

Connect, Manage and Monitor Apache Kafka on Heroku



Saravanan Dhandapani

SOFTWARE ARCHITECT

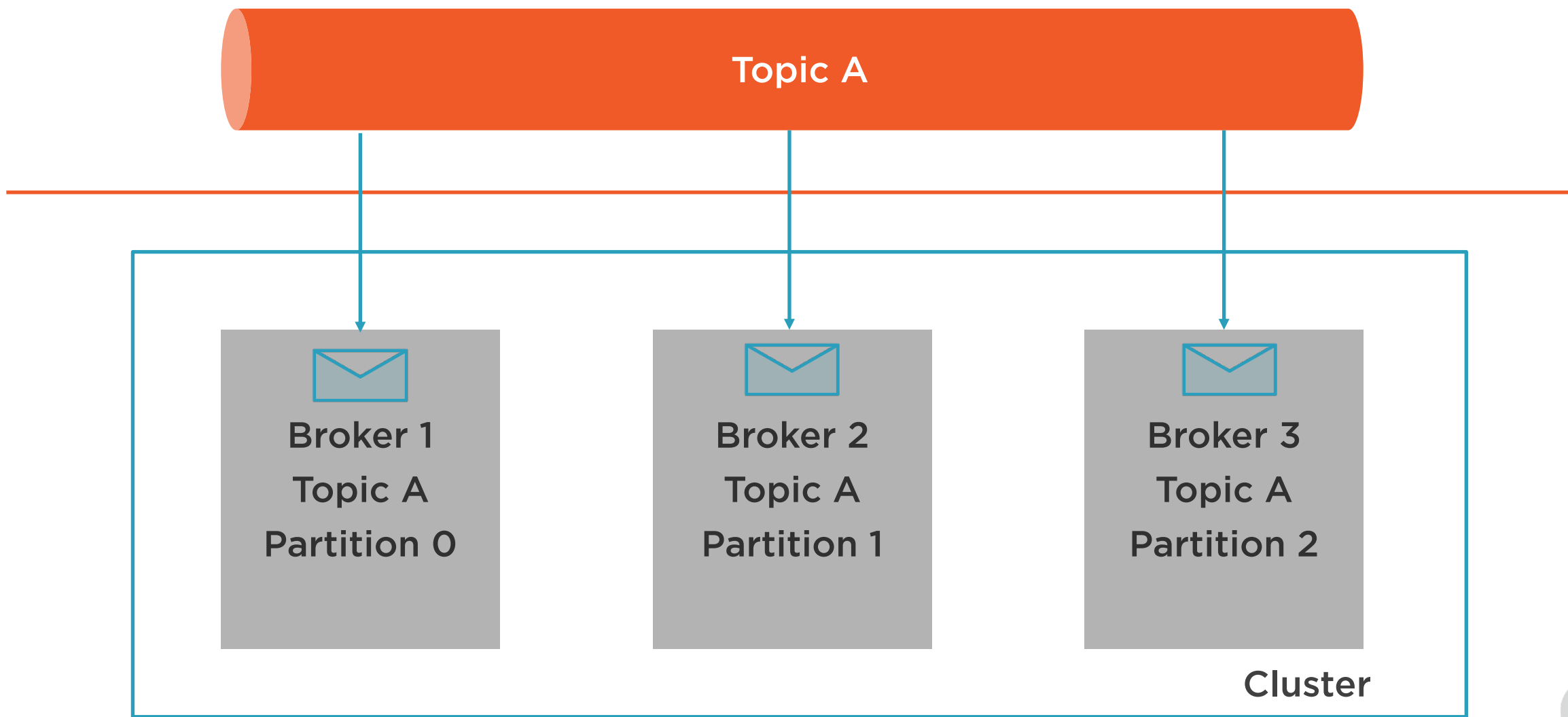
@dsharu



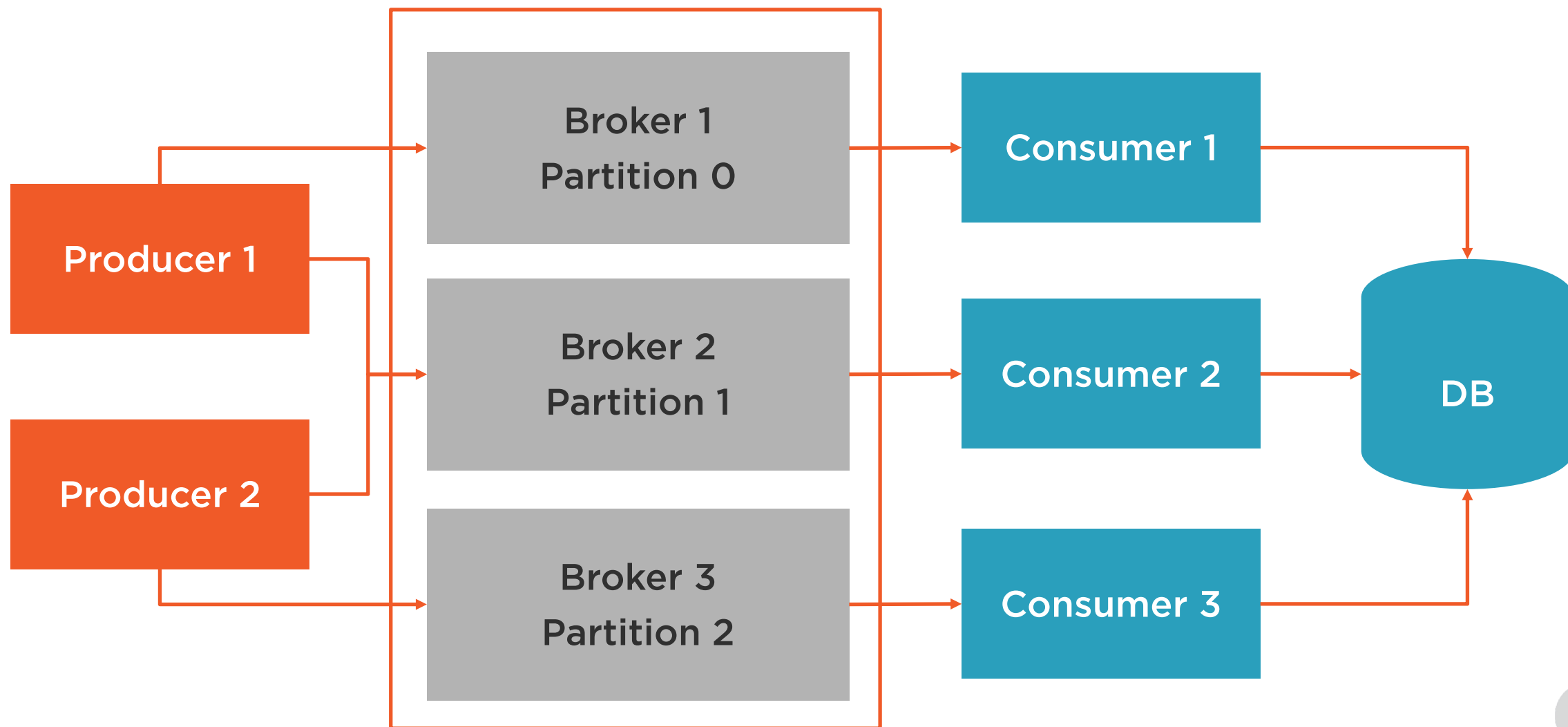
Kafka Partitions, Retention and Replication



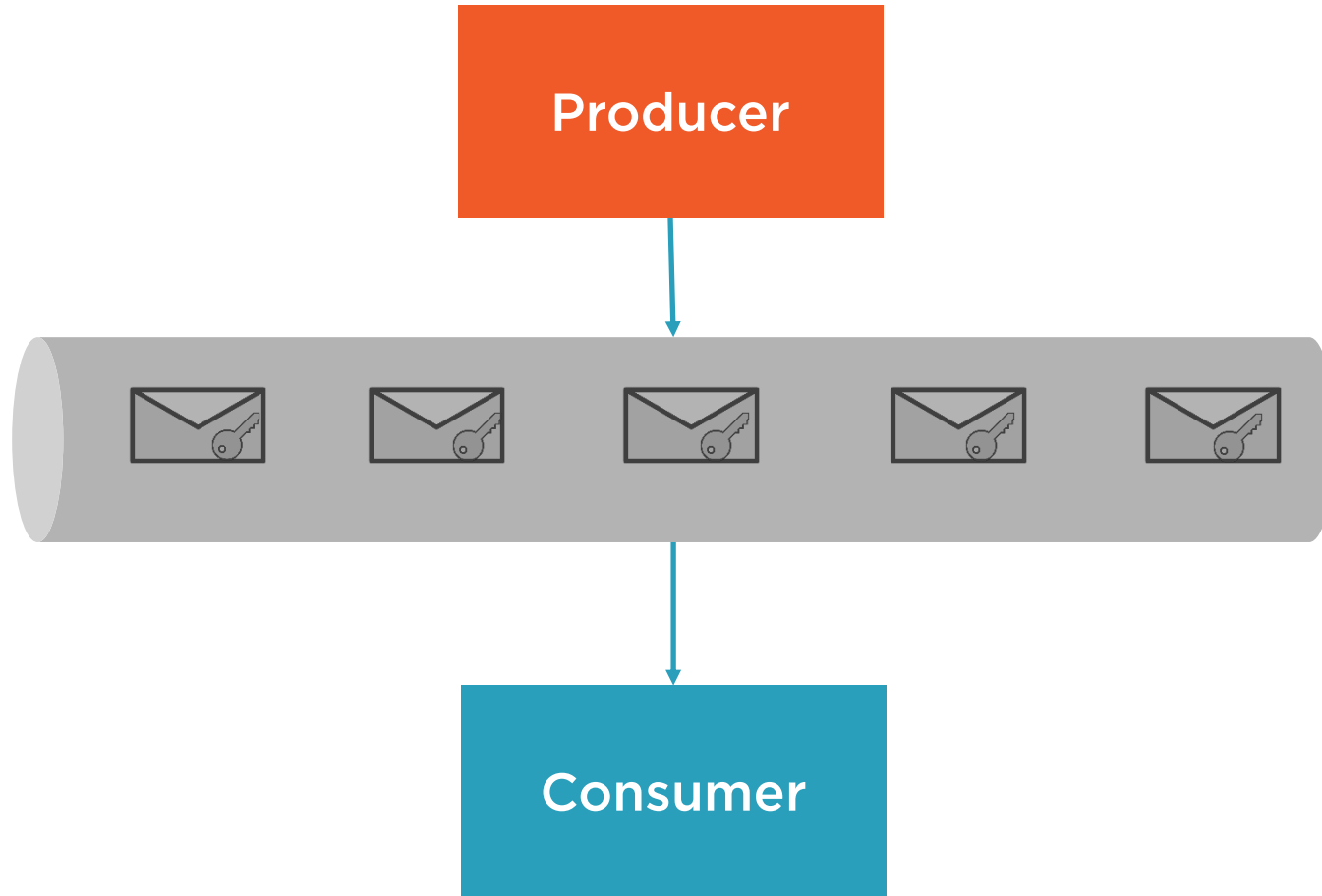
Kafka Partitions



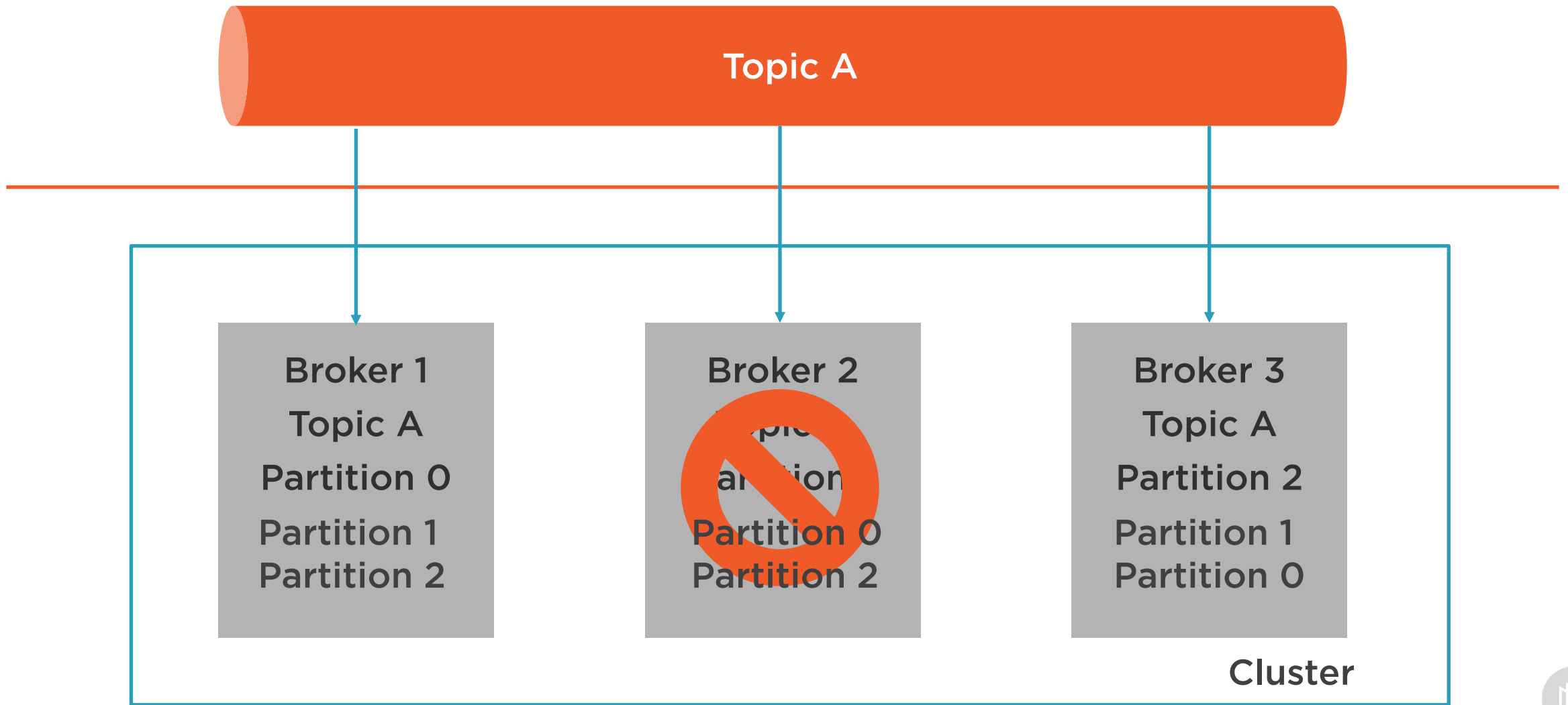
Slow Consumers



Message Ordering in Kafka



Replication



Producer Acks

Acknowledgement
from broker not
needed

Acks = 0

Acknowledgement
only from the
broker to which
message was
delivered

Acks = 1

Acknowledgement
from all brokers

Acks = all



Retention Policy

Expired messages are
removed from the
partition

Time based retention

Latest message of a
given key is retained

Log compaction



Log Compaction

K 1	K 2	K 3	K 2	K 3	K 3			
M 1	M 2	M 3	M 4	M 5	M 6			



Clone a GitHub Java Project



Compile, Provision and Deploy Java Application



Demo



Message sequencing



Summary



Cloned a java project

Installed Kafka addon, provisioned a topic and consumer group

Deployed the application on Heroku

Kafka partition, replication and retention

