# **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 issue types.

#### testExecutionTests

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')  (1) issue in testsWithNoTestSet() (2) issue in testsWithNoTestSet("saved_filter")  issuetype = 'Pre-Condition'     and key in testPreConditions('DEMO-1')</pre>	
testsWithN oTestSet	P1 - Saved filter Name/ID	Returns a list of Test issues not associated with a Test Set.		
testPreCon ditions	P1 - Test Issue Key	Returns the Pre-Condition issues associated with the input Test issue key.		
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	P1 - Project Name/Key/Id	Returns a list of Test issues associated with the Requirement	issuetype = 'Test'	
eqVersion	P2 - Fix Version	issues of the input Fix Versions of the specified project.	and issue in	
	P3 - Fix Version		testsWithReqVersion('DEMO',	
	(Optional)		'v1.0', 'v1.1')	
	Pn - Fix Version (Optional)			
testsWithT	P1 - Project Name/Key/Id	Returns a List of Test issues associated with the Test Set	issuetype = 'Test'	
estSetVersi on	P2 - Fix Version	issues of the input Fix Versions of the specified project.	and issue in	
	P3 - Fix Version		testsWithTestSetVersion( 'DEMO',	
	(Optional)			
			'v1.0', 'v1.1')	
	Pn - Fix Version			
	(Optional)			
testExecuti onTests	P1 - Test Execution Issue Key/Id or Filter ID	Returns a List of Test issues associated with the input Test Execution issues from <i>P1</i> optionally filtered by the current	(1)	
	P2 - Test Run Status list	test run status for each Test issue.	issuetype = 'Test'	
	separated by " "(pipe) (Op	Parameter P1 can either be a single Test Execution issue key, an ID or a saved filter containing multiple Test Execution	and issue in testExecutionTests('DEMO-9')	
	tional)	issues.	(2)	
	P3 - User assigned to execute Test Run	Possible Test Run Status values are: PASS, FAIL,	issuetype = 'Test'	
	(Optional).	EXECUTING, ABORTED, TODO and all custom statuses.	and issue in testExecutionTests('DEMO-9',	
	P4 - Defects Flag with value in true or false (nee	P3 corresponds to the user assigned to execute the Test Run, while P5 corresponds to the one who actually executed	'PASS')	
	ds to be <b>true</b> or <b>false</b> ).	it. For analyzing the joint values of all Test Run Assignees, ""	(3)	
	P5 - User who executed	should be used. For taking into account the Test Runs without any Assignee, then "NULL" should be used.	issuetype = 'Test'	
	the Test Run (optional).	If you pass true as the value for P4, the query returns all		
	P6 - Existence of comments (Optional)	Tests from a particular set of Test Executions where no Defects were created.	and issue in testExecutionTests('DEMO-9',	
		beledis were created.	'PASS',	
	P7 - Existence of evidences (Optional)		'user A')	
	P8 - Started from		(4)	
	(symbols >/< are read as bigger, exactly/smaller or		issuetype = 'Test'	
	exactly, respectively; the = sign or the full absense		and issue in testExecutionTests(	
	of signs is read as exactly		'Saved Test Execution Filter',	
	)			
	P9 - Finished on (symbols >/< are read as bigger,		'PASS')	
	exactly/smaller or exactly, respectively; the = sign o		(5)	
	r the full absense of signs		issuetype = 'Test'	
	is read as exactly)		and issue in testExecutionTests(	
			'Saved Test Execution Filter',	
			,	
			'user A')	
			(6)	
			issue in testExecutionTests(	
			'Saved Test Execution Filter',	
			,	
			'user A', 'true')	
			(7)	
			issue in testExecutionTests(	
			'Saved Test Execution Filter',	

				",", 'false', 'admin')
			(8)	
			issuetype = 'Test'	
			and issue in testExecutionTes	`
				'CALC-397',
				",
				",
				'false',
				",
				'true',
				'false',
				'>2016-05-31',
				'<2016-06-30')
testsWitho	P1 - Saved filter Name/ID	Returns a list of Tests that are not associated with a Test	(1)	
utTestExec ution		Execution to be executed	<pre>issuetype = Test and issue : testsWithoutTestExecution()</pre>	in
			(2)	
			<pre>issuetype = Test and issue : testsWithoutTestExecution(";</pre>	

## requiremen

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 (Optional)

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 Versio n parameters 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')
```

requiremen tsWithStat	P1 - Status list separated by " "(pipe)	Returns a list of Requirement Issues with the coverage status calculated for the given Test Plan issue.	(1) issue in	
usByTestPl an	P2 - Test Plan Issue Key			
	P3 - Test Environment (Optional) P4 - Flat (Optional) P5 - ToDate (Optional)	Optional filters include:	requirementsWithStatusByTestPlan('OK', 'TP-123')	
		Test Environment, for taking into account the Test	(2)	
		Executions made for that environment. For analyzing the joint values of all environments, "" should be used. For taking into	issue in	
		account the Test Executions without any Test Environment assigned, then "NULL" should be used.	requirementsWithStatusByTestPlan('NOK',	
	P6 - Project (Optional)	Flat that indicates whether all Requirements (not only	'TP-123',	
	P7 - Saved Filter (Optional)	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).	'true')	
		Project and Saved Filters considers only requirements from	issue in	
		that specific project or filter.	requirementsWithStatusByTestPlan('NOK',	
			'TP-123',	
			'Android',	
			'false',	
			'2014-01-	
			01')	
			<pre>(4) issue in     requirementsWithStatusByTestPlan('NOK',</pre>	
			'TP-123',	
			'Android', 'false',	
			'Calculator',	
			'Requirements saved filter')	
defectsCre atedDuring	P1 - Test Issue Key/Filter of Test Issues	Return a list of defects created during the execution of the specified Tests.	(1)	
Testing			issue in defectsCreatedDuringTesting()	
			(2)	
			issue in defectsCreatedDuringTesting("TEST-123")	
			(3)	
			<pre>issue in defectsCreatedDuringTesting ("saved_filter")</pre>	
defectsCre	P1 - Test Execution issue	Returns a list of Defects created during the execution of the	(1) issue in	
atedDuring		est Execution specified Test Executions; can optionally be filtered by the	I and the second	
		Defect Issue Assignee username.	defectsCreatedDuringTestExecution(TEST-123)	
TestExecut ion			<pre>defectsCreatedDuringTestExecution(TEST-123) (2) issue in</pre>	
TestExecut	based Filter		<pre>defectsCreatedDuringTestExecution(TEST-123) (2) issue in     defectsCreatedDuringTestExecution (saved_filter)</pre>	
TestExecut	based Filter  P2 - List of users separated by " " (pipe).		(2) issue in  defectsCreatedDuringTestExecution	
TestExecut	based Filter  P2 - List of users separated by " " (pipe).		(2) issue in  defectsCreatedDuringTestExecution (saved_filter)	
TestExecut	based Filter  P2 - List of users separated by " " (pipe).		<pre>(2) issue in    defectsCreatedDuringTestExecution (saved_filter) (3) issue in    defectsCreatedDuringTestExecution</pre>	

defectsCre	P1 - Requirement key or saved filter	Returns a list of defects created during the execution of Tests covering the specified requirements.	(1)
atedForRe quirement			issue in defectsCreatedForRequirement("REQ- 123")
			(2)
			<pre>issue in defectsCreatedForRequirement ("saved_filter")</pre>
manualTes	P1 - Saved filter Name/ID	Returns a list of manual tests that have no test steps.	(1)
tsWithoutS teps			issue in manualTestsWithoutSteps()
			(2)
			<pre>issue in manualTestsWithoutSteps ("saved_filter")</pre>
testTestEx	P1 - Test Issue Key/ld or	Returns a list of test executions associated with the input	(1)
ecutions	Filter Name/Id	Test Issues from <i>P1</i> optionally filtered by the current Test status in each Test Execution issue.	issuetype = 'Test Execution'
	P2 - Test Run Status list separated by " "(pipe) (Op	Parameter <i>P1</i> can either be a single Test issue key or ld or a	and issue in testTestExecutions('DEMO-9')
	tional)	saved filter name or id containing multiple Test issues.	(2)
		Possible Test Run Status values are: PASS, FAIL, EXECUTING, ABORTED, TODO and all custom statuses.	issuetype = 'Test Execution'
		EXECUTIVO, ABONTED, TODO and an oustom statuses.	and issue in testTestExecutions('DEMO-9',
			'PASS')
			(3)
			issuetype = 'Test Execution'
			and issue in testTestExecutions(
			'Saved Test Filter',
			'PASS')
			,
testExecWi thTestRuns	P1 - Username (Optional)	Returns a list of test executions where a user has at least one test run assigned to him. You can optionally specify a	(1)
AssignedT	P2 - Status (Optional) Username is required in	user with P1, or if the user is omitted the current user will be used. Note that if you are not logged in to JIRA, a user must	issuetype = 'Test Execution' and
oUser	case we use this	be specified.	issue in testExecWithTestRunsAssignedToUser()
	parameter	If you use status parameter then user is required	
			(2)
			<pre>issuetype = 'Test Execution' and issue in testExecWithTestRunsAssignedToUser</pre>
			('userDPC')
			(3)
			issuetype = 'Test Execution' and
			<pre>issue in testExecWithTestRunsAssignedToUser ('userDPC', "FAIL")</pre>
	P1 - Test Execution Issue	Return a list of Test Sets that have at least one test in P1.	
testSetPa rtiallyIn	P1 - Test Execution Issue Key/Test Plan Issue Key /Id or Filter Id	Return a list of Test Sets that have at least one test in P1.	('userDPC', "FAIL")
	Key/Test Plan Issue Key	Return a list of Test Sets that have at least one test in P1.	('userDPC', "FAIL") (1)
	Key/Test Plan Issue Key	Return a list of Test Sets that have at least one test in P1.	<pre>('userDPC', "FAIL")  (1) issuetype = 'Test Set' and</pre>
	Key/Test Plan Issue Key	Return a list of Test Sets that have at least one test in P1.	<pre>('userDPC', "FAIL")  (1) issuetype = 'Test Set' and   issue in testSetPartiallyIn('DEMO-15')</pre>
	Key/Test Plan Issue Key	Return a list of Test Sets that have at least one test in P1.	<pre>('userDPC', "FAIL")  (1) issuetype = 'Test Set' and   issue in testSetPartiallyIn('DEMO-15') (2)</pre>
	Key/Test Plan Issue Key	Return a list of Test Sets that have at least one test in P1.	<pre>('userDPC', "FAIL")  (1) issuetype = 'Test Set' and   issue in testSetPartiallyIn('DEMO-15')  (2) issuetype = 'Test Set' and   issue in testSetPartiallyIn('testExecList')</pre>
	Key/Test Plan Issue Key	Return a list of Test Sets that have at least one test in P1.	<pre>('userDPC', "FAIL")  (1) issuetype = 'Test Set' and   issue in testSetPartiallyIn('DEMO-15')  (2) issuetype = 'Test Set' and   issue in testSetPartiallyIn('testExecList')  (3)</pre>
	Key/Test Plan Issue Key	Return a list of Test Sets that have at least one test in P1.	<pre>('userDPC', "FAIL")  (1) issuetype = 'Test Set' and   issue in testSetPartiallyIn('DEMO-15')  (2) issuetype = 'Test Set' and   issue in testSetPartiallyIn('testExecList')</pre>

testSetFu 11yIn testPlanTe sts	P1 - Test Execution Issue Key/Test Plan Issue Key/Id or Filter Id  P1 - Test Plan Key/ Filter of Test Plans  P2 - Status (Optional)  P3 - Environment (Optional)	Returns a list of tests that are associated with the test plan.  The "status" parameter is optional and allows to filter Test issues in a specific Plan with the specified execution status. If the "status" parameter is present, users might also pass the "environment" parameter. If this parameter is filled, Xray will provide all Tests in a Test Plan that are in the specified "status" and for the specified "environment".	<pre>(1) issuetype = 'Test Set' and    issue in testSetFullyIn('DEMO-15') (2) issuetype = 'Test Set' and    issue in testSetFullyIn('testExecList') (3) issuetype = 'Test Set' and    issue in testSetFullyIn('testPlanList')  (1) issue in testPlanTests("DEMO-10") (2) issue in testPlanTests("Test Plans saved filter", "TODO") (3) issue in testPlanTests("DEMO-10", "TODO") (4) issue in testPlanTests("DEMO-10", "TODO","IOS")  Aray 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" (4) issuetype = Test and TestRunStatus = "DEMO-10-TODO" (5)</pre>
testPlanTe stExecutio ns	P1 - Test Plan Key/Filter of Test Plans	Returns a list of test executions that are associated with a Test Plan or a saved filter of Test Plans.	<pre>(1) issue in testPlanTestExecutions("DEMO-10") (2) issue in testPlanTestExecutions("Test Plans</pre>
testPlanRe quirements	P1 - Test Plan Key/Filter of Test Plans	Returns the Requirement issues that are indirectly associated, through Test issues, with a Test Plan or a saved filter of Test Plans.	<pre>saved filter")  (1) issue in testPlanRequirements("DEMO-20")</pre>
testTestPlan	P1 - Test Issue Key	Returns a List of Test Plan issues associated with the input Test issue key.	<pre>issuetype = 'Test Plan' and key in testTestPlan('DEMO-1')</pre>

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".	(1) issue in testRepositoryFolderTests("CALC", 'Parent/Child') (2) issue in testRepositoryFolderTests("CALC", 'Parent/Child', "true")
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")
testExecuti onsWithCo mpletedTe stRunsSince	P1 - Date P2 - Filter ID/Name (Optional)	Return the list of Test execution (belonging to the given filter) that have Test Runs finished since the given date.	(1) issue in testExecutionsWithCompletedTestRunsSince (2022-01-01) (2) issue in testExecutionsWithCompletedTestRunsSince (2022-01-01 12:00, "Current Sprint TestExecs") (3) issue in testExecutionsWithCompletedTestRunsSince(-3 d, 10101)
testPlansW ithComplet edTestRun sSince	P1 - Date P2 - Filter ID/Name (Optional)	Return the list of Test Plans (belonging to the given filter) that have Test Runs finished since the given date.	(1) issue in testPlansWithCompletedTestRunsSince(2022-01-01) (2) issue in testPlansWithCompletedTestRunsSince(2022-01-01 12:00, "Current Sprint TestPlans") (3) issue in testPlansWithCompletedTestRunsSince(-3d, 10101)

# 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	<pre>issuetype = 'Test'   and "Test Type" = "Manual"</pre>

### TestRunSt Test This is a calculated custom field that provides the latest Test Run status based on the current "Test issuetype = 'Test' Run Status Version Strategy" option configured in the Xray administration. atus 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. issue in testPlanTests ("TESTPLAN-123") (i) Test Run Status and TestRunStatus = "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. issue in testPlanTests ("TESTPLAN-123") For consistent results when searching for TestPlan results, filter with the testPlanTests and TestRunStatus = function. "TESTPLAN-123 - TODO" issuetype = 'Test' and TestRunStatus = "FAIL environment:Android" issuetype = 'Test' and TestRunStatus = "v3.0 - PASS environment: Android"

issue in testPlanTests ("TESTPLAN-123")

and TestRunStatus =
"TESTPLAN-123 - PASS
environment:Android"

Requireme nt Status	Require ment	This is a calculated custom field that provides the <b>requirement coverage status</b> .	issuetype = 'New Feature'
nt Status	ment	Possible status values are:	and "Requirement Status" = "OK"
		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
		UNCOVERED - The requirements is not associated with tests	Status" in ("NOTRUN", "UNCOVERED")
		testTestExecutions	_
			issuetype = 'New Feature'
		Syntax: "Requirement Status" = "[Group (version or TestPlan)] - [Status] environment:[environment]"	and "Requirement Status"
		Only the <b>Status</b> is mandatory; if only the status is provided, Xray will assume you are searching for the latest execution	= "v1.0 - OK"
		Xray will lookup for all Requirements with <b>Status</b> in that particular <b>version</b> and <b>environment</b> .	issuetype = 'New Feature'
		Read more about Status and environments.	and "Requirement Status" = "v1.0 - OK 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.