

Testing APIs using Katalon Studio

Overview

In this tutorial, we will create some API tests using [Katalon Studio](#).

Katalon Studio is a free tool that allows you to create and run automated Web, API and mobile tests using a UI that simplifies the writing of tests for non-developers.

Please note

Katalon Studio is able of generating JUnit XML reports and this makes it possible to process and see those results in Xray.

Requirements

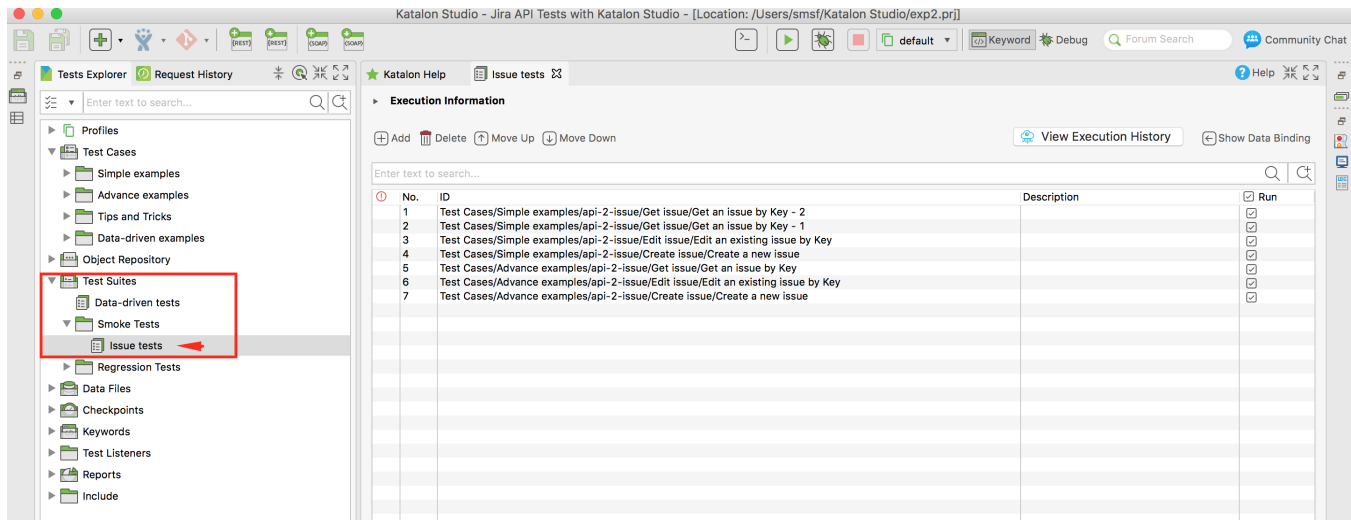
- Katalon Studio

Description

Katalon provides some sample projects, so you may create one using them as basis.

One of these templates is the "Sample JIRA API Tests Project", that includes a bunch of Jira REST API related test cases.

The new project will have some sample Test Suites, such as the Test Suites > Smoke Tests > Issue tests.



Katalon is able to run the tests in console mode, enabling the generation of a JUnit XML report. Katalon's project and test suite must be identified along with the report folder path.

```
./katalon -runMode=console -projectPath=/Users/smsf/Katalon\ Studio/exp2.prj -reportFolder=/tmp/ -reportFileName="report" -testSuitePath="Test Suites/Smoke Tests/Issue tests" -retry=0 -browserType=Chrome
```

After running the tests and generating the JUnit XML report (e.g., [JUnit_Report.xml](#)), it can be imported to Xray (either by the REST API or through the **Import Execution Results** action within the Test Execution).

```
curl -H "Content-Type: multipart/form-data" -u admin:admin -F "file=@/tmp/JUnit_Report.xml" "http://jira.example.com/rest/raven/1.0/import/execution/junit?projectKey=JIRAPI"
```

Each test case is mapped to a Generic Test in Jira and the **Generic Test Definition** field contains the full path of the Test within the "Test Cases" meta-folder in Katalon Studio.

Overall Execution Status

7 PASS

TOTAL TESTS: 7

FILTERS

Test Set	Assignee	Status	Component	Search
All	All			Contains text <input type="text"/> <input type="button" value="Clear"/>

		Key	Summary	Test Type	#Req	#Def	Assignee	Priority	Status		
	1	CALC-2908	Test Cases/Advance examples/api-2-issue/Get issue/Get an issue by Key	Generic	0	0	Administrator		PASS		...
	2	CALC-2913	Test Cases/Advance examples/api-2-issue/Edit issue/Edit an existing issue by Key	Generic	0	0	Administrator		PASS		...
	3	CALC-2912	Test Cases/Simple examples/api-2-issue/Create issue/Create a new issue	Generic	0	0	Administrator		PASS		...

In the Execution Details of the Generic Test, as the Context within the Results section, contains information about the full path of the Test Suite.

Calculator / Test Execution: CALC-2926 / Test: CALC-2908

Test Cases/Advance examples/api-2-issue/Get issue/Get an issue by Key



Export Test as Text

Return to Test Execution

Next

Execution Details

Test Description

None

Test Issue Links (1)

is cloned by CALC-2916 Test Cases/Advance examples/api-2-issue/Get issue/Get an issue by Key

OPEN

Test Details

Test Type: Generic

Definition: Test Cases/Advance examples/api-2-issue/Get issue/Get an issue by Key.Test Cases/Advance examples/api-2-issue/Get issue/Get an issue by Key

Results

Context	Error Message	Duration	Status
TestSuite Test Suites/Smoke Tests/Issue tests - Issue tests	-	-	PASS

References

- <https://www.katalon.com/>
- <https://docs.katalon.com/katalon-studio/docs/jenkins-integration.html>