



Kafka Streams,
nightmare or sweet dream?



Ko Turk
Developer @ **adesso**

@KoTurk77

sweet dream?



nightmare?

Kafka Streams nightmare or sweet dream?

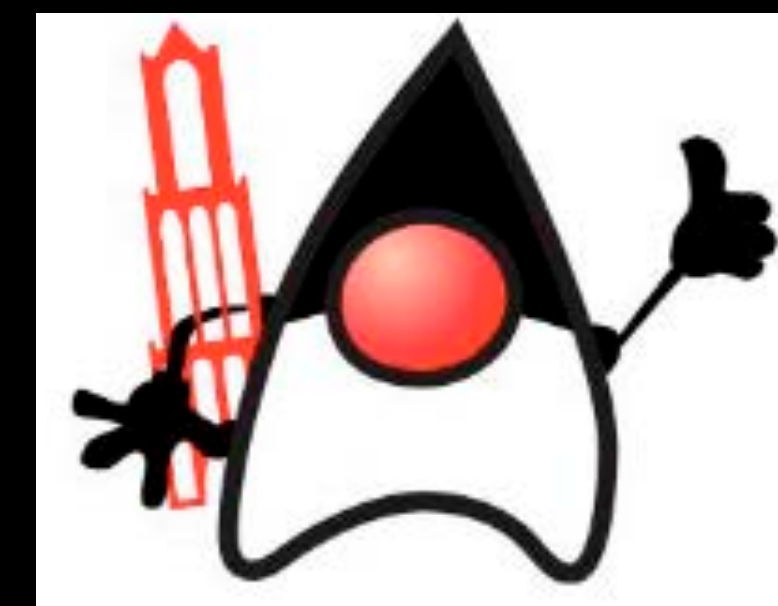


SO IT DEPENDS



MARRIED

WITH
CHILDREN



@KOTURK77

You will learn

How to:

- Produce / consume messages --> spring-kafka
- **Process big data**
- **Custom processing (with timing)** } --> kafka-streams
- Create proper monitoring --> actuator



[https://github.com/KoTurk/Kafka/tree/main/
VoxxedTicino](https://github.com/KoTurk/Kafka/tree/main/VoxxedTicino)

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!





MIDJOURNEY MADE



but first, why???

event streaming

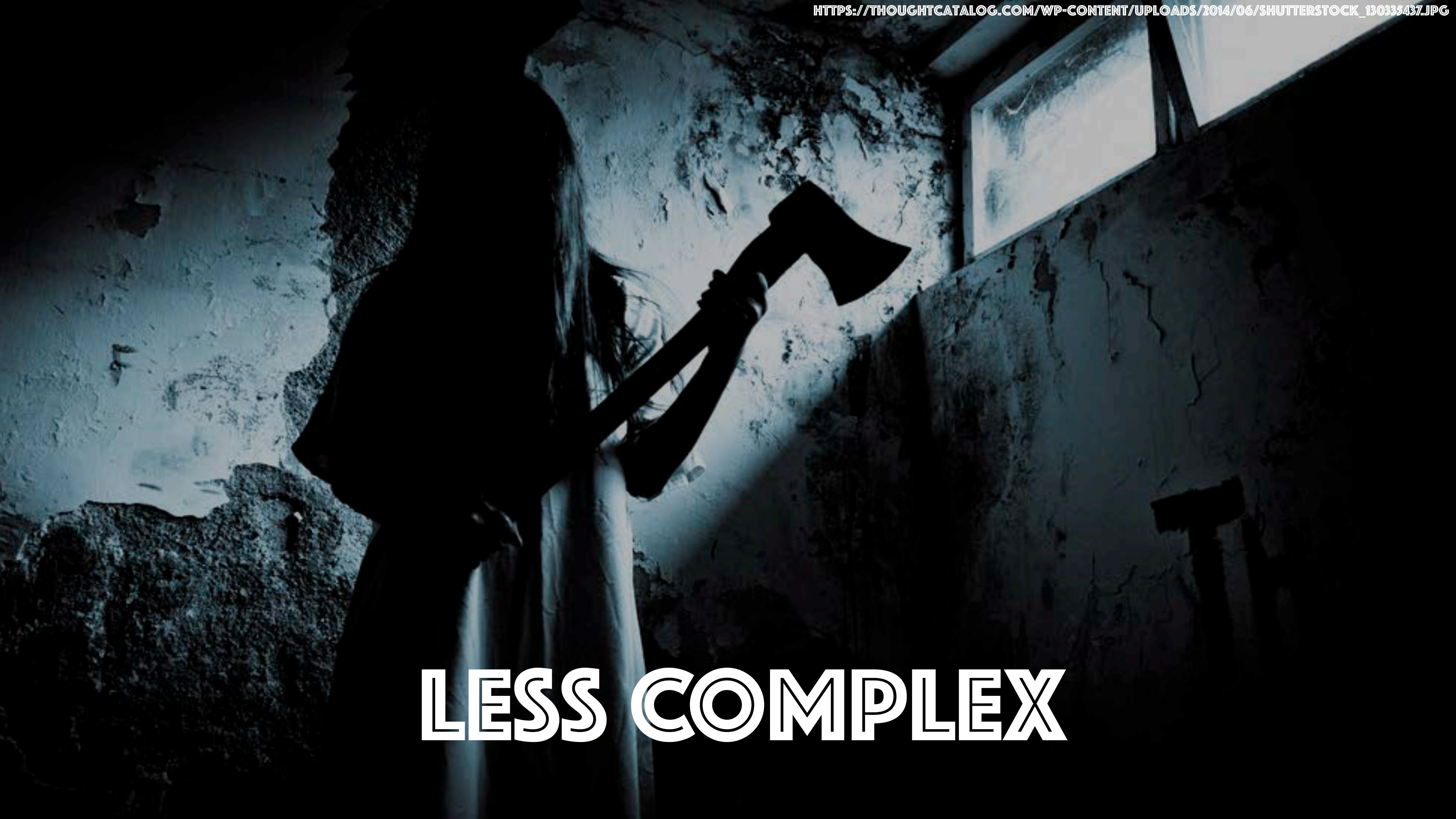


EVENTS



A full-page image of Ghost Rider, a character with a flaming skull, riding a motorcycle at night. The character is wearing a black leather jacket and has flames coming out of his mouth and hands. The background is a dark, wooded area with a large, dark, pointed tombstone visible on the right. The text "SOMETHING FAST" is overlaid at the bottom in a large, white, bold, sans-serif font.

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

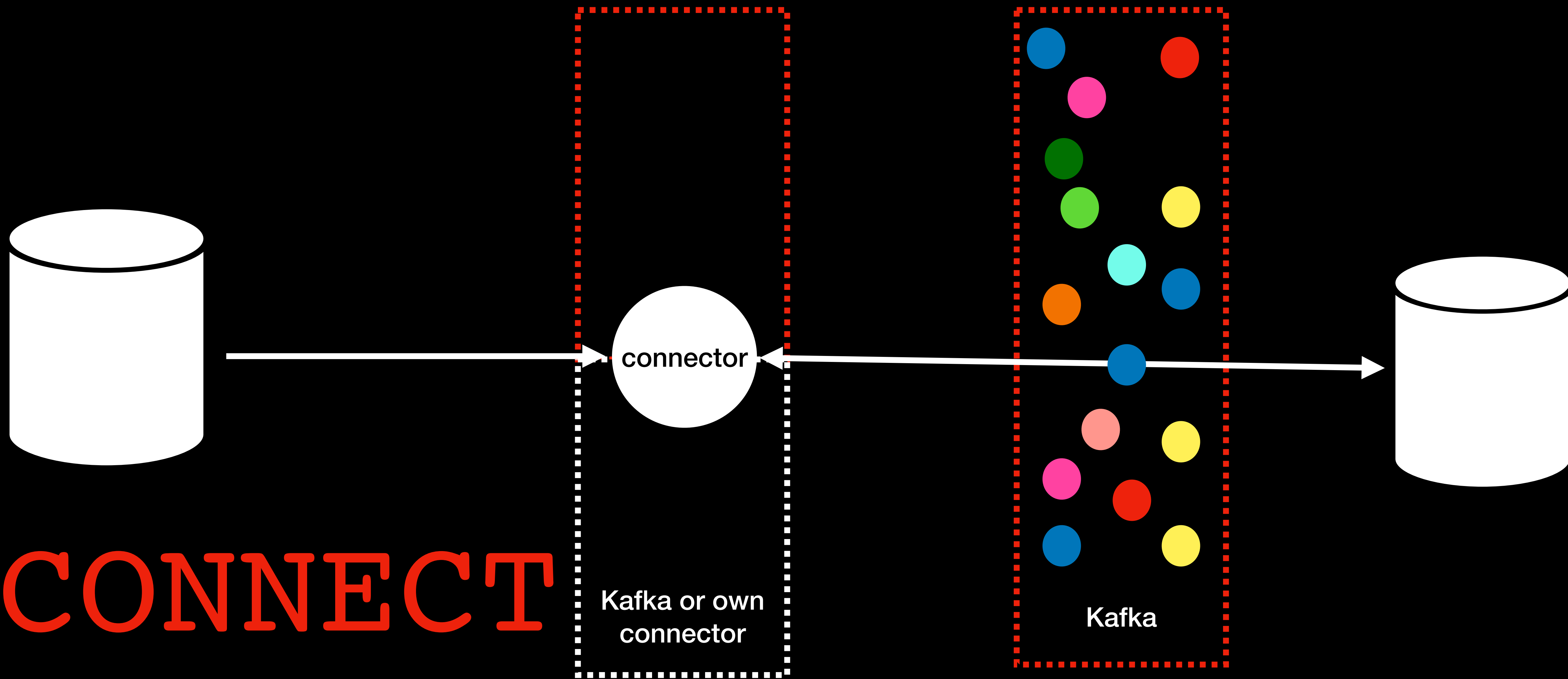




KAFKA is most useful
with BIG DATA

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 SCENARIOS' is overlaid in white, bold, sans-serif font across the middle of the image.

THREE SCENARIOS



NIGHTMARE

But when
configured, it
runs smoothly



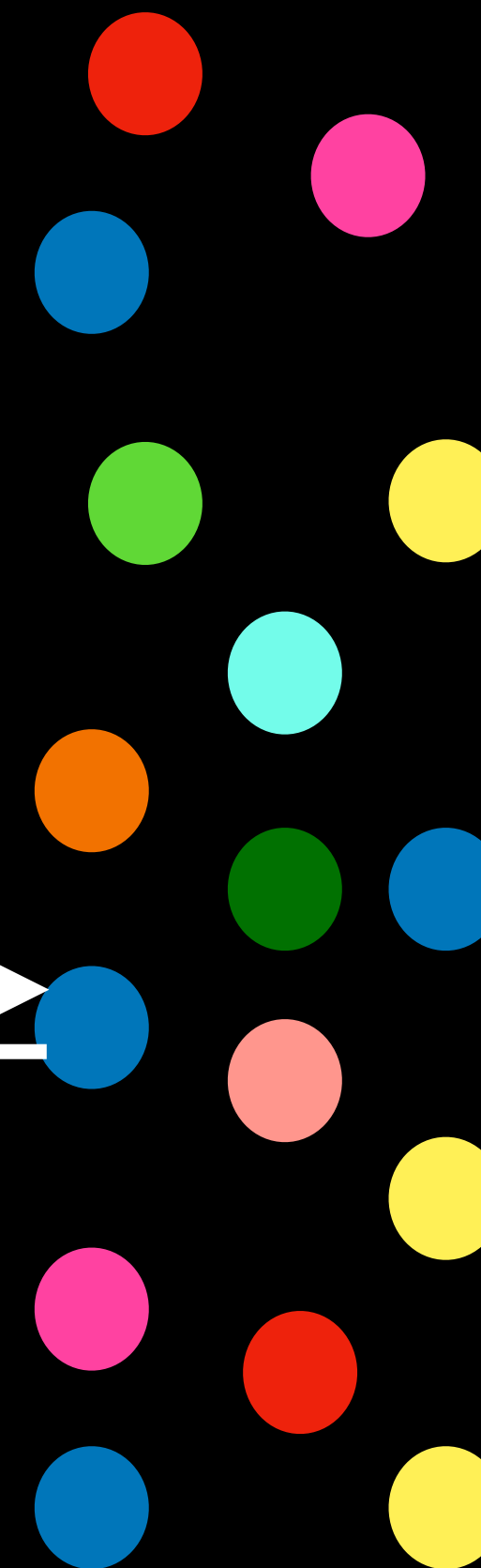
rest

SIMPLE

basic

Spring Boot /
Spring Kafka /
Actuator

Kafka



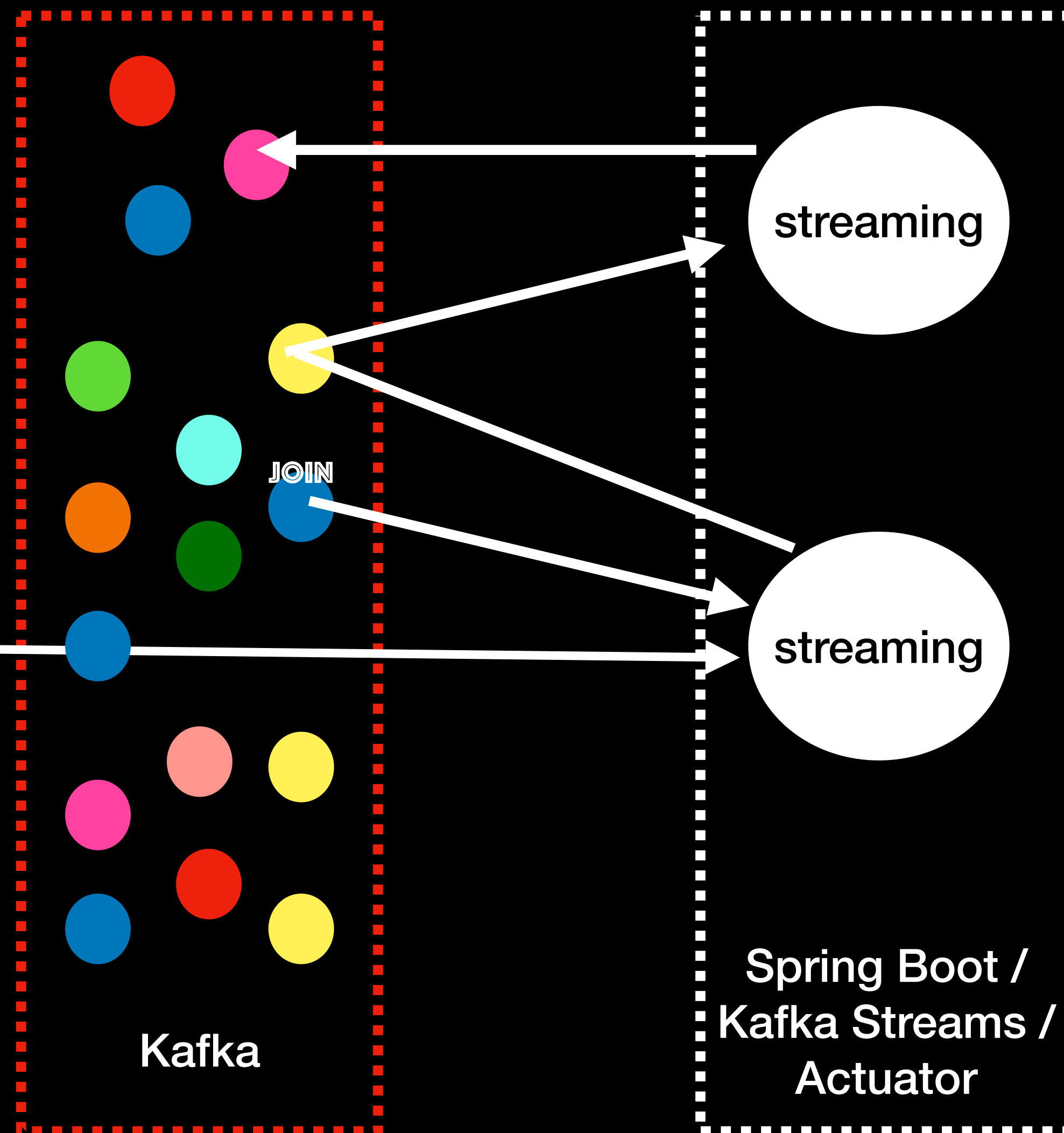
SWEET DREAM

& &

NIGHTMARE



BIG DATA



SWEET DREAMS?

LET'S DISCOVER TOGETHER

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/>



Sweet
dreams

Slides + code (branch 'solution')
Follow me at Twitter: [@KoTurk77](https://twitter.com/KoTurk77)





But why not using

RABBITMQ