



Intégration à l'ère du Cloud avec Camel et Quarkus

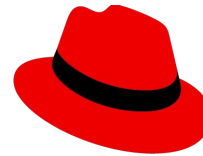
Alexandre Gallice

Zineb Bendhiba

About

Zineb Bendhiba

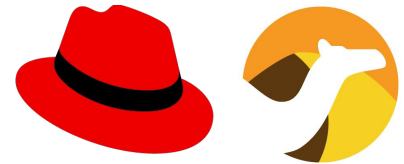
- Senior Software Engineer at Red Hat
- Apache Camel committer
- Duchess France
- Based in Paris - France
- She/Her/Hers
- Twitter : [@ZinebBendhiba](https://twitter.com/ZinebBendhiba)
- GitHub : [zbendhiba](https://github.com/zbendhiba)



About

Alexandre Gallice

- Senior Software Engineer at Red Hat
- Apache Camel PMC member
- Based in France
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What is Apache Camel ?

<https://camel.apache.org/>



Apache Camel is an **Open Source** Integration
Framework

Apache Camel



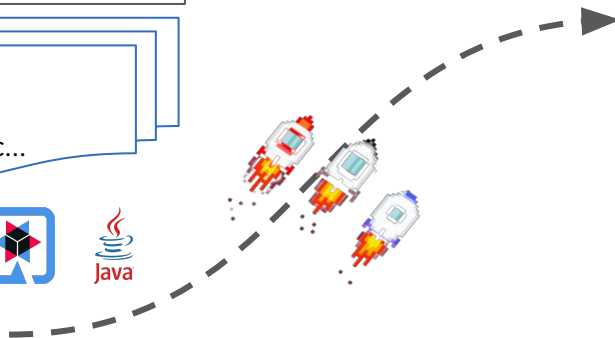
Domain Specific Language (DSL)



```
from("kafka:topic")  
    .unmarshal().json()  
    .to("atlasmap:servicenow.adm")  
    .to("json-validator:gcpschema.json")  
    .to("http:my-host/api/path")
```



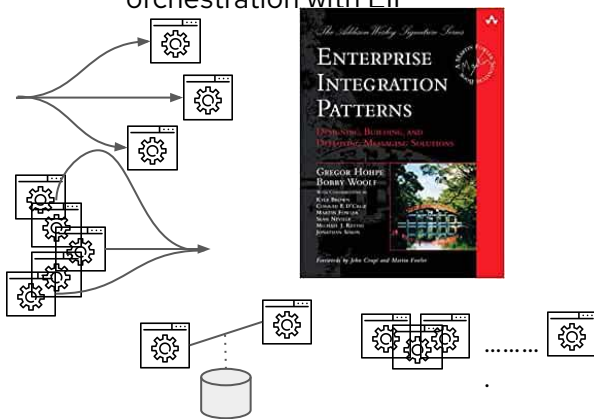
Libraries
POJO
Biz Logic...





EIP

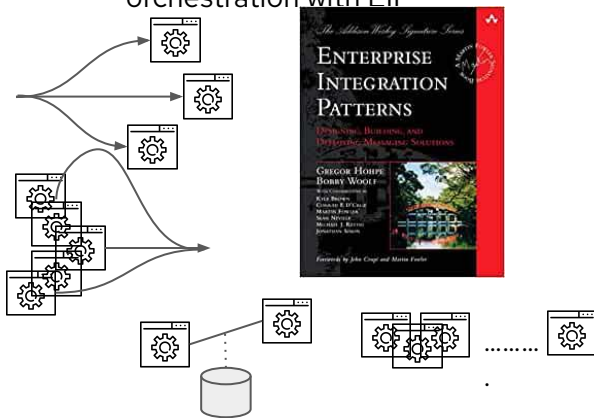
- ▶ Microservices orchestration with EIP



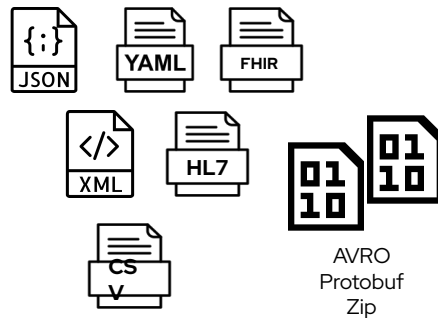


Data Transformation

- ▶ Microservices orchestration with EIP



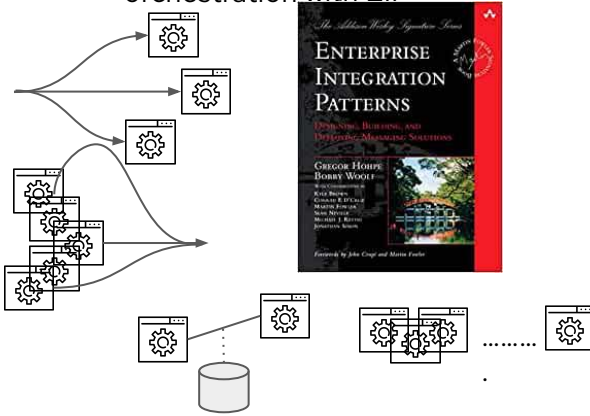
- ▶ Data Transformation



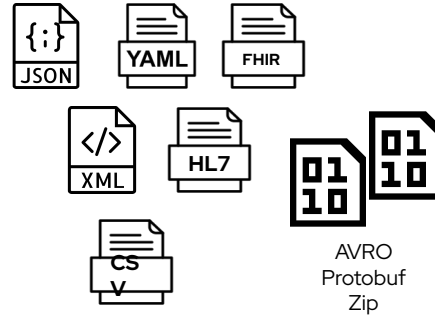
Data Transformation with Tools



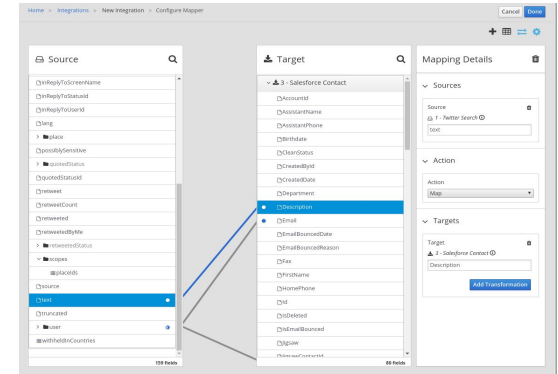
- ▶ Microservices orchestration with EIP



- ▶ Data Transformation



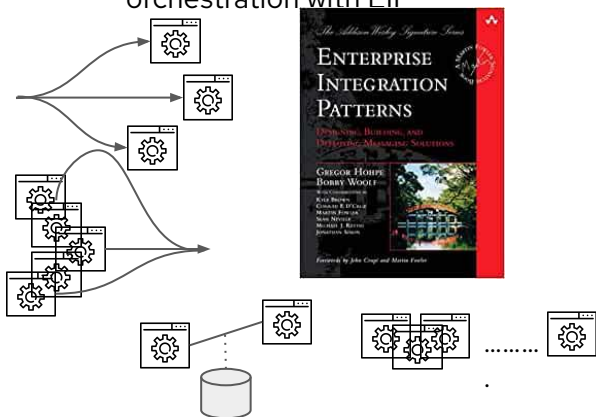
- ▶ Data Transformation with Tools



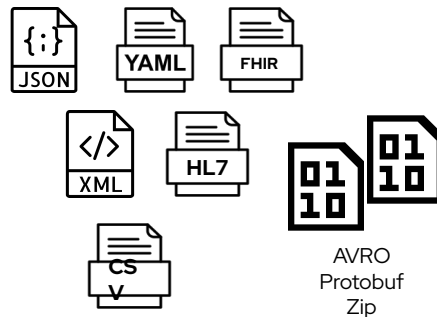


Components

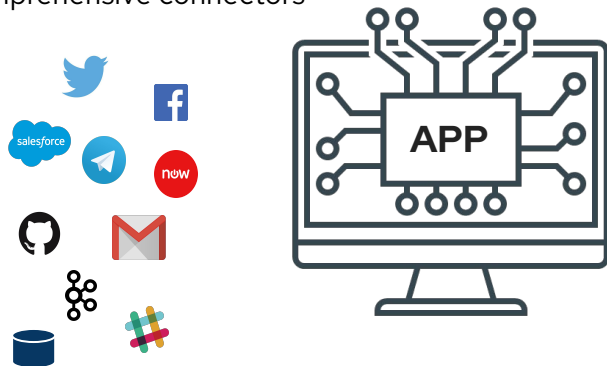
- ▶ Microservices orchestration with EIP



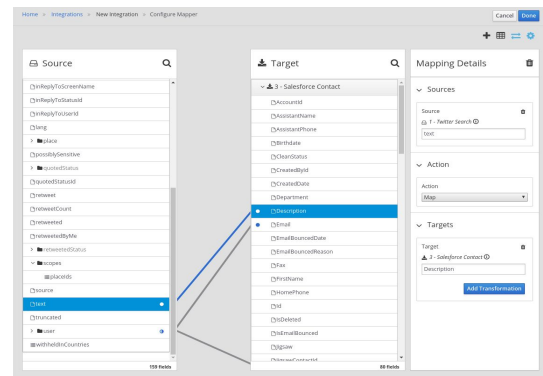
- ▶ Data Transformation



- ▶ Comprehensive connectors



- ▶ Data Transformation with Tools





Why use Apache Camel ?

Apache Camel



- The biggest and most active community for Open Source **integration** software

Apache Camel



- The biggest and most active community for Open Source **integration** software
- You can connect to almost everything

Apache Camel



- The biggest and most active community for Open Source **integration** software
- You can connect to almost everything
- Focus on your use case logic



Runtimes

Camel runs on

(but not limited to)



Spring Boot



Standalone



QUARKUS



MICROPROFILE™
OPTIMIZING ENTERPRISE JAVA



WildFly 

VERT.X



Knative/Kubernetes



Karaf

APACHE
kafka®



Camel Quarkus



Camel Quarkus brings together the
awesome integration capabilities of
Apache Camel and its vast
component library to the
Supersonic, Subatomic Quarkus
runtime



How does a *framework* start?

Build Time



*Packaging
(maven, gradle...)*

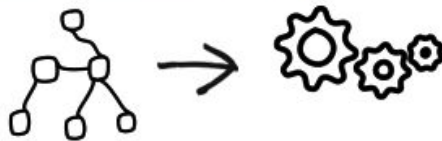
Runtime



*Load config file from file system
Parse it*



*Classpath scanning to find
annotated classes
Attempt to load class to
enable/disable features*

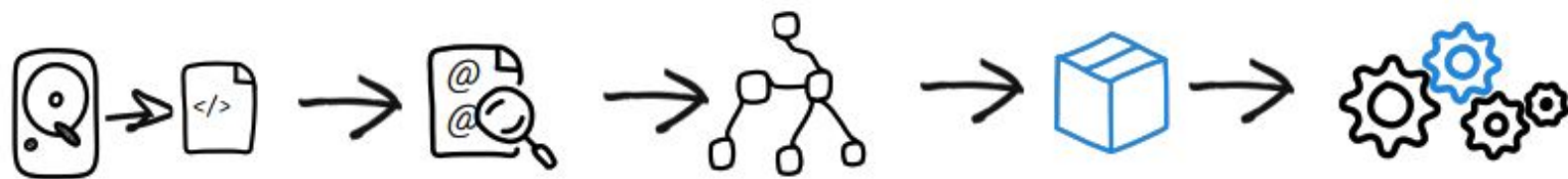


*Start the
management
(thread, pool...)*

*Build its model of
the world.*



The Quarkus Way



Build Time

Runtime

Why Apache Camel on Quarkus

- Small size on disk \Rightarrow Small container images



Why Apache Camel on Quarkus

- Small size on disk \Rightarrow Small container images
- Fast boot time \Rightarrow Instant scale up



Why Apache Camel on Quarkus



- Small size on disk \Rightarrow Small container images
- Fast boot time \Rightarrow Instant scale up
- Low memory footprint \Rightarrow More containers with the same amount of RAM

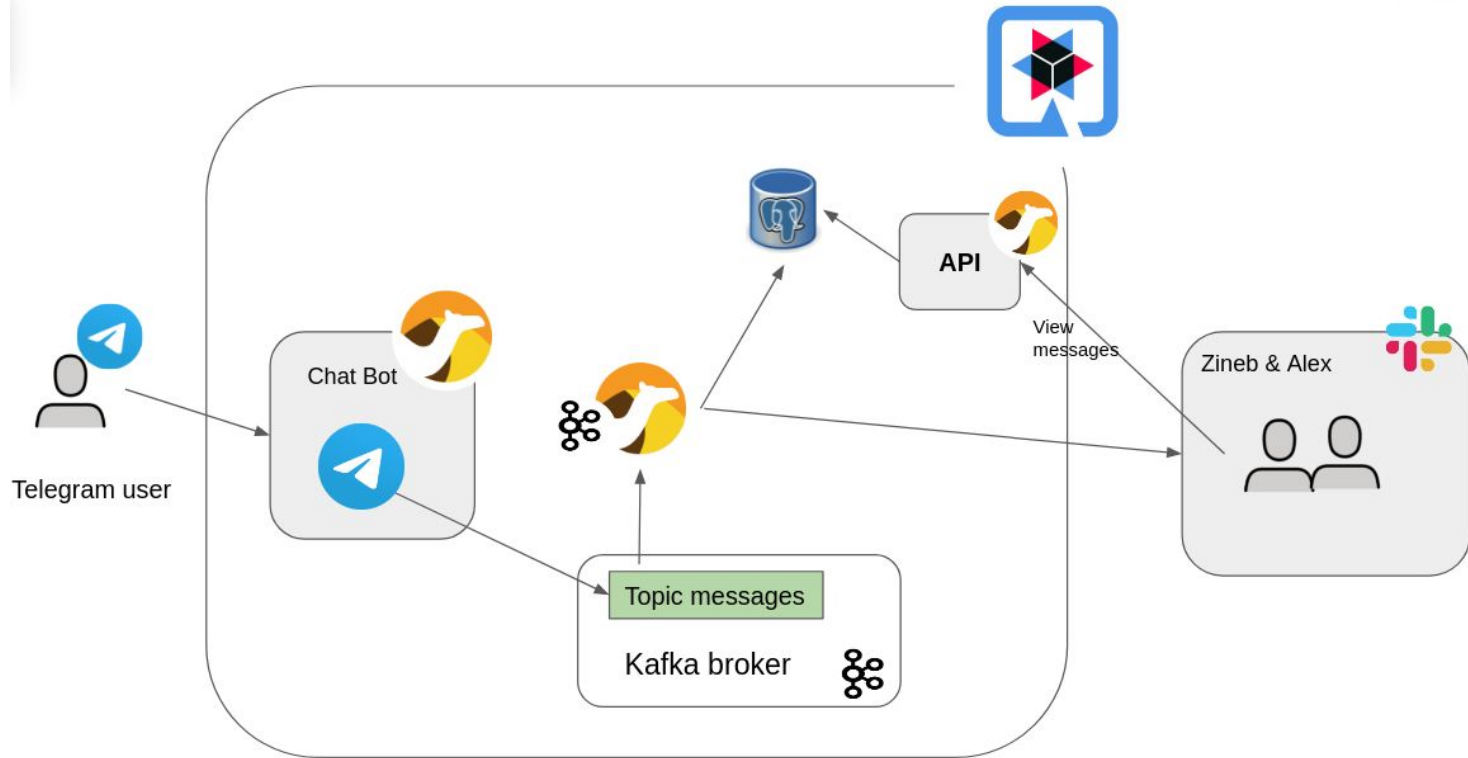
JVM and native mode



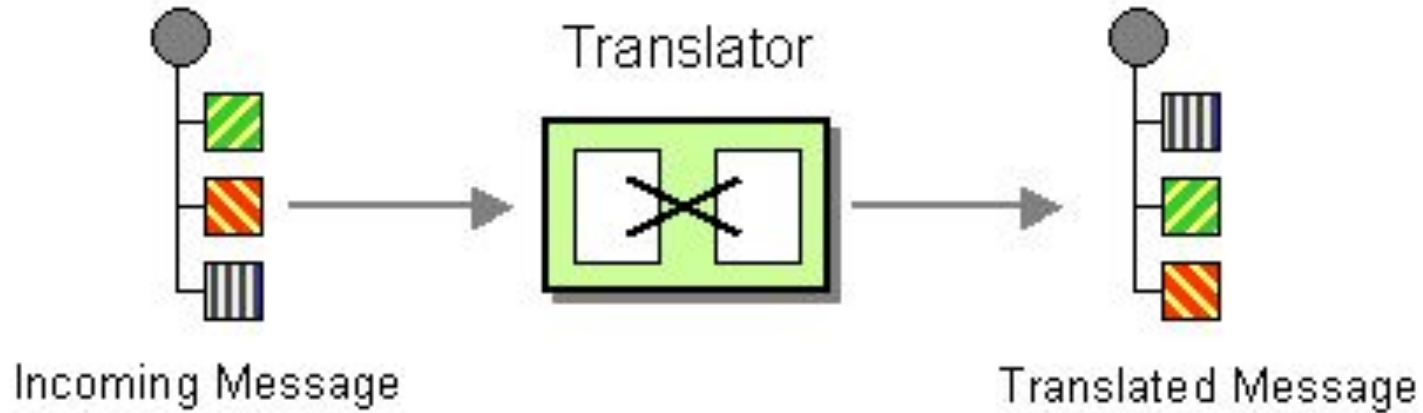
	JVM MODE	NATIVE MODE
BUILD	Quick	Slow
DEBUG	Easy	Hard
BOOT TIME	Fast	Instant
MEMORY USAGE	Small	Tiny
PERFORMANCE	Based on runtime optimization	Based on better density
USE CASE	A single long running service	Some short running services

Demo

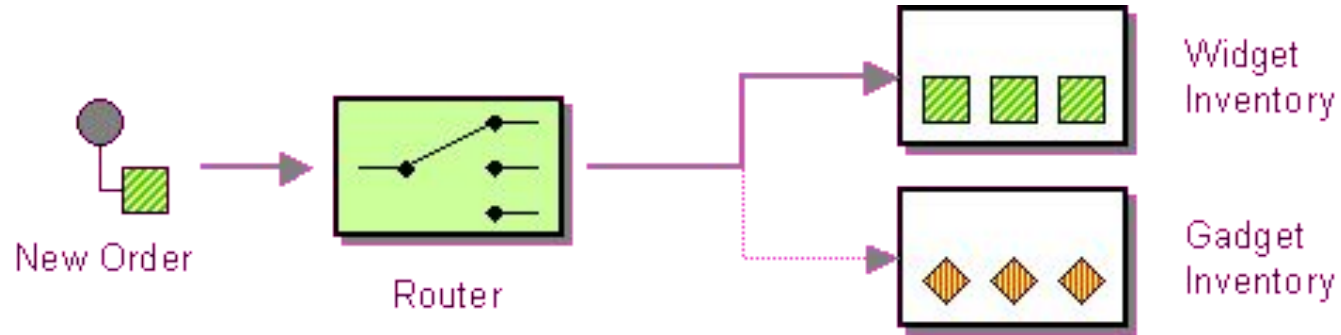
Demo : Telegram Bot : camel_quarkus



Message Translator EIP



Content Based Router EIP



Links

- <https://camel.apache.org/>
- <https://github.com/apache/camel-quarkus>
- <https://github.com/zbendhiba/conference-talks>
- <https://github.com/aldettinger>
- <https://camel.zulipchat.com/>

Thank you

Merci