

Call private method with PowerMock

 automationrhapsody.com/call-private-method-powermock

By Lyudmil Latinov

May 27, 2017

Post summary: How to invoke a private method with PowerMock.

This post is part of [PowerMock series examples](#). The code shown in examples below is available in GitHub [java-samples/junit](#) repository.

Unit test private method

Mainly public methods are being tested, so it is a very rare case where you want to unit test a private method. PowerMock provides utilities that can invoke private methods via a reflection and get output which can be tested.

Code to be tested

Below is a sample code that shows a class with a private method in it. It does nothing else but increases the **X** and **Y** coordinates of given as argument **Point**.

```
public class PowerMockDemo {  
    private Point privateMethod(Point point) {  
        return new Point(point.getX() + 1, point.getY() + 1);  
    }  
}
```

Unit test

Assume that this private method has to be unit tested for some reason. In order to do so, you have to use PowerMock's **Whitebox.invokeMethod()**. You give an instance of the object, method name as a **String** and arguments to call the method with. In the example below argument is **new Point(11, 11)**.

```
import org.junit.Before;
import org.junit.Test;
import org.powermock.reflect.Whitebox;
import static org.hamcrest.CoreMatchers.is;
import static org.hamcrest.MatcherAssert.assertThat;
public class PowerMockDemoTest {
    private PowerMockDemo powerMockDemo;
    @Before
    public void setUp() {
        powerMockDemo = new PowerMockDemo();
    }
    @Test
    public void testCallPrivateMethod() throws Exception {
        Point actual = Whitebox.invokeMethod(powerMockDemo,
            "privateMethod" , new Point( 11 , 11 ));
        assertThat(actual.getX(), is( 12 ));
        assertThat(actual.getY(), is( 12 ));
    }
}
```

Conclusion

PowerMock provides utilities which uses reflection to do certain things, as shown in the example above to invoke a private method.

Related Posts

[PowerMock examples and why better not to use them](#)

Category: [Java](#), [Unit testing](#) | Tags: [JUnit](#), [PowerMock](#)