Integration with Maven

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In order to make the integration in your Java Maven projects easier, we have developed the ***Xray-Maven-Plugin.*** It enables the upload of your Tests directly to Xray with a single Maven command.

The plugin supports single or multi-module projects and multiple test frameworks. With the execution of a single Maven target ***com.xpandit.xray:xray-maven-plugin:xray,*** the plugin will upload the results of the tests to your Jira instance.

List of Available Properties

> **Please note**
>
> The user present in the properties below must exist in the JIRA instance and have permission to Create Test and Test Execution Issues

Property Name	Required (✓-Yes, ?-Optional)	Description	Examples
`xray.jiraURL`	✓	Full URL of Jira, including the relative path, if its being used	`http://localhost:8080`
`xray.resultsFormat`	✓	Results format. Available formats: JUNIT. (more on format specifics in Import Execution Results - REST) case sensitive	`JUNIT`
`xray.username`	✓	Jira Username	`admin`
`xray.password`	✓	Jira Password plain-text only	`password`
`xray.projectKey`	✓	Jira Project Key	MYPROJKEY
`xray.testExecKey`	?	Test Execution Issue ID	MYT2-5
`xray.testPlanKey`	?	Test Plan Issue ID	MYT2-54

xray.testEnvironments	?	Test Environment	iOS
xray.fixVersion	?	Fix Version. It supports only one value.	Release 1.0
xray.revision	?	Revision	1234

xray.surefire.location	✓	Folder with .xml files or xml file to be uploaded	`${basedir}/target/surefire-reports/TEST-com.xpandit.xray.service.ResultImporterTest.xml`
			
			`${basedir}/target/surefire-reports`

Please note

You may configure the plugin properties in your project pom.xml, the settings.xml file (see project guidelines below) or via the console with -D option (e.g., -Dxray.projectKey=PROJ).

List of Available Result Formats

Each result format points to a specific Xray REST Endpoint where the results are imported. The result format is configured in the property **xray.resultsFormat** and is **case-sensitive**.

Results Format (xray.resultsFormat)	Description
JUNIT	JUnit XML output format (more information regarding its endpoint here)

Build, Test and Upload Results

```
mvn clean package surefire:test com.xpandit.xray:xray-maven-plugin:xray
```

Upload Results Only

```
mvn com.xpandit.xray:xray-maven-plugin:xray
```

Maven Project Guidelines

Standard Environment Configuration

~/.m2/settings.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<settings xsi:schemaLocation="http://maven.apache.org/SETTINGS/1.0.0 http://maven.apache.org/xsd/settings-1.0.0.
xsd" xmlns="http://maven.apache.org/SETTINGS/1.0.0"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <!-- OTHER CONFS-->
  <profiles>
    <profile>
        <!-- OTHER CONFS-->
      <properties>
        <xray.jiraURL>http://localhost:8080</xray.jiraURL>
        <xray.resultsFormat>JUNIT</xray.resultsFormat>
        <xray.username>admin</xray.username>
        <xray.password>password</xray.password>
      </properties>
    <id>MyActiveProfile</id>
    </profile>
  </profiles>
  <activeProfiles>
    <activeProfile>MyActiveProfile</activeProfile>
  </activeProfiles>
</settings>
```

Simple Project

This example describes the usage of the plugin on a standard simple, single-module Project

```
<project xmlns="http://maven.apache.org/POM/4.0.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
         xsi:schemaLocation="http://maven.apache.org/POM/4.0.0
                             http://maven.apache.org/maven-v4_0_0.xsd">
    <!-- CONF's -->
    <properties>

        <!--XRay Properties -->

        <!--IN PROFILE ~.m2/settings.xml-->
        <!--<xray.jiraURL></xray.jiraURL>
        <xray.resultsFormat></xray.resultsFormat>
        <xray.username></xray.username>
        <xray.password></xray.password>-->

        <xray.projectKey>MYPROJKEY</xray.projectKey>
        <!--
                <xray.testExecKey></xray.testExecKey>
        <xray.testPlanKey></xray.testPlanKey>
        <xray.testEnvironments></xray.testEnvironments>
        <xray.fixVersion></xray.fixVersion>
        <xray.revision></xray.revision>
        -->

        <xray.surefire.location>${basedir}/target/surefire-reports</xray.surefire.location>
        <!--End Xray Properties -->

    </properties>

    <build>
                <pluginManagement>
                <plugins>
             <plugin>
                  <groupId>org.apache.maven.plugins</groupId>
                  <artifactId>maven-surefire-plugin</artifactId>
                  <version>2.19.1</version>
                  <configuration>
                      <testFailureIgnore>true</testFailureIgnore>
                  </configuration>
             </plugin>
         </plugins>
          </pluginManagement>
    </build>

    <reporting>
        <plugins>
            <plugin>
                <artifactId>maven-surefire-report-plugin</artifactId>
            </plugin>
            <plugin>
                <groupId>com.xpandit.xray</groupId>
                <artifactId>xray-maven-plugin</artifactId>
                <version>1.0.0</version>
            </plugin>
        </plugins>
    </reporting>

    <pluginRepositories>
        <pluginRepository>
            <id>xpand-plugins</id>
            <name>xpand-plugins</name>
            <url>http://maven.xpand-it.com/artifactory/releases</url>
        </pluginRepository>
    </pluginRepositories>

</project>
```

Multi-Module Project

This example describes the usage of the plugin on a Module Project, in this case just one sub-module.

pom.xml

```
<project xmlns="http://maven.apache.org/POM/4.0.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
         xsi:schemaLocation="http://maven.apache.org/POM/4.0.0
                             http://maven.apache.org/maven-v4_0_0.xsd">
    <!-- CONF's -->
        <modules>
            <module>ModuleA</module>
        </modules>
    <properties>

        <!--XRay Properties -->

        <!--IN PROFILE ~/.m2/settings.xml-->
        <!--<xray.jiraURL></xray.jiraURL>
        <xray.resultsFormat></xray.resultsFormat>
        <xray.username></xray.username>
        <xray.password></xray.password>-->

        <xray.projectKey>MYPROJKEY</xray.projectKey>
        <!--
                <xray.testExecKey></xray.testExecKey>
        <xray.testPlanKey></xray.testPlanKey>
        <xray.testEnvironments></xray.testEnvironments>
        <xray.fixVersion></xray.fixVersion>
        <xray.revision></xray.revision>
        -->

        <xray.surefire.location>${basedir}/target/surefire-reports</xray.surefire.location>
        <!--End Xray Properties -->

    </properties>

    <build>
                <pluginManagement>
                        <plugins>
                     <plugin>
                           <groupId>org.apache.maven.plugins</groupId>
                           <artifactId>maven-surefire-plugin</artifactId>
                           <version>2.19.1</version>
                           <configuration>
                               <testFailureIgnore>true</testFailureIgnore>
                           </configuration>
                      </plugin>
                </plugins>
                </pluginManagement>
    </build>

    <reporting>
        <plugins>
            <plugin>
                <artifactId>maven-surefire-report-plugin</artifactId>
            </plugin>
            <plugin>
                <groupId>com.xpandit.xray</groupId>
                <artifactId>xray-maven-plugin</artifactId>
                <version>1.0.0</version>
            </plugin>
        </plugins>
    </reporting>

    <pluginRepositories>
        <pluginRepository>
            <id>xpand-plugins</id>
            <name>xpand-plugins</name>
            <url>http://maven.xpand-it.com/artifactory/releases</url>
        </pluginRepository>
    </pluginRepositories>

</project>
```

ModuleA.pom

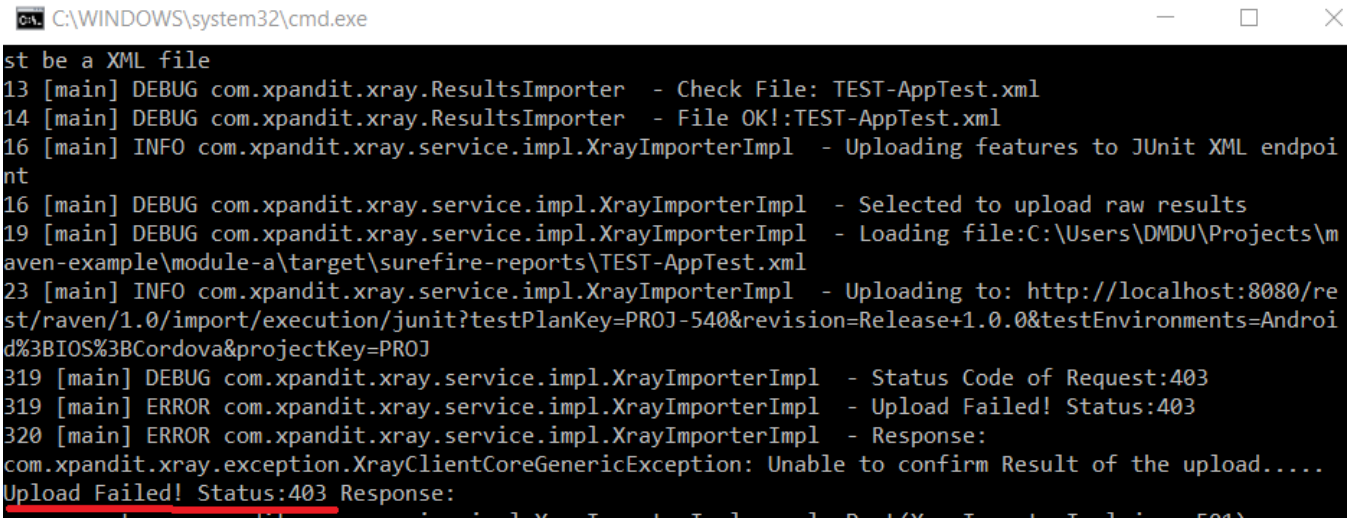
```
<project xmlns="http://maven.apache.org/POM/4.0.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:
schemaLocation="http://maven.apache.org/POM/4.0.0
                            http://maven.apache.org/maven-v4_0_0.xsd">
    <!-- CONF's -->
    <name>Module A</name>

    <properties>
        <!--XRay Properties -->
        <xray.surefire.location>${basedir}/target/surefire-reports</xray.surefire.location>
        <!--End Xray Properties -->
    </properties>
</project>
```

Troubleshooting

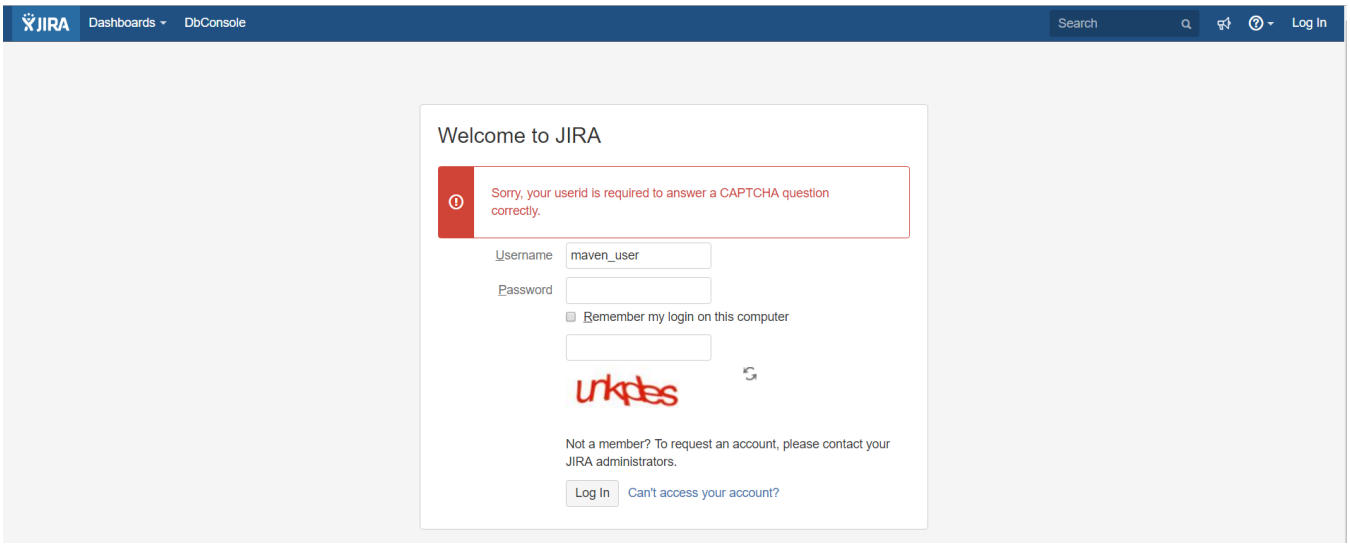
Unable to upload the results file: The process is failing with status code 403

The importing of the execution results file failed and when you check the log, it shows the following:

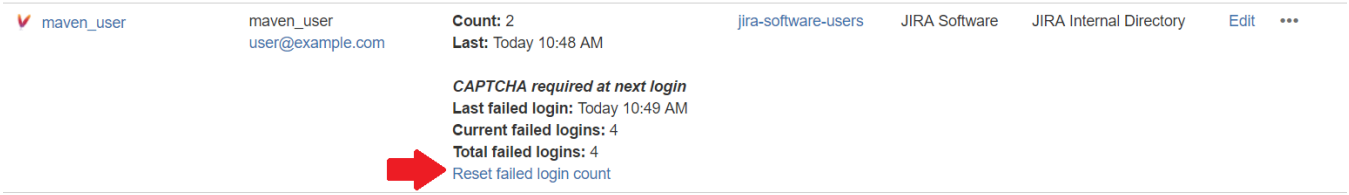


By default, when you successively try to log into Jira with the wrong credentials, the Jira instance will prompt you to provide a CAPTCHA the next time you try to log in. It is not possible to provide this information via the Maven project configuration, so it will fail with status code **403 Forbidden**.

You will need to log into Jira via the browser and provide the CAPTCHA.



If you are a Jira administrator, you can go to Jira administration > User Management and reset the failed login.



Version History

- 1.0.0 - 9 May 2017
  - Import JUnit results: You can import the JUnit results to Xray either as an XML file or a folder with multiple XML files.