Share and Troubleshoot Apache Kafka on Heroku

Saravanan Dhandapani
SOFTWARE ARCHITECT

@dsharu

Share Apache Kafka Between Apps

Sharing Kafka

Globomantics3

Kafka

Globomantics3

Globomantics4

Kafka

Sharing Kafka

Apache Kafka Logs and Metrics

Demo

Deleting a shared add-on

Rotate Kafka Credentials

Cyber Attacks

Enhanced Security

Rotating Credentials

A new set of credentials are generated

Application config vars are updated

Old and new certificates are maintained for 5 minutes

New certificates comes into effect

Migrate Kafka Add-on

Migration Scenarios

Upgrading Kafka plan

Downgrading Kafka plan

Upgrading clusters

Migration Strategies

By entering maintenance mode

By not entering maintenance mode
- Involves code change

Demo

Kafka migration by entering maintenance mode

Testing Kafka Applications for Resilience

Broker Regions
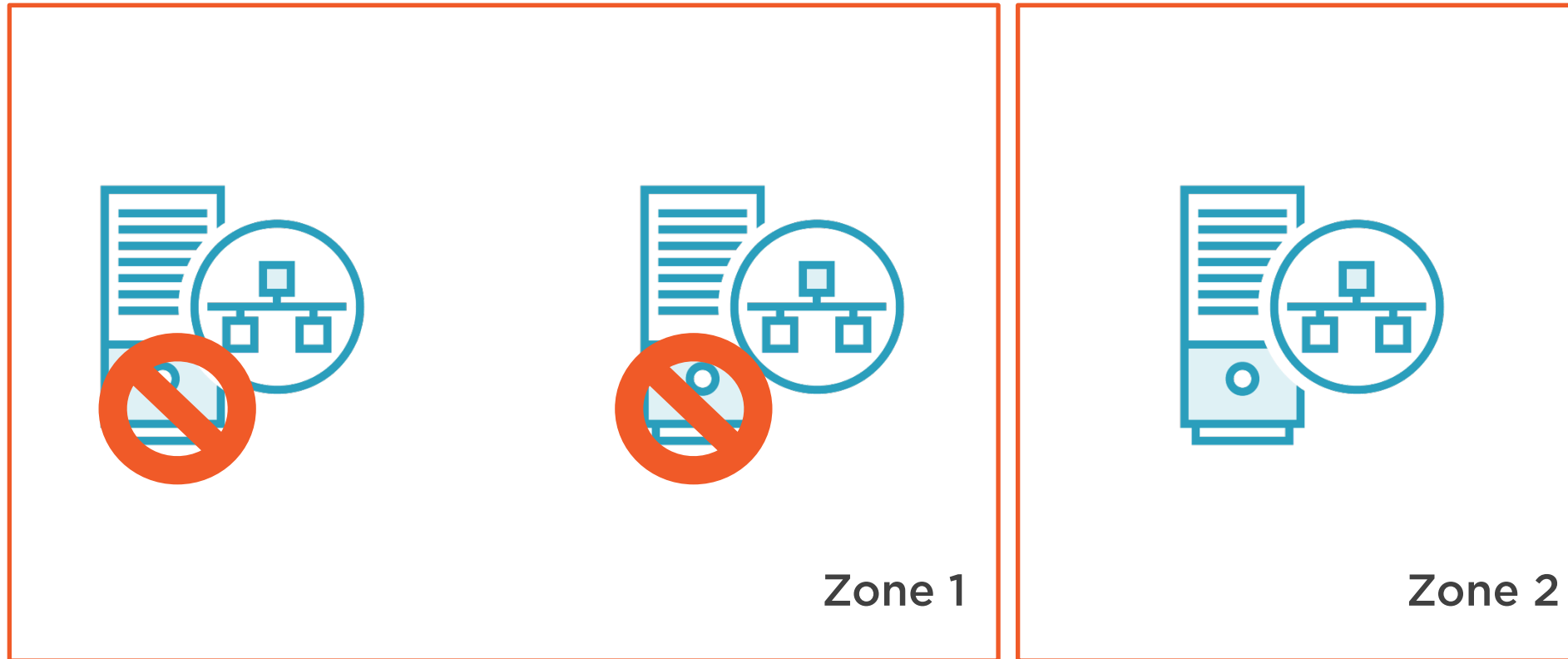
Common runtimes in the US or EU region

Frankfurt, Sydney or Tokyo regions

Basic plan

Private spaces

Broker Resilience

Zone 1

Zone 2

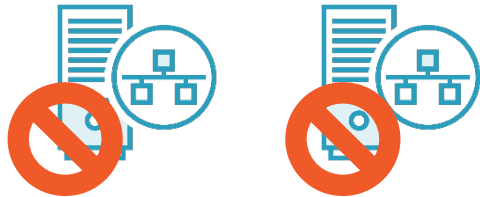# Extended Plan

Demo

Testing fault tolerance

- Cannot be performed on a basic plan
- Standard-0 and above
- Must be performed only in staging area

Go to Heroku dashboard
and
DELETE
the Kafka add-on

Summary

Provision Kafka add-on

Multi tenant Kafka architecture

Provisioned topics and consumer groups

Deployed java application on Heroku

Share Kafka between Heroku apps

Fault tolerance testing