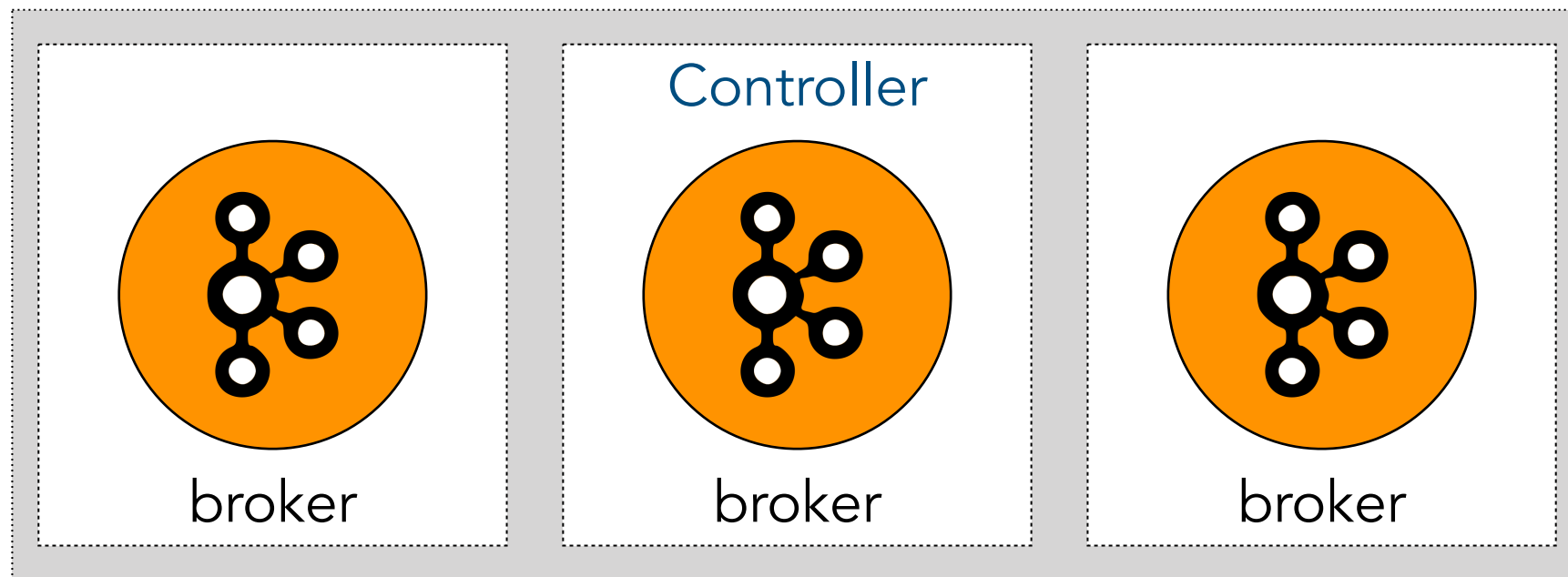


Ensemble



# Kafka cluster

Cluster

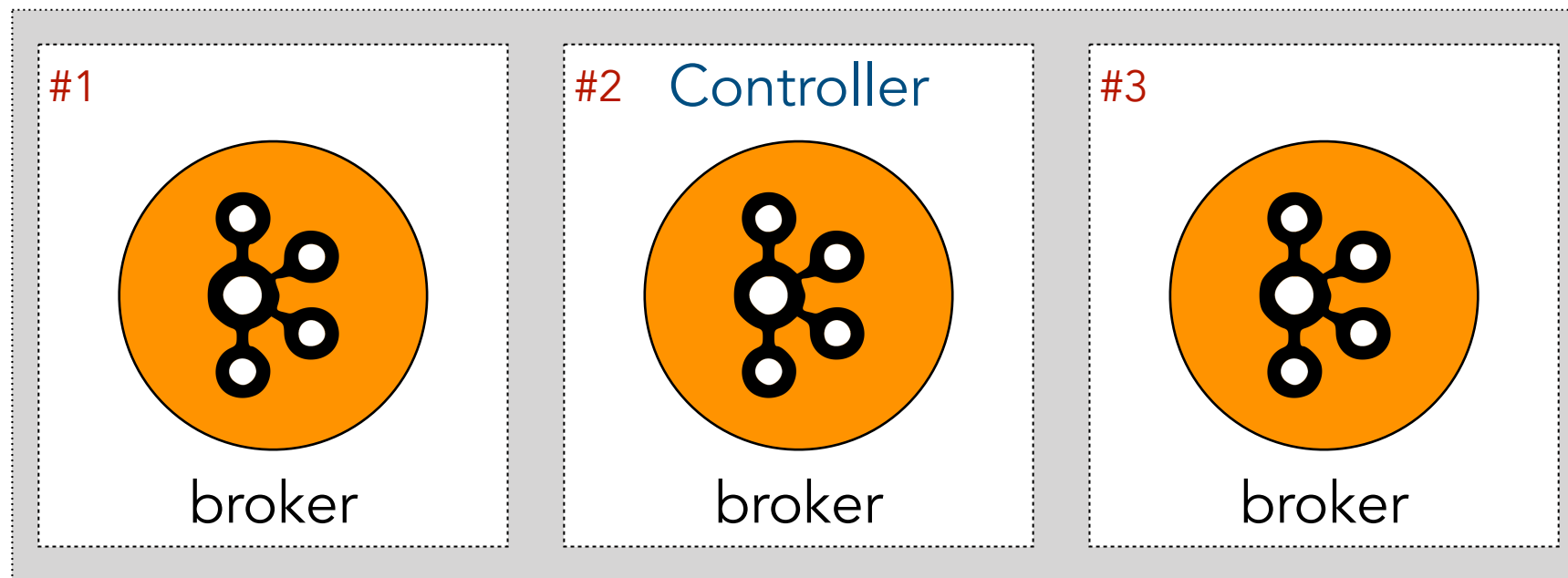


Ensemble



# Kafka cluster

Cluster



Ensemble



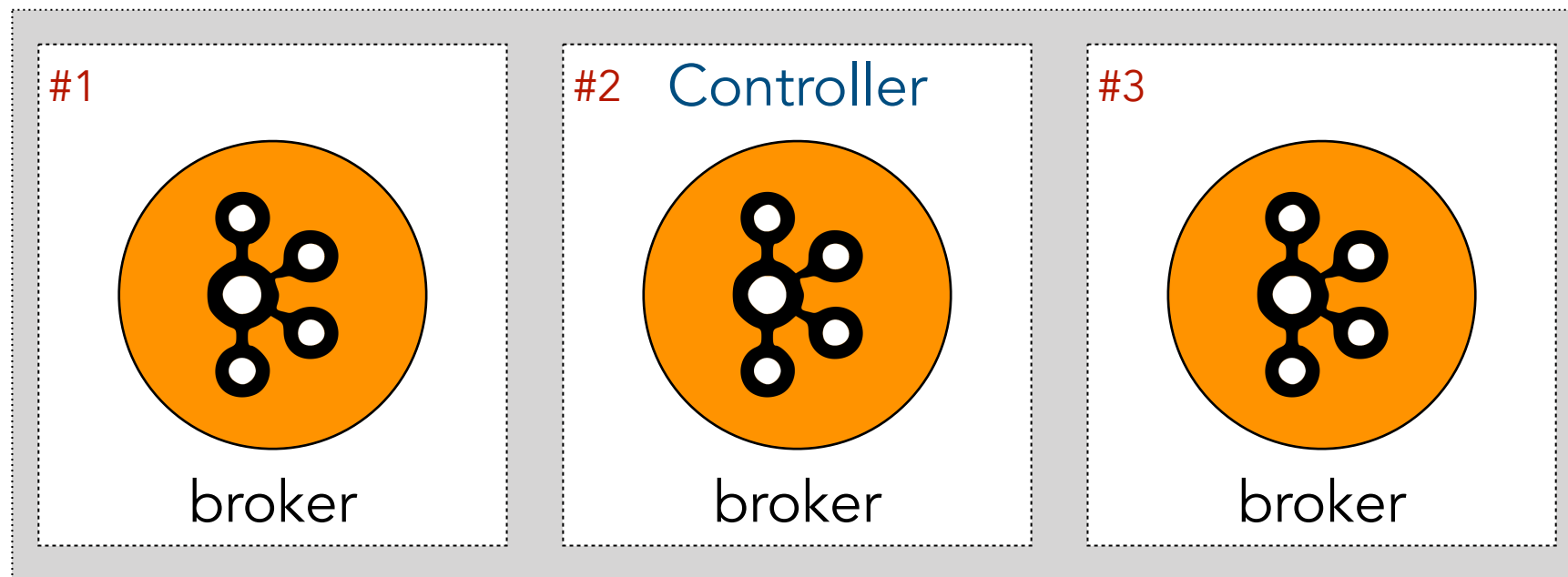
# Kafka cluster

Cluster

ID

PORT

9092



Ensemble



# Kafka cluster

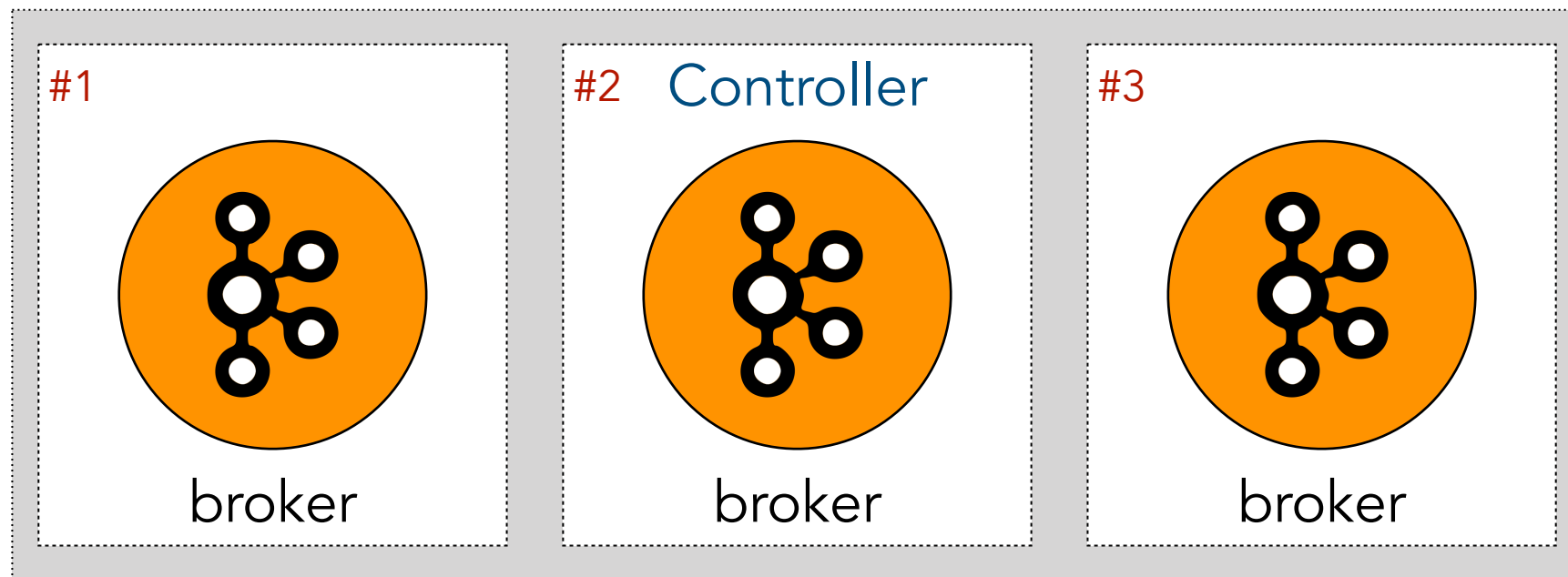
Cluster

ID

PORT

9092

ADVERTISED\_LISTENER



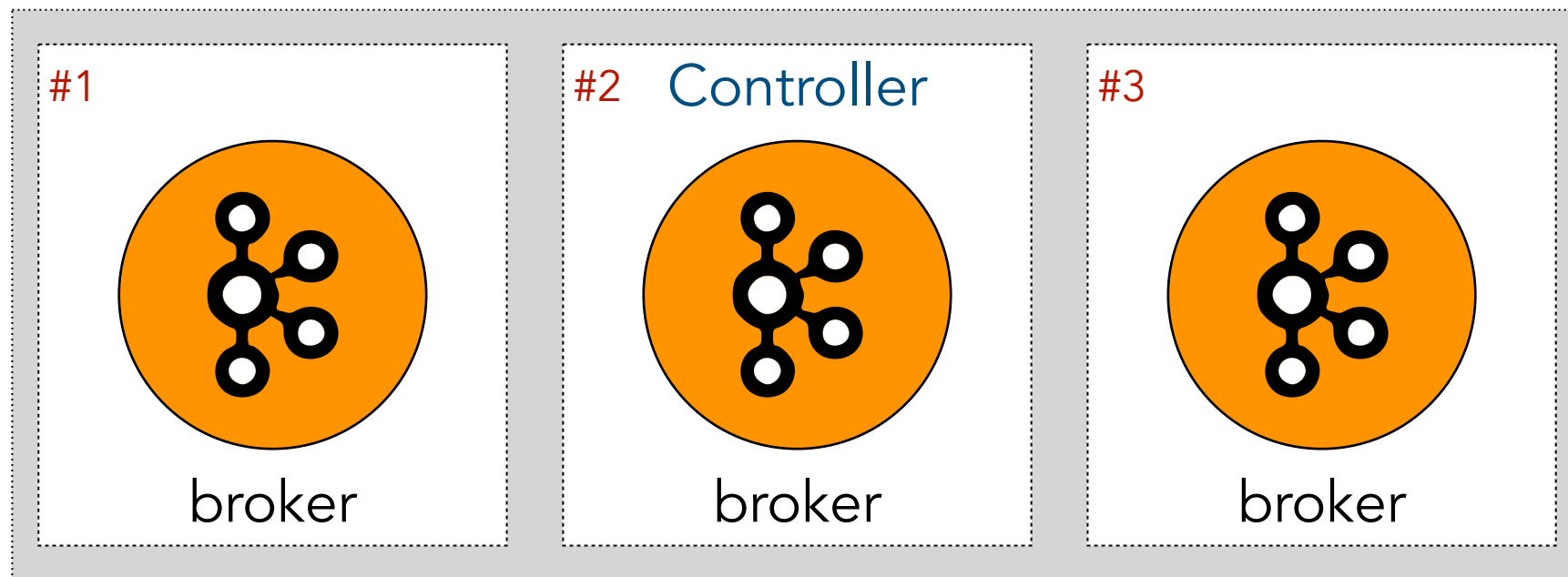
Ensemble



# Kafka cluster

Cluster

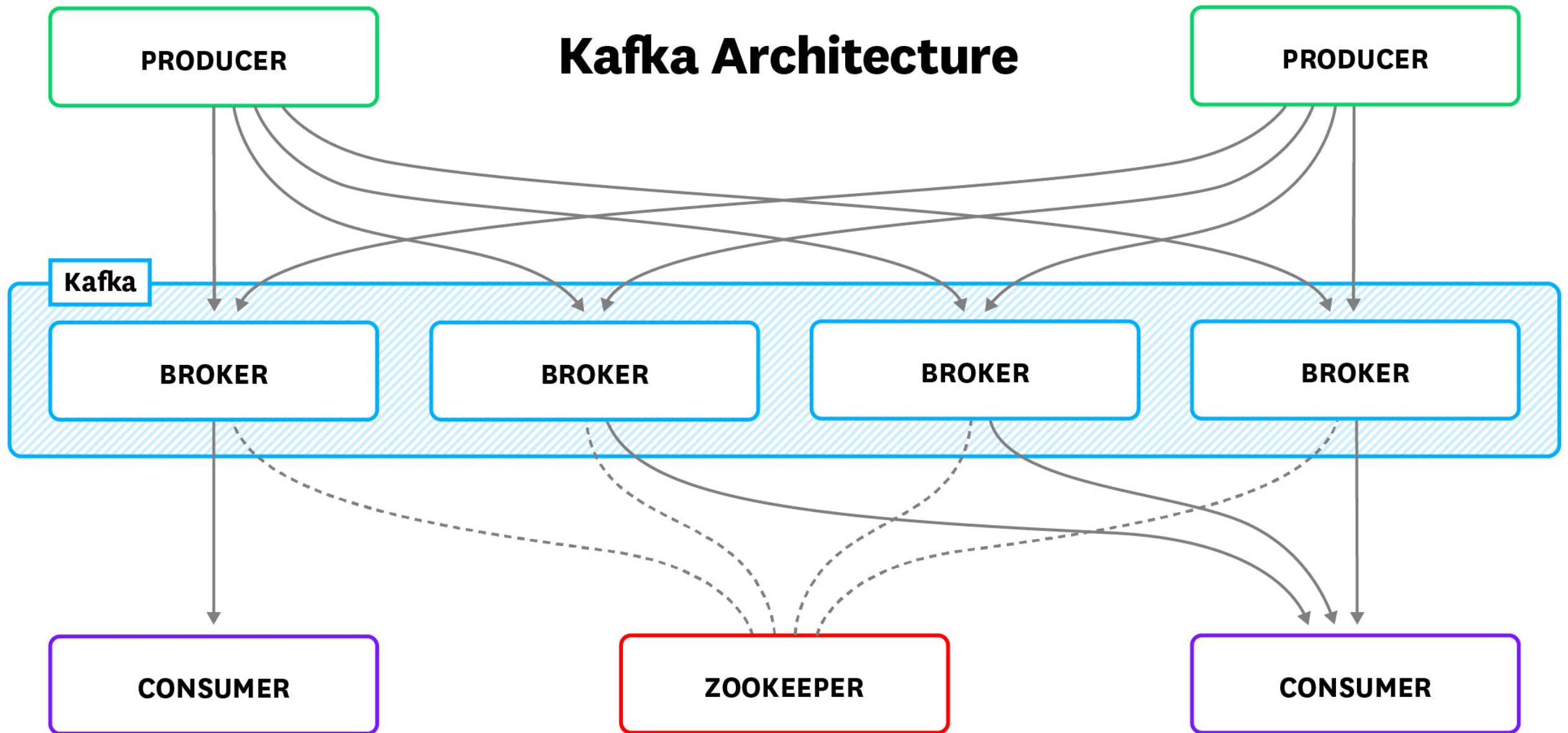
ID  
PORT 9092  
ADVERTISED\_LISTENER  
ZOOKEEPER\_CONNECT



Ensemble



# Kafka Architecture



----- COORDINATES CLUSTER MEMBERSHIP

# Zookeeper







# Zookeeper

- Leader Election
- Controller Election
- Partition + OffSet storage
- Discovery
- High Availability

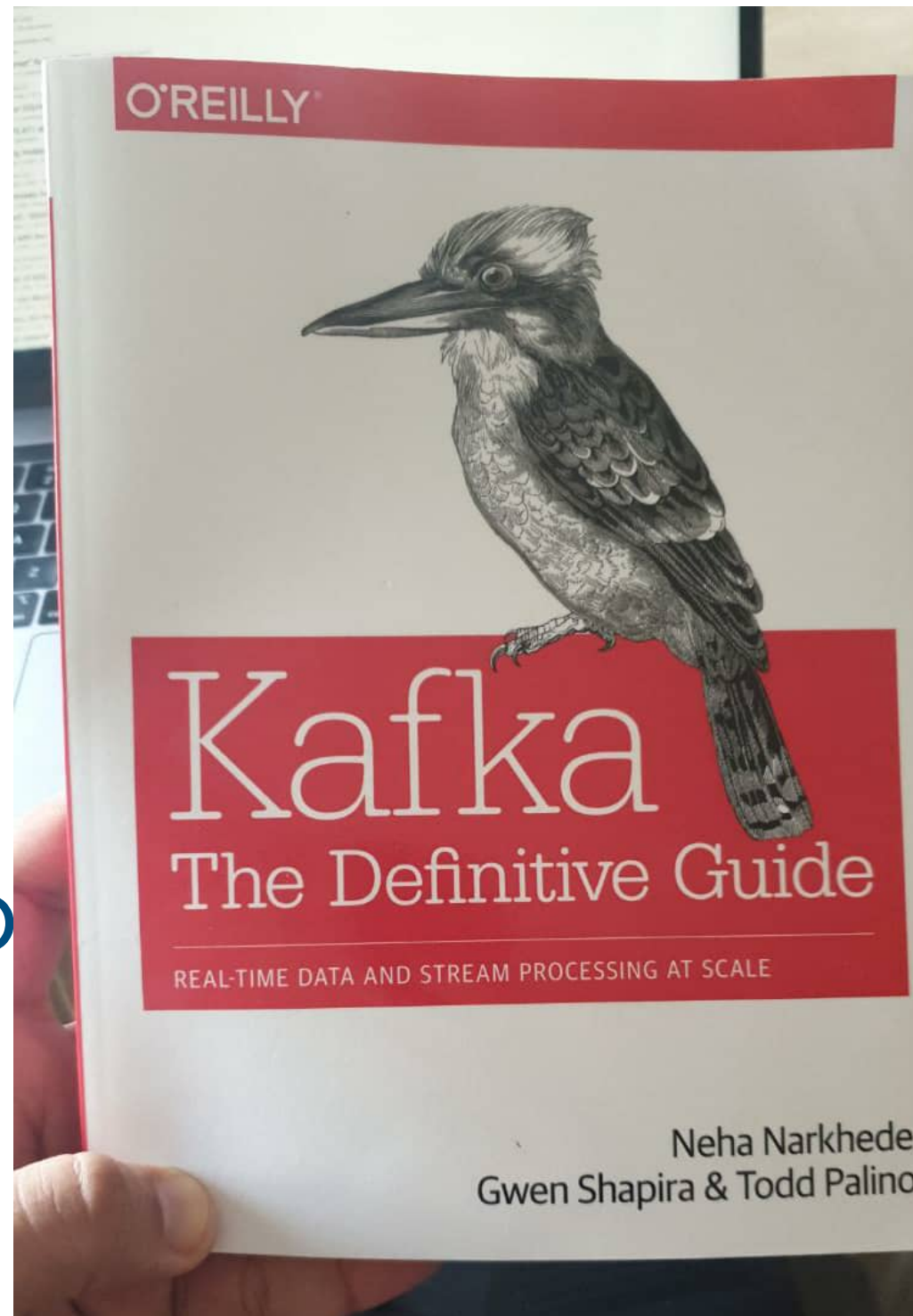
# Use cases

- Messaging
- Website Activity Tracking
- Metrics
- Log Aggregation
- Stream Processing
- Event Sourcing
- Commit Log

# Getting started

<https://kafka.apache.org/>

G  
http  
ed  
org/



# Merci

<https://www.goscreencasts.io> | <https://bit.ly/32kFbp1>