Config TestNG suite guidline

TestNG is a testing framework designed to simplify a broad range of testing needs, from unit testing (testing a class in isolation of the others) to integration testing (testing entire systems made of several classes, several packages and even several external frameworks, such as application servers).

Writing a test is typically a three-step process:

* Write the business logic of your test and insert [TestNG annotations](http://testng.org/doc/documentation-main.html" \l "annotations) in your code.
* Add the information about your test (e.g. the class name, the groups you wish to run, etc...) in a [testng.xml](http://testng.org/doc/documentation-main.html#testng-xml) file or in build.xml.
* [Run TestNG](http://testng.org/doc/ant.html).

# Create test suite XML file

When we execute test suite with some classes or methods, we need to create a XML file to collect all packages, classes, methods. This section describes the format of test suite xml file.

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| <!DOCTYPE suite SYSTEM "<http://testng.org/testng-1.0.dtd>" > | | | | | | | | | | | | | |
|  | | | | | | | | | | | | | | |
| <suite name="*TestSuiteName*" verbose="1" >  *<!— suite name is name of test suite, maybe feature name*  *Verbose : the number execute this suite time -->* | | | | | | | | | | | | | | | |
| <packages> <package name="***com.dts.adminportal.test***"> </package> | | | | | | | | | | | | | | | |
| *<!—package name is name of package contain test class-->* | | | | | | | | | | | | | | | |
| <test name="*TestName*" > | | | | | | | | | | | | |
| <classes> | | | | | | | | | | | |
| <class name=" **com.dts.adminportal.test.LoginTest**" />  *<!—class name is class that contain testing methods-->*  <methods>  <include name**="\_1\_verifyLoginPage**"></include>  *<!—include name is name of testing methods -->*  </methods> | | | | | | | | | | |
| </classes> | | | | | | | | | |
| </test>  </suite> | | | | | | | | |
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In testng.xml file:

* The name of test suite must be unique in all test suites
* If The <Package> tag is declared, test suite will be cover all classes in this package. This tag can be invisible if we don’t want to run all class in package.
* <Classes> tag: contain the class that we want to run.
* <Methods> tag : list out the method we want to run in a class

# Declare test suite file in pom.xml file

In pom.xml file, It contain all configure of Maven, please find the code look like:

<build>

<plugins>

<plugin>

<groupId>org.apache.maven.plugins</groupId>

<artifactId>maven-surefire-plugin</artifactId>

<version>2.17</version>

<configuration>

<forkMode>always</forkMode>

<systemPropertyVariables>

<reporter.debug>false</reporter.debug>

</systemPropertyVariables>

<suiteXmlFiles>

<suiteXmlFile>**${suiteXmlFile}**</suiteXmlFile>

</suiteXmlFiles>

</configuration>

</plugin>

</plugins>

</build>

${suiteXmlFile}: The path directly to test suite files (that define in above step). We can declare many suite XML files and add to pom.xml.