QUARKUS

Super Heroes Workshop

Hackathon Ninja BBVA 2020

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Who

Aurea Muñoz
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redhat.

QUARKUS

Supersonic Subatomic Java
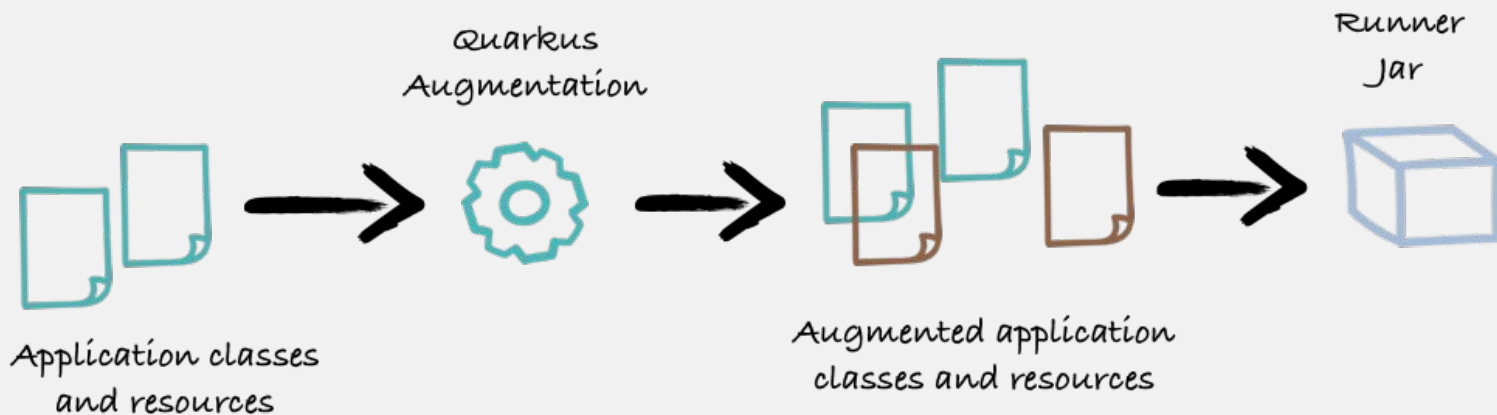
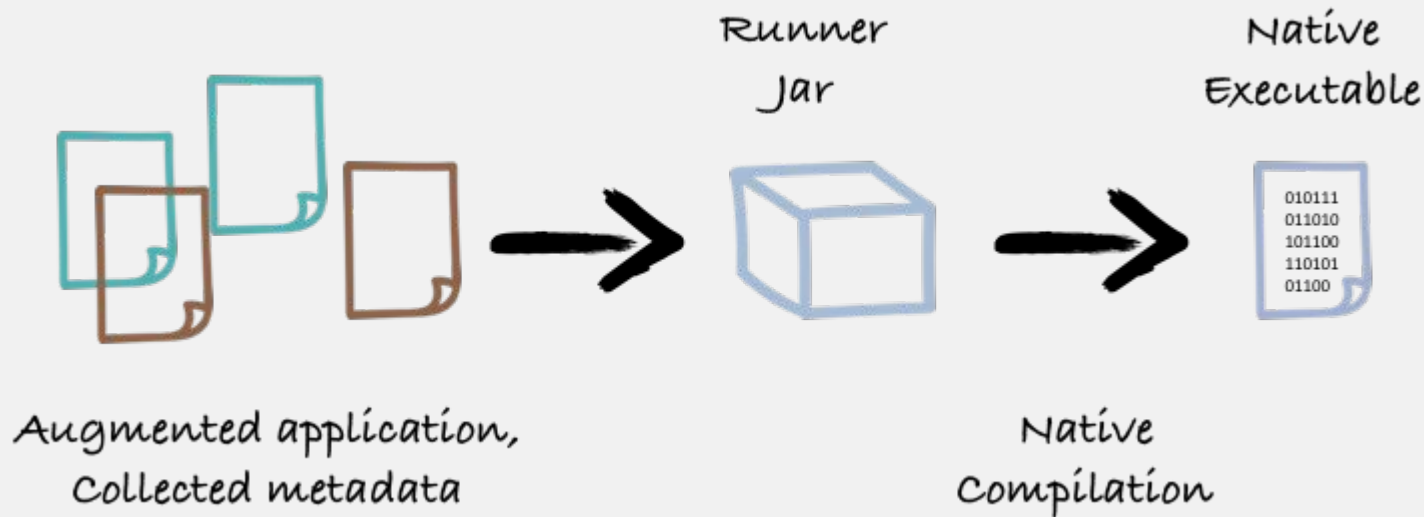# An Open Source stack to write Java apps

Cloud Native,   Microservices,   Serverless

redhat.

What's Quarkus

What's Quarkus

Runner Jar

Native Executable

Augmented application, Collected metadata

Native Compilation

010111
011010
101100
110101
01100

From java to native: getting started guide

https://quarkus.io/guides/getting-started#bootstrapping-the-project

```
mvn io.quarkus:quarkus-maven-plugin:1.9.2.Final:create \
    -DprojectGroupId=org.acme \
    -DprojectArtifactId=getting-started \
    -DclassName="org.acme.getting.started.GreetingResource" \
    -Dpath="/hello"
cd getting-started
```

redhat.

Quarkus core + extensiones

Extensiones de Quarkus

- RESTEasy
- Netty
- Hibernate ORM
- Hibernate Validator
- MP OpenAPI
- MP JWT
- Eclipse Vert.X
- Agroal (conn pool)
- Narayana JTA
- MP Reactive Messaging
- Apache Camel
- ...

Quarkus Core

Arc (DI)

Jandex

Gizmo

Graal SDK

HotSpot

SubstrateVM

Best frameworks
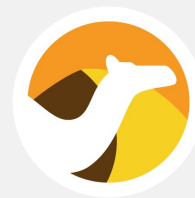
Eclipse Vert.x

Eclipse MicroProfile

Spring Compat

Hibernate

RESTEasy

Apache Camel

Kubernetes

OpenShift

Jaeger

Prometheus

Apache Kafka

Netty

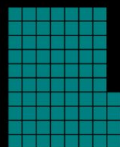redhat.

QUARKUS

Supersonic Subatomic Java

MEMORY AND BOOT + FIRST RESPONSE TIME

Memory (RSS) in Megabytes

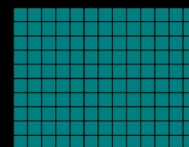**REST**

Quarkus + GraalVM
13 MB

Quarkus + OpenJDK
74 MB

Traditional Cloud-Native Stack
140 MB

REST + JPA

Quarkus + GraalVM
35 MB

Quarkus + OpenJDK
130MB

Traditional Cloud-Native Stack
218MB

35 MB   130 MB   218 MB

Boot + First Response Time in Seconds

REST

Quarkus + GraalVM 0.014 sec

Quarkus + OpenJDK 0.75 sec

Traditional Cloud-Native Stack 4.3 sec

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩

REST +JPA

Quarkus + GraalVM .055 sec

Quarkus + OpenJDK 2.5 sec

Traditional Cloud-Native Stack 9.5sec

QUARKUS

QUARKUS

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Quarkus Insights

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