Testing using Cucumber in Ruby/JRuby

Overview

In this tutorial, we will create some tests in Cucumber for Ruby (or JRuby).

The test (specification) is initially created in Jira as a Cucumber Test and afterwards, it is exported using the UI or the REST API.

Requirements

- Install Ruby or JRuby
- Install the "cucumber" gem

Description

After creating a Cucumber Test, of Cucumber Type "Scenario Outline", in Jira, you can export the specification of the test to a Cucumber .feature file via the REST API or the **Export to Cucumber** UI action from within the Test Execution issue.

The created file will be similar to the following:

1_CALC-889.feature

```
@REQ_CALC-889
Feature: As a user, I can calculate the sum of 2 numbers

        @TEST_CALC-908 @UI @core
        Scenario Outline: Cucumber Test As a user, I can calculate the sum of 2 numbers
                                                    Given I have entered <input_1> into the calculator
                                                    And I have entered <input_2> into the calculator
                                                    When I press <button>
                                                    Then the result should be <output> on the screen


                                                  Examples:
                                                    | input_1 | input_2 | button | output |
                                                    | 20      | 30      | add    | 50     |
                                                    | 2       | 5       | add    | 7      |
                                                    | 0       | 40      | add    | 40     |
                                                    | 4       | 50      | add    | 54     |
```

After running the tests and generating the Cucumber JSON report (e.g., data.json), it can be imported to Xray via the REST API or the **Import Execution Results** action within the Test Execution.

```
cucumber -x -f json -o data.json
```

Please note

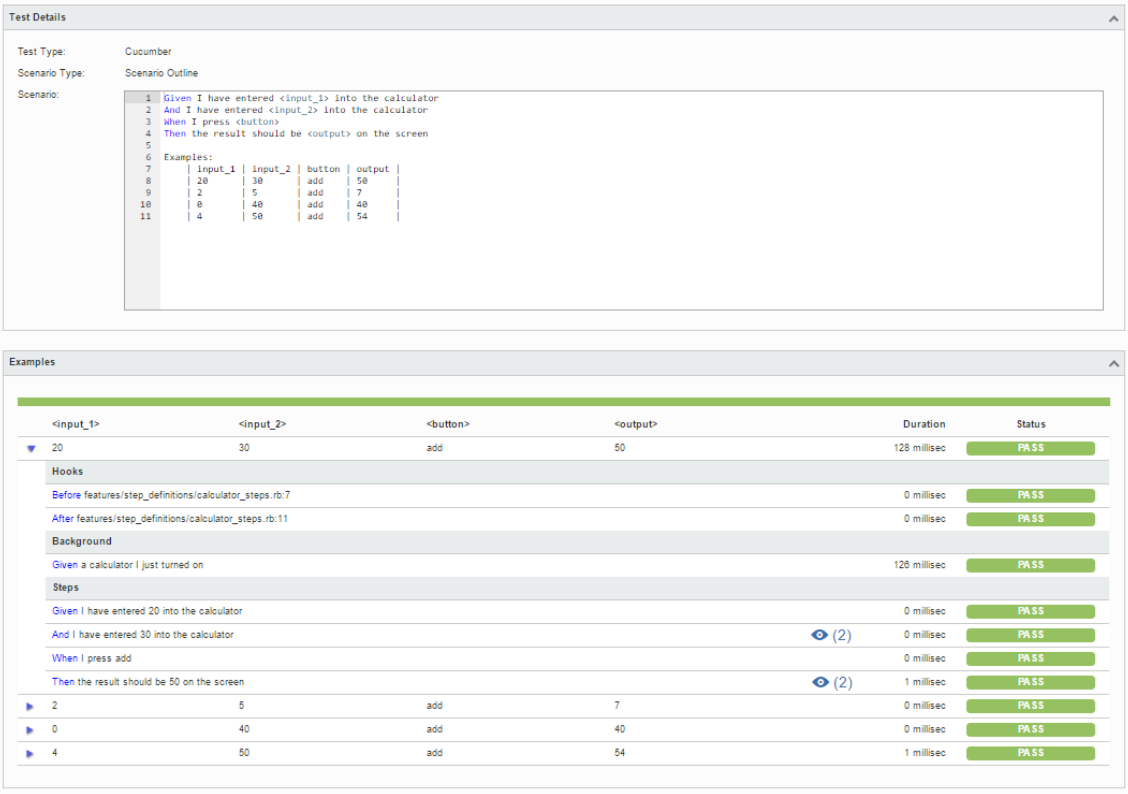
As the report format in Cucumber JSON is being deprecated in favour of Cucumber Messages, a protocol buffer based implementation, the previous command needs to be adapted slightly.

The report starts by being generated in Cucumber Messages, using "-f message" argument, and then converted to the legacy Cucumber JSON report using the tool cucumber-json-formatter.

```
cucumber -x -f message -o data.ndjson
cat data.ndjson | cucumber-json-formatter --format ndjson > data.json
```

The execution screen details will not only provide information on the test run result, but also of each of the examples provided in the Scenario Outline.

The Cucumber Scenarios Example/Result details (i.e., **Hooks, Backgrounds** and **Steps**) are only available for executions done in Xray v2.2.0 and above.



The icon (2) represents the evidences ("embeddings") for each **Hook, Background** and **Steps**, but is only available for executions done in Xray v2.3.0 and above.

Learn more

Please see Testing in BDD with Gherkin based frameworks (e.g. Cucumber) for an overview on how to use Cucumber Tests with Xray.

References

- https://cucumber.io/docs/reference/ruby
- Automated Tests (Import/Export)
- Exporting Cucumber Tests - REST