

# Building Intelligent Applications with Kogito

PV207 BPM Labs

Mgr. Ivo Bek  
Senior Product Manager

April 2021

Mgr. Marian Macik  
Senior Quality Engineer



# KOGITO

<https://kogito.kie.org/>

- Domain-Driven Development
- Generated Domain-specific APIs from your BPMN and DMN models
- Lightweight orchestration microservices
- Event-driven business logic
- Dev-mode hot reload
- Distributed sagas for microservices
- Serverless workflows
- Polyglot programming

More info at

- [Blogs](#)
- [Youtube](#)

# PREREQUISITES

- Java with JAVA\_HOME configured (should be already done for jBPM)
- [Visual Studio Code](#)
- [Kogito Bundle Extension](#) for VS Code

# YOUR FIRST KOGITO APPLICATION

- Generate a preconfigured Quarkus application with Kogito extension at [code.quarkus.io](https://code.quarkus.io)
  - Generate your application -> Download as a zip
- Design BPMN/DMN in src/main/resources folder
  - VS Code
  - [bpmn.new](https://bpmn.new)
- [myProcess](#)
- Start the application in development mode
  - ./mvnw clean compile quarkus:dev
- Domain-specific API available at <http://localhost:8080/q/swagger-ui/>
  - OpenAPI specification
  - Generated only in development mode by default

# YOUR FIRST KOGITO APPLICATION

"Raw commands"

- Start a process

```
curl -X POST -H 'Content-Type:application/json' -H 'Accept:application/json' -d '{"personName": "John"}'  
http://localhost:8080/myProcess
```

- Show processes

```
curl -H 'Accept:application/json' http://localhost:8080/myProcess
```

- Show Tasks

```
curl -H 'Accept:application/json' http://localhost:8080/myProcess/{puuid}/tasks?user=admin
```

- Complete a task

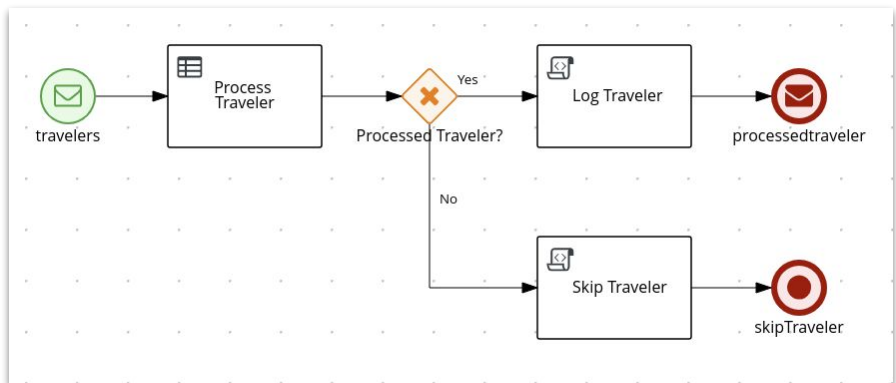
```
curl -X POST -H 'Content-Type:application/json' -H 'Accept:application/json' -d '{"personName": "John Doe"}'  
http://localhost:8080/myProcess/{puuid}/{taskName}/{tuuid}?user=admin
```

# YOUR FIRST KOGITO APPLICATION

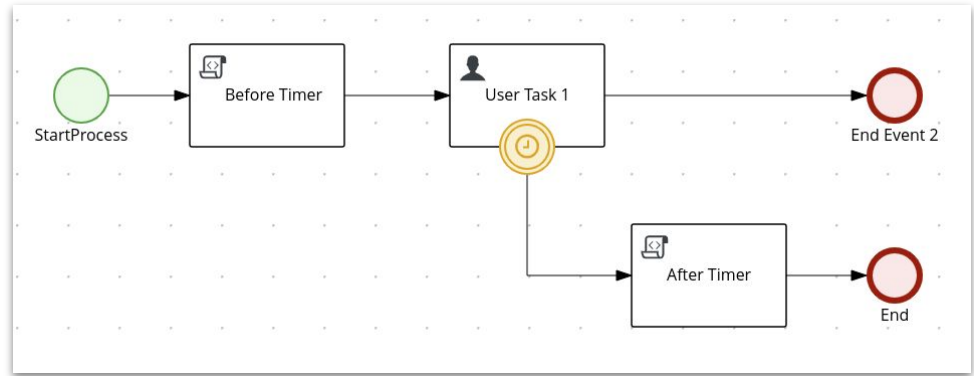
- Change the greeting phrase
  - Edit an asset, e.g. the script task
  - Execute a command to invoke the Kogito endpoint again
  - Asset is recompiled and a new version is invoked
- Compile
  - `./mvnw clean install`
  - Append `-Dquarkus.swagger-ui.always-include=true` to include Swagger UI in production
- Run
  - `java -jar target/quarkus-app/quarkus-run.jar`
  - Application uses **whole quarkus-app** directory
- Run on a different port
  - `java -Dquarkus.http.port=8090 -jar target/quarkus-app/quarkus-run.jar`

# KOGITO EXAMPLES

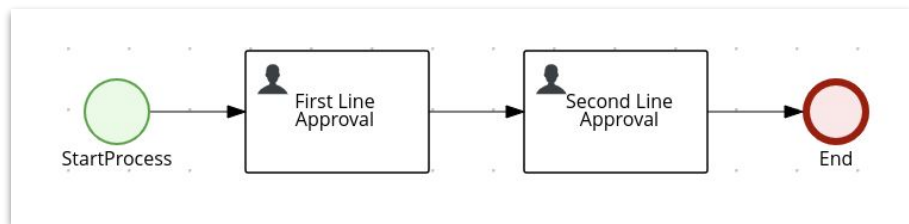
<https://github.com/kiegroup/kogito-examples>



KAFKA MESSAGE EVENTS  
process-kafka-quickstart-quarkus



TIMERS  
process-timer-quarkus



4-EYE PRINCIPLE  
process-usertasks-quarkus

● ● ● and more

Thank you,  
questions?