Test Runs

A Test Run (sometimes simply referred to as a "run") occurs when a Test is scheduled to execute within a Test Execution. Therefore, each time you run a Test, you're, in fact, running a Test Run.

A Test Run is an internal instance of a Test scenario that is used to validate some specific version of source code/SUT, in a specific environment. Various test runs allow you to easily detect code defects that could lead to system failures.

A Test Run is not a Jira issue; it's an Xray internal entity that you can search (see Enhanced querying with JQL).

Normally, you may see Test Runs within specific panels, such as in a Test Execution (a test run per Test) or within the Test issue screen (history of previous runs for that Test).

A Test Execution represents a task for running several Tests. It contains as many Test Runs as the number of Tests associated with it. To be precise, there is one Test Run per associated Test, in order to track the result for each Test.

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What is stored in a Test Run

A Test Run contains a copy of the testing specification of the Test and associated Pre-Conditions. This specification only comprises some fields of these entities; thus, not all fields are copied to the Test Run.

General custom fields, summary, description fields are not replicated in the Test Run. Thus, you should avoid using those fields to add "relevant" information to the test specification.

Depending on the original type of the Test associated with this Test Run, these are the fields are replicated in the Test Run.

	Manual Tests	Cucumber Tests	Generic Tests
Test	• Test Type • manual steps	• Test Type • Scenario	• Test Type • Generic Test Definition
linked Pre-Condition(s)	• Pre-Condition(s) Type • Conditions	• Pre-Condition(s) Type • Conditions	• Pre-Condition(s) Type • Conditions

Since a Test Run is related to the execution of a Test, obviously, it contains comments and information about linked defects and evidences (i.e., attachments).

Data consistency

Test Runs represent the results of running some Test specification at some moment in time, in the context of some Test Execution. Thus, they assure data consistency.

So, what happens if you change the Test specification at any time? Your existing Test Runs will not change (unless you want them to), in order to ensure data consistency and compliance with conformance regulations.

At the execution screen of a given Test Run, you will be presented with two options:

1. Merge current Test specification with the current specification in the Test Run
2. Reset the current Test Run, by copying the current Test specification to the Test Run and discard all recorded results

Learn more

More information on these actions can be found in the Execute Tests page.

Execution History

The execution history of a given Test issue is available in the Test issue screen in the "Test Runs" section.

The Test Runs section is headlined by the Test Runs Filter that allows you to sort for:

- the **Project** in which the Test Execution the current Test is associated with
- the target release **Version** tested by the Test Execution the current Test is associated with
- the **Status** of the Test Execution the current Test is associated with
- the **Start** and **End** dates of the Test Execution the current Test is associated with
- the **Clear** button, that empties all the Test Runs Filter fields

The search results are displayed on the table immediately under the Test Runs Filter, containing the following columns:

- the **Execution Key** of the listed Test Execution the current Test is associated with
- the **Fix Version** tested by the listed Test Execution the current Test is associated with
- the **System Revision** tested by the listed Test Execution the current Test is associated with
- the **Exec by** who is the Assignee of the listed Test Execution the current Test is associated with
- the **Start** and **End** dates of the listed Test Execution the current Test is associated with
- the **Defects** related with the listed Test Execution the current Test is associated with
- the **Status** of the listed Test Execution the current Test is associated with

Actions

The "Execute Test" and "Execute Test Inline" actions are available in the Test issue screen. They may also be available in similar Test Runs sections that may be present in other places.

- Execute Test
- Execute Test Inline
- View Test Execution Details
- Ad hoc Test Execution

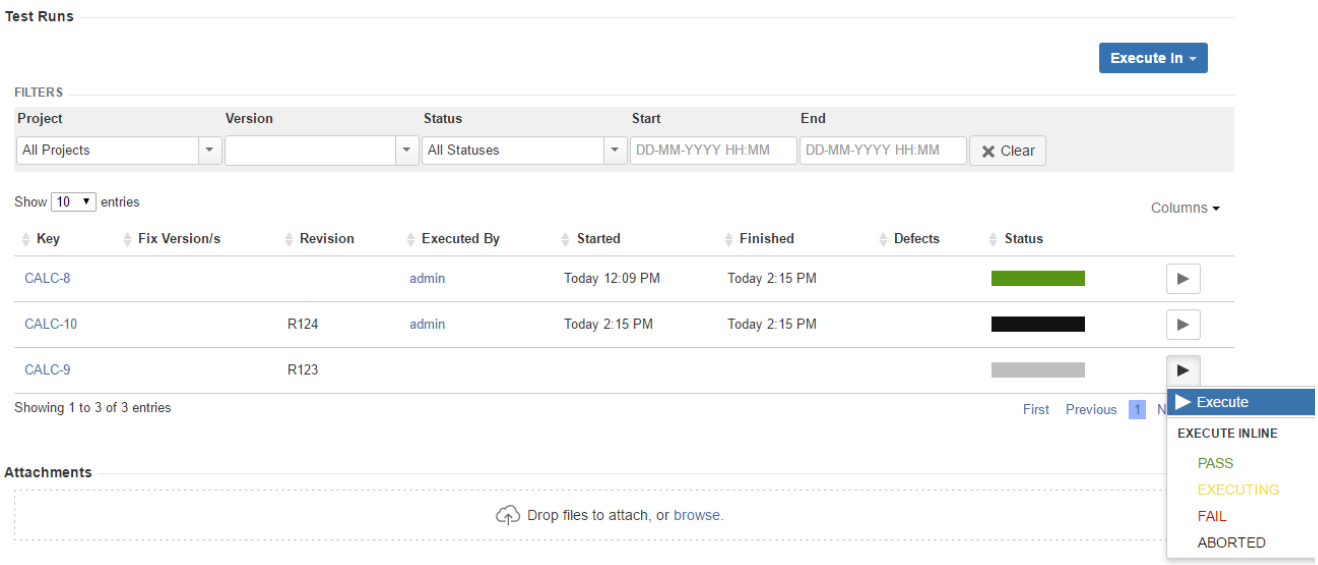
Execute Test

To execute a Test from a Test issue:

Step 1: Open the Test you wish to run.

Step 2: Click the **Execute** button that appears in the last column of the desired Test Run. The actions menu should pop up with the available actions.

Step 3: Click **Run** action to open the **Execution** page.



Execute Test Inline

To execute Test Runs Inline from the Test issue screen, this option must be enabled in the Xray administration page. The option for setting the Test Run status manually, without having to execute all Test Steps (or Examples in the case of Cucumber Tests), must also be enabled in the Xray administration page.

If the above options are enabled and you have permission to execute the Test, the context menu for executing Test Runs, accessed be the **Execute** button on each Test Run must show the available transitions.

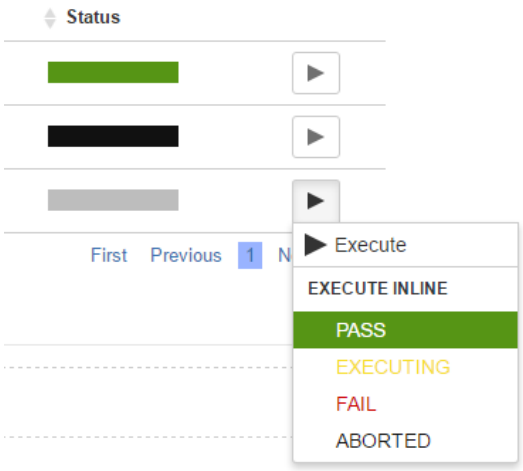
When executing inline Tests, the status of the manual steps (or Examples in the case of Cucumber Tests), can be changed automatically. The following rules are applied:

- **PASS**: All steps statuses will be changed to PASS independent of their current status.
- **FAIL**: All steps statuses will remain unchanged, even if they are all PASS. This is because a Test might fail due to a Pre-Condition.
- **TODO**: All steps statuses will be changed to TODO.
- **ABORTED**: The Test execution status will be changed to ABORTED.
- **EXECUTING**: The Test execution status will be changed to EXECUTING.
- ***CUSTOM***: The Test execution status will be changed to the specified custom status.

To execute a Test Run inline:

Step 1: Open the Test issue you wish to run.

Step 2: Click the **Execute** button located in the last column of the **Test Runs** table and select one of the available statuses.



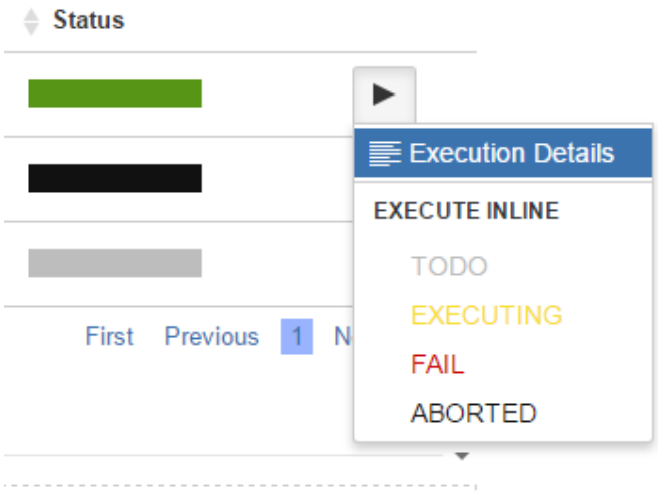
View Test Execution Details

To view the execution details:

Step 1: Open the Test issue you wish to view the test execution details.

Step 2: Click the **Execute** button that appears in the last column of the desired Test Run that is in a final state. The actions menu should pop up with the available actions.

Step 3: Click **Execution Details** action to open the **Execution** page and view the details.



Ad hoc Test Execution

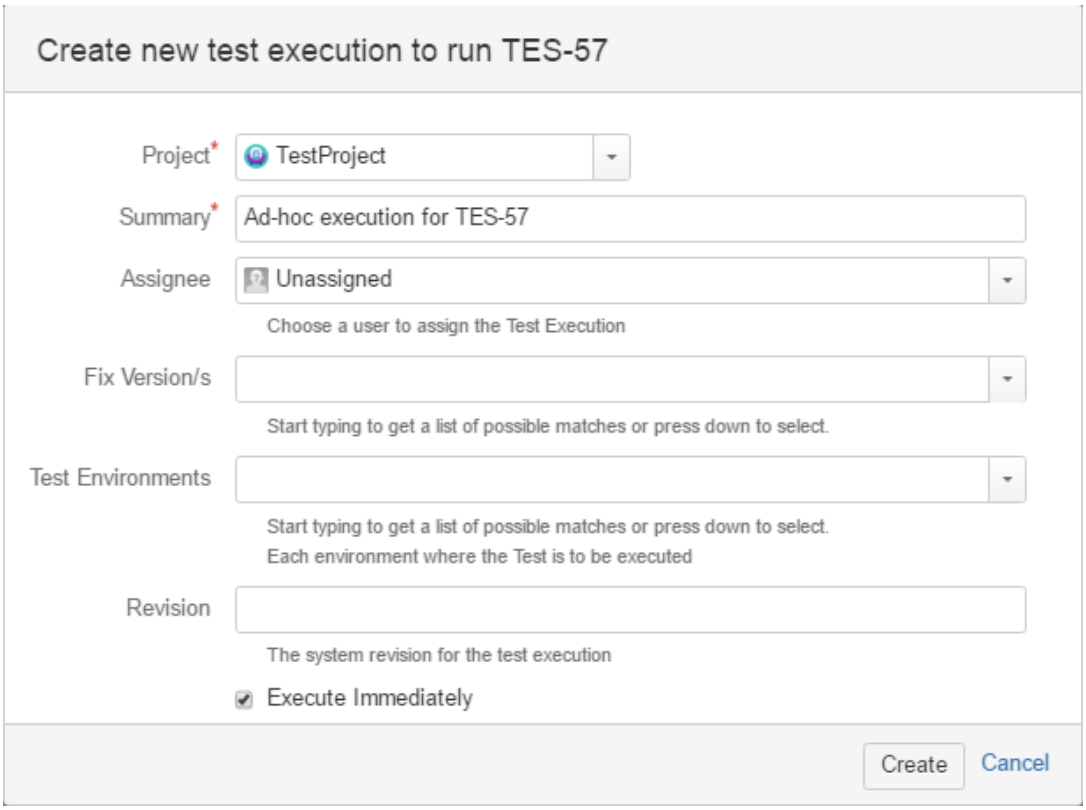
To execute a test in an ad hoc manner:

Step 1: Open the Test issue you wish to execute.

Step 2: Click the **Execute In** button in Test Runs section and select **New Test Execution....**

Step 3: The dialog comes with pre-populated fields so if you don't want to change anything, just click **Create.**

Note: If there are custom required fields, the normal issue create dialog will be displayed with the pre-populated fields. If the revision field is not configured in the create issue screen of the Test Execution for the selected Project, the field will not appear in the dialog.



If the Redirect To Execute Test Page option is selected, you will be redirected to the Execute Test page after the test execution is created.