

# 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 <a href="#">Import Execution Results - REST</a> ) <div>! case sensitive</div>	JUNIT
<code>xray.username</code>	✓	Jira Username	admin
<code>xray.password</code>	✓	Jira Password <div>! 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>	?	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 (xray.resultsFormat)	Description
JUNIT	JUnit XML output format (more information regarding its endpoint <a href="#">here</a> )

**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">

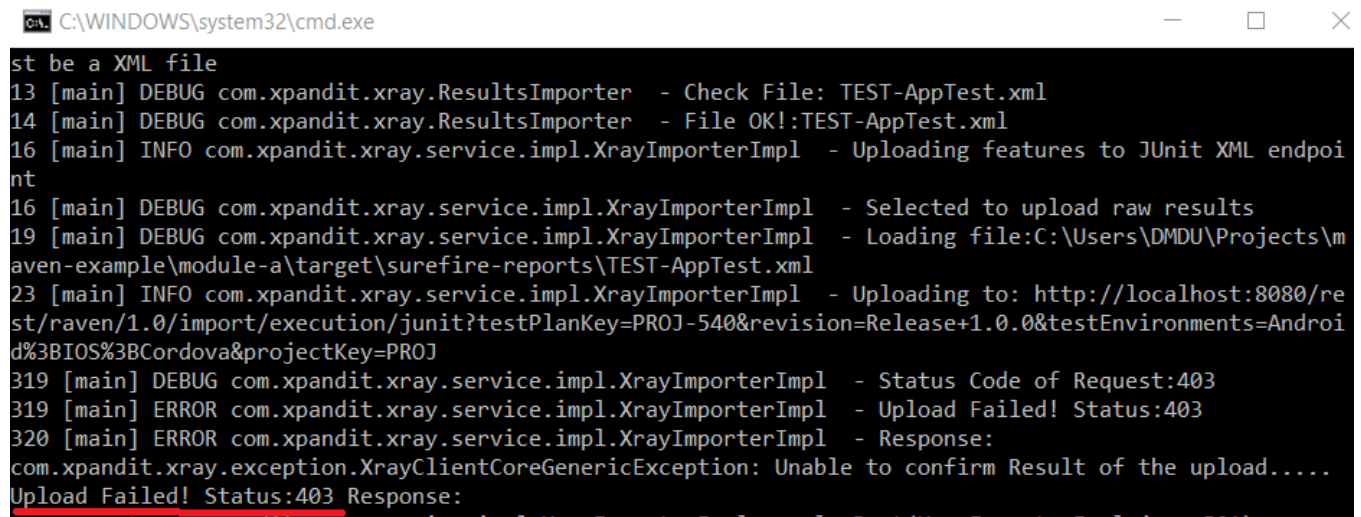
  <!-- CONF's -->
  <name>Module A</name>

  <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%3BIOS%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.XrayClientCoreGenericException: 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

maven\_user

Password

☐ Remember my login on this computer






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

Log In

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 ...
<b>CAPTCHA required at next login</b>						
Last failed login: Today 10:49 AM						
Current failed logins: 4						
Total failed logins: 4						
 <a href="#">Reset failed login count</a>						

## 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.