

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

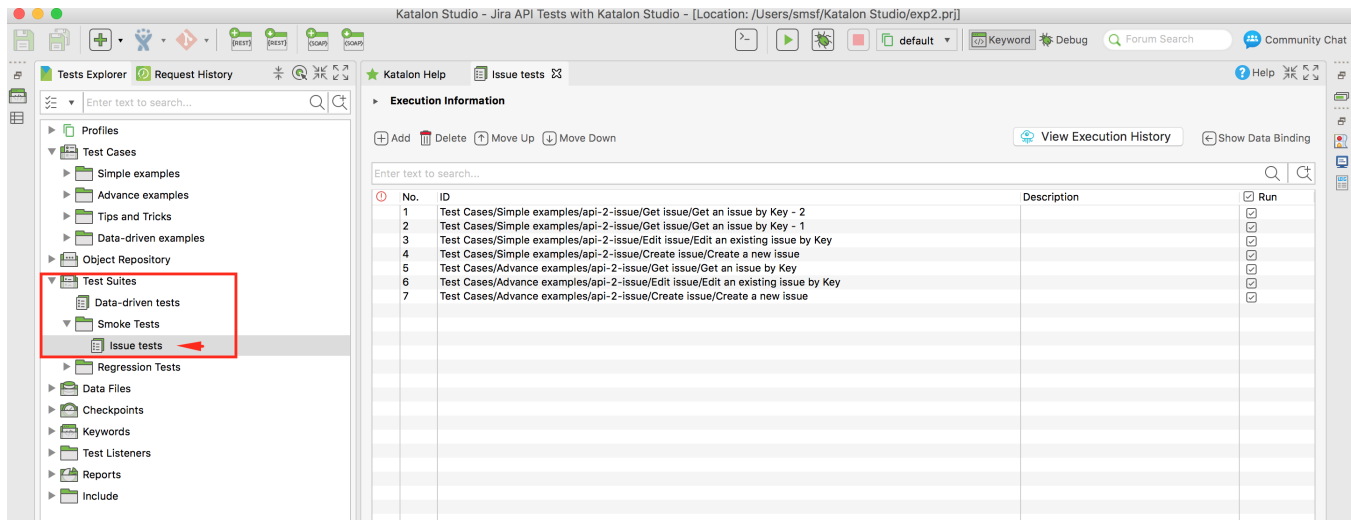
- Katalon Studio

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).

```
token=$(curl -H "Content-Type: application/json" -X POST --data @"cloud_auth.json" https://xray.cloud.getxray.
app/api/v2/authenticate| tr -d ' ')
curl -H "Content-Type: text/xml" -X POST -H "Authorization: Bearer $token" --data @"/tmp/JUnit_Report.xml"
https://xray.cloud.getxray.app/api/v2/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.

CALC-28001

Execution results [1540559569819]

Edit
Comment
Assign
To Do
In Progress
Done
Admin

Type: Test Execution Status: TO DO (View workflow)

Priority: Medium Resolution: Unresolved

Affects Version/s: None Fix Version/s: None

Labels: None

Sprint:

Description
Click to add description

Tests

Create Test
Add

Overall Execution Status TOTAL TESTS: 7

7 PASSED

Filters

10

Columns

Key	Summary	Test Type	Status	Actions
<a>CALC-28008	Test Cases/Simple examples/api-2-issue/Get issue/Get an issue by Key - 2	Generic	PASSED	<a> <a>...
<a>CALC-28005	Test Cases/Simple examples/api-2-issue/Get issue/Get an issue by Key - 1	Generic	PASSED	<a> <a>...
<a>CALC-28007	Test Cases/Simple examples/api-2-issue/Edit issue/Edit an existing issue by	Generic	PASSED	<a> <a>...

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.

Execution Status **PASSED**

Started On: 26/Oct/2018 2:12 PM

Finished On: 26/Oct/2018 2:12 PM

Assignee:

Unassigned

Executed By:
André Miguel Pereira Rodrigues

Test Environments: -

Versions: -

Revision: -

Comment

Preview comment

Execution Defects (0)

Add Defects

Create Defect

Execution Evidence (0)

Add Evidence

Execution Details

Test Description

None

Test Details

Test Type:

Generic

Definition:

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

Results

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

References

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