

# 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.

**Test Details**

Test Type: Cucumber

Scenario Type: Scenario Outline

Scenario:

```
1 Given I have entered <input_1> into the calculator
2 And I have entered <input_2> into the calculator
3 when I press <button>
4 Then the result should be <output> on the screen
5
6 Examples:
7   | input_1 | input_2 | button | output |
8   | 20      | 30      | add    | 50      |
9   | 2       | 5       | add    | 7       |
10  | 0       | 40      | add    | 40      |
11  | 4       | 50      | add    | 54      |
```

**Examples**

<input_1>	<input_2>	<button>	<output>	Duration	Status
20	30	add	50	128 millicec	PASS
<b>Hooks</b>					
Before features/step_definitions/calculator_steps.rb:7				0 millicec	PASS
After features/step_definitions/calculator_steps.rb:11				0 millicec	PASS
<b>Background</b>					
Given a calculator I just turned on				128 millicec	PASS
<b>Steps</b>					
Given I have entered 20 into the calculator				0 millicec	PASS
And I have entered 30 into the calculator				0 millicec	PASS
When I press add				0 millicec	PASS
Then the result should be 50 on the screen				1 millicec	PASS
2	5	add	7	0 millicec	PASS
0	40	add	40	0 millicec	PASS
4	50	add	54	1 millicec	PASS



The icon 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](#)