

# CI-CD

## Mise en place

### SpringBoot-GitHub

#### Intégration de Junit Jupiter

Déjà présent dans **pom.xml**

```
<dependency>
  <groupId>org.jetbrains.kotlin</groupId>
  <artifactId>kotlin-test-junit5</artifactId>
  <scope>test</scope>
</dependency>
```

Exécution des tests en local :

```
mvn -B -U -ntp test
```

### CI GitHub actions

A mettre dans `.github/workflows/ci-tests.yml` : Vérifiez :

- La version de java (17 ?)
- Le nom de la branche principale (master/main ?)

```
name: CI • Tests (Maven)

on:
  push:
    branches: [ master ]
  pull_request:
    branches: [ master ]

concurrency:
  group: ci-tests-${{ github.ref }}
  cancel-in-progress: true

jobs:
  test:
    runs-on: ubuntu-latest
    strategy:
      matrix:
        java: [ '17' ]
```

```
env:
  MAVEN_OPTS: -XX:+UseParallelGC -Xmx1g -Djava.awt.headless=true
  MAVEN_ARGS: ""

steps:
  - name: Checkout
    uses: actions/checkout@v4

  - name: Set up Temurin JDK
    uses: actions/setup-java@v4
    with:
      distribution: temurin
      java-version: ${ matrix.java }
      cache: maven

  - name: Build & test
    run: mvn -B -U -ntp $MAVEN_ARGS verify

  - name: Upload test and coverage reports
    if: always()
    uses: actions/upload-artifact@v4
    with:
      name: test-reports-java-${ matrix.java }
      path: |
        **/target/surefire-reports/**
        **/target/failsafe-reports/**
        **/target/site/jacoco/**
      retention-days: 7
```

Le workflow :

- Se déclenche sur push et pull\_request vers master.
- Installe JDK 17, restaure le cache Maven, compile et lance les tests (verify).
- Archive les rapports (téléchargeables depuis l'onglet "Actions" de Github).

## Couverture JaCoCo

Ajoute la configuration JaCoCo+Surefire dans **pom.xml** :

Ajouter les numéros de version :

```
<properties>
  <java.version>17</java.version>
  <kotlin.version>1.9.25</kotlin.version>
  <maven.compiler.source>${java.version}</maven.compiler.source>
  <maven.compiler.target>${java.version}</maven.compiler.target>
  <project.build.sourceEncoding>UTF-8</project.build.sourceEncoding>
  <maven.surefire.plugin.version>3.2.5</maven.surefire.plugin.version>
  <jacoco.version>0.8.12</jacoco.version>
</properties>
```

Ajouter les 2 plugins Maven suivants :

```

<build>
  <plugins>
    <plugin>
      <groupId>org.apache.maven.plugins</groupId>
      <artifactId>maven-surefire-plugin</artifactId>
      <version>${maven.surefire.plugin.version}</version>
      <configuration>
        <useModulePath>>false</useModulePath>
      </configuration>
    </plugin>

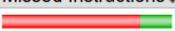
    <plugin>
      <groupId>org.jacoco</groupId>
      <artifactId>jacoco-maven-plugin</artifactId>
      <version>${jacoco.version}</version>
      <executions>
        <execution>
          <goals>
            <goal>prepare-agent</goal>
          </goals>
        </execution>
        <execution>
          <id>report</id>
          <phase>test</phase>
          <goals>
            <goal>report</goal>
          </goals>
        </execution>
      </executions>
    </plugin>
  </plugins>
</build>

```

Le rapport de couverture (téléchargeable via actions) :

 e-commerce

## e-commerce

Element	Missed Instructions	Cov.	Missed Branches	Cov.	Missed	Cxty	Missed	Lines	Missed	Methods	Missed	Classes
 eadl.ecommerce		18%		n/a	1	2	2	4	1	2	1	2
Total	13 of 16	18%	0 of 0	n/a	1	2	2	4	1	2	1	2

## Seuil de couverture

Ajout d'une exécution jacoco:check pour échouer sous le seuil de 80% de couverture :

```

<execution>
  <id>check</id>
  <goals><goal>check</goal></goals>
  <configuration>
    <rules>

```

```
<rule>
  <element>BUNDLE</element>
  <limits>
    <limit>
      <counter>INSTRUCTION</counter>
      <value>COVEREDRATIO</value>
      <minimum>0.80</minimum>
    </limit>
  </limits>
</rule>
</rules>
</configuration>
</execution>
```

### Bonnes pratiques CI

- Protéger la branche master :
  - Settings → Branches → Add rule → exiger le job “CI • Tests (Maven)” avant merge.
- Déclencheurs:
  - Pour limiter le bruit: exécuter seulement sur PR ou sur changements Java/Maven:

```
on:
  pull_request:
    branches: [ master ]
    paths: [ 'src/**', 'pom.xml', '.github/workflows/**' ]
```

From:  
<http://slamwiki2.kobject.net/> - **SlamWiki 2.1**

Permanent link:  
[http://slamwiki2.kobject.net/eadl/bloc3/dev\\_av/tests](http://slamwiki2.kobject.net/eadl/bloc3/dev_av/tests)

Last update: **2025/09/17 00:41**

