# **Working with Test Environments**

"Test Environment" is a concept introduced in Xray v2.

Here is a short video which explains Test Environments and how you can use them.

#### Overview

(i)

The status of a Test (i.e., TestRunStatus) is generally calculated by looking at the Test's last execution (more detail here). However, this does not work well if you execute the same Test in two different test environments (e.g., devices) and you want the two results to be consolidated.

Within a Test Execution, you may specify the **Test Environment**(s) where the tests will be executed in the respective attribute. A Test Environment is similar to a label, but Xray has special logic to deal with it.

If you use Test Environments, you may reuse the same Test for multiple test environments and create Test Executions for each one. If you don't use Test Environments and you want to track tests for multiple environments (e.g., devices), then the only way to do it is to create multiple tests, one per each test environment.

Let's say that you have executions for two Test Environments: "Android" and "iOS". The test is considered as PASS only if the **latest** executions for Android and iOS are **both** PASS; otherwise, it will be FAIL.



Note: If you don't use Test Environments, then the TestRunStatus is calculated as usual.

If you start using Test Environments in your Test Executions, then it's not only your test status calculation that will change. All custom fields that depend on it (e.g., Requirement status, Test Sets status) will change. Consequently, the requirement coverage calculation and all associated charts/gadgets are also affected.

### How it works

(i)

Let's say we have a Test being executed two times. We will start by creating Test Executions TE1 and TE2.

TE2 will be executed after TE1, so TE1 is considered older.

Below are example scenarios and shows how the TestRunStatus is calculated in each.

If you have a mix of Test Executions (i.e., with and without Test Environment as in scenario D), it wil be treated the same way as scenarios A, B and C.

Scenario	Test Environment(s) of TE 1	Test Environment(s) of TE 2	Test run status in TE1	Test run status in TE2	Calculated value of "TestRunStatus" custom field
Α	Android	iOS	PASS	PASS	PASS
В	iOS	iOS	PASS	FAIL	FAIL
С	iOS	iOS	FAIL	PASS	PASS

D	iOS	-	FAIL	PASS	FAIL
E	-	-	PASS	FAIL	FAIL
F	-	-	FAIL	PASS	PASS

## Example

When creating a Test Execution, you must set the Test Environment in which the execution will be executed. You can use this field as a simple label: just add the environment or reuse a previously created one.

Create Issue		袋 Config
Project	See Test New Xray Mobile Game	
Issue Type	Test Execution 👻 🕐	
General Test E	xecution Details	
Begin Date		
	The planned start date	
End Date	Ē	
	The planned end date	
Revision		
	The system revision for the test execution	
Test Environments	Android ×	Ψ.
	Begin typing to find and create labels or press down to select a suggested lab	el.

#### Test Execution for "Android" Test Environment

Edit Issue : TNX	MG-2		Configure Fields -
General Test Ex	ecution Details		
Begin Date		Ø	
	The planned start date		
End Date		Ω.	
	The planned end date		
Revision			
	The system revision for th	test execution	
Test Environments	IOS ×		×
	<b>R</b> 1 - 21 2 - <b>R</b> - 2 2 -		

Test Execution for "iOS" Test Environment

The Test Environments column is shown in your Test Runs table so you can distinguish each execution of the Test between the different environments.

Details					
Type:	Test		Status:	OPEN (View Workflow)	
Priority:	↑ Medium		Resolution:	Unresolved	
Labels:	None				
> Test Details					
Pre-Condition					
> Test Sets					
Test Runs					
				Exec	cute In 👻
FILTERS					
Project	Version	Status	Start	End	
All Projects	*	<ul> <li>All Statuses</li> </ul>	<ul> <li>DD-MM-YY</li> </ul>	YY HH:MM DD-MM-YYYY HH:M	X Clear
Show 10 😒 e	ntries				Columns -
¢ <sup>Key</sup> ¢	Executed by Started	Finished $_{\varphi}$ Defe	cts	s 🕀 Status	
TNXMG- 1 add	min Today 7:07 PM	Today 7:07 PM	Android	FAIL	►
TNXMG- 2 add	min Today 7:07 PM	Today 7:13 PM	IOS	PASS	►
Showing 1 to 2 of	f 2 entries			First Previous	Next Last
Issue Links					+
tests	TNXN	G-3 As a user I can see	the main menu	OPEN	

The same Test has been executed in both Test Environments (a Test Execution per Test Environment).

The Requirement Status will show  $\ensuremath{\text{NOK}}$  because the Test has failed for one of the environments.

P As	t New Xray Mobil S a user I c	e Game / Can see	TNXMG-3 e the m	ain menu				
🖋 Edit	□ Comment	Assign	More +	Start Progress	Resolve Issue	Close Issue	Admin +	
Details								
Type:		Story		ş	Status:	OPEN (V	iew Workflow)	
Priority:	<b>↑</b>	Medium		F	Resolution:	Unresolve	d	
Labels:	Nor	ne						
Requiremen	nt Status:	N	ок					
Description								
Click to add	I description							
Attachments								
			G.	) Drop files to atta	ich, or browse.			
Issue Links								
tested by		O TNX	MG-4 Test -	As a user I can se	e the main menu		↑ OPEN	

# Tips

- Use Test Environments only if want to run the same Test on different environments.
  If you do use it, then assign just one Test Environment per Test Execution.
  You may filter using Test Environments in your Test Executions panel to see how the executions are doing, per environment.

#### Learn more (1)

For advanced Test Environment management capabilities, please check our Integration with Apwide Golive.