

Configuring the Build System to Include Required Libraries

You can manually modify your build system to ensure that the required are available. The following sections list all the libraries UTA may require. The set of dependencies you need to configure depends on your testing framework and may vary between projects.

- [Adding Dependencies in Maven](#)
- [Adding Dependencies in Gradle](#)
- [Adding Dependencies in Ant](#)

Adding Dependencies in Maven

Modify the pom.xml file by updating the <dependencies> section.

i Multi-module projects may require centralizing dependency information in the <dependencyManagement> section.

```
<dependencies>
  <dependency>
    <groupId>org.apiguardian</groupId>
    <artifactId>apiguardian-api</artifactId>
    <version>1.1.0</version>
  </dependency>

  <dependency>
    <groupId>net.bytebuddy</groupId>
    <artifactId>byte-buddy</artifactId>
    <version>1.10.0</version>
  </dependency>

  <dependency>
    <groupId>net.bytebuddy</groupId>
    <artifactId>byte-buddy-agent</artifactId>
    <version>1.10.0</version>
    <scope>test</scope>
  </dependency>

  <dependency>
    <groupId>org.hamcrest</groupId>
    <artifactId>hamcrest</artifactId>
    <version>2.1</version>
    <scope>test</scope>
  </dependency>

  <dependency>
    <groupId>org.javassist</groupId>
    <artifactId>javassist</artifactId>
    <version>3.24.0-GA</version>
  </dependency>

  <dependency>
    <groupId>junit</groupId>
    <artifactId>junit</artifactId>
    <version>4.12</version>
    <scope>test</scope>
  </dependency>

  <dependency>
    <groupId>org.junit.jupiter</groupId>
    <artifactId>junit-jupiter-api</artifactId>
    <version>5.5.1</version>
    <scope>test</scope>
  </dependency>

  <dependency>
    <groupId>org.junit.jupiter</groupId>
    <artifactId>junit-jupiter-engine</artifactId>
    <version>5.5.1</version>
    <scope>test</scope>
  </dependency>
</dependencies>
```

```
<dependency>
  <groupId>org.junit.jupiter</groupId>
  <artifactId>junit-jupiter-migrationsupport</artifactId>
  <version>5.5.1</version>
  <scope>test</scope>
</dependency>

<dependency>
  <groupId>org.junit.jupiter</groupId>
  <artifactId>junit-jupiter-params</artifactId>
  <version>5.5.1</version>
  <scope>test</scope>
</dependency>

<dependency>
  <groupId>org.junit.platform</groupId>
  <artifactId>junit-platform-commons</artifactId>
  <version>1.5.1</version>
</dependency>

<dependency>
  <groupId>org.junit.platform</groupId>
  <artifactId>junit-platform-engine</artifactId>
  <version>1.5.1</version>
  <scope>test</scope>
</dependency>

<dependency>
  <groupId>org.junit.platform</groupId>
  <artifactId>junit-platform-launcher</artifactId>
  <version>1.5.1</version>
  <scope>test</scope>
</dependency>

<dependency>
  <groupId>org.junit.platform</groupId>
  <artifactId>junit-platform-runner</artifactId>
  <version>1.5.1</version>
  <scope>test</scope>
</dependency>

<dependency>
  <groupId>org.junit.platform</groupId>
  <artifactId>junit-platform-suite-api</artifactId>
  <version>1.5.1</version>
  <scope>test</scope>
</dependency>

<dependency>
  <groupId>org.junit.vintage</groupId>
  <artifactId>junit-vintage-engine</artifactId>
  <version>5.5.1</version>
  <scope>test</scope>
</dependency>

<dependency>
  <groupId>pl.pragmatists</groupId>
  <artifactId>JUnitParams</artifactId>
  <version>1.1.1</version>
</dependency>

<dependency>
  <groupId>org.mockito</groupId>
  <artifactId>mockito-core</artifactId>
  <version>2.28.2</version>
  <scope>test</scope>
</dependency>

<dependency>
  <groupId>org.mockito</groupId>
```

```

    <artifactId>mockito-junit-jupiter</artifactId>
    <version>2.28.2</version>
    <scope>test</scope>
</dependency>

<dependency>
    <groupId>org.objenesis</groupId>
    <artifactId>objenesis</artifactId>
    <version>3.0.1</version>
    <scope>test</scope>
</dependency>

<dependency>
    <groupId>org.opentest4j</groupId>
    <artifactId>opentest4j</artifactId>
    <version>1.2.0</version>
</dependency>

<dependency>
    <groupId>org.powermock</groupId>
    <artifactId>powermock-api-mockito2</artifactId>
    <version>2.0.2</version>
    <scope>test</scope>
</dependency>

<dependency>
    <groupId>org.powermock</groupId>
    <artifactId>powermock-module-junit4</artifactId>
    <version>2.0.2</version>
    <scope>test</scope>
</dependency>

<dependency>
    <groupId>org.powermock</groupId>
    <artifactId>powermock-module-junit4-common</artifactId>
    <version>2.0.2</version>
</dependency>

<dependency>
    <groupId>org.powermock</groupId>
    <artifactId>powermock-reflect</artifactId>
    <version>2.0.2</version>
</dependency>

<dependency>
    <groupId>org.powermock</groupId>
    <artifactId>powermock-core</artifactId>
    <version>2.0.2</version>
    <scope>test</scope>
</dependency>

<dependency>
    <groupId>org.powermock</groupId>
    <artifactId>powermock-api-support</artifactId>
    <version>2.0.2</version>
</dependency>
</dependencies>

```

Adding Dependencies in Gradle

Modify the build.gradle file by updating the following sections. The following entries include all the required libraries:

```

dependencies {
    compile 'org.apiguardian:apiguardian-api:1.1.0'
    compile 'org.javassist:javassist:3.24.0-GA'
    compile 'net.bytebuddy:byte-buddy:1.10.0'
    testCompile 'net.bytebuddy:byte-buddy-agent:1.10.0'
    testCompile 'org.hamcrest:hamcrest:2.1'

    testCompile 'org.objenesis:objenesis:3.0.1'
    testCompile 'junit:junit:4.12'
    testCompile 'org.junit.jupiter:junit-jupiter-api:5.5.1'
    testCompile 'org.junit.jupiter:junit-jupiter-engine:5.5.1'
    testCompile 'org.junit.jupiter:junit-jupiter-migrationsupport:5.5.1'
    testCompile 'org.junit.jupiter:junit-jupiter-params:5.5.1'

    compile 'org.junit.platform:junit-platform-commons:1.5.1'
    testCompile 'org.junit.platform:junit-platform-engine:1.5.1'
    testCompile 'org.junit.platform:junit-platform-launcher:1.5.1'
    testCompile 'org.junit.platform:junit-platform-runner:1.5.1'
    testCompile 'org.junit.platform:junit-platform-suite-api:1.5.1'
    testCompile 'org.junit.vintage:junit-vintage-engine:5.5.1'
    testCompile 'pl.pragmatists:JUnitParams:1.1.1'
    testCompile 'org.mockito:mockito-core:2.28.2'
    testCompile 'org.mockito:mockito-junit-jupiter:2.28.2'

    compile 'org.powermock:powermock-api-support:2.0.2'
    compile 'org.powermock:powermock-core:2.0.2'
    testCompile 'org.powermock:powermock-api-mockito2:2.0.2'
    testCompile 'org.powermock:powermock-module-junit4:2.0.2'
    testCompile 'org.powermock:powermock-module-junit4-common:2.0.2'
    testCompile 'org.powermock:powermock-reflect:2.0.2'
}

```

Adding Dependencies in Ant

Ant requires all required JAR files to be added to a separate directory. The directory must be added manually by including in the build.xml file:

```

<classpath>
    <!-- filesets can be used in classpath and bootpath -->
    <fileset dir="C:/directory_name/lib">
        <include name="**/*.jar"/>
    </fileset>
</classpath>

```

The following libraries are required:

- apiguardian-api-1.1.0.jar
- byte-buddy-agent-1.10.0.jar
- byte-buddy-1.10.0.jar
- hamcrest-2.1.jar
- javassist-3.24.0-GA.jar
- junit-platform-suite-api-1.5.1.jar
- junit-platform-runner-1.5.1.jar
- junit-platform-launcher-1.5.1.jar
- junit-platform-engine-1.5.1.jar
- junit-platform-commons-1.5.1.jar
- junit-jupiter-migrationsupport-5.5.1.jar
- junit-jupiter-engine-5.5.1.jar
- junit-vintage-engine-5.5.1.jar
- junit-jupiter-api-5.5.1.jar
- junit-jupiter-params-5.5.1.jar
- junit-4.12.jar
- JUnitParams-1.1.1.jar
- mockito-core-2.28.2.jar
- mockito-junit-jupiter-2.28.2.jar
- objenesis-3.0.1.jar
- opentest4j-1.2.0.jar
- powermock-api-mockito2-2.0.2.jar
- powermock-api-support-2.0.2.jar

- powermock-core-2.0.2.jar
- powermock-module-junit4-2.0.2.jar
- powermock-module-junit4-common-2.0.2.jar
- powermock-reflect-2.0.2.jar

The libraries are available online or in the `[INSTALL_DIR]/examples/demo/lib`.