

Event streaming applications With Kafka Streams, Spring Kafka and Actuator



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You will learn

How to:

- Produce / consume messages --> spring-kafka
- Process big data --> kafka-streams
- Create proper monitoring --> actuator

WARNING

This meeting will contain live coding,
so everything could (potentially) go wrong.



The story.....



IT WAS A NIGHTMARE

TO BE A DEVELOPER (in the 90's)



CORBA

SOAP



REST

but it's slow.....



Let's do async

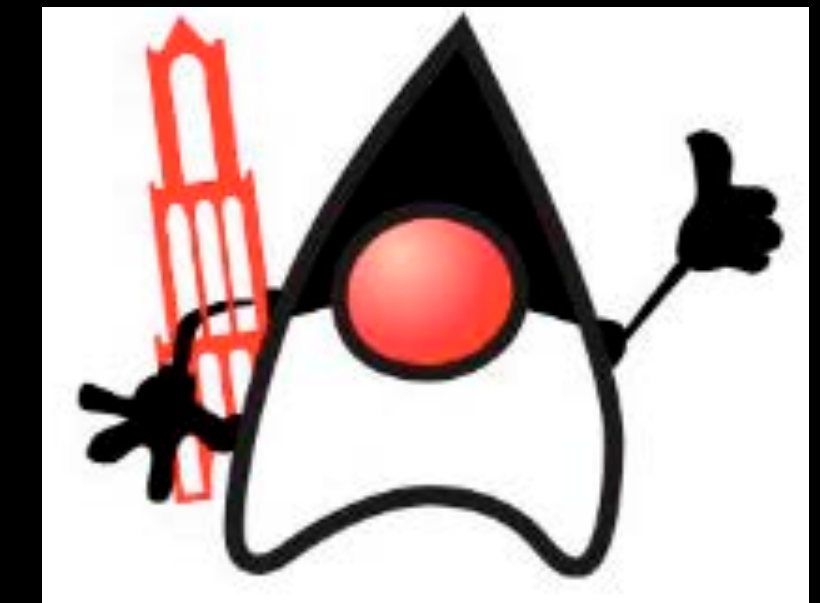
With Apache Kafka!

EVENT STREAMING APPLICATIONS

With Kafka Streams, Spring Kafka and Actuator

MARRIED

WITH
CHILDREN



@KOTURK77

Who is already using
Kafka?

but first, why???

event streaming

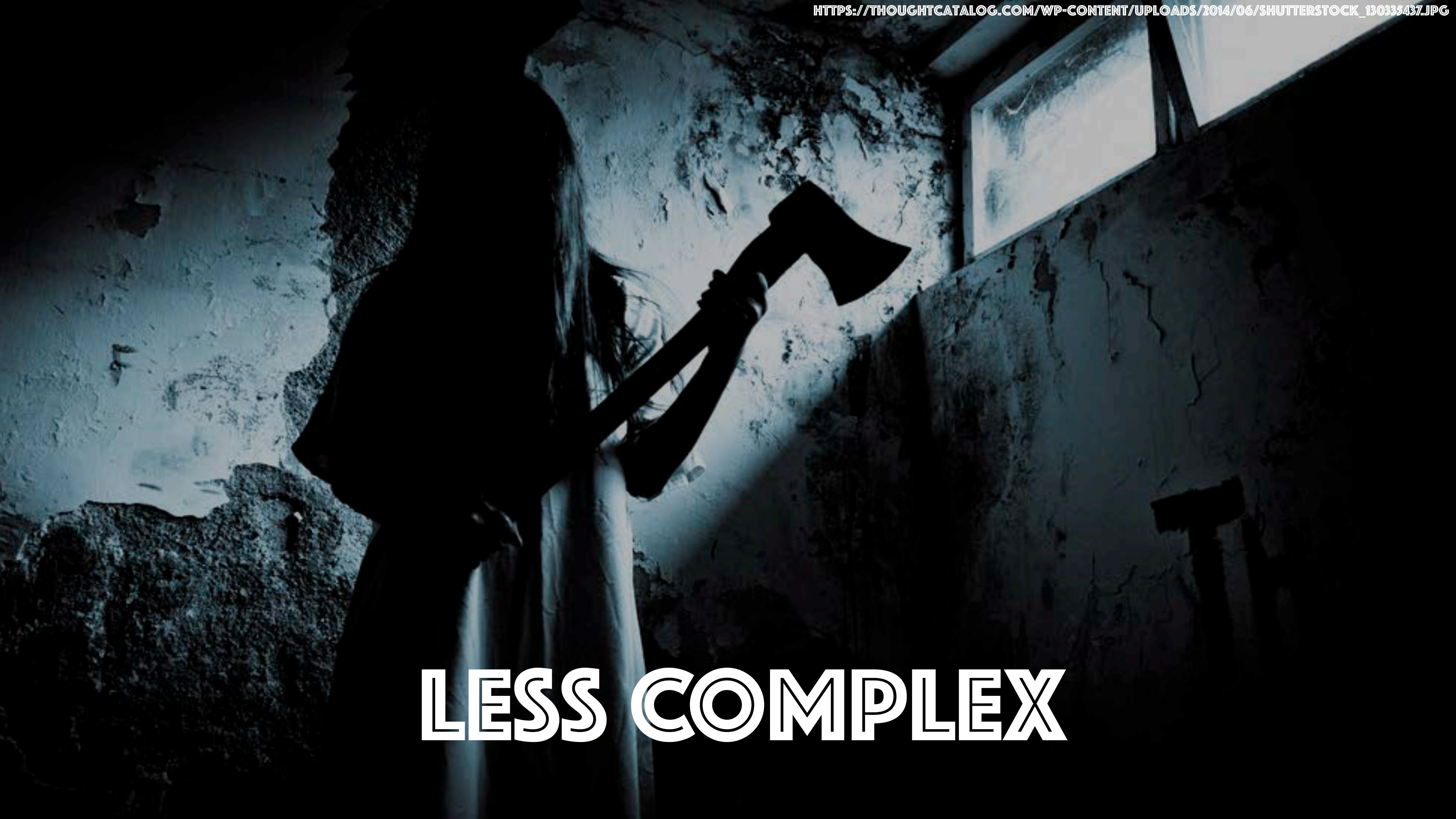


EVENTS



A cinematic still from the movie 'Ghost Rider'. The character, a skull with glowing red eyes, is riding a chrome motorcycle at night. He is wearing a black leather jacket and has flames coming out of his mouth and hands. The background is a dark, wooded area with tombstones visible in the distance. The lighting is dramatic, with the fire providing a warm glow against the cool blue tones of the night.

SOMETHING FAST

A person with long hair, seen from the side, is holding a large, dark axe. They are standing in a dark, dilapidated room with peeling walls and a window in the background. The lighting is dramatic, with strong shadows.

LESS COMPLEX



FAULT TOLERANT



REPLAYABILITY

For that we have





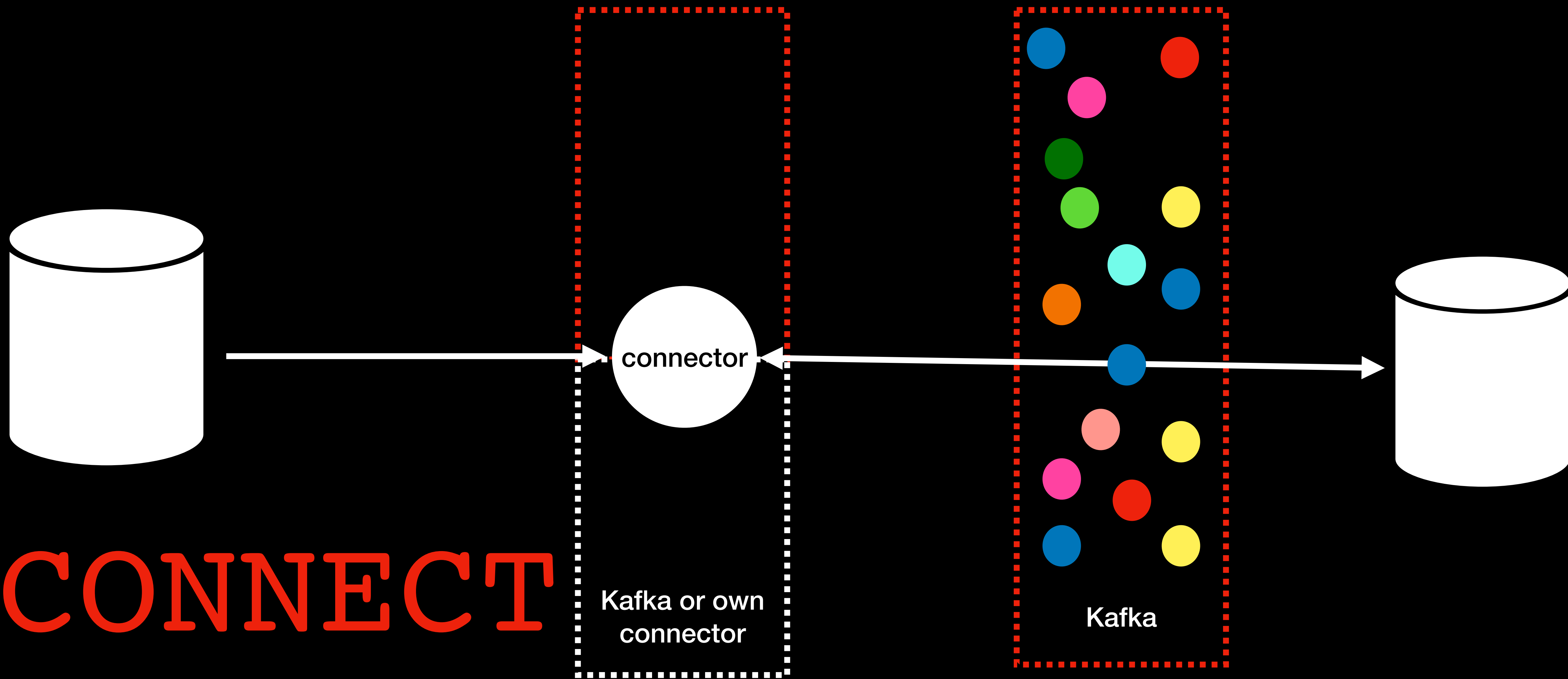


But why not using

RABBITMQ

Three clowns from the movie 'It' are shown from the chest up. The clown on the left has a yellow and orange flame-like wig, blue face paint, and a large green and yellow collar. The clown in the center has a red pointed collar, a large red nose, and a wide, toothy grin. The clown on the right has a red spiky wig, blue face paint, and a red and blue striped outfit. The text 'THREE FLAVOURS' is overlaid in white, bold, sans-serif font across the middle of the image.

THREE FLAVOURS





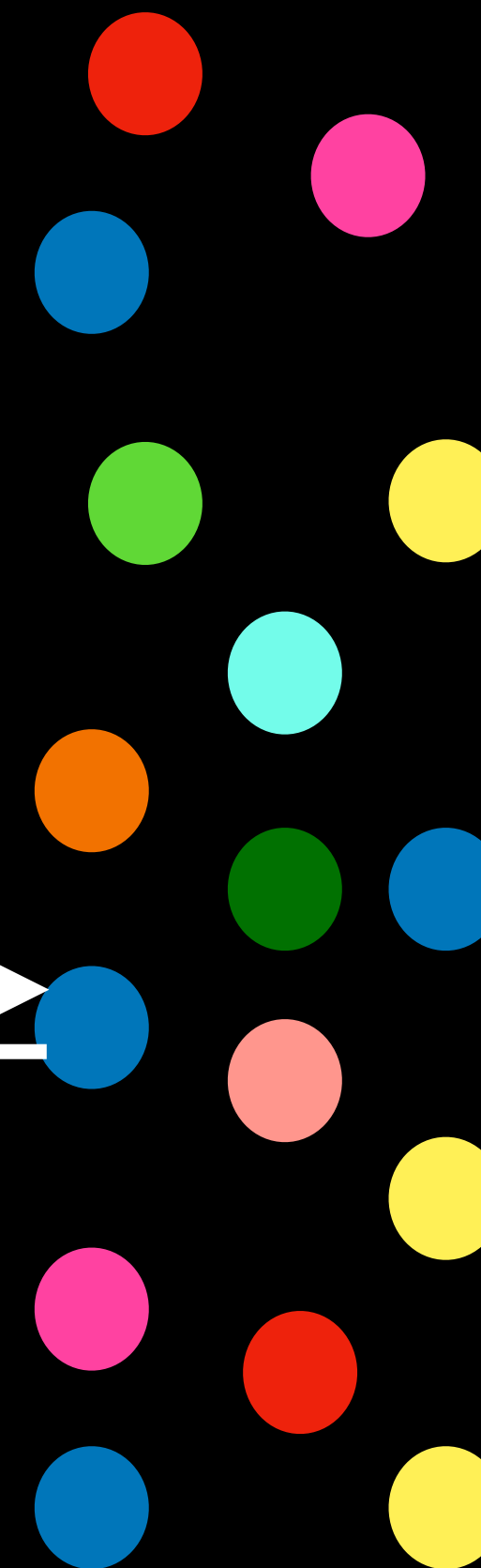
rest

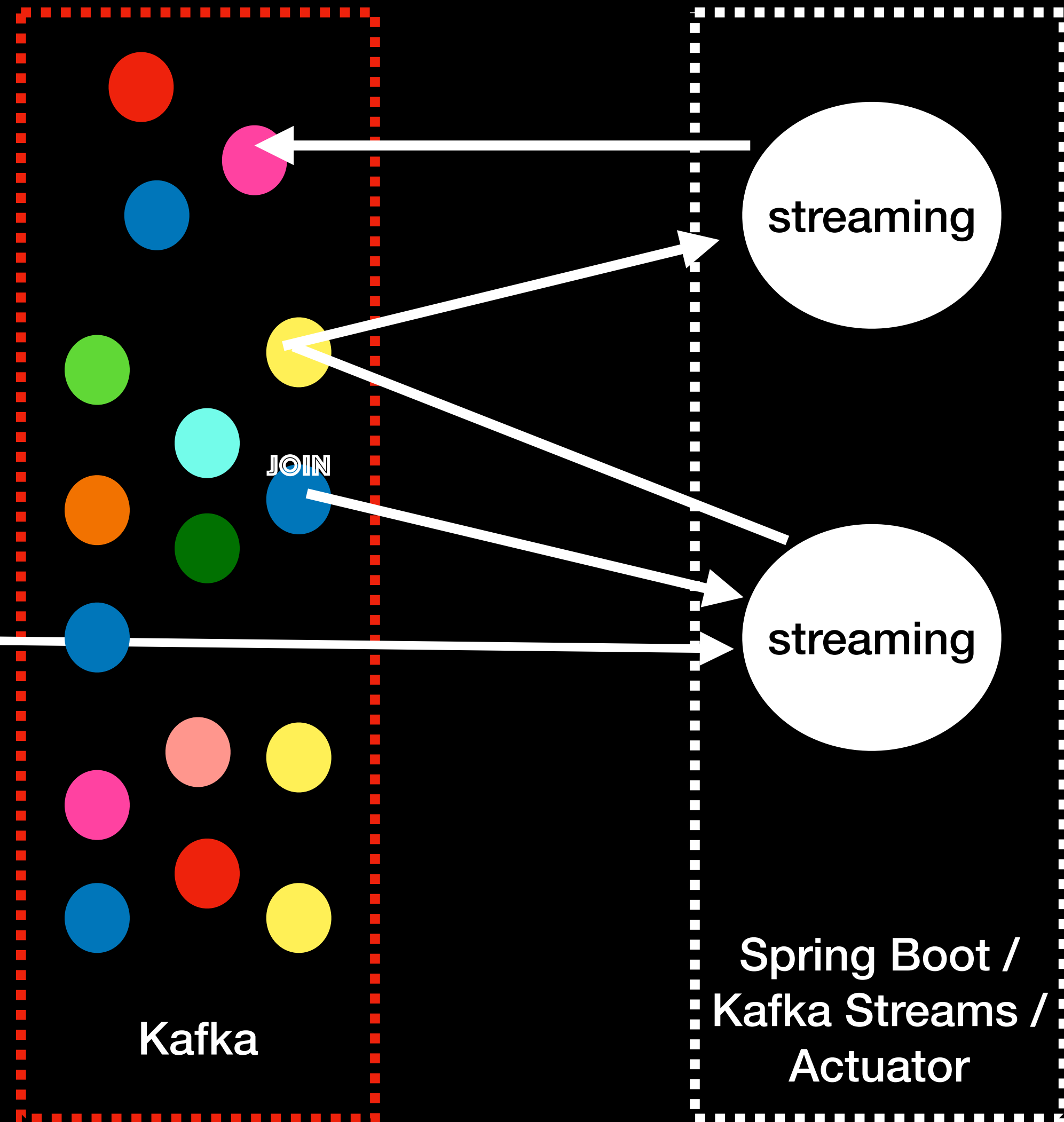
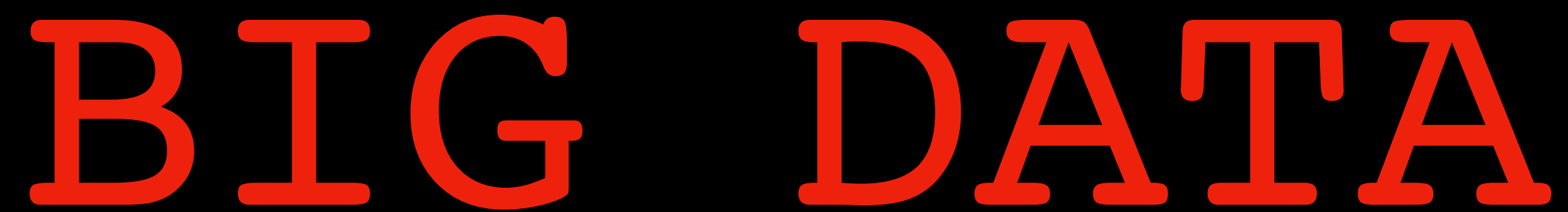
SIMPLE

basic

Spring Boot /
Spring Kafka /
Actuator

Kafka





LET'S EAT SOME CODE



You learned

How to use:

- Consumer -> `@KafkaListener`
- Producer -> `KafkaTemplate`
- Streams -> `StreamsBuilder`

Learn to create metrics (actuator)!!

[HTTPS://YOUTU.BE/UNSZKYPAMZC?T=688](https://youtu.be/unszkypamzc?t=688)



MONITORING

REFERENCES

for more fun

- spring kafka
<https://docs.spring.io/spring-kafka/docs/current/reference/html/#preface>
- streams (more tutorials)
<https://developer.confluent.io/tutorials/>

IMAGE FROM:

[HTTPS://RUINMYWEEK.COM](https://ruinmyweek.com)



Thank you

Slides + code (branch 'solution'): <https://github.com/KoTurk/Kafka/tree/main/Jetbrains>
Follow me at Twitter: [@KoTurk77](https://twitter.com/KoTurk77)