

TESTNG - SUITE TEST

http://www.tutorialspoint.com/testng/testng_suite_test.htm

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A **test suite** is a collection of test cases intended to test a behavior or a set of behaviors of software program. In TestNG, we cannot define a suite in testing source code, but it is represented by one XML file, as suite is the feature of execution. It also allows flexible configuration of the *tests* to be run. A suite can contain one or more tests and is defined by the `<suite>` tag.

`<suite>` is the root tag of your testng.xml. It describes a test suite, which in turn is made of several `<test>` sections.

The following table lists all the legal attributes that `<suite>` accepts.

Attribute	Description
name	The name of this suite. It is a mandatory attribute.
verbose	The level or verbosity for this run.
parallel	Whether TestNG should run different threads to run this suite.
thread-count	The number of threads to use, if parallel mode is enabled <i>ignored other – wise</i> .
annotations	The type of annotations you are using in your tests.
time-out	The default timeout that will be used on all the test methods found in this test.

In this chapter, we will show you an example having two test classes, Test1 & Test2, to run together using Test Suite.

Create a Class

Create a java class to be tested, say, MessageUtil.java in **C:\>JUNIT_WORKSPACE**.

```
/*
 * This class prints the given message on console.
 */

public class MessageUtil {
    private String message;

    // Constructor
    // @param message to be printed
    public MessageUtil(String message) {
        this.message = message;
    }

    // prints the message
    public String printMessage() {
        System.out.println(message);
        return message;
    }

    // add "Hi!" to the message
    public String salutationMessage() {
        message = "Hi!" + message;
        System.out.println(message);
        return message;
    }
}
```

Create Test Case Classes

Create a java class file named Test1.java in **C:\>TestNG_WORKSPACE**.

```
import org.testng.Assert;
import org.testng.annotations.Test;

public class Test1 {
    String message = "Manisha";
    MessageUtil messageUtil = new MessageUtil(message);

    @Test
    public void testPrintMessage() {
        System.out.println("Inside testPrintMessage()");
        Assert.assertEquals(message, messageUtil.printMessage());
    }
}
```

Create a java class file named Test2.java in **C:\>TestNG_WORKSPACE**.

```
import org.testng.Assert;
import org.testng.annotations.Test;

public class Test2 {
    String message = "Manisha";
    MessageUtil messageUtil = new MessageUtil(message);

    @Test
    public void testSalutationMessage() {
        System.out.println("Inside testSalutationMessage()");
        message = "Hi!" + "Manisha";
        Assert.assertEquals(message, messageUtil.salutationMessage());
    }
}
```

Now, let's write the testng.xml in **C:\>TestNG_WORKSPACE**, which would contain the <suite> tag as follows:

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE suite SYSTEM "http://testng.org/testng-1.0.dtd" >

<suite name="Suite1">

    <test name="exampletest1">
        <classes>
            <class name="Test1" />
        </classes>
    </test>

    <test name="exampletest2">
        <classes>
            <class name="Test2" />
        </classes>
    </test>

</suite>
```

Suite1 includes *exampletest1* and *exampletest2*.

Compile all java classes using javac.

```
C:\TestNG_WORKSPACE>javac MessageUtil.java Test1.java Test2.java
```

Now, run the testng.xml, which will run the test case defined in the provided Test Case class.

```
C:\TestNG_WORKSPACE>java -cp "C:\TestNG_WORKSPACE" org.testng.TestNG testng.xml
```

Verify the output.

```
Inside testPrintMessage()  
Manisha  
Inside testSalutationMessage()  
Hi!Manisha
```

```
=====  
Suite1  
Total tests run: 2, Failures: 0, Skips: 0  
=====
```

You can also check the *test-output* folder. Under the *Suite1* folder, you can see two html files created, *exampletest1.html* and *exampletest2.html*, which would look as follows:

exampletest1

Tests passed/Failed/Skipped:	1/0/0
Started on:	Wed Aug 14 10:17:02 IST 2013
Total time:	0 seconds (15 ms)
Included groups:	
Excluded groups:	

(Hover the method name to see the test class name)

PASSED TESTS			
Test method	Exception	Time (seconds)	Instance
testPrintMessage		0	Test1@74ed3306
Test class: Test1			

exampletest2

Tests passed/Failed/Skipped:	1/0/0
Started on:	Wed Aug 14 19:17:02 IST 2013
Total time:	0 seconds (1 ms)
Included groups:	
Excluded groups:	

(Hover the method name to see the test class name)

PASSED TESTS			
Test method	Exception	Time (seconds)	Instance
testSalutationMessage		0	Test2@460275221
Test class: Test2			

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