TEST AUTOMATION UNIVERSITY
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Chapter 7.2: Depends On Methods

Introduction

In this chapter, we will cover execute Test Methods without the Depends On Methods Attribute then execute Test Methods with the Depends On Methods Attribute and execute an xml file to exclude a Test Method.

Execute Without Depends On Methods

In this example, we have 7 Test Methods. I placed set up Chrome in a Test Annotation. We want to test, we can set up Chrome. In addition, the other Test Methods are Open Orange HRM, Sign In, Search User, Search Employee, Search Candidate, and Sign Out. This example does not have a dependsOnMethods attribute. Here's the Test Steps with our Test Application. After signing in we will go to the Admin tab and Search for a User, go to the PIM tab and search for an employee, go to the Recruitment tab and search for a candidate then sign out.

Let's run our Test Script and see what happens. This site can't be reached. Refused to connect. Go to the Console. There's a cascade of failures. A cascade failure is when 1 failure force the remaining test in the suite to fail. We see 7 runs and 6 of those runs are Failures. Why do we have 6 Failures? We could not connect to the application to start our testing.

That's not right and the Test Report is not correct. We should have 1 Pass, 1 Failure, and 5 Skips. It should be 5 Skips because we could not open the OrangeHRM application to execute the last 5 Test Methods: Sign In, Search User, Search Employee, Search Candidate, and Sign Out. To solve this problem, we can use the Depends On Methods Attribute.

Execute With Depends On Methods

If we go to the annotations package, we can find the Depends On Methods attribute in a Configuration Annotation along with the groups and Depends On Groups attribute. However, we are going to use the Test Annotation that also have the Depends On Methods attribute, Depends On Groups attribute, and Groups attribute.

We add the attribute within parenthesis after the annotation. Lowercase d for dependsOnMethods equals. Next, we write the name of the Test Method that this Test Method depends on. Test2_OpenOrangeHRM depends on Test 1_SetUpChrome. Hover over the dependsOnMethods attribute and the description states "The list of methods this method depends on". Test3_SignIn depends on Test 2_OpenOrangeHRM and the list goes on. Test 4_Search User depends on Test 3_SignIn. There are some cases where a Test Method depend on more than one Test Method. It's not required in this Test Script but I want to show you how to add multiple Test Methods to depend on. Test 5 depends

on Test 2 and Test 3. We surround the Test Methods with curly brackets and separate the Test Methods with a comma. The same for Test 6 and Test 7. Copy and Paste.

Let's Run. Now, we see 1 Failure and 5 Skips. Set Up Chrome is the only Test Method that Passed. The Results tab also shows 5 Skips.

Exclude Test Method via xml File

Exclude a Test Method using an xml File. I converted the dependsOnMethods_PASS class file into this xml file called Depends On Methods.

By default, an xml file does not include a methods tag because it's optional. For our example, I added an opening and closing methods tag then exclude a Test Method. That Test Method is test4_SearchUser.

Let's imagine, everyone in the organization know that searching for a user is not working. The defect has been reported and we will add it back to our Test Suite once the defect has been resolved. In the meantime, we don't have to keep executing that Test. Exclude it for now.

Let's Run. There are zero Failures, zero Skips, and we do not see Test 4 Search For User. Go to the Results tab, no Test 4 because it was not included at Runtime. The Depends On Methods attribute is great for small test when 1 Test Method depends on another Test Method. Next, is groups and Depends On Groups Attribute which makes our Dependency Testing more robust and easy to scale.