# **Enhanced querying with JQL**

- JQL Functions Custom Fields

## JQL Functions

The following JQL functions are available for querying Xray issues in the Issue Search Page. They enable you to query the relationships between Xray

JQL Function	Parameters	Description	Example	
testTestSet	P1 - Test Issue Key	Returns a list of Test Set issues associated with the input Test issue key.	<pre>issuetype = 'Test Set'   and key in testTestSet('DEMO-1')</pre>	
testSetTests	P1 - Test Set Issue Key /Filter of Test Sets	Returns a list of Test issues associated with the input Test Set issue key.	<pre>(1) issuetype = 'Test' and key in testSetTests('DEMO 5') (2) issuetype = 'Test'    and key in testSetTests('Test sets saved filter')</pre>	
testsWithN oTestSet	P1 - Saved filter Name/ID	Returns a list of Test issues not associated with a Test Set.	<pre>(1) issue in testsWithNoTestSet() (2) issue in testsWithNoTestSet("saved_filter")</pre>	
testPreCon ditions	P1 - Test Issue Key	Returns the Pre-Condition issues associated with the input Test issue key.	<pre>issuetype = 'Pre-Condition'   and key in testPreConditions('DEMO-1')</pre>	
preConditi onTests	P1 - Pre- Condition Issue Key	Returns the Test issues associated with the input Pre-Condition issue key.	<pre>issuetype = 'Test'   and key in preConditionTests('DEMO-1')</pre>	
testRequire ments	P1 - Test Issue Key /Filter name of Tests	Returns a list of Requirement issues associated with the input Test issue key/Filter of tests.	<pre>(1) issuetype = 'Feature' and key in testRequirements('DEMO-1')  (2) issuetype = 'Feature' and key in testRequirements('Tests saved filter')</pre>	
requiremen tTests	P1 - Requirement Issue Key /Filter of Requirement Issues	Returns a list of Test issues associated with the input Requirement issue key or saved filter with Requirements.	<pre>(1) issuetype = 'Test'   and key in requirementTests('DEMO-10') (2) issuetype = 'Test'   and key in requirementTests('Requirements saved filter')</pre>	

testsWithR eqVersion	P1 - Project Name/Key/ld P2 - Fix Version P3 - Fix Version (Optional)  Pn - Fix Version (Optional)	Returns a list of Test issues associated with the Requirement issues of the input Fix Versions of the specified project.	<pre>issuetype = 'Test' and issue in testsWithReqVersion('DEMO',</pre>
testsWithT estSetVersi on	P1 - Project Name/Key/ld P2 - Fix Version P3 - Fix Version (Optional) Pn - Fix Version (Optional)	Returns a List of Test issues associated with the Test Set issues of the input Fix Versions of the specified project.	<pre>issuetype = 'Test' and issue in   testsWithTestSetVersion( 'DEMO',</pre>

testExecuti onTests	P1 - Test Execution Issue Key/Id or Filter ID  P2 - Test Run Status list separated by " "(pipe) (Optio nal)  P3 - User assigned to execute Test Run (Optional).  P4 - Defects	Parameter P1 can either be a single Test Execution issue key, an ID or a saved filter containing multiple Test Execution issues.  Possible Test Run Status values are: PASS, FAIL, EXECUTING, ABORTED, TODO and all custom statuses.  P3 corresponds to the user assigned to execute the Test Run, while P5 corresponds to the one who actually executed it. For analyzing the joint values of all Test Run Assignees, "" should be used. For taking into account the Test Runs without any Assignee, then "NULL" should be used.  If you pass true as the value for P4, the query returns all Tests	<pre>(1) issuetype = 'Test'    and issue in testExecutionTests('DEMO-9')  (2) issuetype = 'Test'    and issue in testExecutionTests('DEMO-9',</pre>	
	Flag with value in true or false (optional).	created.	'PASS',	
	P5 - User who executed the Test Run (optional).		(4) issuetype = 'Test'	
			and issue in testExecutionTests(  'Saved Test Execution  Filter',	
			'PASS')	
			issuetype = 'Test'	
			and issue in testExecutionTests(	
			'Saved Test Execution Filter',	
			'', 'user A')	
			(6)	
			issue in testExecutionTests(	
			'Saved Test Execution Filter',	
			117	
			'user A', 'true')	
			(7)	
			issue in testExecutionTests(	
			'Saved Test Execution Filter',	
			'','', 'false', 'admin')	
testsWitho utTestExec ution	P1 - Saved filter Name/ID	Returns a list of Tests that are not associated with a Test Execution to be executed	<pre>(1) issuetype = Test and issue in testsWithoutTestExecution()</pre>	
			<pre>issuetype = Test and issue in testsWithoutTestExecution("saved_filter")</pre>	

#### requiremen ts

P1 - Status list separated by "|"(pipe)

P2 - Project (Optional)

P3 - Version to calculate requirement status (Optional)

P4 - Test Environment (Optional)

P5 -Flat (Optional)

P6 -ToDate (Optio nal)

P7 - Saved Filter (Optional) Returns a list of Requirement Issues with the provided coverage status

Please provide *Project* parameter (P2) to restrict the requirements to the specified project.

If analyzing on a specific version, then the *Project and Version* para meters must be filled.

#### Optional filters include:

Test Environment, for taking into account the Test Executions made for that environment. For analyzing the joint values of all environments, "" should be used. For taking into account the Test Executions without any Test Environment assigned, then "\_\_NULL\_\_" should be used.

Flat that indicates whether all Requirements (not only parents) should be searched. If "Flat" is not provided, the default value is 'false'.

ToDate considers only those requirements executions before a specific date/time (the date literal must follow the ISO8601 format).

Saved Filters considers only requirements from that specific filter.

(1)

issue in requirements('OK','Calculator')



#### Please note

Although optional, it is highly recommended to specify the *Project* parameter as means to define the project having the requirments and thus reduce the amount of issues that will be processed/returned. Otherwise, requirements from *all* JIRA projects will be processed, which possibly is something that you don't want or need at all.

```
(2)
priority = Major and fixVersion <= 'v3.0' and
   issue in requirements('NOK', 'Calculator', 'V4.
0')
(3)
issue in
   requirements('NOK', '', '', '', '', '2014-01-
01')
(4)
issue in
   requirements('OK',
              'Calculator',
              'v1.0',
              'chrome'
              'false'
              '2014-08-30')
(5)
issue in
   requirements('NOK',
              'Calculator',
              'v2.0',
              'true')
(6)
issue in
    requirements('NOK',
                  'Calculator',
                  'v2.0',
'chrome',
                  'false',
                  'Requirements saved filter')
```

eparated by    "(pipe)			
(bibe)	calculated for the given Test Plan issue.	issue in	
P2 - Test Plan ssue Key	Optional filters include:	requirementsWithStatusByTestPlan( 123')	'OK', 'TP-
P3 - Test Environment Optional)	Test Environment, for taking into account the Test Executions made for that environment. For analyzing the joint values of all environments, "" should be used. For taking into account the Test	issue in	
P4 -	Executions without any Test Environment assigned, then "NULL" should be used.	requirementsWithStatusByTestPlan(	'NOK',
Flat (Optional)	Flat that indicates whether all Requirements (not only parents)		TP-123',
P5 - FoDate (Optio nal)	should be searched. If "Flat" is not provided, the default value is 'false'.		', true')
P6 - Project	ToDate considers only those requirements executions before a specific date/time (the date literal must follow the ISO8601 format).	(3)	crue
	Project and Saved Filters considers only requirements from that	issue in	
-ilter	specific project of filter.	requirementsWithStatusByTestPlan(	'NOK',
Ориопаі)			TP-123',
		٠.	Android',
			false',
			2014-01-01')
		(4)	
		requirementsWithStatusByTestPlan(	'NOK', 'TP-123', 'Android', 'false',
			'Calculator',
		'Requirements saved filter')	
P1 - Test	Return a list of defects created during the execution of the	(1)	
Filter of Test	specified Tests.	issue in defectsCreatedDuringTesting()	
ssues		(2)	
		issue in defectsCreatedDuringTesting(	"TEST-123")
		(3)	
		<pre>issue in defectsCreatedDuringTesting ("saved_filter")</pre>	
P1 - Test	Returns a list of Defects created during the execution of the	(1) issue in	
ssue Key or	specified Test Executions; can optionally be filtered by the Defect Issue Assignee username.	defectsCreatedDuringTestExecution(	TEST-123)
Test Execution		(2) issue in	
		defectsCreatedDuringTestExecution(	saved_filter)
P2 - List of users		(3) issue in	
separated by ' " (pipe). 'Ontional)		<pre>defectsCreatedDuringTestExecution (saved_filter, 'user1 user2')</pre>	
-puonal)		(4) issue in	
		<pre>defectsCreatedDuringTestExecution(' 'user1 user2')</pre>	TEST-123,
21 -	Returns a list of defects created during the execution of Tests	(1)	
Requirement key or saved filter	covering the specified requirements.	issue in defectsCreatedForRequirement	("REQ-123")
		(2)	~ - /
		issue in defectsCreatedForRequirement ("saved_filter")	
	3 - Test invironment Optional) 4 - Islat (Optional) 5 - SoDate (Optional) 6 - Project Optional) 7 - Saved ilter Optional) 1 - Test sue Key ciliter of Test sue Key ciliter of Test sues 1 - Test sues 1 - Test sues 1 - Test sues 1 - Test sue Key ciliter of Test sues 1 - Test sues 2 - List of sues 2 - List of sues 2 - List of sues 3 - List of sues 4 - List of s	Test Environment, for taking into account the Test Executions made for that environment. For analyzing the joint values of all environments "" should be used. For taking into account the Test Executions without any Test Environment assigned, then "NULL" should be used.  Flat that indicates whether all Requirements (not only parents) should be searched. If "Flat" is not provided, the default value is 'lalse'.  ToDate considers only those requirements executions before a specific date/time (the date literal must follow the ISO8601 format).  Project and Saved Filters considers only requirements from that specific project or filter.  Return a list of defects created during the execution of the specified Tests.  Returns a list of Defects created during the execution of the specified Test Executions; can optionally be filtered by the Defect Issue Key or sat wecution ased Filter  2 - List of Sers spearated by (loipe). Optional)  Returns a list of defects created during the execution of Tests covering the specified requirement equirement alist of defects created during the execution of Tests covering the specified requirements.	Tast Emioroment for taking into account the Test Executions made for that environment. For analyzing the joint values of all environments and for that environment assignad, then Should produced by the Contingents of the test Executions without any Test Environment assignad, then Should produced by the Contingents of the test Executions without any Test Environment assignad, then Should be searched. If "Flar" is not provided, the default value is talse".    To Date considers only those requirements executions before a specific distribute the date literal must follow the ISC-Beoti formal).   Project and Saved Filters considers only requirements from that specific project or filter.    Total specific distribute the date literal must follow the ISC-Beoti formal).   Project and Saved Filters considers only requirements from that specific project or filter.    Total specific of Tests.   Return a list of defects created during the execution of the specified Tests.   (1)

manualTes tsWithoutS	P1 - Saved filter Name/ID	Returns a list of manual tests that have no test steps.	(1)
teps			issue in manualTestsWithoutSteps()
			(2)
			<pre>issue in manualTestsWithoutSteps("saved_filter")</pre>
testTestEx ecutions	P1 - Test Issue Key/Id	Returns a list of test executions associated with the input Test Issues from P1 optionally filtered by the current Test status in each	(1)
ccutions	or Filter Name	Test Execution issue.	issuetype = 'Test Execution'
		Parameter P1 can either be a single Test issue key or ld or a	and issue in testTestExecutions('DEMO-9')
	P2 - Test Run Status list		(2)
	separated by " "(pipe) (Optio	Possible Test Run Status values are: PASS, FAIL, EXECUTING, ABORTED, TODO and all custom statuses.	issuetype = 'Test Execution'
	nal)		and issue in testTestExecutions('DEMO-9',
			'PASS')
			(3)
			issuetype = 'Test Execution'
			and issue in testTestExecutions(
			'Saved Test Filter',
			'PASS')
testExecWi thTestRuns	P1 - Username (Optional) P2 - Status (Optional) Username is required in case we use this parameter	Returns a list of test executions where a user has at least one test run assigned to him. You can optionally specify a user with P1, or	(1)
AssignedT oUser		if the user is omitted the current user will be used. Note that if you are not logged in to JIRA, a user must be specified.  If you use status parameter then user is required	issuetype = 'Test Execution' and
			issue in testExecWithTestRunsAssignedToUser()
		,	(2)
			issuetype = 'Test Execution' and
			issue in testExecWithTestRunsAssignedToUser ('userDPC')
			(3)
			issuetype = 'Test Execution' and
			issue in testExecWithTestRunsAssignedToUser ('userDPC', "FAIL")
			, , ,
testSetPa rtiallyIn	P1 - Test Execution	Return a list of Test Sets that have at least one test in P1.	(1)
-	Issue Key /Test Plan Issue Key/Id		issuetype = 'Test Set' and
			issue in testSetPartiallyIn('DEMO-15')
	or Filter Id		(2)
			issuetype = 'Test Set' and
			issue in testSetPartiallyIn('testExecList')
			(3)
			issuetype = 'Test Set' and
			issue in testSetPartiallyIn('testPlanList')

testSetFu	P1 - Test	Return a list of Test Sets that have all its tests in P1.	(1)
llyIn	Execution Issue Key		issuetype = 'Test Set' and
	/Test Plan Issue Key/Id		issue in testSetFullyIn('DEMO-15')
	or Filter Id		(2)
			issuetype = 'Test Set' and
			issue in testSetFullyIn('testExecList')
			(3)
			issuetype = 'Test Set' and
			issue in testSetFullyIn('testPlanList')
testPlanTe sts	P1 - Test Plan Key/Filter of	Returns a list of tests that are associated with the test plan.	(1)
	Test Plans	The "status" parameter is optional and allows to filter Test issues in a specific Plan with the specified execution status. If the "status"	issue in testPlanTests("DEMO-10")
	P2 - Status (Option	parameter is present, users might also pass the "environment" parameter. If this parameter is filled, Xray will provide all Tests in a	(2)
	al)	Test Plan that are in the specified "status" and for the specified "environment".	issue in testPlanTests("Test Plans saved filter"," TODO")
	P3 - Environment (		(3)
	Optional)		issue in testPlanTests("DEMO-10","TODO")
			(4)
			issue in testPlanTests("DEMO-10","TODO","IOS")
			When searching for Tests with a certain status inside a Test Plan, we recommend you to use the custom field search instead.
			Xray has created a new way of searching with big improvements when filtering by test status, using the Custom Fields: (3)
			issuetype = Test and TestRunStatus = "DEMO-10 - TODO" (4)
			issuetype = Test and TestRunStatus = "DEMO-10 - TODO environment:IOS"
testPlanTe	P1 - Test Plan	Returns a list of test executions that are associated with a Test	(1)
stExecutio ns	Key/Filter of Test Plans	Plan or a saved filter of Test Plans.	issue in testPlanTestExecutions("DEMO-10")
			(2)
			issue in testPlanTestExecutions("Test Plans saved filter")
testPlanRe	P1 - Test Plan Key/Filter of	Returns the Requirement issues that are indirectly associated, through Test issues, with a Test Plan or a saved filter of Test Plans.	(1)
quirements	Test Plans	unough rest issues, with a rest right of a saveu liner of rest rights.	issue in testPlanRequirements("DEMO-20")
			(2)
			issue in testPlanRequirements("Test Plans saved filter")
testTestPlan	P1 - Test Issue Key	Returns a List of Test Plan issues associated with the input Test issue key.	issuetype = 'Test Plan'
			and key in testTestPlan('DEMO-1')

testReposit oryFolderT ests	P1 - Project Key P2 - Folder Path P3 - Flatten (Optional)	Returns the list of Tests contained in a folder (P2) of the Test Repository of a Project (P1)  May optionally include the Tests in sub-folders by setting Flatten (P3) to "true".	<ul> <li>(1)</li> <li>issue in testRepositoryFolderTests("CALC", 'Parent/Child')</li> <li>(2)</li> <li>issue in testRepositoryFolderTests("CALC", 'Parent/Child', "true")</li> </ul>
testPlanFol derTests	P1 - Test Plan Key P2 - Folder Path P3 - Flatten (Optional) P4 - Test Run Status (Optional) P5 - Test Environment (Optional)	Returns the list of Tests contained in a folder (P2) of a Test Plan (P1).  May optionally include the Tests in sub-folders by setting Flatten (P3) to "true".  Can also filter by Tests Run Status (P4) for a given Test Environment (P5).  To analyze the joint values of all Test Environments, "" should be used. To analyze the Test Executions without any Test Environment assigned, then "NULL" should be used.	(1) issue in testPlanFolderTests(CALC-10, 'Parent/Child') (2) issue in testPlanFolderTests(CALC-10, 'Parent/Child', "true") (3) issue in testPlanFolderTests(CALC-10, 'Parent/Child', "true", "TODO FAIL", "windows")
projectPare ntRequire ments	P1 - Project Key	Returns the list of Requirement issues, from a given Project, which are not Sub-requirements	(1) issue in projectParentRequirements("CALC")

## **Custom Fields**

Xray also provides custom fields to allow more refined queries when searching for issues.

JQL Function	Issue Type	Description	Example
Test Type	Test	The Test type: Manual; Cucumber; Generic	issuetype = 'Test'
			and "Test Type" = "Manual"

### TestRunSt Test This is a calculated custom field that provides the latest Test Run status based on the current "Test issuetype = 'Test' atus Run Status Version Strategy" option configured in the Xray administration. and TestRunStatus in ("FAIL", "ABORTED") <u>Syntax</u>: TestRunStatus = "[Group (version or TestPlan)] - [Status] environment:[environment]" issuetype = 'Test' Only the Status is mandatory; if only the status is provided, Xray will assume you are searching for the and TestRunStatus = "PASS" Xray will lookup for all Tests with Status in that particular version and environment. Read more about Status and environments. issuetype = 'Test' and TestRunStatus = Test Run Status (ii) "TESTPLAN-123 - PASS" The latest Test Run Status is calculated based on the latest final Test Run (i.e., latest finish date) or, in case there are no final Test Runs, the latest non-final Test Run (i.e., latest start date). Please see the custom fields preferences page. issuetype = 'Test' and TestRunStatus = "FAIL environment: Android" issuetype = 'Test' and TestRunStatus = "v3.0 - PASS environment: Android" issuetype = 'Test' and TestRunStatus = "TESTPLAN-123 - PASS environment:Android" issuetype = 'Test' and TestRunStatus is EMPTY Requireme Require This is a calculated custom field that provides the requirement coverage status. issuetype = 'New Feature' nt Status ment and "Requirement Status" = "OK" Possible status values are: OK - All tests passed the requirement NOK - At least one test failed issuetype = 'New Feature' NOTRUN - At least one test did not run and "Requirement Status" in ("NOTRUN", UNCOVERED - The requirements is not associated with tests "UNCOVERED") testTestExecutions issuetype = 'New Feature' Syntax: "Requirement Status" = "[Group (version or TestPlan)] - [Status] environment:[environment]" and "Requirement Status" = "v1.0 - OK" Only the Status is mandatory; if only the status is provided, Xray will assume you are searching for the latest execution issuetype = 'New Feature' Xray will lookup for all Requirements with Status in that particular version and environment. and "Requirement Status" = "v1.0 - OK Read more about Status and environments. environment:Android" Requirement Coverage

For more information, please check out our page dedicated to requirements coverage.

If the Requirements Coverage Strategy depends on the version, then you must also include the actual version name and the status when you do the search. The syntax: "[version]

name] - [status]"

Steps Count	Test	The number of Steps in a Manual Test	issuetype = 'Test' and "Steps Count" = 3
Manual Test Steps	Test	Find Tests by text present in the Manual Test Steps fields	issuetype = 'Test'  and "Manual Test Steps" ~ "Login with user administrator"



The Test Set Status and Test Plan Status custom fields, mentioned in Custom Fields, are not queryable.