

Export Cucumber Features

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 - Case B: Test-C without requirement
 - Case C: TestSet/TestPlan/TestExec with 2 tests TEST-A, TEST-B

Cucumber .feature files can be exported from Xray and executed externally. They can be generated from the following Xray issues:

- Test
- Test Set
- Test Execution
- Test Plan

Or, from an Issue mapped as a Requirement issue type.

If the **language** defined to export the cucumber .feature files is not the default (i.e., En), then a language tag will be added.

Rules

Xray generates Cucumber .feature files according to the context issue and the following rules. The global setting "**Generate features by requirements**" affects how feature files are generated. If this setting is disabled, Xray will ignore the connection between Requirements and Tests.

Considering Requirements associated with Tests ("Generate features by requirements" setting is **enabled**)

Test

- A single Cucumber **feature** file is generated for each **requirement** associated with this Test.
- The feature contains the **feature header** description of the associated requirement, if present.
- The feature contains the **background** of the Test, if present in the Pre-Condition associated with it.
- The feature contains the **Scenario/Scenario Outline** defined in this Test.

Test Set, Test Execution, Test Plan or Requirement issue

- A single Cucumber **feature** file is generated for each different tuple (**Requirement, Pre-Condition**).
- A Test Execution does not contain repeated tests.
- If a Test is not associated with a requirement, then it will be exported as an independent feature file.
- If a Test is associated with more than one requirement, then a feature file will be generated for each requirement. The generated .feature files will contain repeated test scenarios.
- The feature contains the **feature header** description of the associated requirement, if present.
- The feature contains the common **background** of the Tests, if present in the Pre-Condition.
- The feature contains the **Scenario/Scenario Outline** for all the tests.

Ignoring Requirements associated with Tests ("Generate features by requirements" setting is **disabled**)

Test

- A single Cucumber **feature** file is generated for the Test.
- The feature contains the **background** of the Test, if present in the Pre-Condition associated with it.
- The feature contains the **Scenario/Scenario Outline** defined in this Test.

Test Set, Test Execution, Test Plan or Requirement issue

- A single Cucumber **feature** file is generated for each **Pre-Condition**. If there are some Test cases without Pre-Conditions that a **default** feature file will be generated.
- The feature contains the common **background** of the Tests, if present in the Pre-Condition.

- The feature contains the **Scenario/Scenario Outline** for all the tests.

Feature File Format

```
[ #language: { language } ]

[ @{ Test Execution issue Key } ]

[ @{ Requirement issue Key } ]
Feature: [{ Requirement Issue Summary }]
        [{ Requirement Issue Description }]

        [Background:
          { Pre-Conditions }]

        [# { Test Issue Description }]
        @{ Test Issue Key }
        [{ SubRequirement Issue Key 1 } ... @{ SubRequirement Issue Key N }]
        [{ Test Set Issue Key 1 } ... @{ Test Set Issue Key N }]
        [{ Test Issue Label 1 } ... @{ Test Issue Label N}]
        Scenario [Outline]: { Test Issue Summary }
          {Test Issue Steps}
        ...
```

Feature File Naming Convention

```
<sequential_id_one_based>[_<issue_requirement_key>][_<issue_precondition_key>]
```

Example

Exporting a Test Execution with the following Tests:

Key	Requirement	Pre-Condition
T1	R1	C1
T2	R1	-
T3	-	C2
T4	R2	C1
T5	R2	C3
T6	-	-
T7	R2, R3	C1
T8	R2, R3	-
T9	-	C2
T10	R1	C1

generates the following **9** feature files when the "**Generate features by requirements**" setting is **enabled**:

File	Requirements	Pre-Condition	Tests	Filename
1	R1	C1	T1, T10	1_R1_C1.feature
2	R1	-	T2	2_R1.feature

3	R2	C1	T4, T7	3_R2_C1.feature
4	R2	C3	T5	4_R2_C3.feature
5	R2	-	T8	5_R2.feature
6	R3	-	T8	6_R3.feature
7	R3	C1	T7	7_R3_C1.feature
8	-	C2	T3, T9	8_C2.feature
9	-	-	T6	9.feature

and will also generate the following feature files when the "Generate features by requirements" setting is **disabled**:

File	Pre-Condition	Tests	Filename
1	C1	T1, T4, T7, T10	1_C1.feature
2	C2	T3, T9	2_C2.feature
3	C3	T5	3_C3.feature
4	-	T2, T6, T8	4.feature

Feature Name

The 'feature name' can be defined in the Xray miscellaneous, and we have the option to choose from the following:

- Requirement Summary (default)
- Requirement Key
- Test Summary
- Test Key

Examples:

Case A: Requirement REQ-A with tests TEST-A, and TEST-B, and REQ-B with test TEST-A

Case B: Test-C without requirement

Case C: TestSet/TestPlan/TestExec with 2 tests TEST-A, TEST-B

Expected results when the "Generate features by requirements" setting is **enabled**:

	Case A From Requirement	Case A From Test A	Case B	Case C from TestSet/TestPlan/TestExec
Requirement Key	Requirement Key in each req file	Respective requirement key in each req file	DEFAULT	Respective requirement key in each req file
Requirement Summary	Requirement Summary in each req file	Respective requirement summary in each req file	DEFAULT	Respective requirement summary in each req file
Test Key	All respective test keys in each req file	Test Key in each req file	TEST-C Key	All respective test keys in each req file
Test Summary	All respective test summaries in each req file	Test Summary in each req file	TEST-C Summary	All respective test summaries in each req file
Old versions	Requirement Summary in each req file	Requirement Summary in each req file	DEFAULT	Respective requirement summary in each req file

Expected results when the "Generate features by requirements" setting is **disabled**:

	Case A From Requirement	Case A From Test A	Test A/Test Run	Case B	Case C from TestSet/TestPlan/TestExec
Requirement Key	REQ-A Key	REQ-A, REQ-B Keys	REQ-A, REQ-B Keys	DEFAULT	REQ-A, REQ-B Keys
Requirement Summary	REQ-A Summary	REQ-A, REQ-B Summaries	REQ-A, REQ-B Summaries	DEFAULT	REQ-A, REQ-B Summaries

Test Key	TEST-A, TEST-B Keys	TEST-A Key	TEST-A Key	TEST-C Key	TEST-A, TEST-B Keys
Test Summary	TEST-A, TEST-B Summaries	TEST-A Summary	TEST-A Summary	TEST-C Summary	TEST-A, TEST-B Summaries
Old versions	DEFAULT	DEFAULT	DEFAULT	DEFAULT	DEFAULT