

How to utilize KAFKA more efficiently

2019.10.18

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2016 ~ 2019

Kafka 운영자가 말하는 처음 접하는 Kafka

Kafka 운영자가 말하는 Kafka Consumer Group

Kafka 운영자가 말하는 Producer ACKS

Kafka 운영자가 말하는 Kafka 서버 실전 로그 분석

Kafka 운영자가 말하는 TIP

Kafka 운영자가 말하는 Topic Replication

Kafka 운영자가 말하는 Replication Factor 변경

Kafka 운영자가 말하는 카프카 매니저 소개

카프카를 활용한 워크 큐

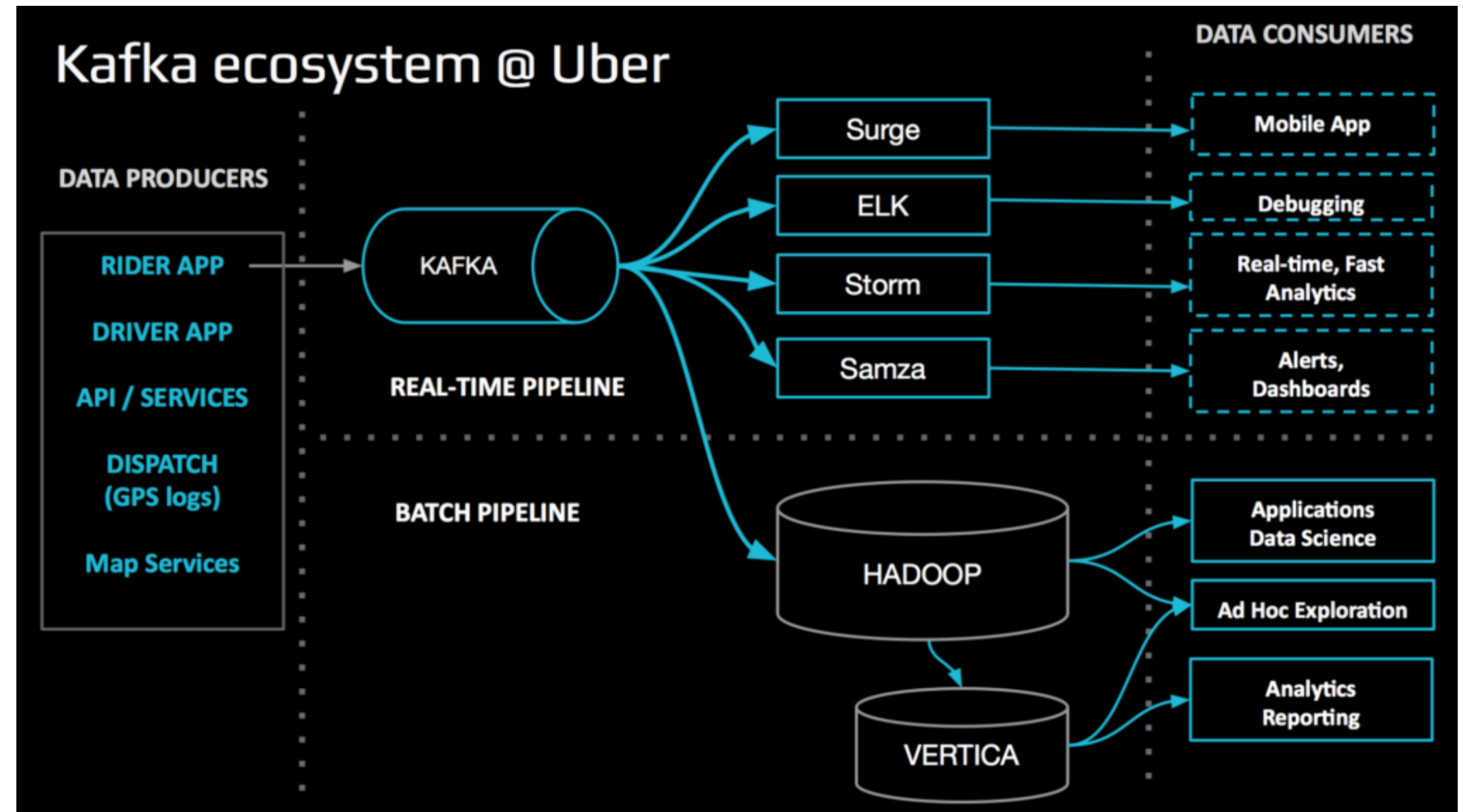
카프카 설치 시 가장 중요한 설정 4가지

카프카 서버 디스크 최적화

Default

Why do we use default options?

- ▶ 너무 많은 애플리케이션
- ▶ 촉박한 개발 일정
- ▶ 촉박한 서비스 오픈 일정



Prepared for you



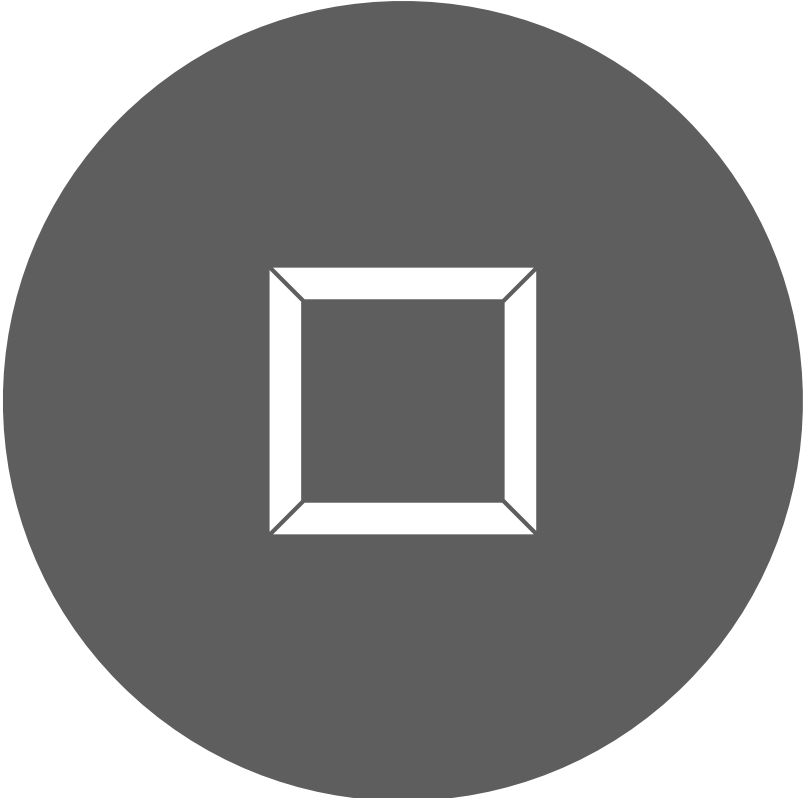
No study



No time



In a hurry

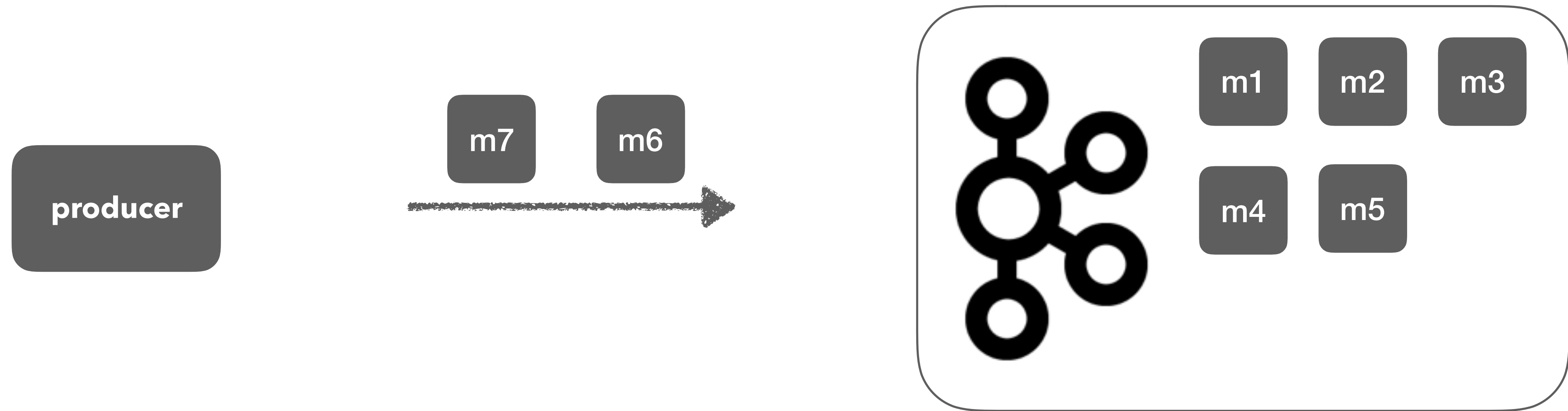


Simplicity

Broker Options

log.retention.hours

► recommend: 72



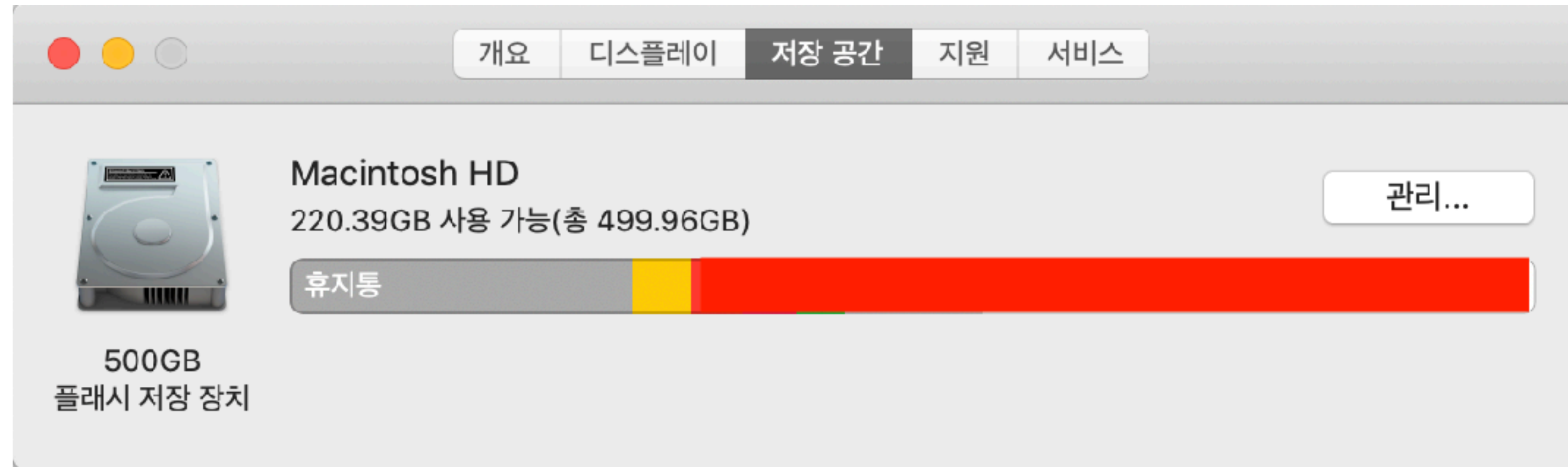
$1\text{KB/msg} * 10,000(\text{msg/sec}) * 60(1\text{min}) * 60(1\text{hour}) * 24(1\text{day}) * 7\text{days} * 3(\text{replica}) * 10(\text{topics})$

168TB

72TB

delete.topic.enable

▶ recommend: true



```
[root@dev-kafka01 ~]# /usr/local/kafka/bin/kafka-topics.sh --zookeeper dev-kafka01.foo.bar:2181/dev-kafka --topic peter-topic --delete
```

Topic peter-topic is marked for deletion.

Note: This will have no impact if delete.topic.enable is not set to true.

allow.auto.create.topics

▶ recommend: false

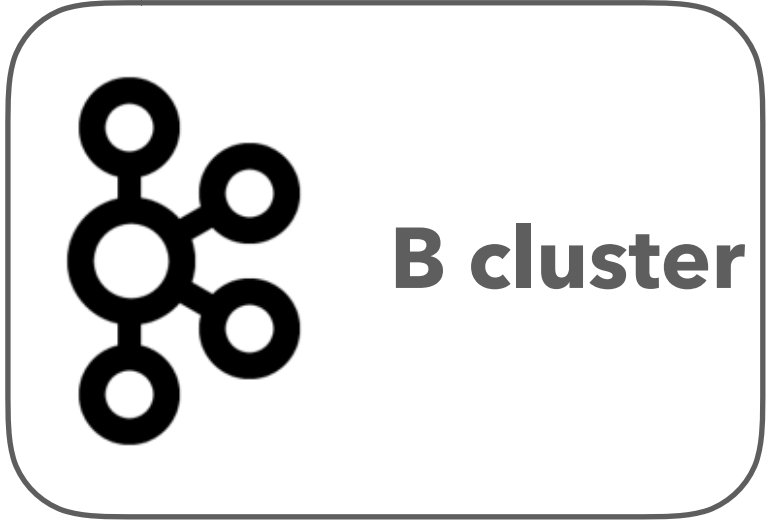
A producer

A topic



B producer

B topic



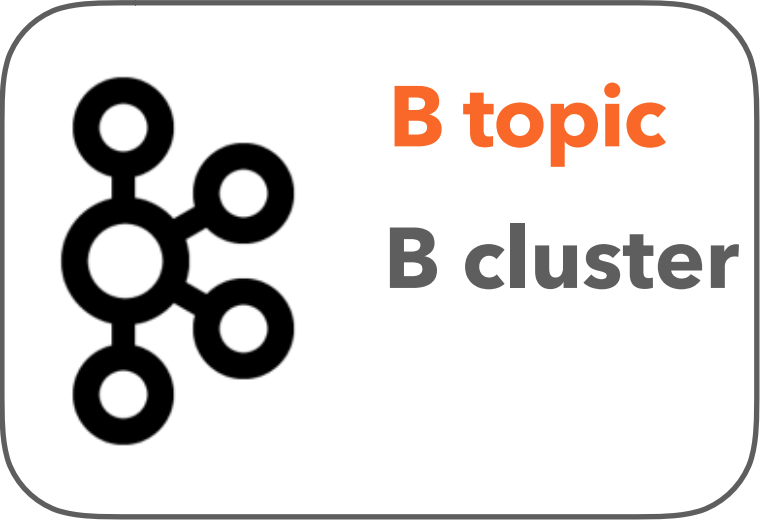
allow.auto.create.topics

▶ recommend: false

A producer



B producer

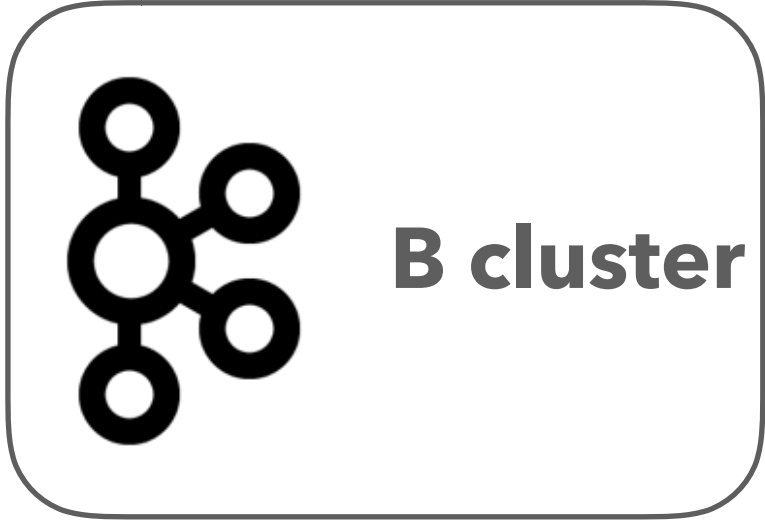


allow.auto.create.topics

▶ recommend: false

A producer

B producer

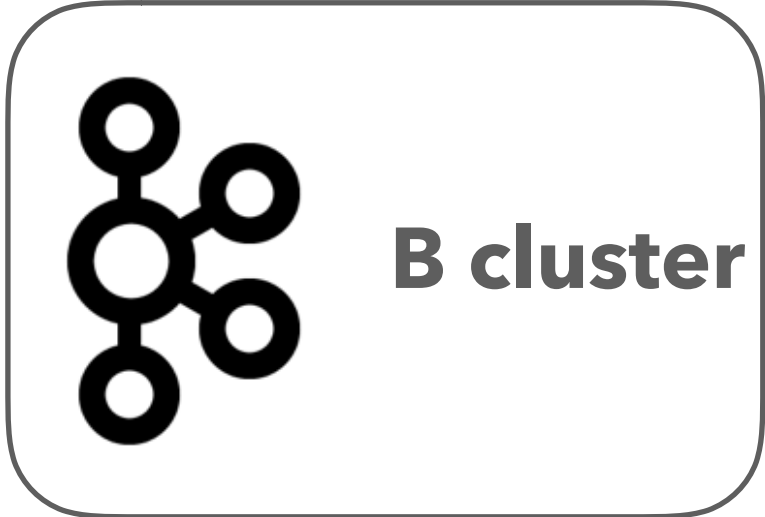
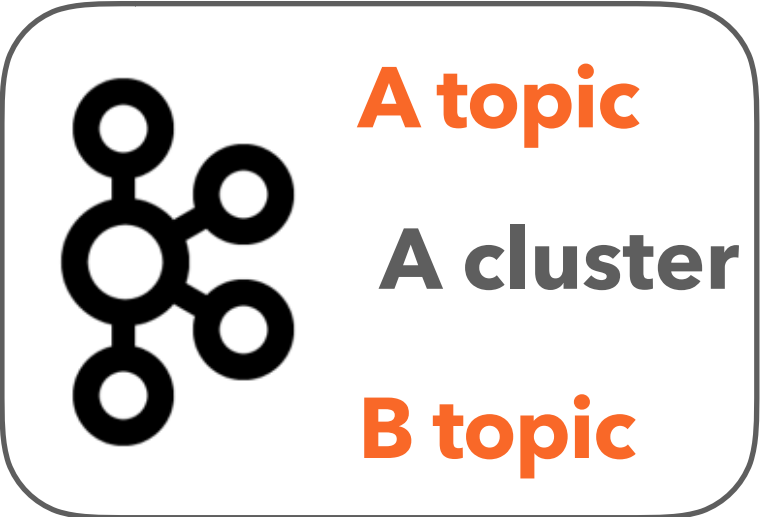


allow.auto.create.topics

▶ recommend: false

A producer

B producer

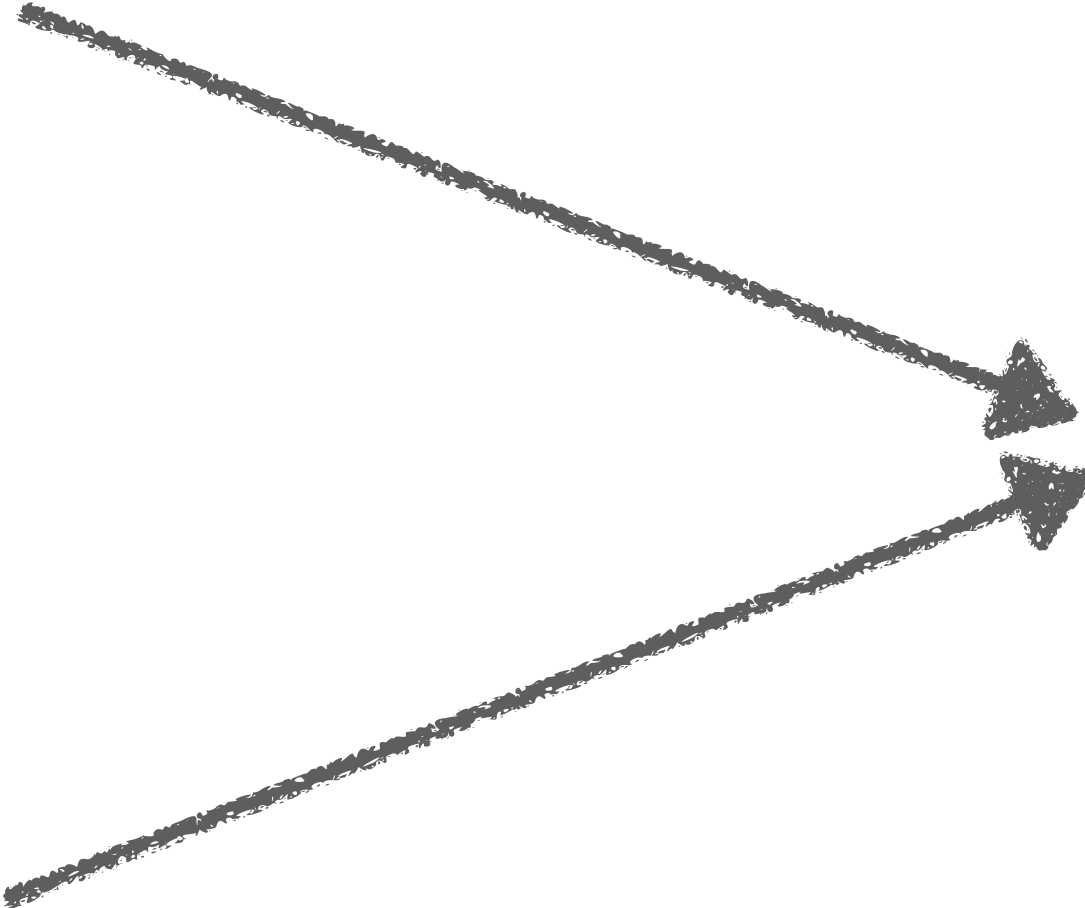


allow.auto.create.topics

▶ recommend: false

A-1 producer

A-2 producer



A topic
A cluster

allow.auto.create.topics

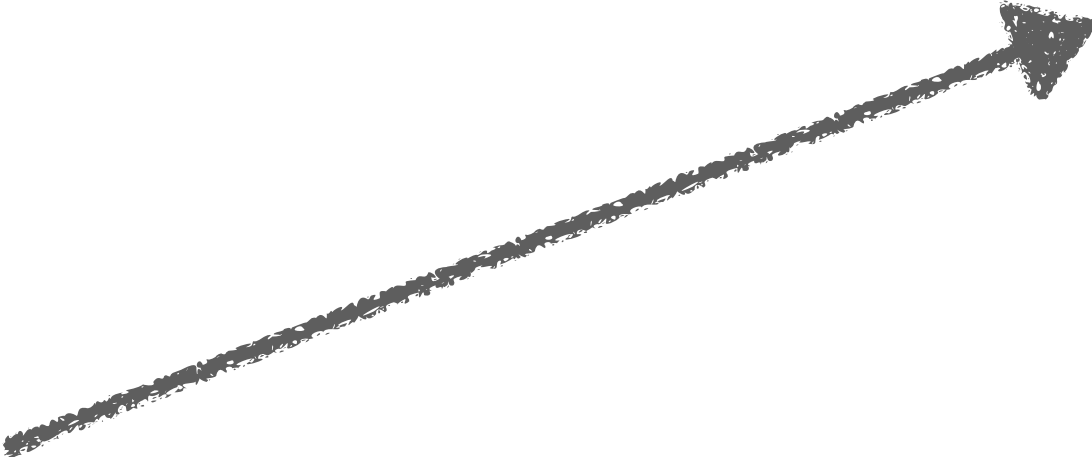
▶ recommend: false

A-1 producer

Shut down

Delete A topic

A-2 producer



allow.auto.create.topics

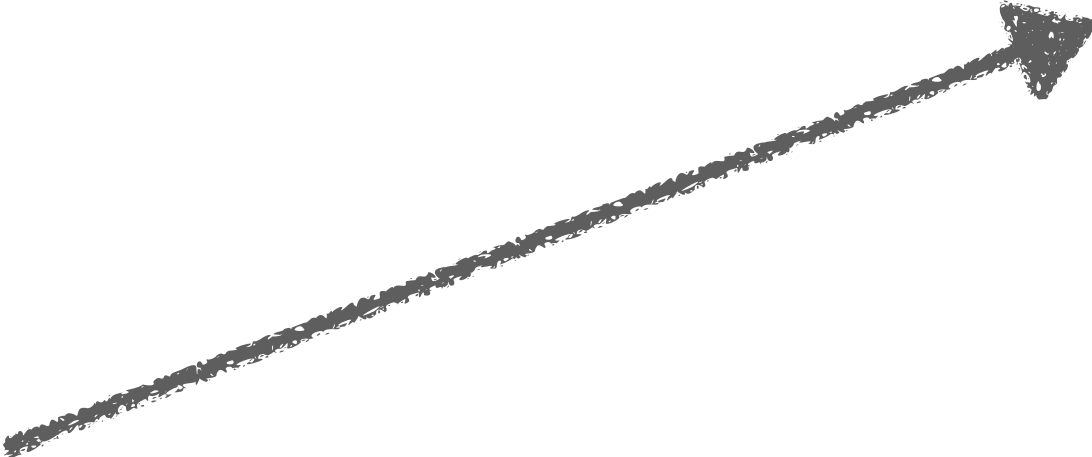
▶ recommend: false

A-1 producer

Shut down

Delete A topic

A-2 producer



log.dirs

▶ **recommend: /data**

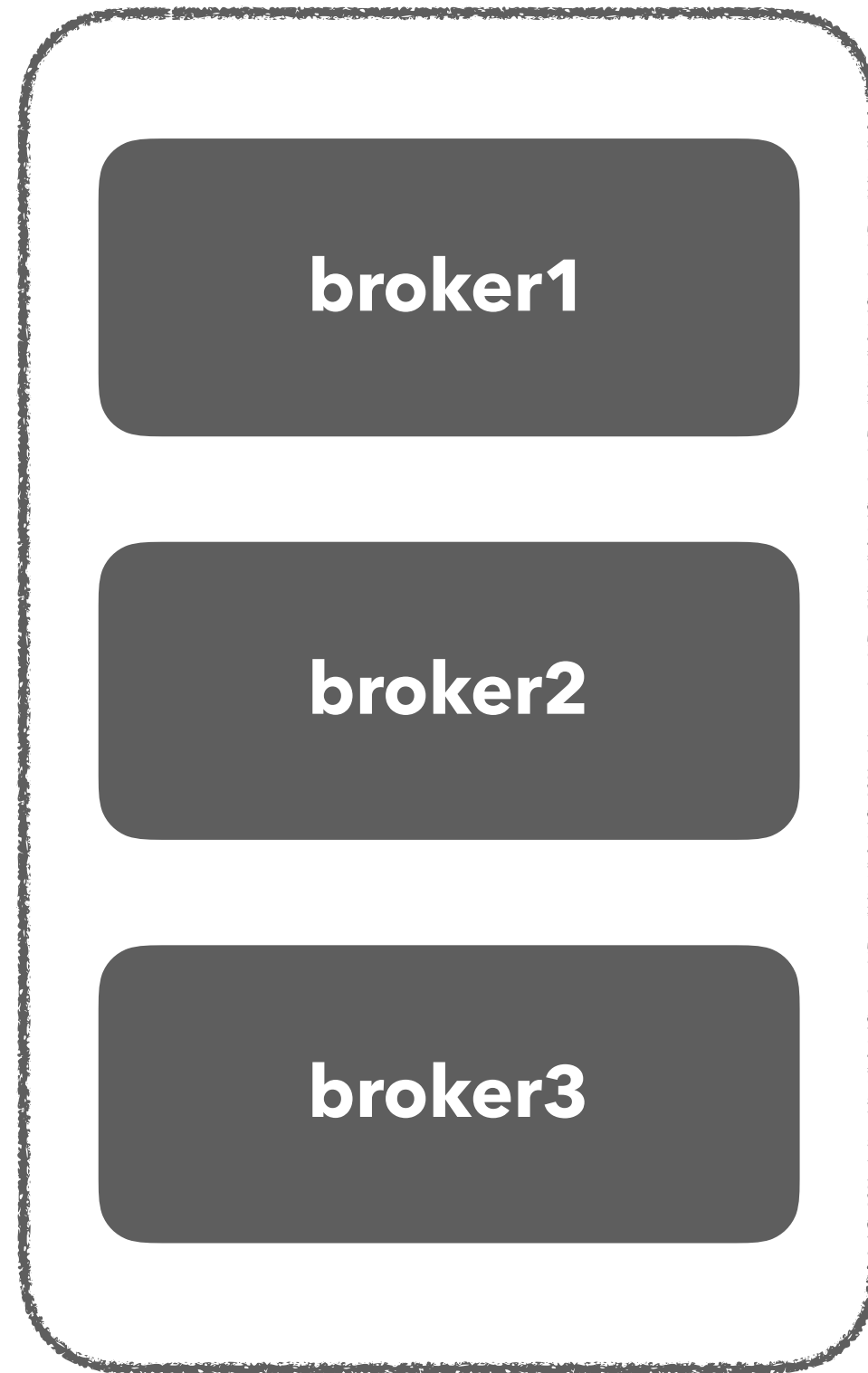
In computing, a **temporary folder** or **temporary directory** is a [directory](#) used to hold [temporary files](#). Many [operating systems](#) and some [software](#) automatically delete the contents of this directory at [bootup](#) or at regular intervals, leaving the directory itself intact.

In [MS-DOS](#) and [Microsoft Windows](#), the temporary directory is set by the [environment variable](#) TEMP. Originally, the default was C:\Temp, then %WinDir%\Temp.

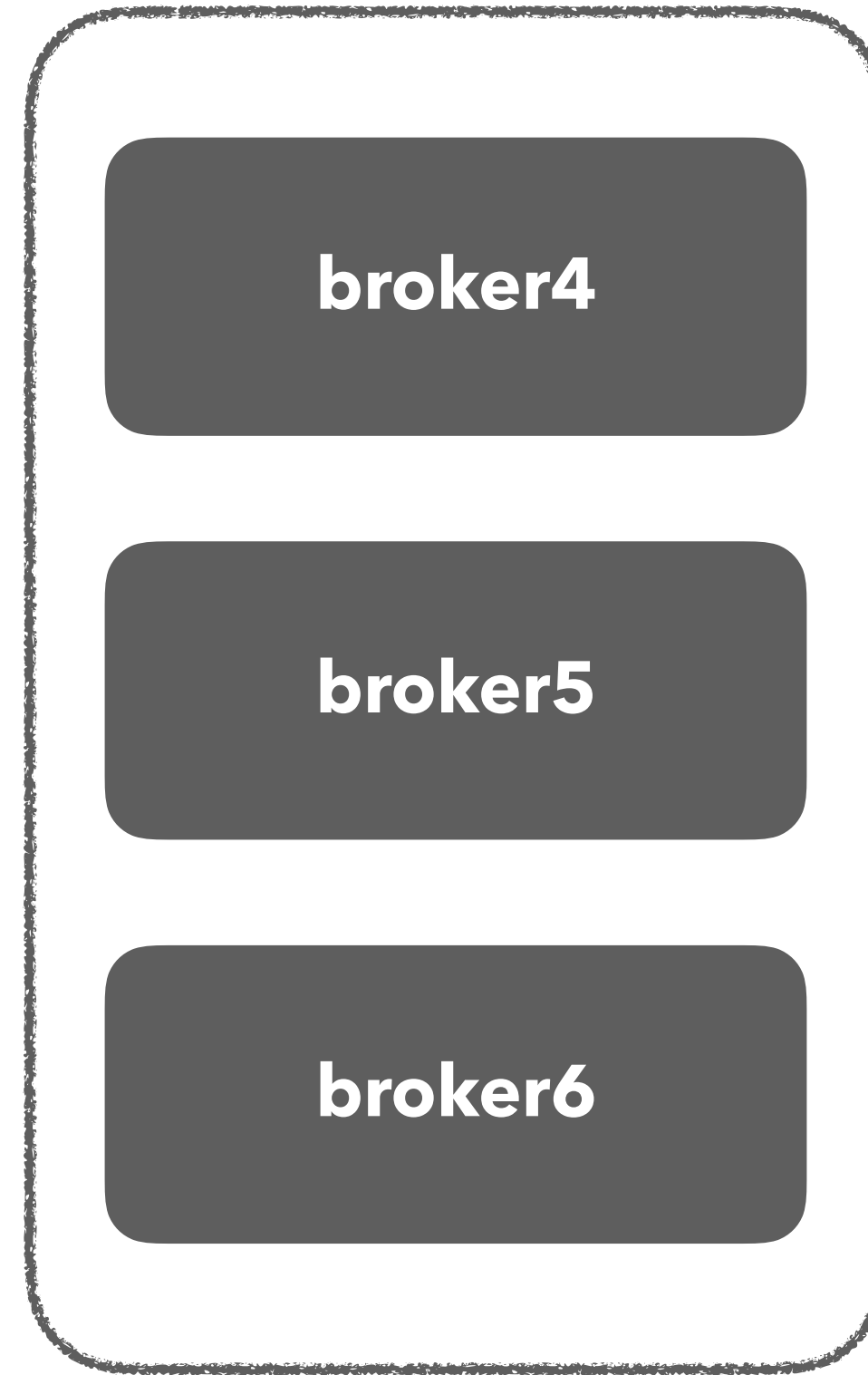
In [Unix](#) and [Linux](#), the global temporary directories are /tmp and /var/tmp.

broker.rack(Rack Awareness)

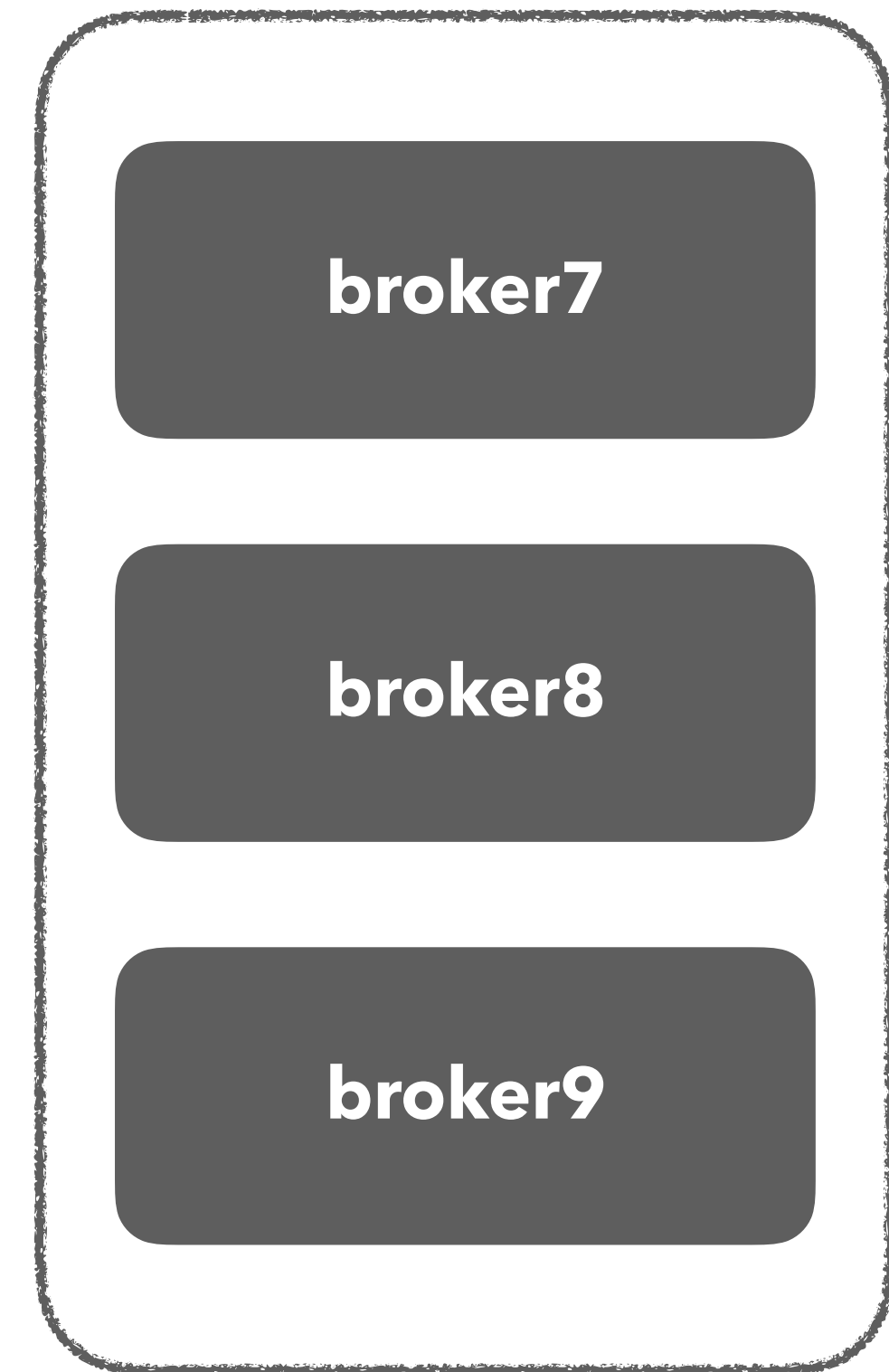
► recommend: rack1



RACK1



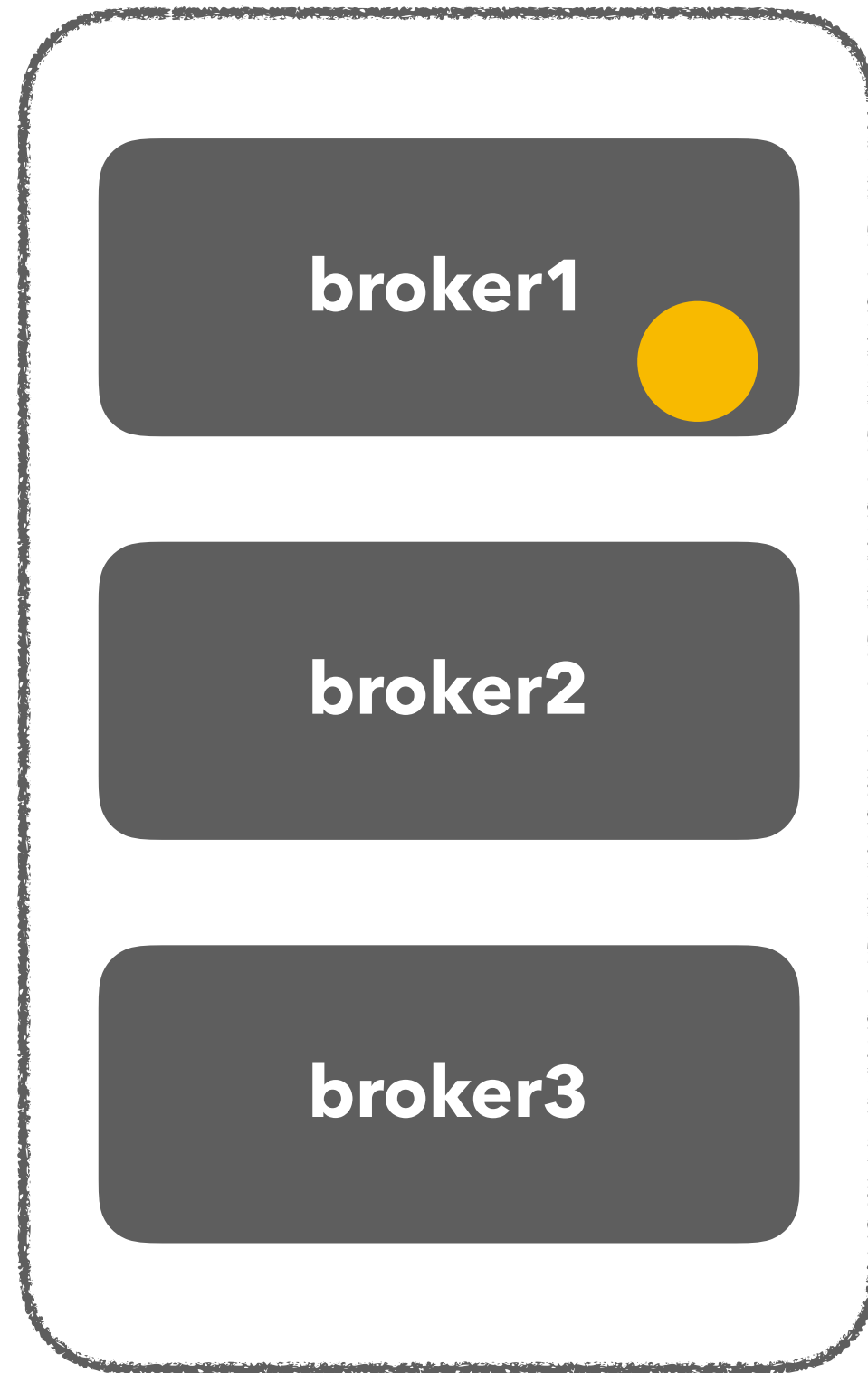
RACK2



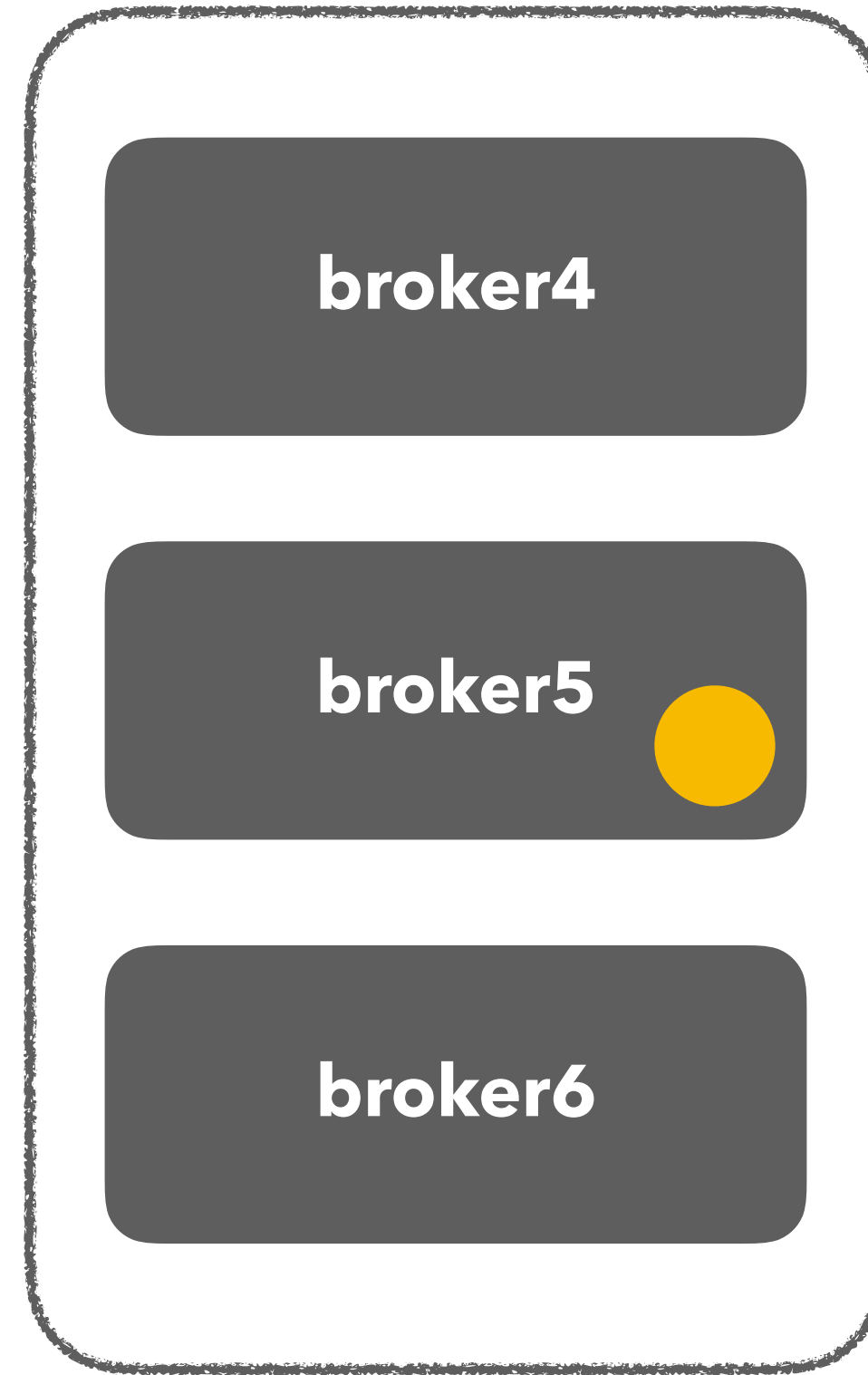
RACK3

broker.rack(Rack Awareness)

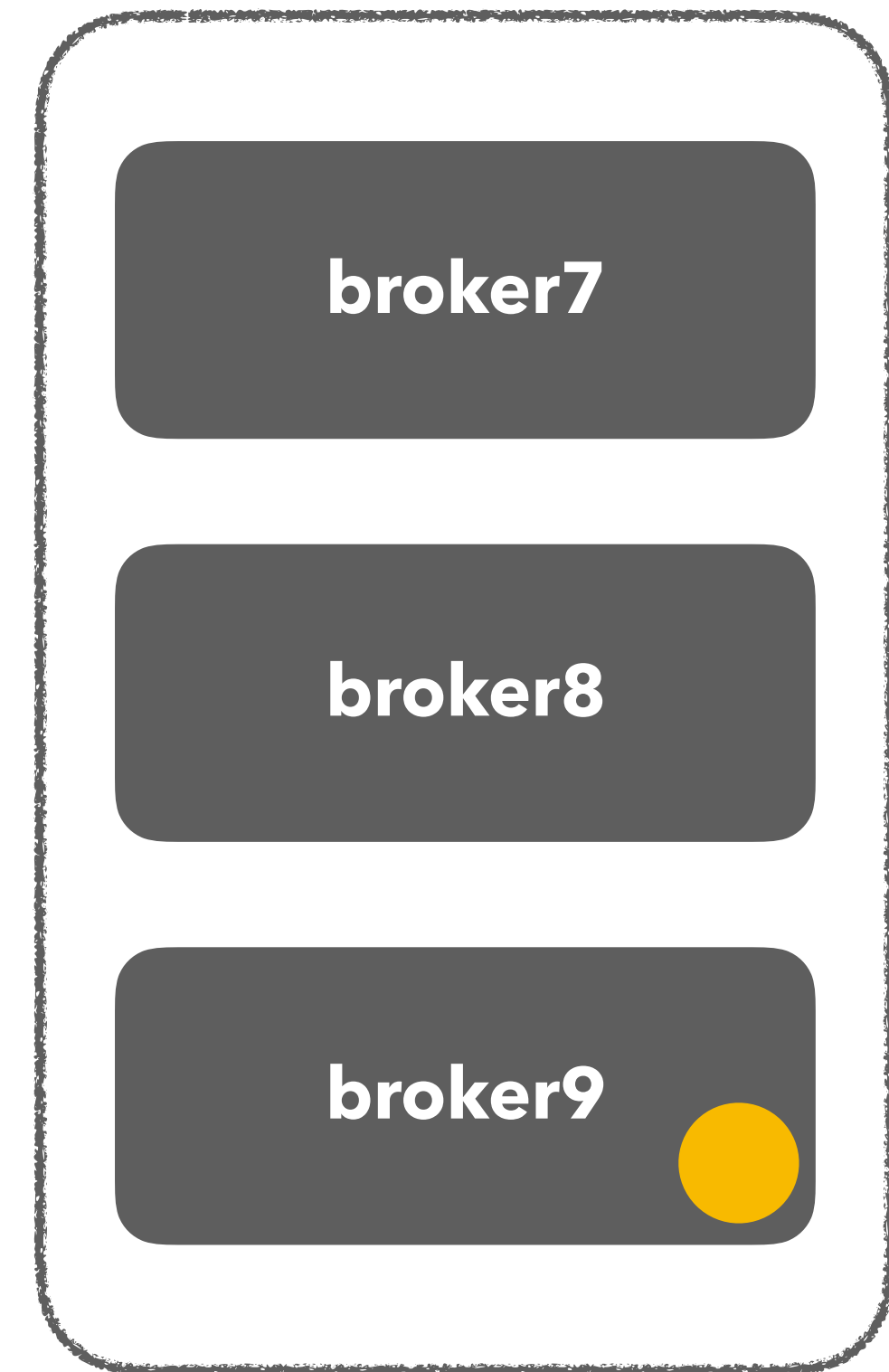
► recommend: rack1



RACK1



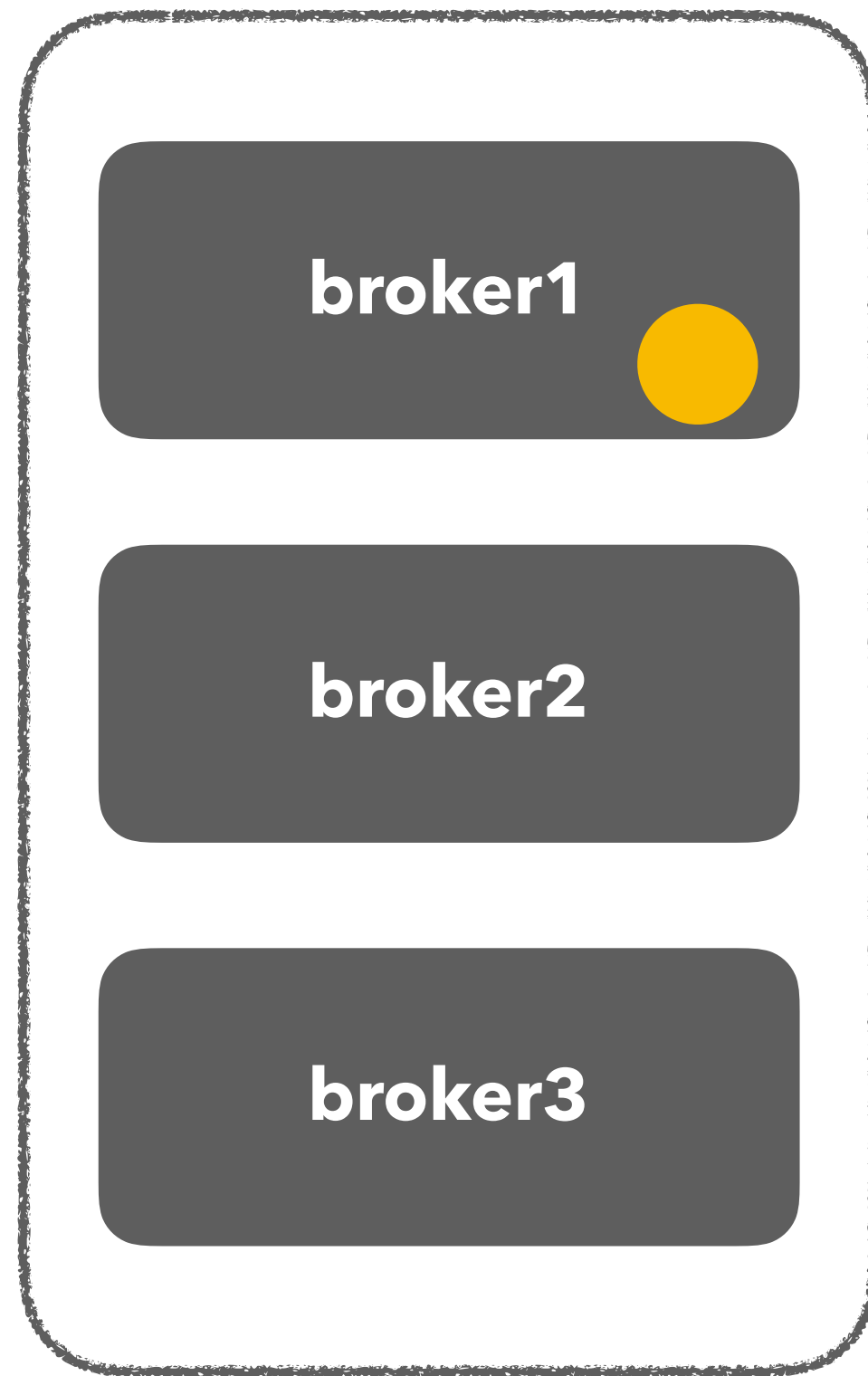
RACK2



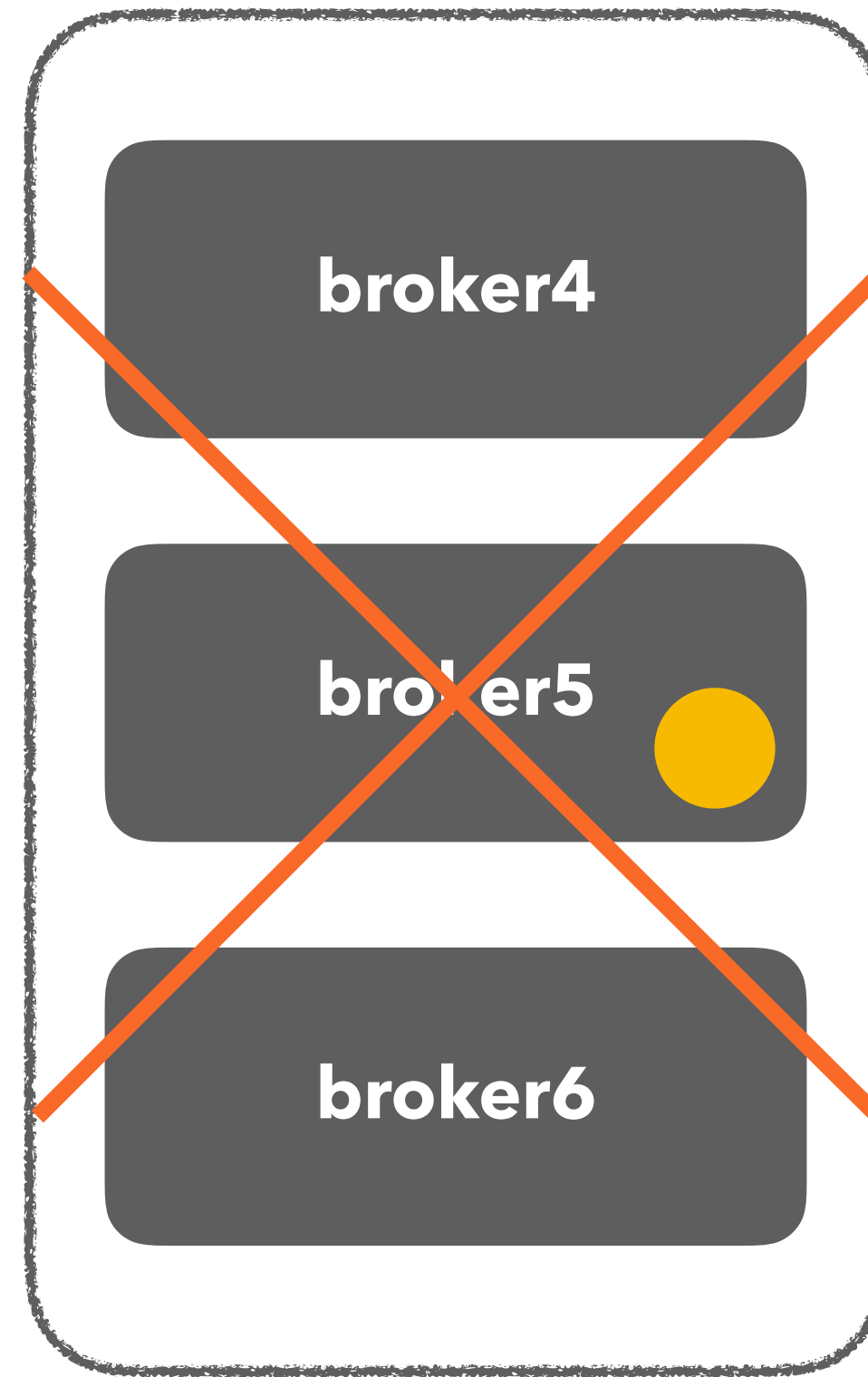
RACK3

broker.rack(Rack Awareness)

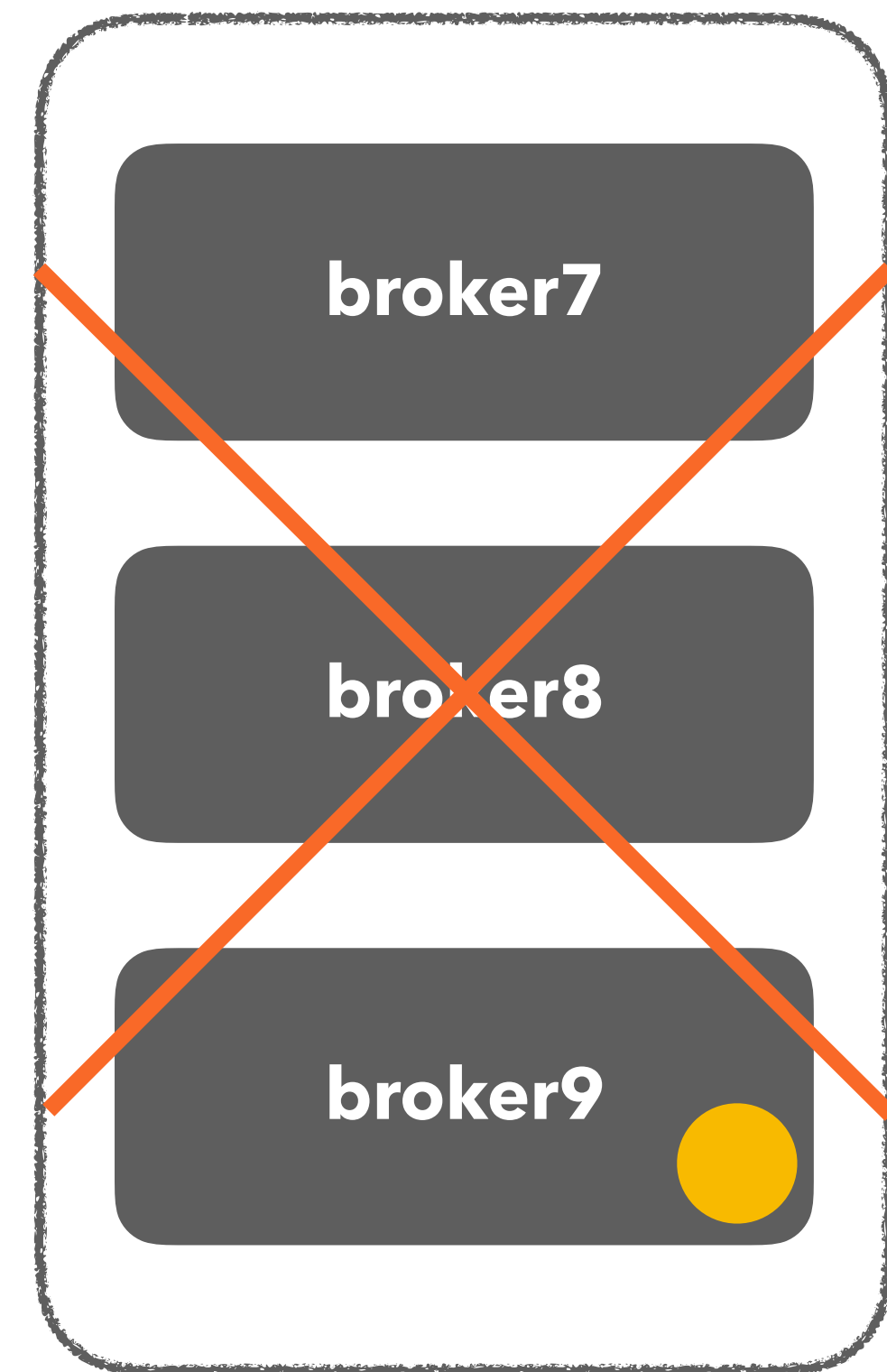
► recommend: rack1



RACK1



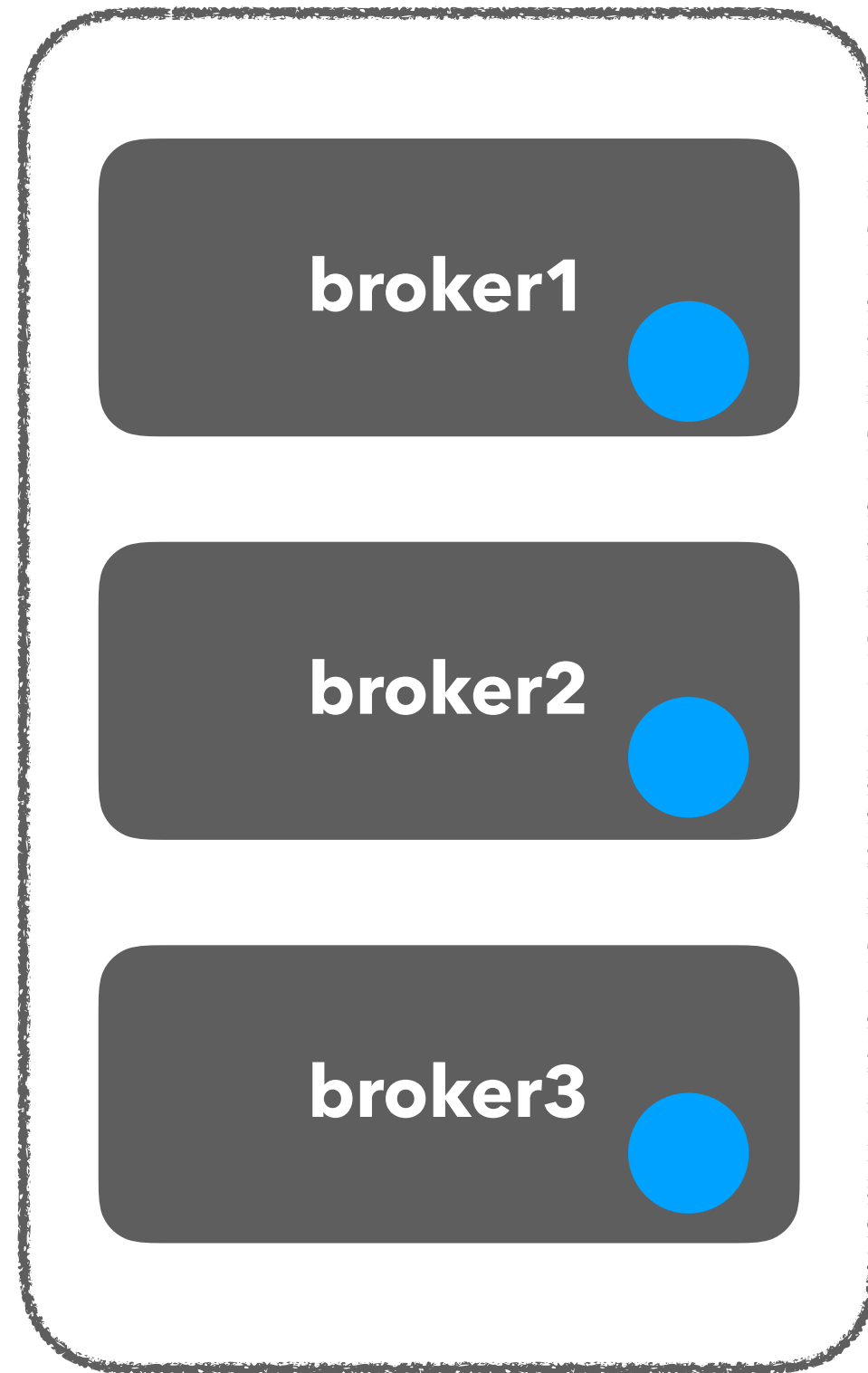
RACK2



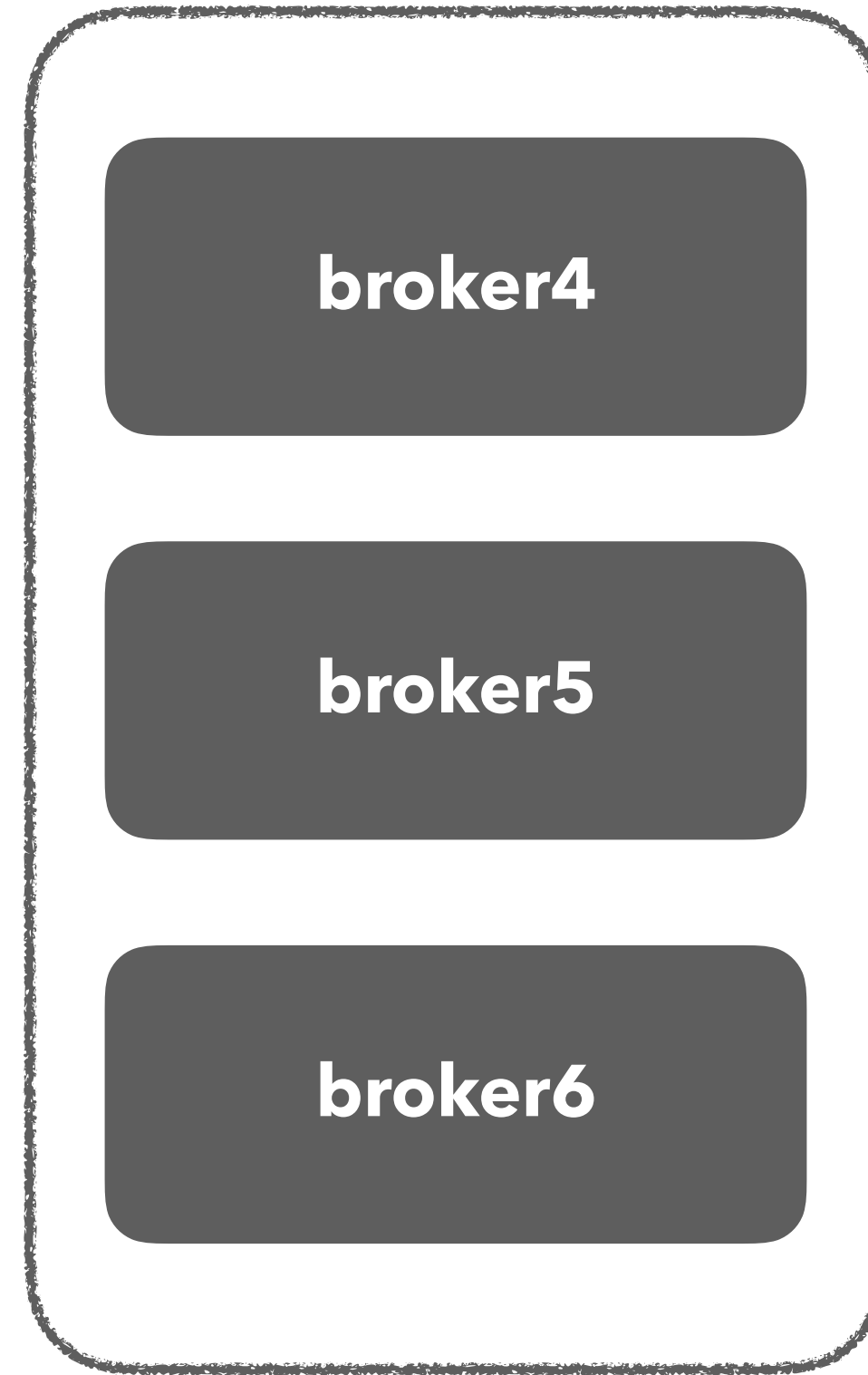
RACK3

broker.rack(Rack Awareness)

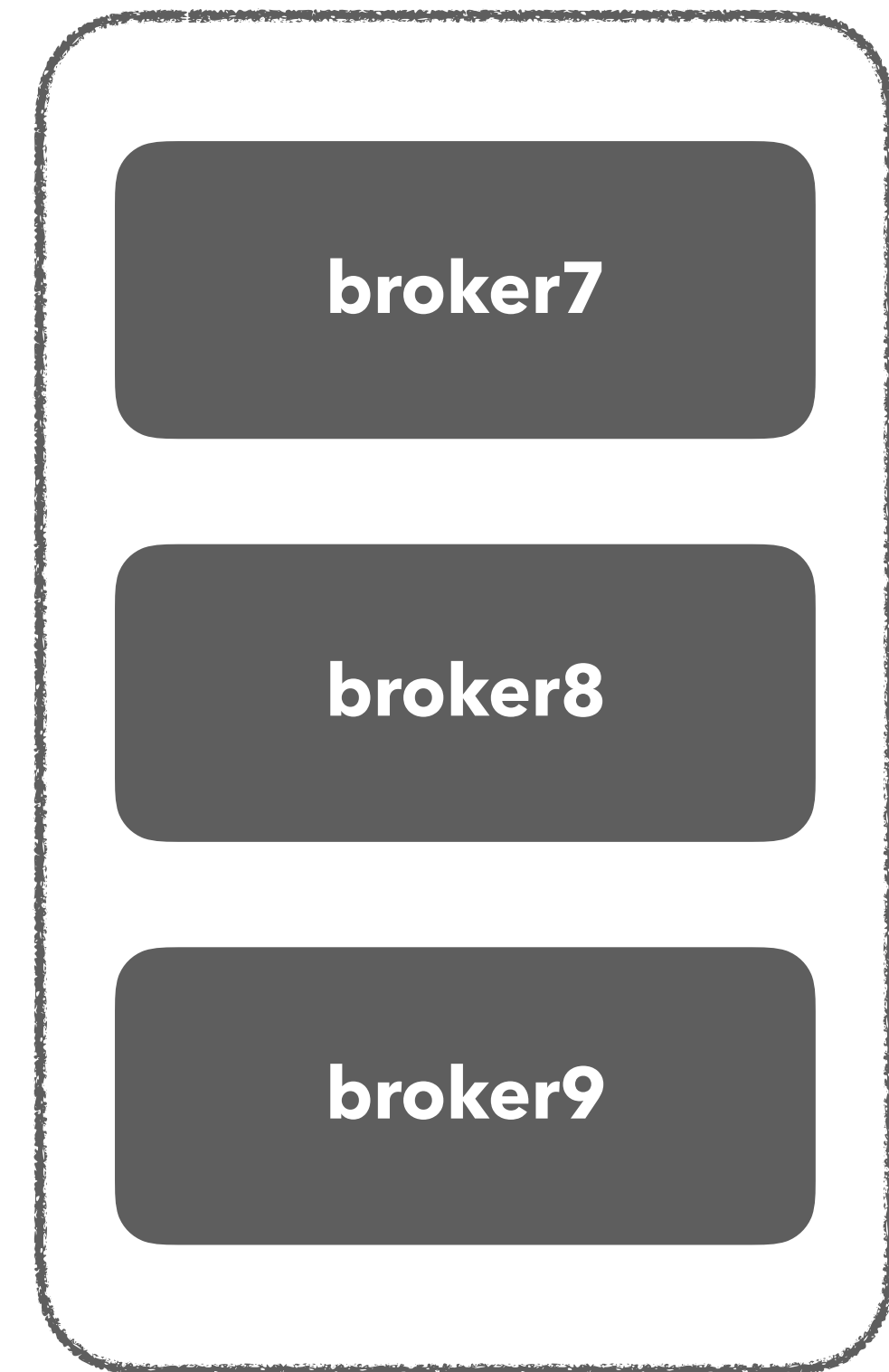
► recommend: rack1



RACK1



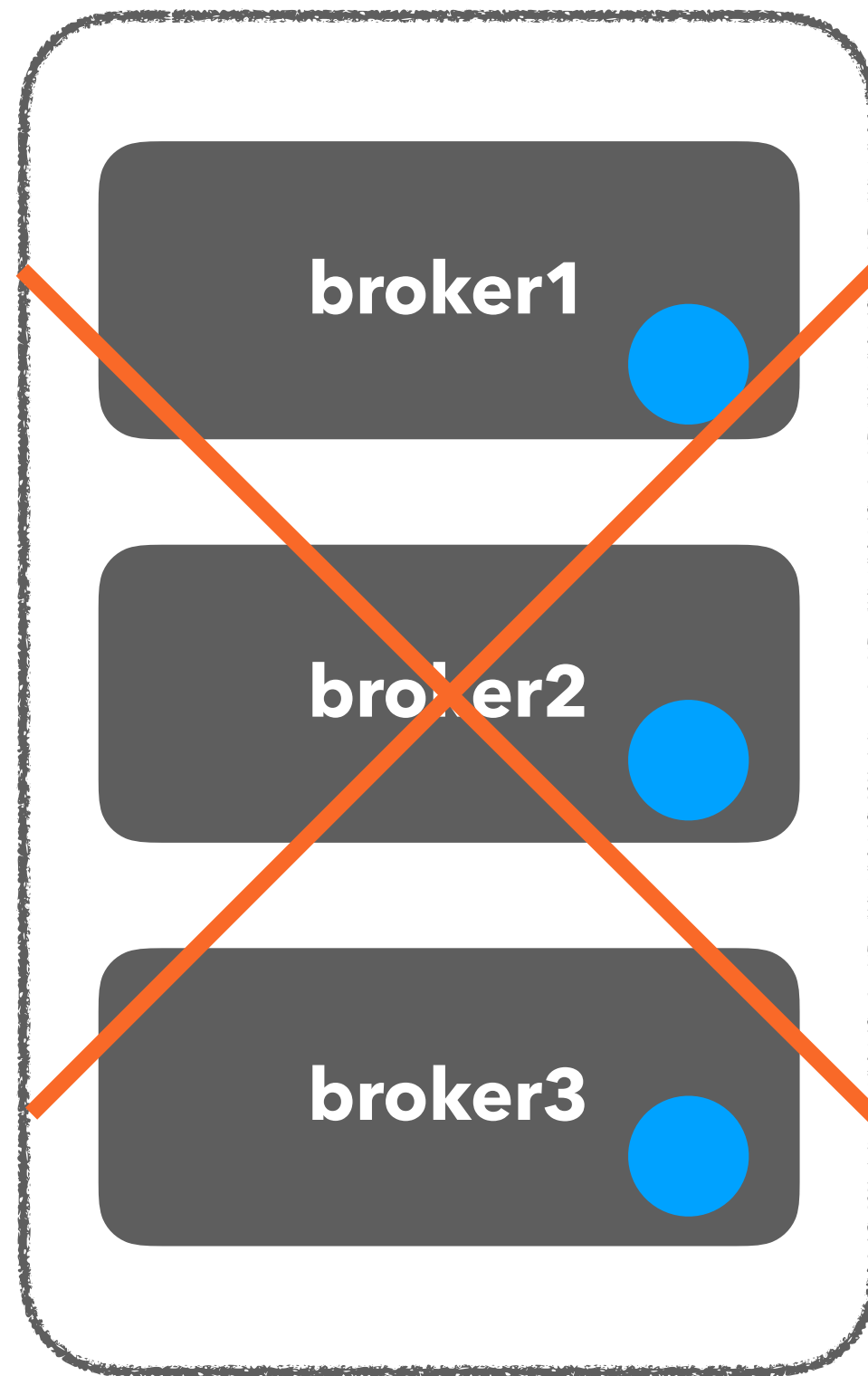
RACK2



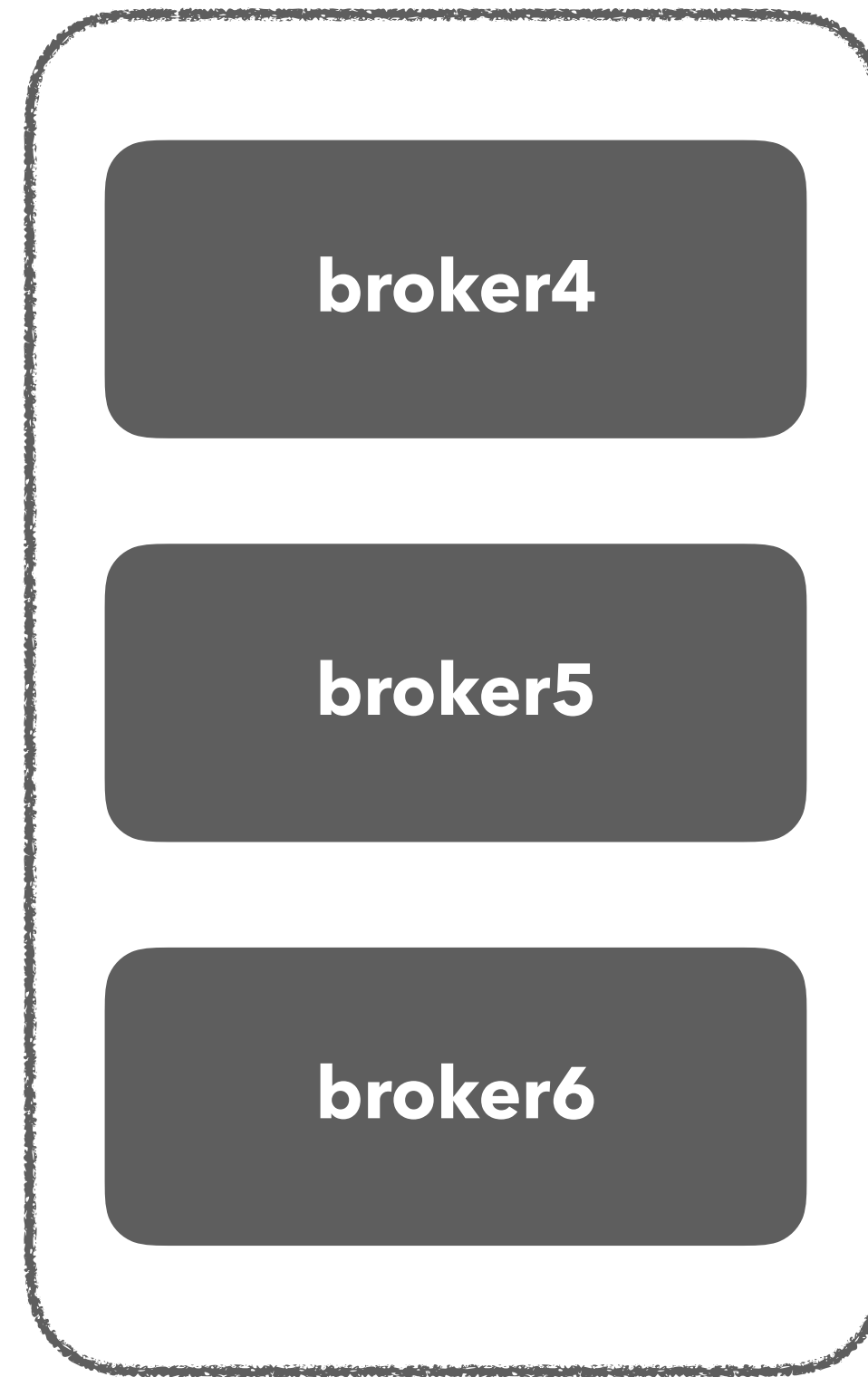
RACK3

broker.rack(Rack Awareness)

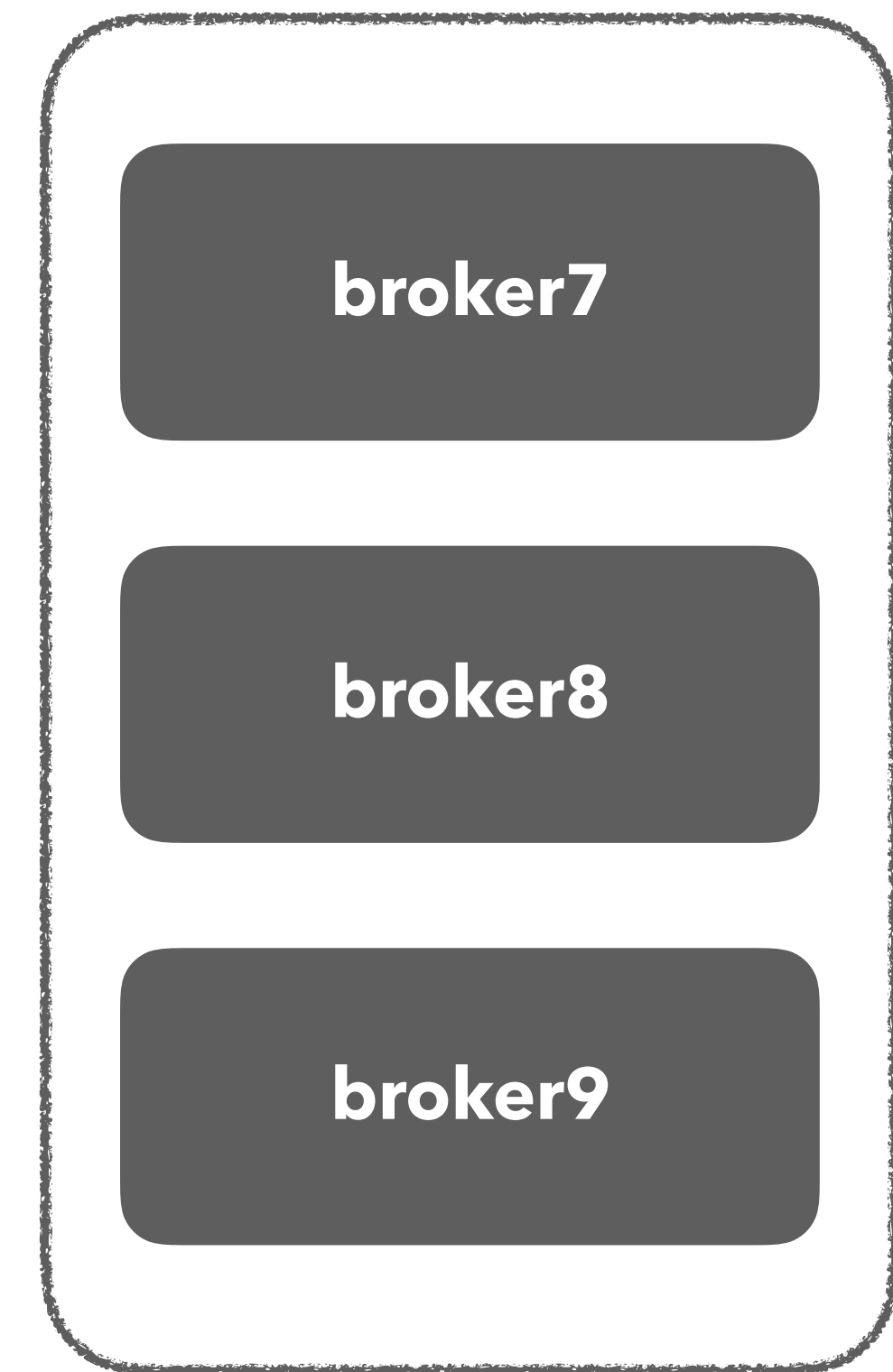
► recommend: rack1



RACK1



RACK2



RACK3

broker.rack(Rack Awareness)

▶ recommend: rack1

brokerID -> rack mapping

0 -> rack1

1 -> rack3

2 -> rack3

3 -> rack2

4 -> rack2

5 -> rack1

[0, 3, 1, 5, 4, 2]

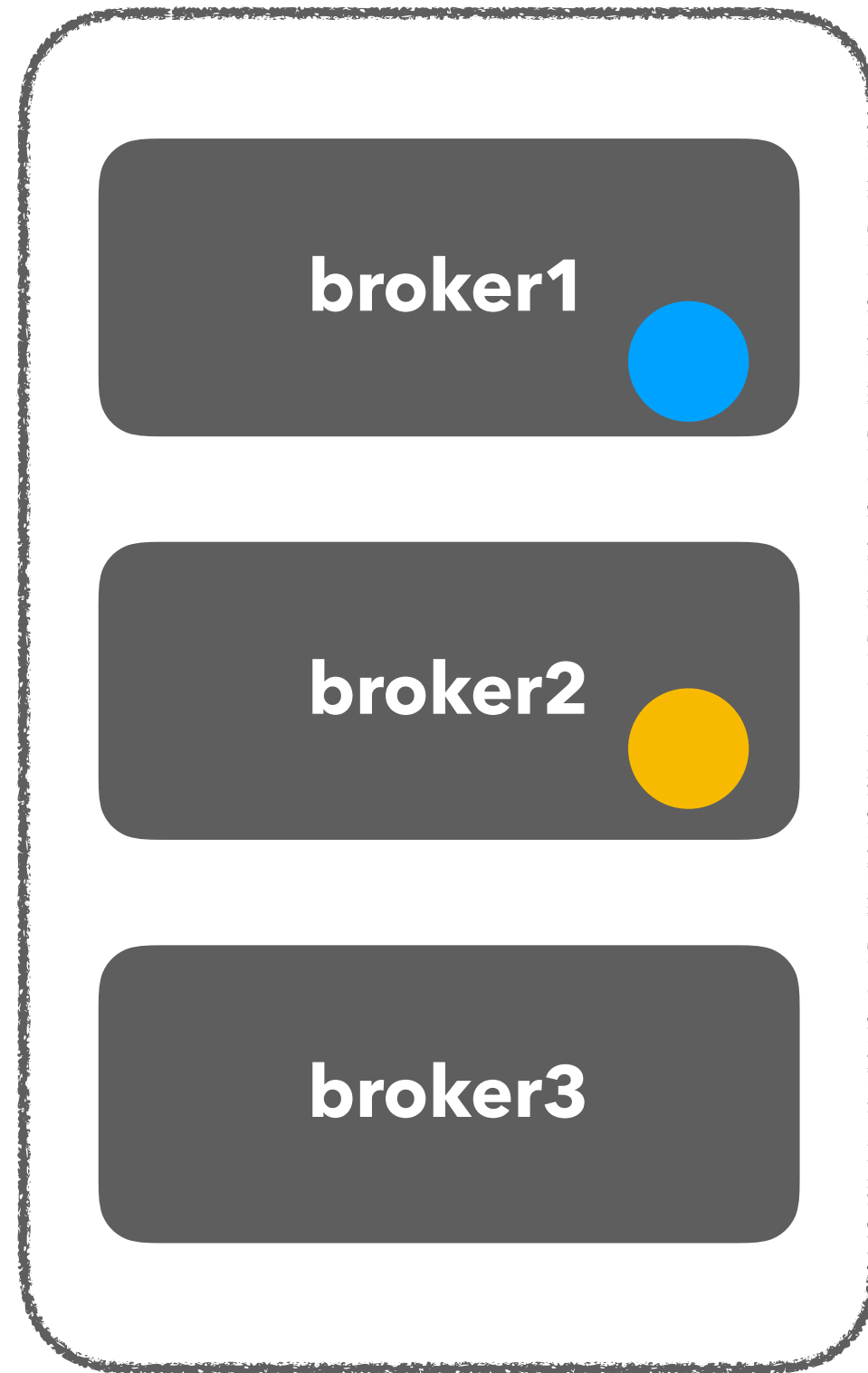
Partition 0 -> 0, 3, 1

Partition 1 -> 3, 1, 5

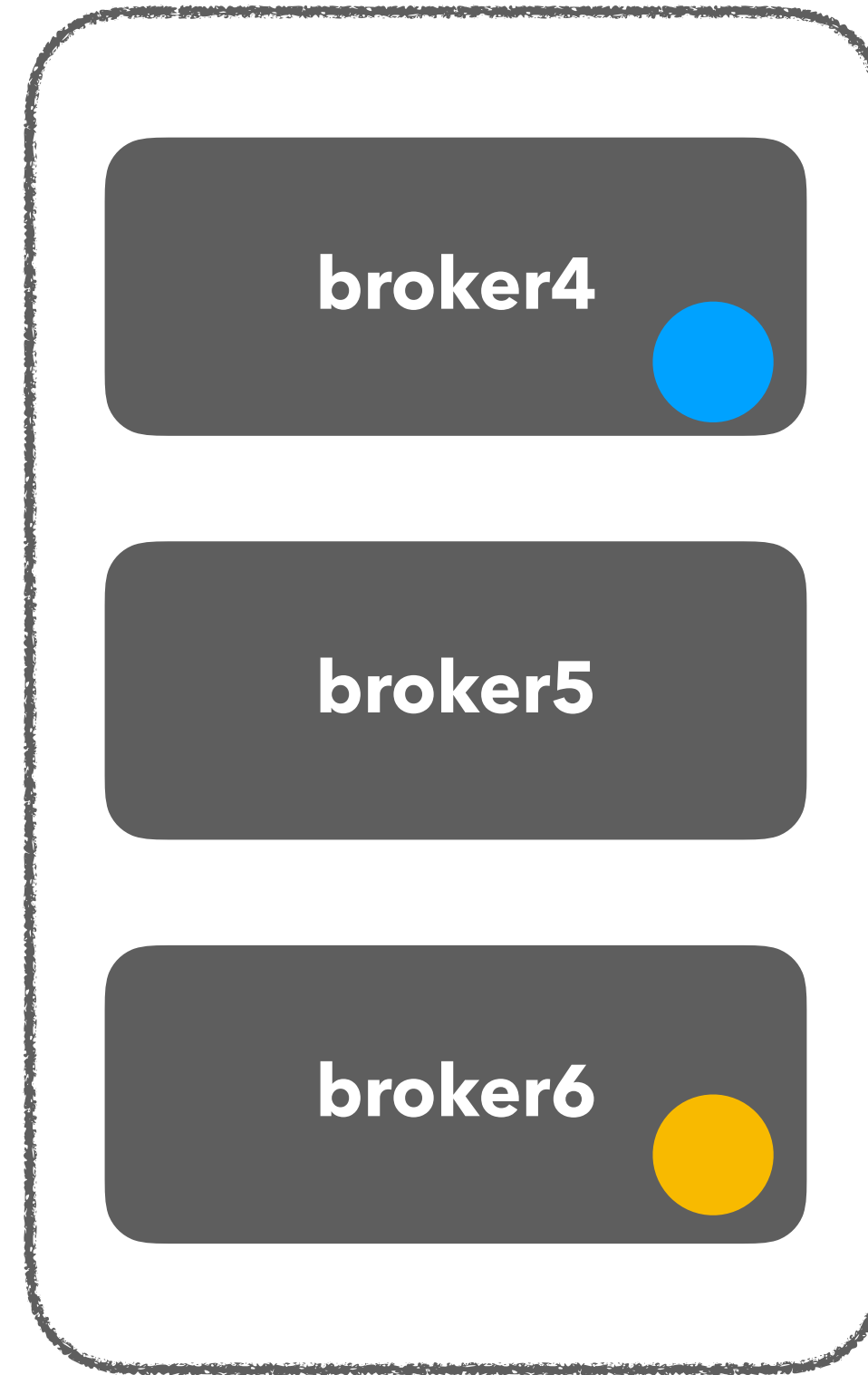
Partition 2 -> 1, 5, 4

broker.rack(Rack Awareness)

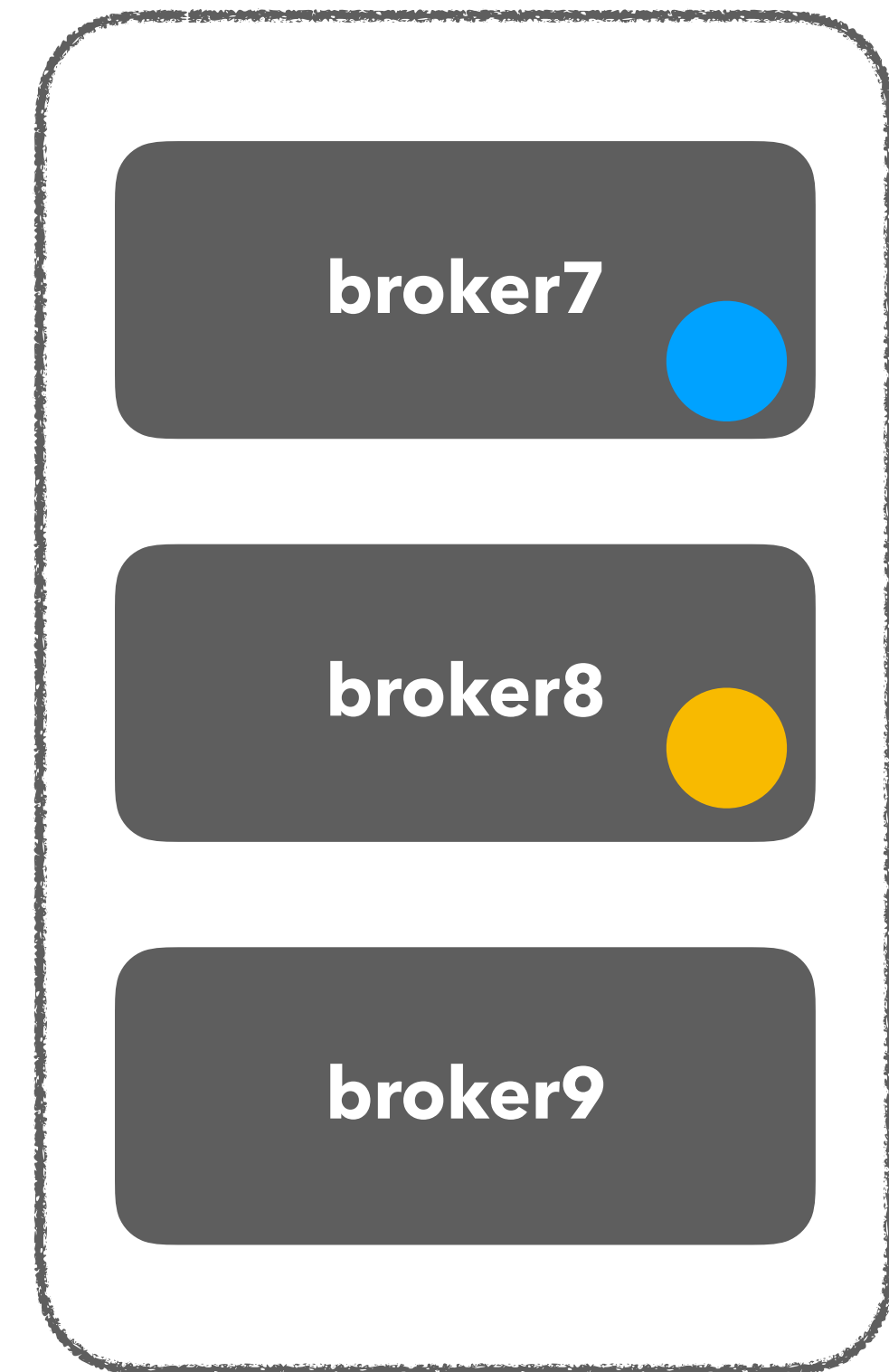
► recommend: rack1



RACK1



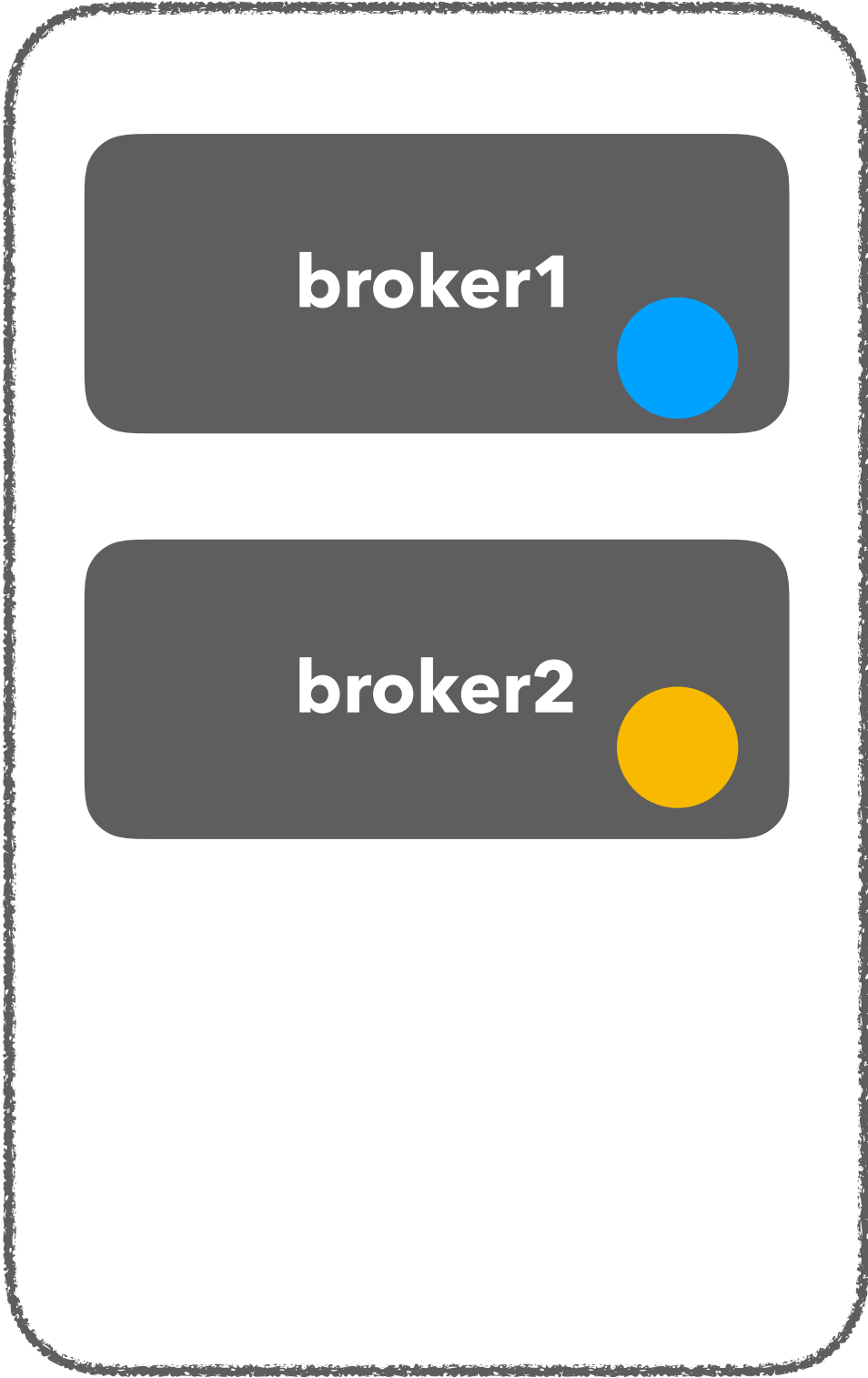
RACK2



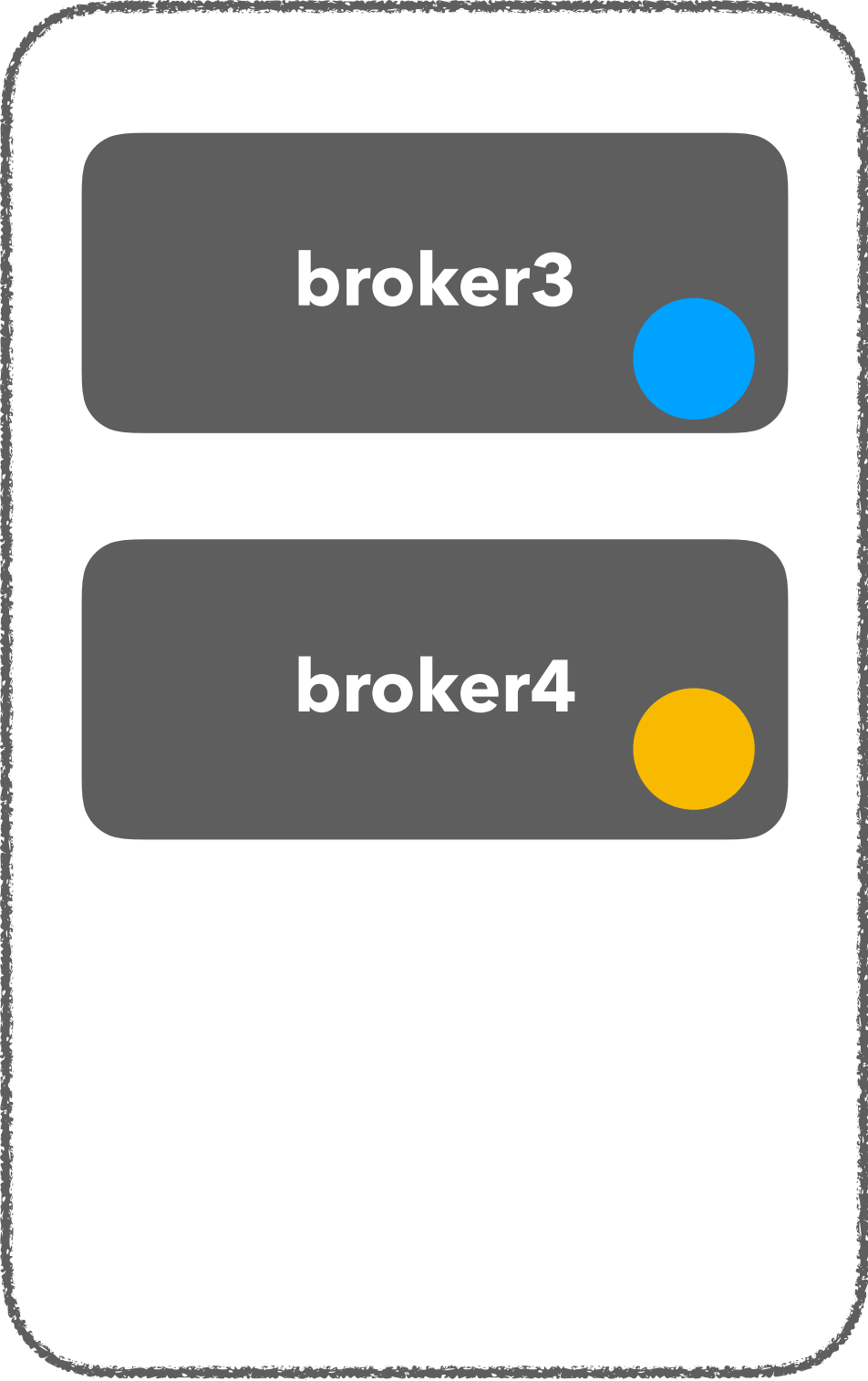
RACK3

broker.rack(Rack Awareness)

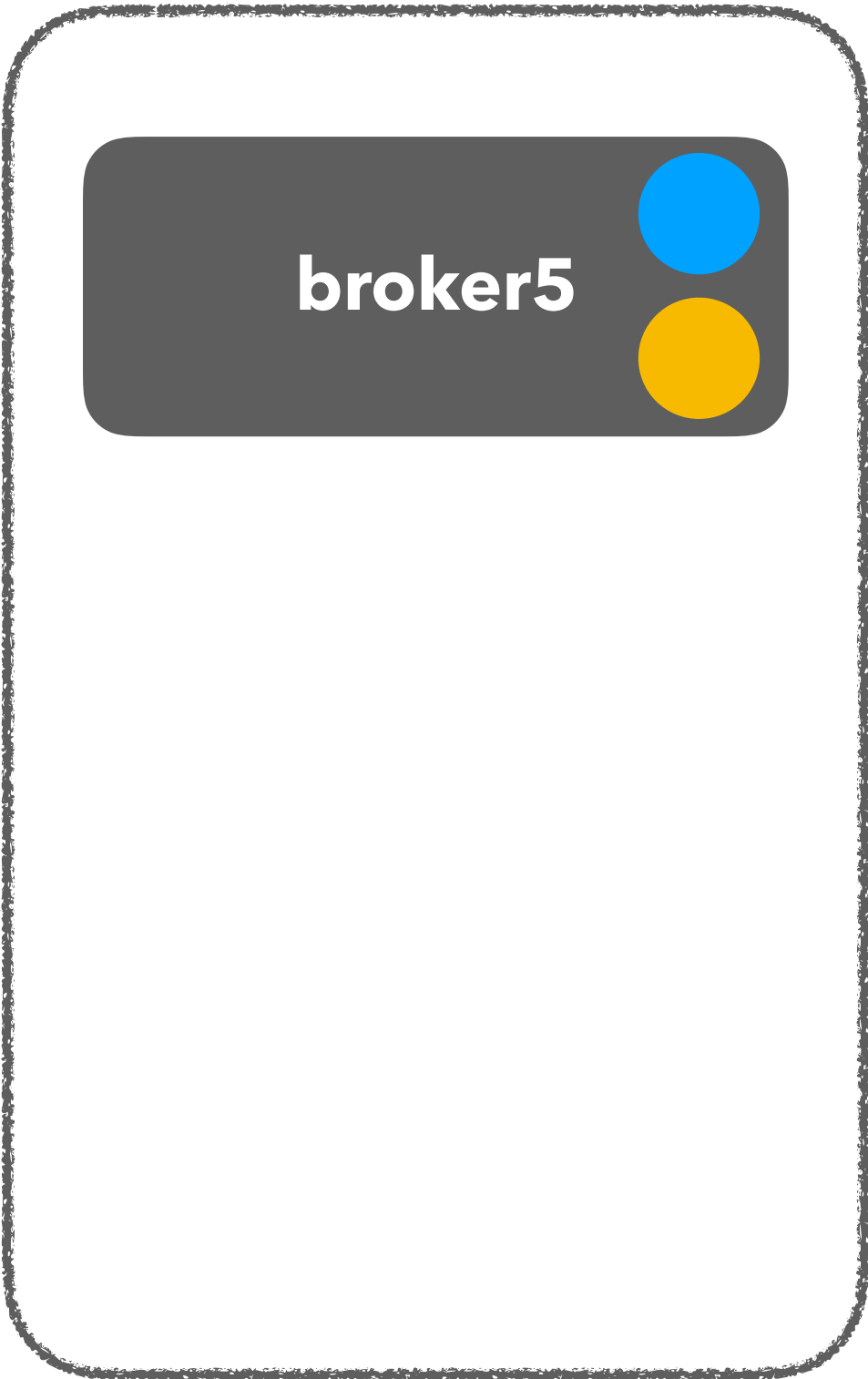
▶ recommend: rack1



RACK1



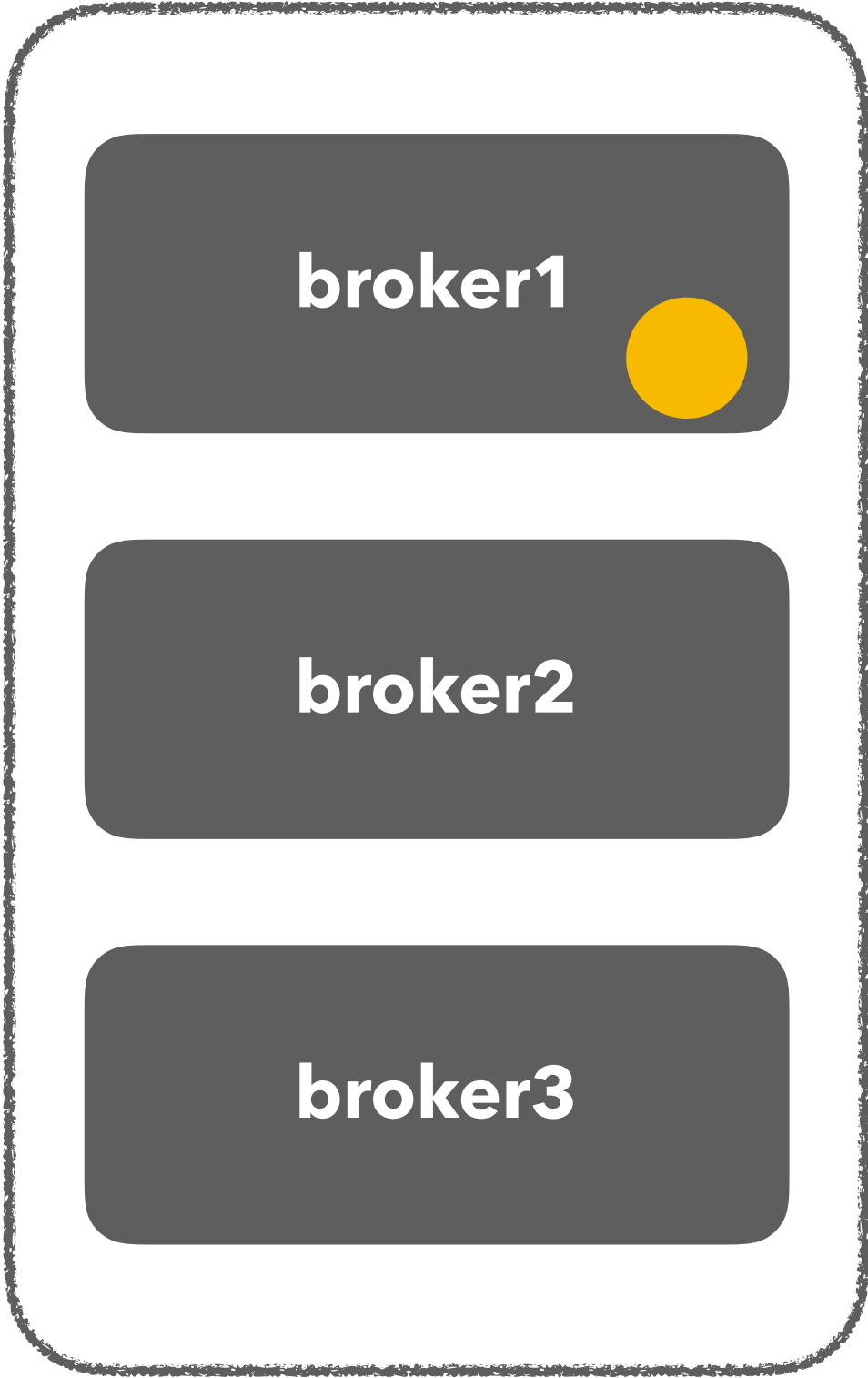
RACK2



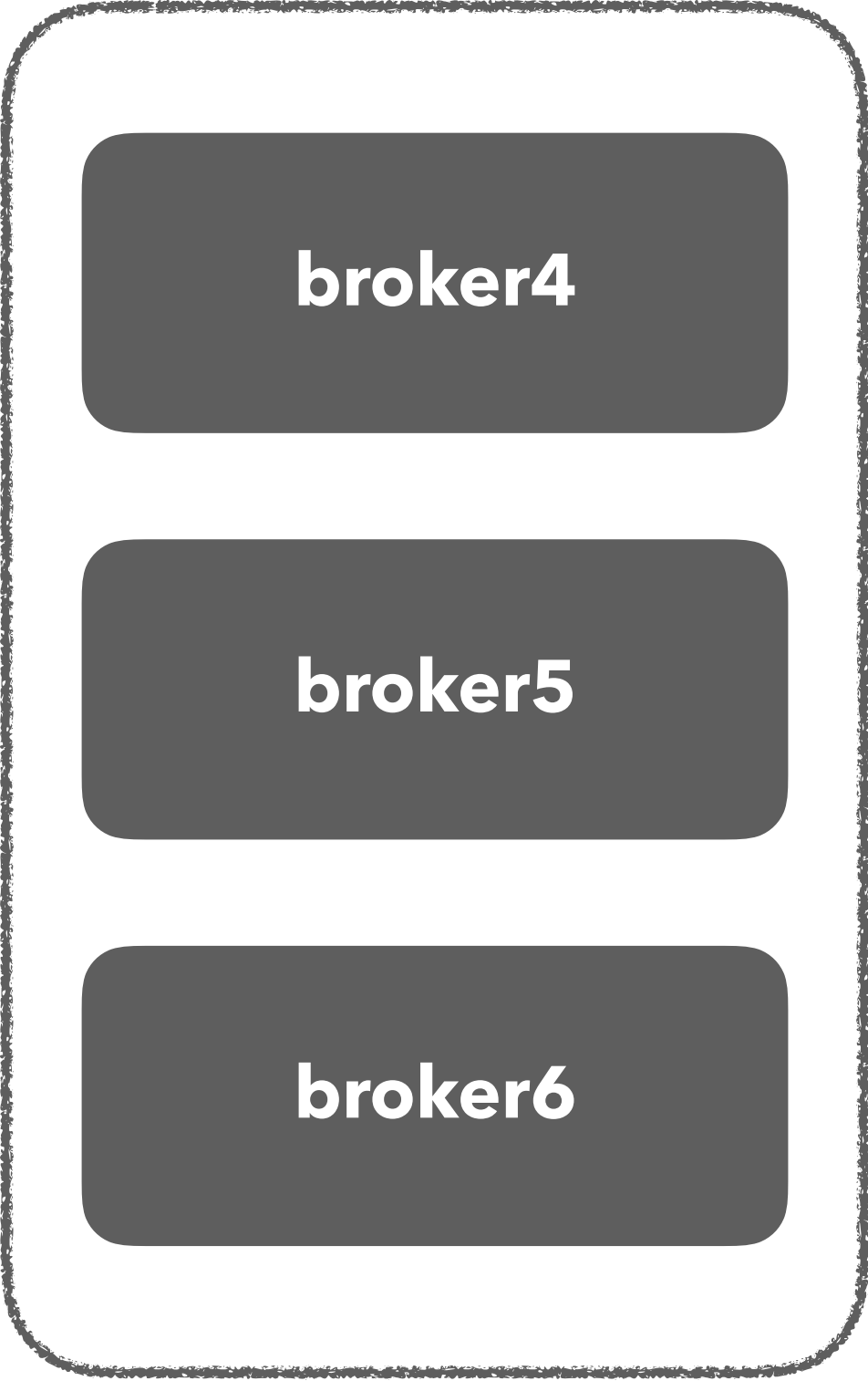
RACK3

replication.factor

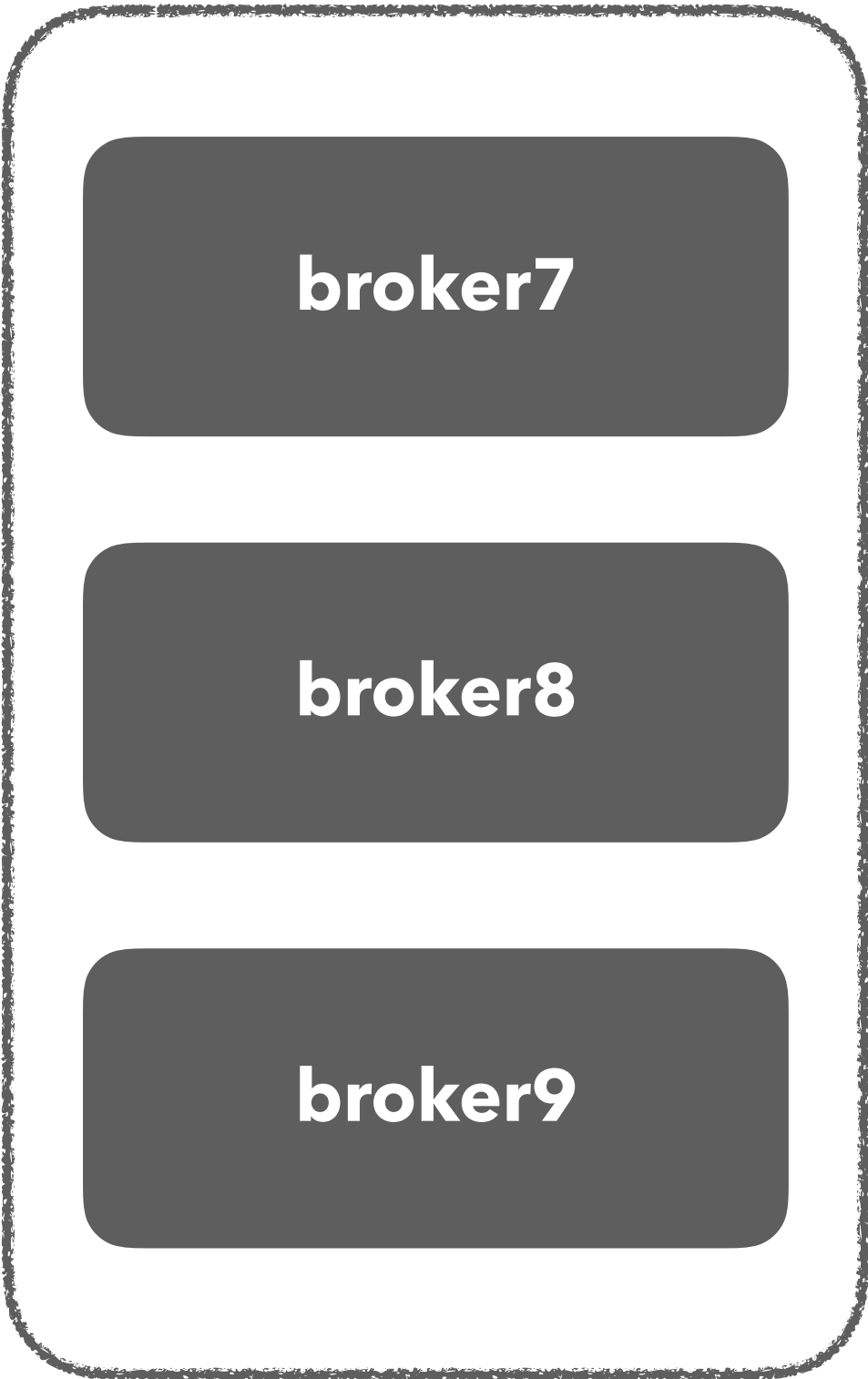
► recommend: 3



RACK1



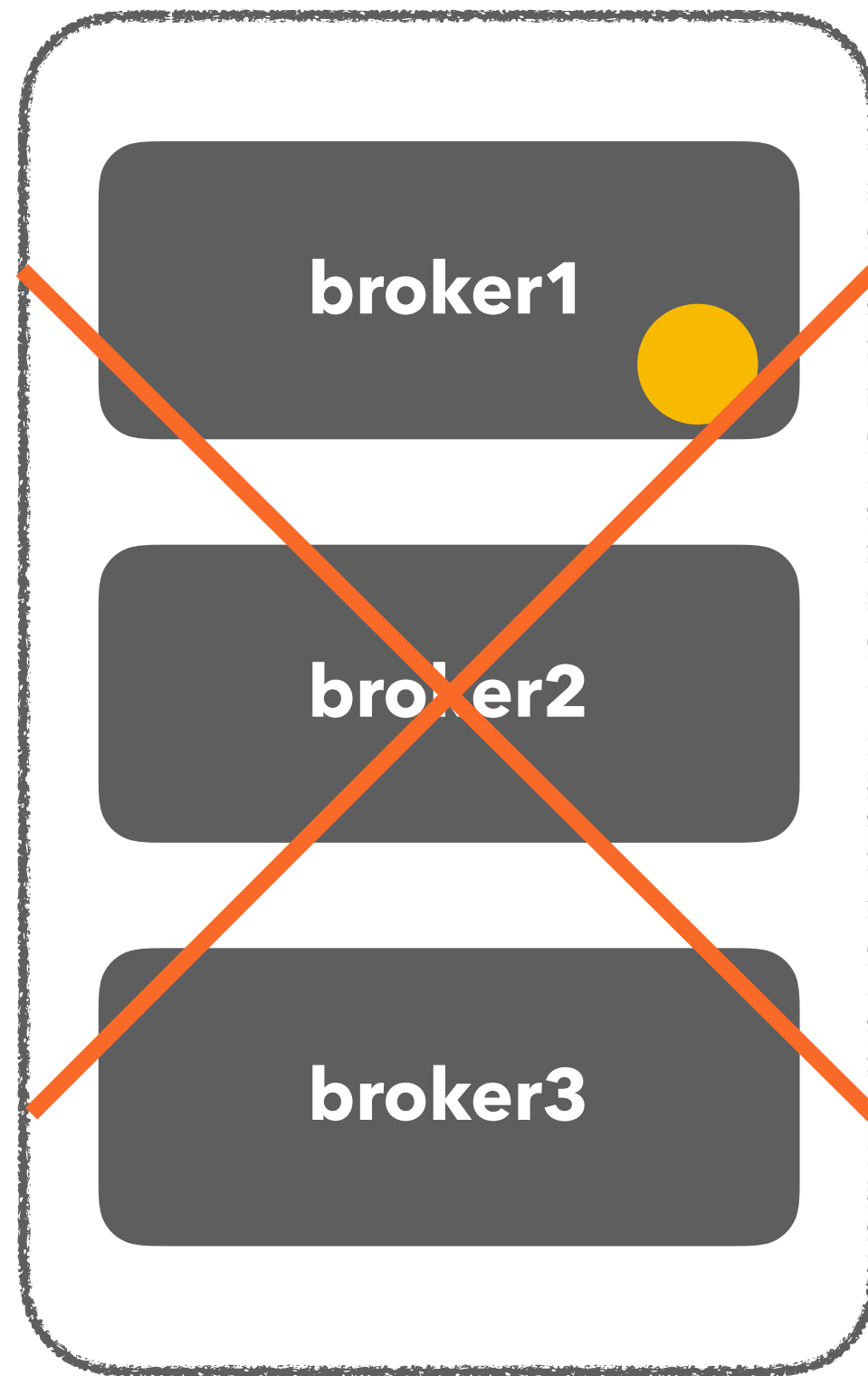
RACK2



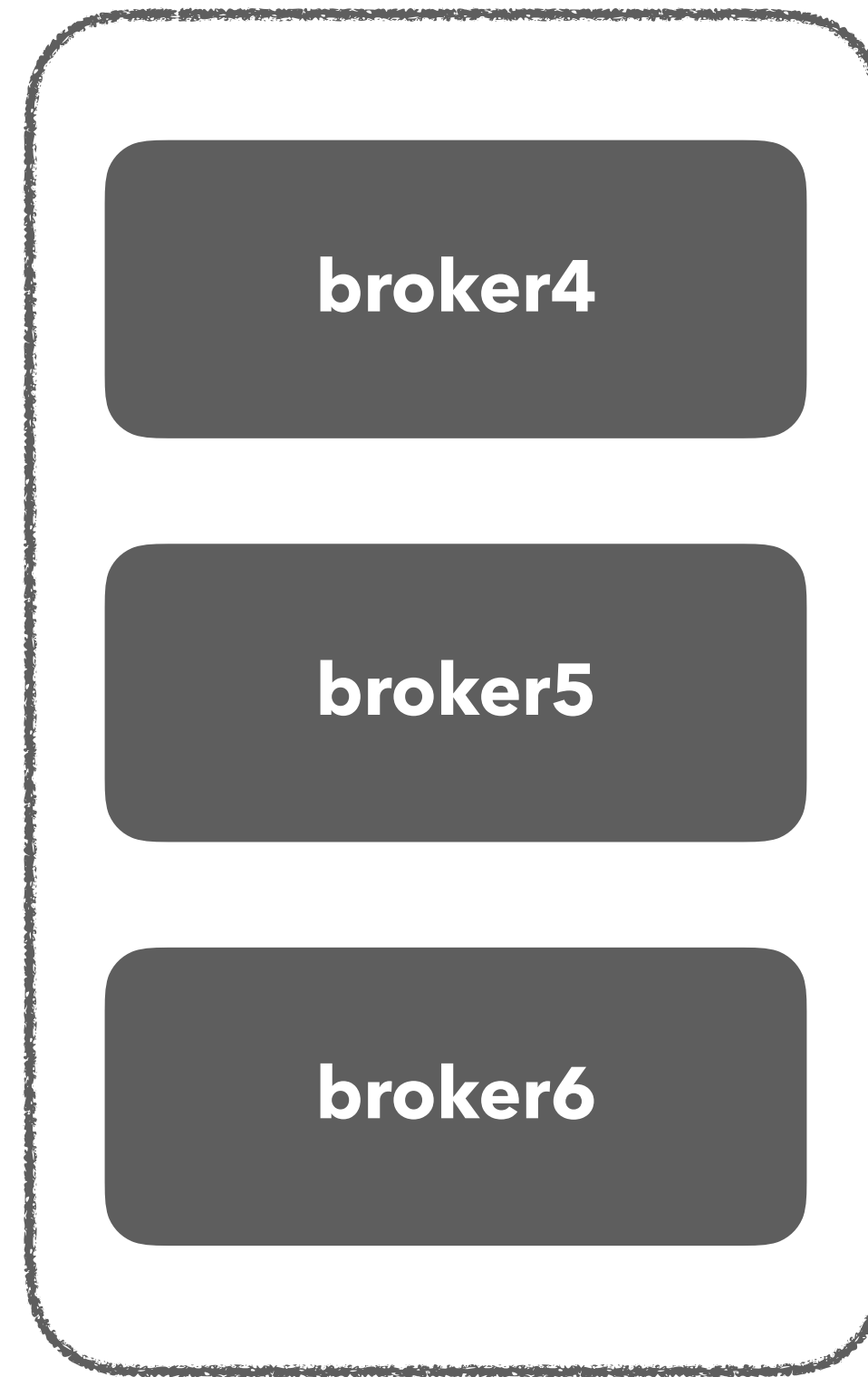
RACK3

replication.factor

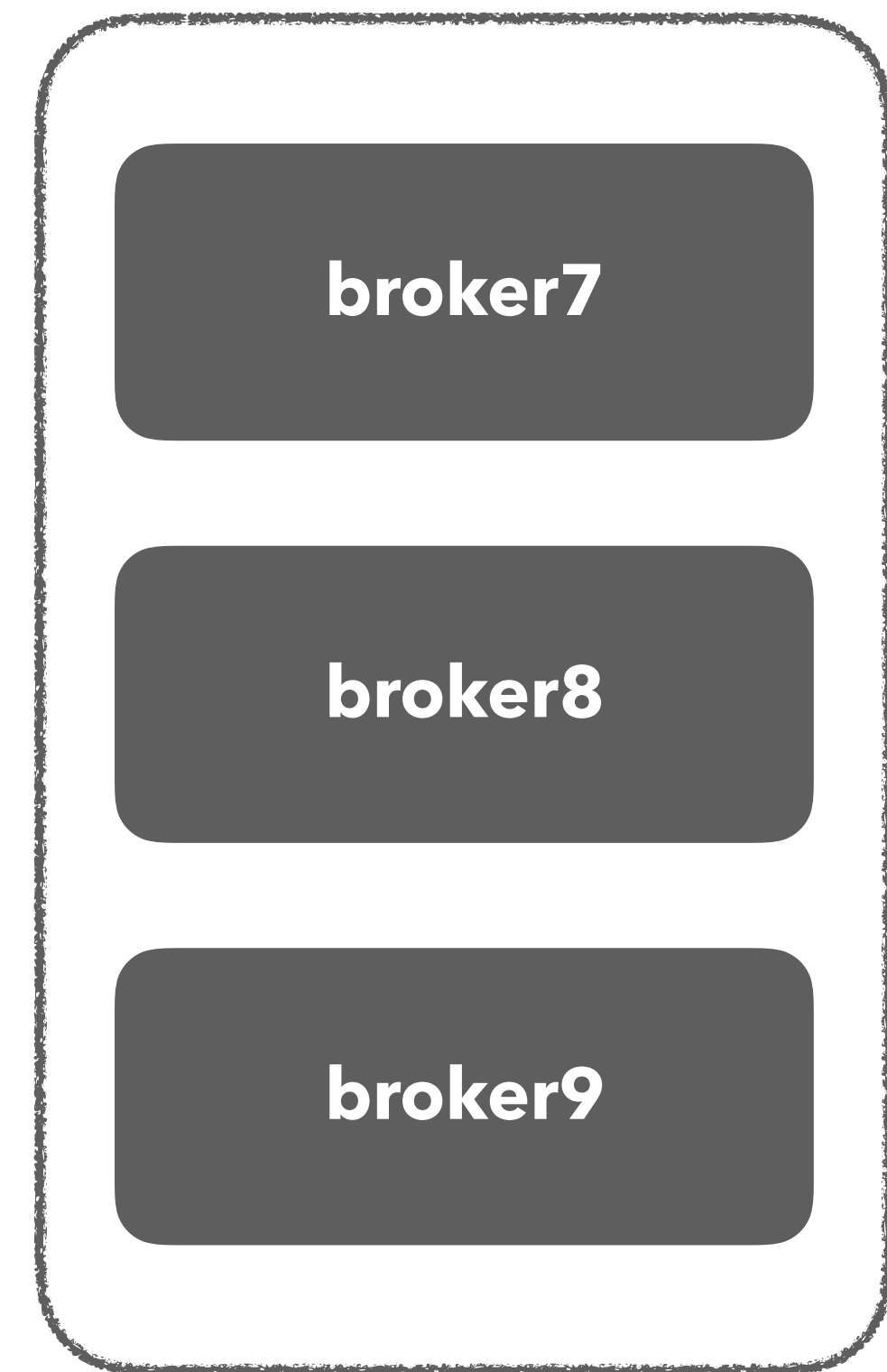
► recommend: 3



RACK1



RACK2



RACK3

Conclusion

We don't use default options while using Kafka.

Thank you