

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
<code>xray.jiraURL</code>	✓	Full URL of Jira, including the relative path, if its being used	<code>http://localhost:8080</code>
<code>xray.resultsFormat</code>	✓	Results format. Available formats: JUNIT. (more on format specifics in Import Execution Results - REST) <div style="border: 1px solid red; padding: 5px; display: inline-block;"> case sensitive</div>	JUNIT
<code>xray.username</code>	✓	Jira Username	admin
<code>xray.password</code>	✓	Jira Password <div style="border: 1px solid red; padding: 5px; display: inline-block;"> plain-text only</div>	password
<code>xray.projectKey</code>	✓	Jira Project Key	MYPROJKEY
<code>xray.testExecKey</code>	?	Test Execution Issue ID	MYT2-5
<code>xray.testPlanKey</code>	?	Test Plan Issue ID	MYT2-54
<code>xray.testEnvironments</code>	?	Test Environment	iOS

<code>xray.fixVersion</code>	blocked URL	Fix Version. It supports only one value.	Release 1.0
<code>xray.revision</code>		Revision	1234
<code>xray.surefire.location</code>		Folder with .xml files or xml file to be uploaded	<code>\${basedir}/target/surefire-reports/TEST-com.xpandit.xray.service.ResultImporterTest.xml</code> <code>\${basedir}/target/surefire-reports</code>



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 (<code>xray.resultsFormat</code>)	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

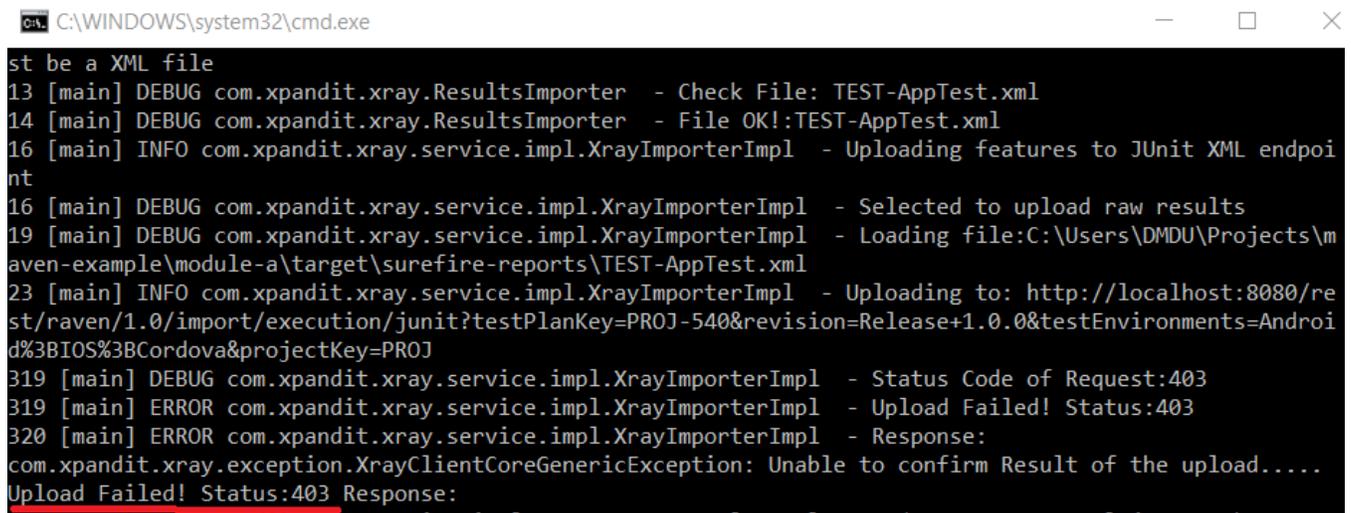
```
<project xmlns="http://maven.apache.org/POM/4.0.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://maven.apache.org/POM/4.0.0
http://maven.apache.org/maven-v4_0_0.xsd">
  <!-- CONF's -->
  <name>Module A</name>

  <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:



```
C:\WINDOWS\system32\cmd.exe
st be a XML file
13 [main] DEBUG com.xpandit.xray.ResultsImporter - Check File: TEST-AppTest.xml
14 [main] DEBUG com.xpandit.xray.ResultsImporter - File OK!:TEST-AppTest.xml
16 [main] INFO com.xpandit.xray.service.impl.XrayImporterImpl - Uploading features to JUnit XML endpoint
16 [main] DEBUG com.xpandit.xray.service.impl.XrayImporterImpl - Selected to upload raw results
19 [main] DEBUG com.xpandit.xray.service.impl.XrayImporterImpl - Loading file:C:\Users\DMDU\Projects\maven-example\module-a\target\surefire-reports\TEST-AppTest.xml
23 [main] INFO com.xpandit.xray.service.impl.XrayImporterImpl - Uploading to: http://localhost:8080/rest/raven/1.0/import/execution/junit?testPlanKey=PROJ-540&revision=Release+1.0.0&testEnvironments=Android%3BBIOS%3BCordova&projectKey=PROJ
319 [main] DEBUG com.xpandit.xray.service.impl.XrayImporterImpl - Status Code of Request:403
319 [main] ERROR com.xpandit.xray.service.impl.XrayImporterImpl - Upload Failed! Status:403
320 [main] ERROR com.xpandit.xray.service.impl.XrayImporterImpl - Response:
com.xpandit.xray.exception.XrayClientCoreException: Unable to confirm Result of the upload....
Upload Failed! Status:403 Response:
```

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.

JIRA Dashboards ▾ DbConsole Search 🔍 🗨️ 🌐 Log In

Welcome to JIRA

ⓘ Sorry, your userid is required to answer a CAPTCHA question correctly.

Username

Password

Remember my login on this computer

Not a member? To request an account, please contact your JIRA administrators.

[Can't access your account?](#)

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

 maven_user	maven_user user@example.com	Count: 2 Last: Today 10:48 AM	jira-software-users	JIRA Software	JIRA Internal Directory	Edit ⋮
		CAPTCHA required at next login Last failed login: Today 10:49 AM Current failed logins: 4 Total failed logins: 4 Reset failed login count				



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.