Unit Testing

* **What is Unit Testing**

Testing our piece of code before integration assuming we have all the objects needed from environment.

* **How is it done**

We mock all the objects which are not available while we test in our local instances.

* **Frameworks used**

Mockito, Power Mockito, Junit, AEM Mocks (OSGiContext, SlingContext & AemContext)

* **Changes to be done to bundle pom.xml**

***Plugins***

<plugin>

<groupId>org.jacoco</groupId>

<artifactId>jacoco-maven-plugin</artifactId>

<version>0.7.1.201405082137</version>

<executions>

<execution>

<id>instrument</id>

<phase>process-classes</phase>

<goals>

<goal>instrument</goal>

</goals>

</execution>

<execution>

<id>agent-for-ut</id>

<goals>

<goal>prepare-agent</goal>

</goals>

<configuration>

<destFile>${sonar.jacoco.reportPath}</destFile>

<append>true</append>

</configuration>

</execution>

<execution>

<id>restore</id>

<phase>prepare-package</phase>

<goals>

<goal>restore-instrumented-classes</goal>

<goal>report</goal>

</goals>

</execution>

<execution>

<id>agent-for-it</id>

<goals>

<goal>prepare-agent-integration</goal>

</goals>

<configuration>

<append>true</append>

<destFile>${sonar.jacoco.itReportPath}</destFile>

</configuration>

</execution>

</executions>

</plugin>

***Dependencies***

<dependency>

<groupId>junit-addons</groupId>

<artifactId>junit-addons</artifactId>

<version>1.4</version>

</dependency>

<dependency>

<groupId>org.powermock</groupId>

<artifactId>powermock-api-mockito</artifactId>

<version>1.6.5</version>

<scope>test</scope>

</dependency>

<dependency>

<groupId>org.powermock</groupId>

<artifactId>powermock-module-junit4</artifactId>

<version>1.6.5</version>

<scope>test</scope>

</dependency>

* **How we handled Unit Testing till now**

<https://wiki.cisco.com/display/WCM/WEM+-+JUNIT+-+Implementation+Details>

* **How are we going to handle from now on**

Available ResourceTypes for AemContext



TestResourceModel.java - <https://gitscm.cisco.com/projects/CDC/repos/wem-git/browse/osgi/CPDMAuthoring/src/test/java/com/cisco/wem/models/TestResourceModel.java?at=BR_CPDM_FEATURE>

<https://felix.apache.org/documentation/subprojects/apache-felix-maven-scr-plugin/apache-felix-maven-scr-plugin-use.html>