



THE DEVELOPER'S CONFERENCE

"Micronaut" Trilha – Arquitetura Java Marcelo Adamatti











Microservices







2005/2006





Why Micronaut?



- Designed for microservices and serveless
- Fast Startup time
- Low memory
- "Small jar"
- Zero Dependencies
- 12 factors
- Ahead of time (AOT) compilation (e.g. CDI)

Jar Sizes

- Java: 8 mb
- Groovy: 12 mb
- Spring + Groovy: 36 mb
- Grails: 27 mb

zenvia

Heap Size

- Java: 7 mb
- Groovy: 19 mb
- Spring + Groovy: 33 mb
- Grails: 49 mb

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Startup Time

- ~1 second
- Spring / Grails: ~3-4 seconds



zenvia



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Confirmed, #micronautfw hello world runs with -Xmx10m, visualvm reports ~6-7m used heap and returns a Single<HttpResponse<String>>

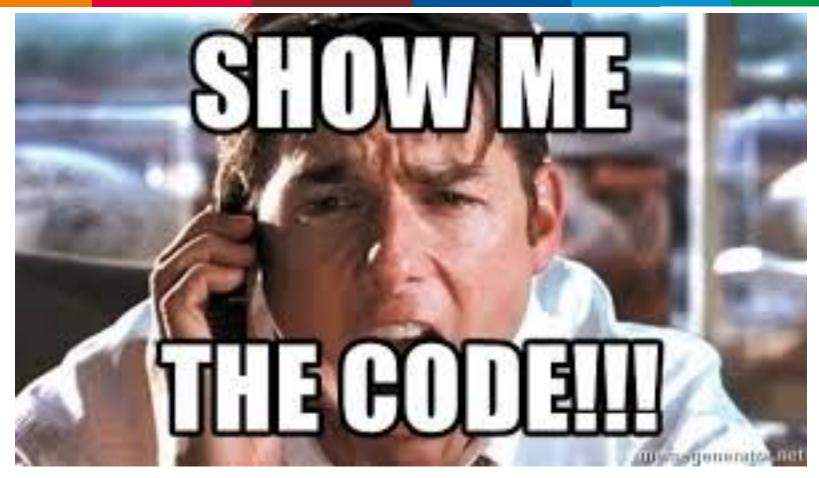
2:50 am - 26 May 2018







14 ms





References



- <u>http://micronaut.io</u>
- Micronaut Announcement: <u>https://www.youtube.com/watch?v=56j_f3OCg6E</u>
- https://www.technipelago.se/blog/show/The-road-to-Micronaut
- AWS Lambda with Micronaut and without any framework billing in serverless architecture <u>https://github.com/asc-lab/aws-lambda-billing</u>
- <u>https://www.slideshare.net/alvarosanchezmariscal/conoce-micronaut-un-fra</u> <u>mework-para-microservicios-jvm-commit-conf-2018</u>



ProductClient.java

import io.micronaut.configuration.kafka.annotation.*; @KafkaClient 1 public interface ProductClient { @Topic("my-products") 2 void sendProduct(@KafkaKey String brand, String name); 3 }

ProductListener.java

}

import io.micronaut.configuration.kafka.annotation.*;

@KafkaListener(offsetReset = OffsetReset.EARLIEST) 1
public class ProductListener {

@Topic("my-products") 2
public void receive(@KafkaKey String brand, String name) { 3
 System.out.println("Got Product - " + name + " by " + brand);