# CG WM Developer Guide

Version 1.18-SNAPSHOT

2018-08-21

# Table of Contents

*Table 1. History*

| Date | Author | Detail |
|---|---|---|
| 2018-08-21 | NeVraX | HTML Asciidoc to Github |
| 2018-08-11 | NeVraX | Anonymisation |
| 2018-07-25 | NeVraX182 | adapted asciidoc to github + removed SonarQube instance |
| 2018-07-25 | NeVraX182 | Images relocation |
| 2018-07-25 | bcouetil | First (real) commit |

*Table 2. References*

| Réf. | Ver. | Date | Document | Description |
|---|---|---|---|---|
| [01] | 1.18-SNAPSHOT | 2018-08-21 | ci-pf-configuration.pdf | Configuration guide for the whole CI/CD platform |
| [02] | 1.18-SNAPSHOT | 2018-08-21 | cgutils-utility-methods.pdf | CgUtils utility methods |
| [04] | 1.18-SNAPSHOT | 2018-08-21 | cgutils-ano-handling.pdf | CgUtils ano handling |
| [05] | 1.18-SNAPSHOT | 2018-08-21 | cgmsgtracker-user-manual.pdf | CgMsgTracker, UM/Broker documents tracker |
| [06] | 1.18-SNAPSHOT | 2018-08-21 | cgelastic-user-manual | CgElastic, Elastic Stack custom webMethods module |

# 1. Introduction



The purpose of this document is to guide you in the setup of the development environment for CG webMethods (CG-WM) project.

CG-WM gather is mainly composed of 3 projects :

- **cg-utils** (java 8)
  - utility java methods for any webMethods project (see [02])
  - includes asynchronous ano handling (see [03])
- **cg-msg-tracker** (java 8)
  - Swing application for monitoring Broker / Universal Messaging publish/subscribe documents
- **cg-elastic** (java 8)
  - Elastic Stack custom webMethods module for continuous monitoring

Developements on this project are heavily relying on the production line https://cric.pl.s2-eu.nvx.com/ to implement Continuous Integration / Continuous Deployment / Continuous Performance Testing / Continuous Monitoring.

These projects are maintained in an Open Source mode within nvx. This can be volontary to increase personnel knowledge, overall projects quality, or this can be part of a future or actual client need.

# How you think Open Source apps are maintained



# How Open Source apps are really maintained



CommitStrip.com

# 2. Touring the interfaces

## 2.1. FusionForge

https://cric.pl.s2-eu.nvx.com/fusionforge/tracker/?atid=101&func=browse&group_id=6

Everything starts in FusionForge where tasks and tickets are put in decreasing order of need. But anyone can work on anything.
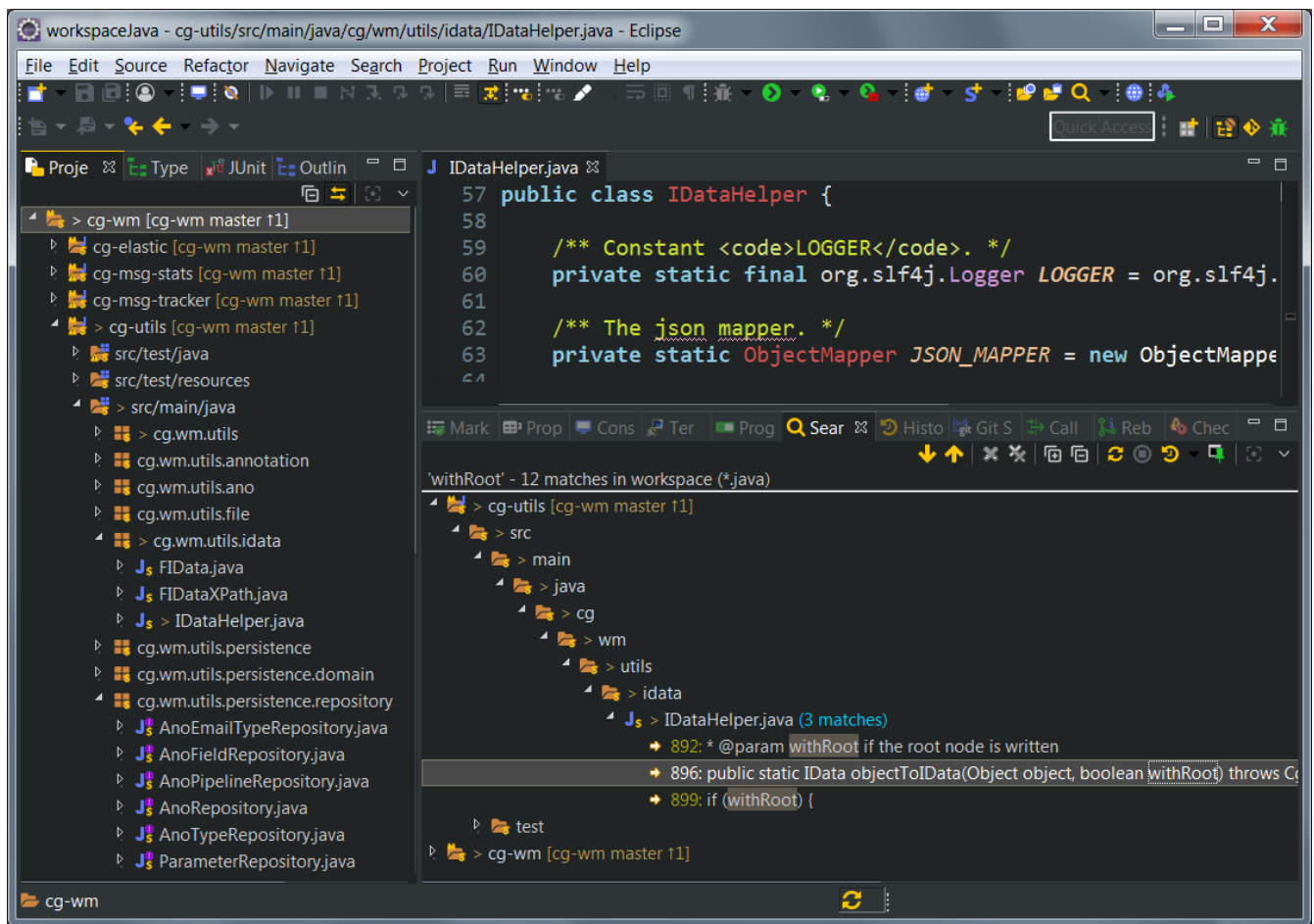
## 2.2. AsciiDocFX

All documentations on the project, including this one, are written as part of DevOps principle Documentation-As-Code using AsciiDocFX and compiled with Asciidoctor under maven to produce PDF.
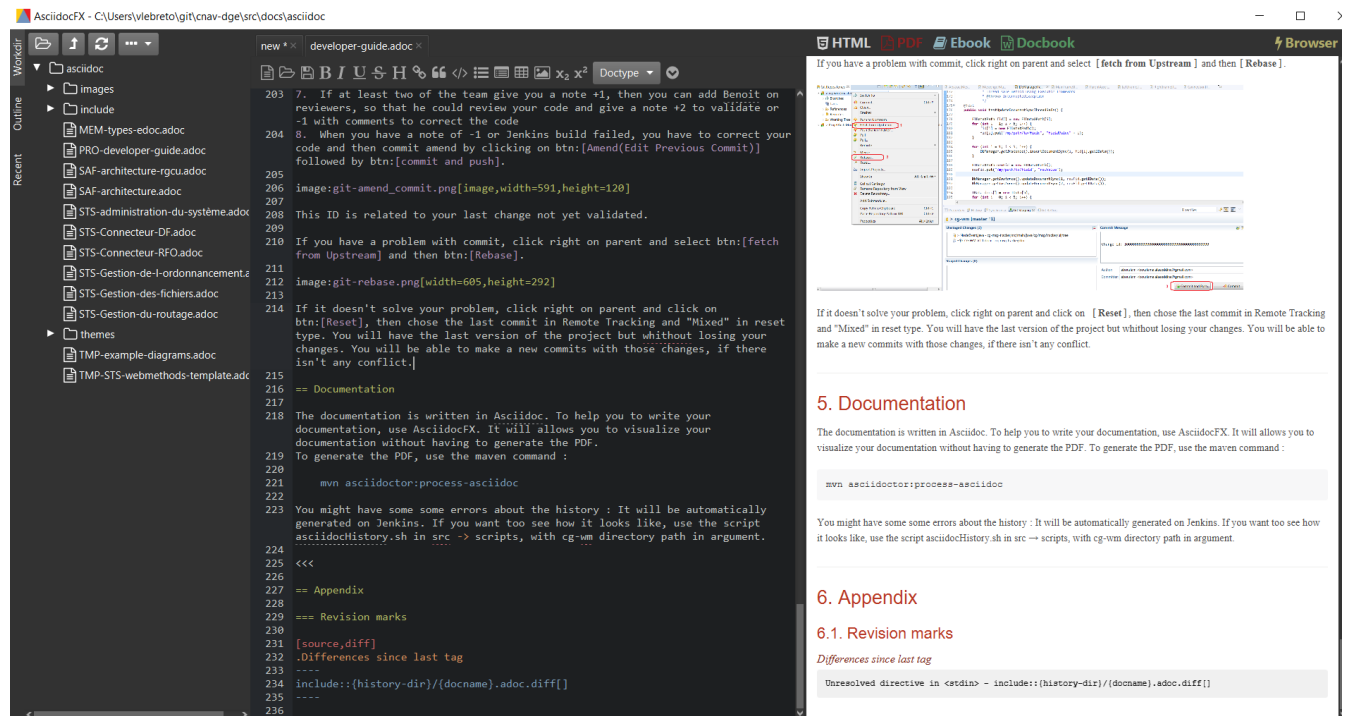
## 2.3. Eclipse

Eclipse is the preferred tool for development.

# 2.4. Gerrit

Collaborative Code Review is applied on the project inspired from open sources projects for better scalability, quality and developer localizations tackling.

## 2.5. Jenkins

https://cric.pl.s2-eu.nvx.com/jenkins/

Jenkins is used for both review and merge modes to automate build and deployement. As part of DevOps principle, Pipeline-As-Code are used. The Jenkins Blue sexy interface is deployed.

# 2.6. SonarQube
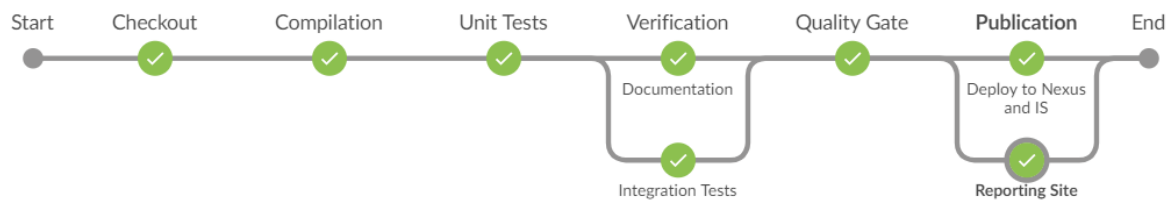
https://cric.pl.s2-eu.nvx.com/sonarqube/

SonarQube helps maintain a continuous high quality with gateways used on each Jenkins pipeline.

## 2.7. Nexus
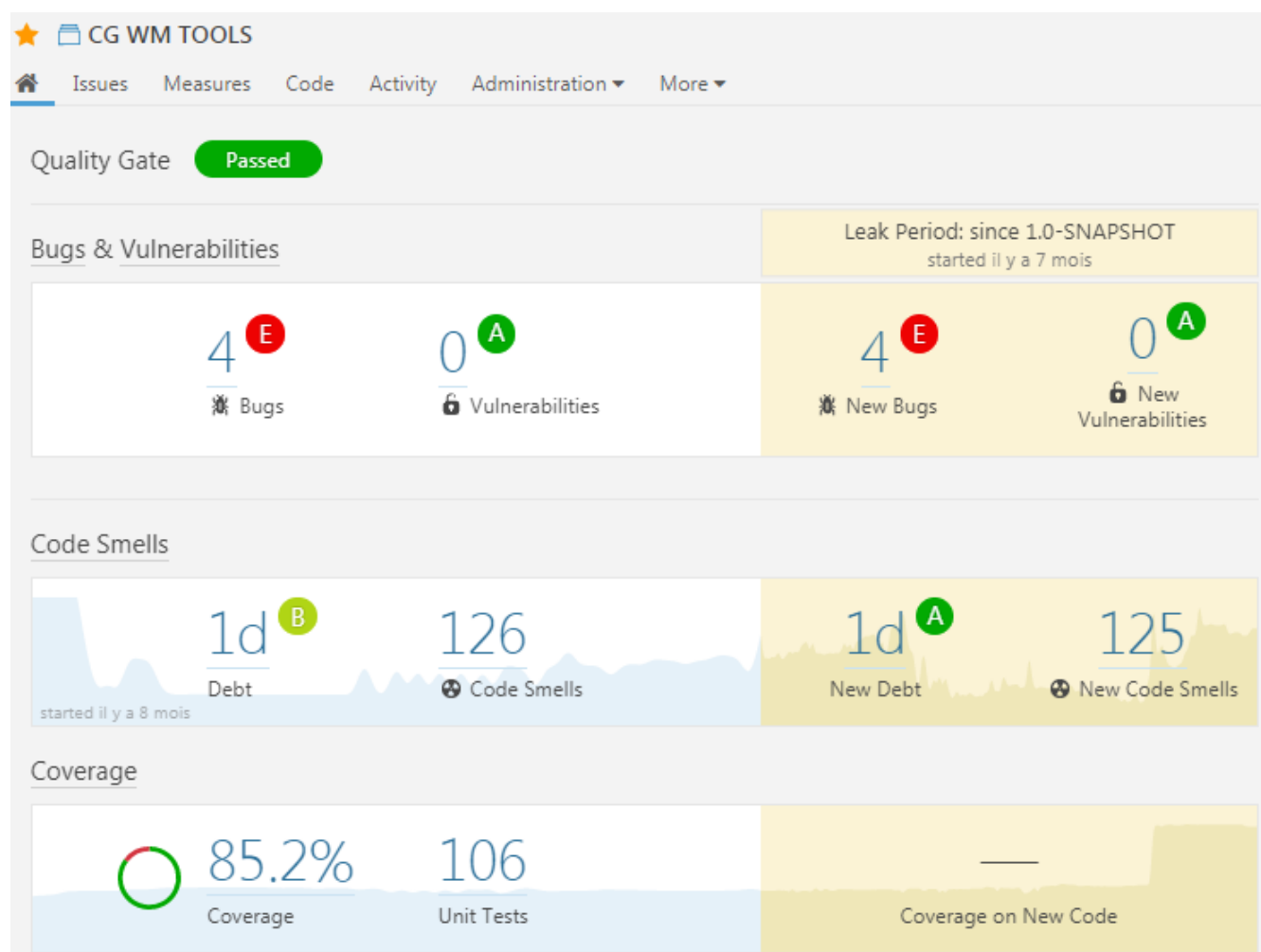
https://cric.pl.s2-eu.nvx.com/nexus/

Nexus stores binary produced on the project, SNAPSHOTS and RELEASES.

# 2.8. Integration Server

http://frpardge.corp.nvx.com:5555/

A basic webMethods 9.12 ecosystem, including Integration Server, Oracle XE Database, CentraSite, Mediator, Universal Messaging, is accessible for development and tests. Assets are automatically deployed on merges by Jenkins.

**WEBMETHODS** Integration Server   default :: frpardge.corp.capgemini.com :: Administrator

| Server |
| --- |
| Scheduler |
| Service Usage |
| Statistics |
| ▶ Logs |
| ▶ Packages |
| ▶ Solutions |
| ▶ Adapters |
| ▶ webMethods Cloud |
| ▶ Security |
| ▶ Settings |

Server > Statistics

**Usage**

| | Current | Peak | Limit |
| --- | --- | --- | --- |
| Total Sessions | 84 | 287 | - |
| Licensed Sessions | 0 | 1 | 2147483647 |
| Stateful Sessions | 0 | 1 | 2147483647 |
| Service Instances | 0 | 37 | - |
| Service Threads | 0 | 29 | - |
| System Threads | 478 | 483 | - |
| Uptime | | 10h:31m:25s | |

**Memory**

| | | | |
| --- | --- | --- | --- |
| Maximum | 932352 KB | | |
| Committed | 792064 KB | | |
| Used | 507128 KB | 65% (memory) | |
| Free | 284936 KB | 35% | |

Memory Usage (average per hour)

# 2.9. Elastic Stack

http://frpardge:5601/app/kibana#/dashboard/44bbf690-ab4d-11e7-80b8-ef10d01e4f2a

The Elastic Stack is used for Continuous Monitoring.

# 2.10. Jaeger tracing

http://frpardge.corp.nvx.com:16686/
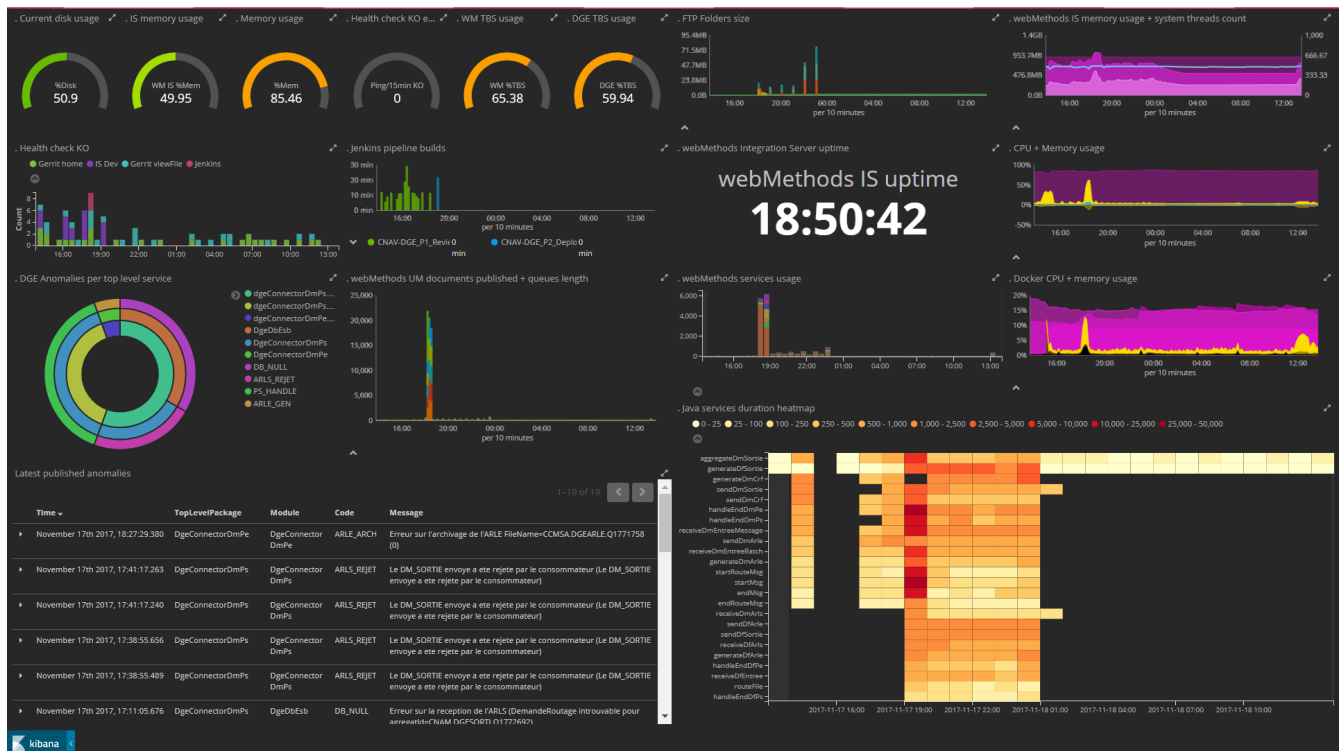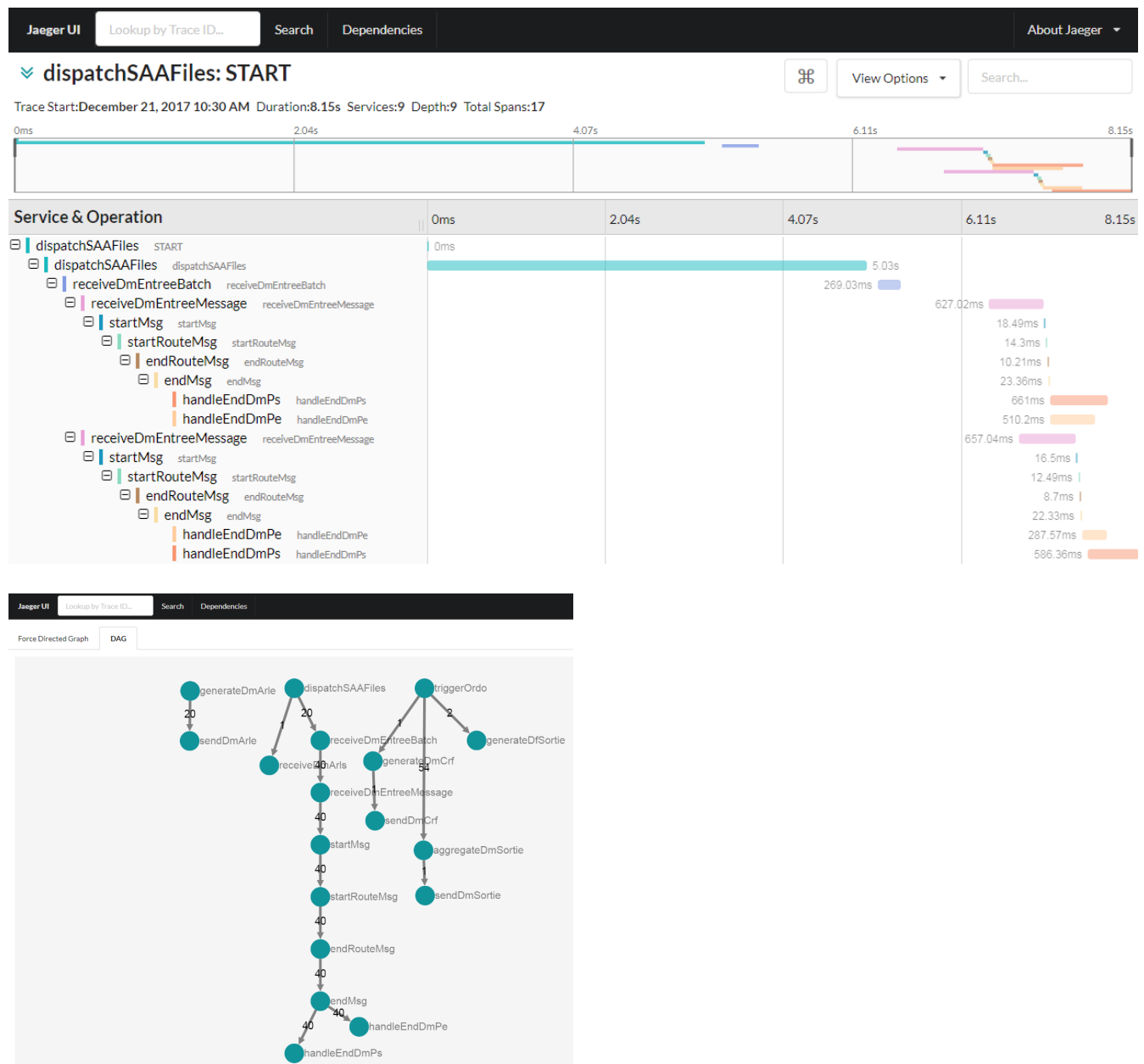




CgUtils implements open-tracing, and send them to a Jaeger server. This allows a fine grained follow up on the business process level, a field where the Elastic Stack cannot go for now.

## 2.11. Maven

- Change the conf/setting.xml of the installed maven, by adding the below tags

```xml
<server>
    <id>nexus-local</id>
    <username>svc-fr-cric</username>
    <password>ESBpwd2018</password>
</server>
```

```xml
<mirrors>
    <mirror>
        <id>nexus-local</id>
        <mirrorOf>*</mirrorOf>
        <url>https://cric.pl.s2-eu.nvx.com/nexus3/repository/maven-public/</url>
    </mirror>
</mirrors>
```

```xml
<profiles>
    <profile>
        <id>nexus-local</id>
        <repositories>
            <repository>
                <id>central</id>
                <url>http://central</url>
                <releases>
                    <enabled>true</enabled>
                </releases>
                <snapshots>
                    <enabled>true</enabled>
                </snapshots>
            </repository>
        </repositories>

        <pluginRepositories>
            <pluginRepository>
                <id>central</id>
                <url>http://central</url>
                <releases>
                    <enabled>true</enabled>
                </releases>
                <snapshots>
                    <enabled>true</enabled>
                </snapshots>
            </pluginRepository>
        </pluginRepositories>

        <properties>
            <snapshotUrl>https://cric.pl.s2-eu.nvx.com/nexus3/repository/maven-snapshots/</snapshotUrl>
            <releaseUrl>https://cric.pl.s2-eu.nvx.com/nexus3/repository/maven-releases/</releaseUrl>
        </properties>

    </profile>
</profiles>
```

```xml
<activeProfiles>
    <activeProfile>nexus-local</activeProfile>
</activeProfiles>
```

- Change the conf/setting.xml of the installed maven, by adding the below tags

```
<server>
    <id>nexus-local</id>
    <username>svc-fr-cric</username>
    <password>ESBpwd2018</password>
</server>
```

```
<mirrors>
    <mirror>
        <id>nexus-local</id>
        <mirrorOf>*</mirrorOf>
        <url>https://cric.pl.s2-eu.nvx.com/nexus3/repository/maven-public/</url>
    </mirror>
</mirrors>
```

```
<profiles>
    <profile>
        <id>nexus-local</id>
        <repositories>
            <repository>
                <id>central</id>
                <url>http://central</url>
                <releases>
                    <enabled>true</enabled>
                </releases>
                <snapshots>
                    <enabled>true</enabled>
                </snapshots>
            </repository>
        </repositories>

        <pluginRepositories>
            <pluginRepository>
                <id>central</id>
                <url>http://central</url>
                <releases>
                    <enabled>true</enabled>
                </releases>
                <snapshots>
                    <enabled>true</enabled>
                </snapshots>
            </pluginRepository>
        </pluginRepositories>

        <properties>
            <snapshotUrl>https://cric.pl.s2-eu.nvx.com/nexus3/repository/maven-snapshots/</snapshotUrl>
            <releaseUrl>https://cric.pl.s2-eu.nvx.com/nexus3/repository/maven-releases/</releaseUrl>
        </properties>

    </profile>
</profiles>
```

```
<activeProfiles>
    <activeProfile>nexus-local</activeProfile>
</activeProfiles>
```

- Change the conf/setting.xml of the installed maven, by adding the below tags

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</server>
```

```xml
<mirrors>
    <mirror>
        <id>nexus-local</id>
        <mirrorOf>*</mirrorOf>
        <url>https://cric.pl.s2-eu.nvx.com/nexus3/repository/maven-public/</url>
    </mirror>
</mirrors>
```

```xml
<profiles>
    <profile>
        <id>nexus-local</id>
        <repositories>
            <repository>
                <id>central</id>
                <url>http://central</url>
                <releases>
                    <enabled>true</enabled>
                </releases>
                <snapshots>
                    <enabled>true</enabled>
                </snapshots>
            </repository>
        </repositories>

        <pluginRepositories>
            <pluginRepository>
                <id>central</id>
                <url>http://central</url>
                <releases>
                    <enabled>true</enabled>
                </releases>
                <snapshots>
                    <enabled>true</enabled>
                </snapshots>
            </pluginRepository>
        </pluginRepositories>

        <properties>
            <snapshotUrl>https://cric.pl.s2-eu.nvx.com/nexus3/repository/maven-snapshots/</snapshotUrl>
            <releaseUrl>https://cric.pl.s2-eu.nvx.com/nexus3/repository/maven-releases/</releaseUrl>
        </properties>

    </profile>
</profiles>
```

```xml
<activeProfiles>
    <activeProfile>nexus-local</activeProfile>
</activeProfiles>
```

# 3. Appendix

## 3.1. Revision marks

*Differences since last tag*