Test Execution

A Test Execution is an issue type that aggregates a user-determined collection of Tests. It monitors and verifies if those Tests are working as expected in a target context and environment. The Overall Execution Status, updated as each test is performed, informs you about the progress of the Test Execution, including which tests passed, failed, are being executed or waiting to be performed.

An association between a Test Execution issue and a Test issue is called a Test Run. Hence, a Test Execution is a list of Test Runs.

A Test Execution issue can be assigned to a Tester. It is also possible to assign individual Test Runs to several Testers.



Sub Test Execution

You can create a Test Execution as a Sub-Task in the Requirement Issue View Page. Learn more here.

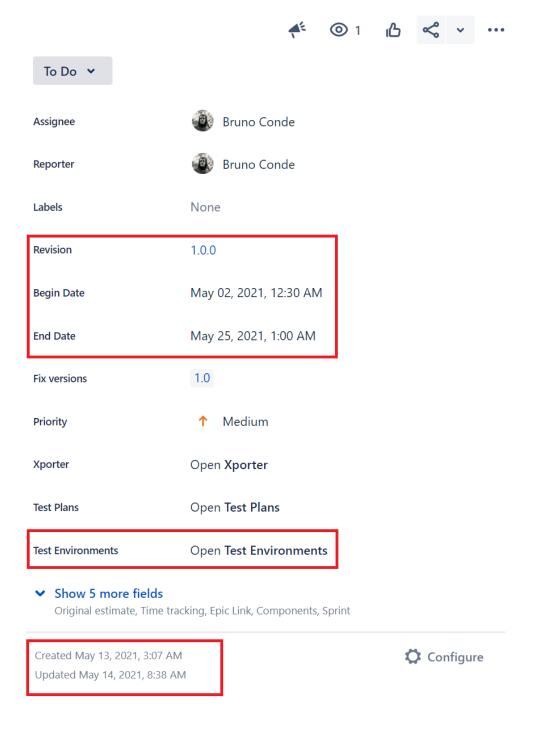
- Fields
- Sections
 - Tests Section
 - Overall Execution Status
 - Test Run Filters
 - Test Runs Table
- Actions
 - o Create
 - o Edit
 - Clone
 - Adding Tests
 - Add Tests
 - Add Tests from Test Sets
 - Associate with a Test Plan
 - Remove Tests
 - Assigning Work
 - Change Test Run Rank
 - Drag-and-Drop
 - Change Rank Action
 - Execute Test
 - Execute Test Inline
 - View Test Run Details
 - Bulk Operations
 - Filter Test Runs
 - O Configure Test Run Columns
 - Export to Cucumber
 - Import Automated Test Results
 - Importing from Test Execution view issue screen
 - Importing from the Execution Details Page
 - Archive Test Runs
 - Archive a Single Test Run
 - Bulk archive Test Runs
 - View archived Test Runs
- Xray History

Fields

A **Test Execution** has the following custom fields:

- Begin Date the date the Test Execution is planned to start. This is a normal Jira custom field.
- End Date the date the Test Execution is planned to end. This is a normal Jira custom field
- · Revision the current source code and documentation version used in the Test Execution. This is a normal Jira custom field.
- Test Environments environments in which the Test Run is executed.

These custom fields are located in the right column (issue details).



Sections

Xray contributes an additional section to the Test Execution view issue screen.

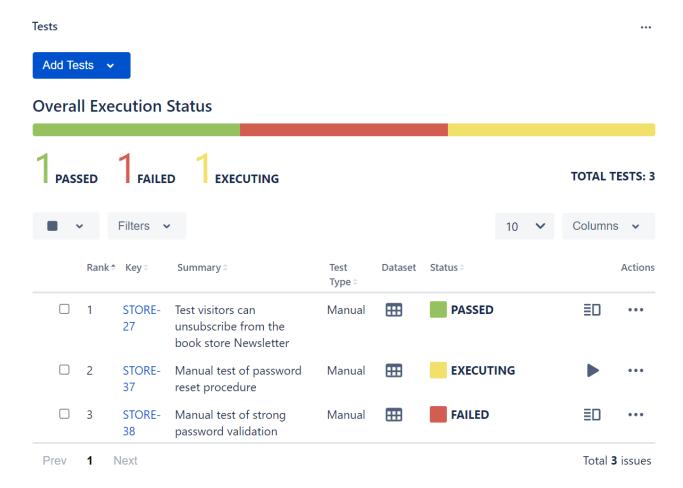
Tests Section

The Tests section provides the following views:

Overall Execution Status

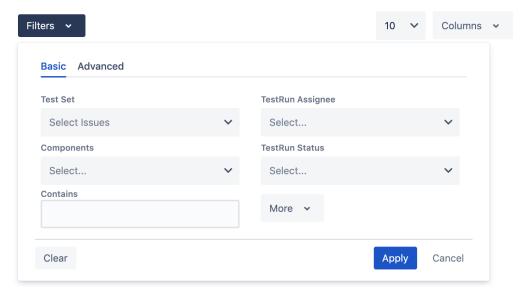
This view has a colored progress bar where you can clearly see the status of a Test Execution. Final statuses float to the left side; the last status color to appear is the TODO status.

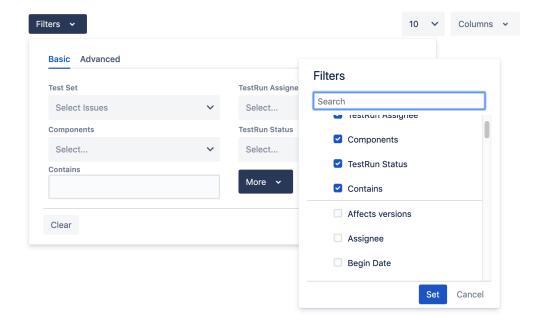
It is possible to filter tests by status in Test Execution Progress Bar as shown in the image below:



Test Run Filters

A filter section is present above the Test Runs table to allow you to filter Test Runs by Assignee, Status, Test Set, Components or open text. It is also possible to add other fields to the filter by clicking on the **More** button and selecting the wanted fields.



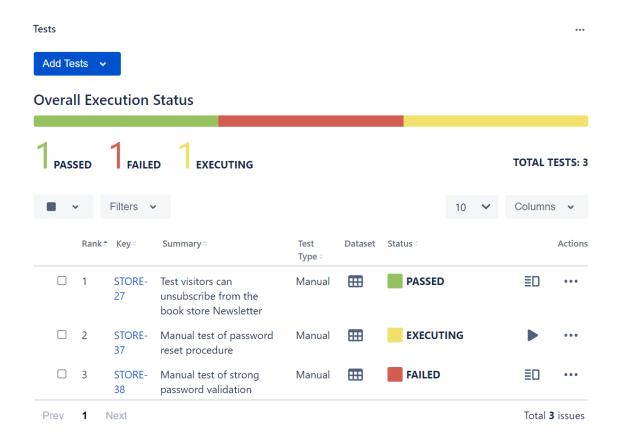


Test Runs Table

This table has all the Test Runs created for the Test execution issue. Each row represents a Test Run and contains a set of actions that can be performed on a Test Run.

You can configure the Columns, perform bulk operations and change rank of Test Runs.

When Xray is installed, the default columns are: Rank, Key, Summary, Test Type, Dataset, Status and Action, where the Status is fixed and cannot be removed.



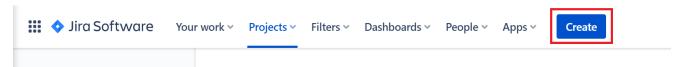
Actions

- Tests Section
- Create
- Edit
- Clone
- Adding Tests
- Associate with a Test Plan
- Remove Tests
- Assigning Work
- Change Test Run Rank
- Execute Test
- Execute Test Inline
- View Test Run Details
- Bulk Operations
- Filter Test Runs
- Configure Test Run Columns
- Export to Cucumber
- Import Automated Test Results
- Archive Test Runs

Create

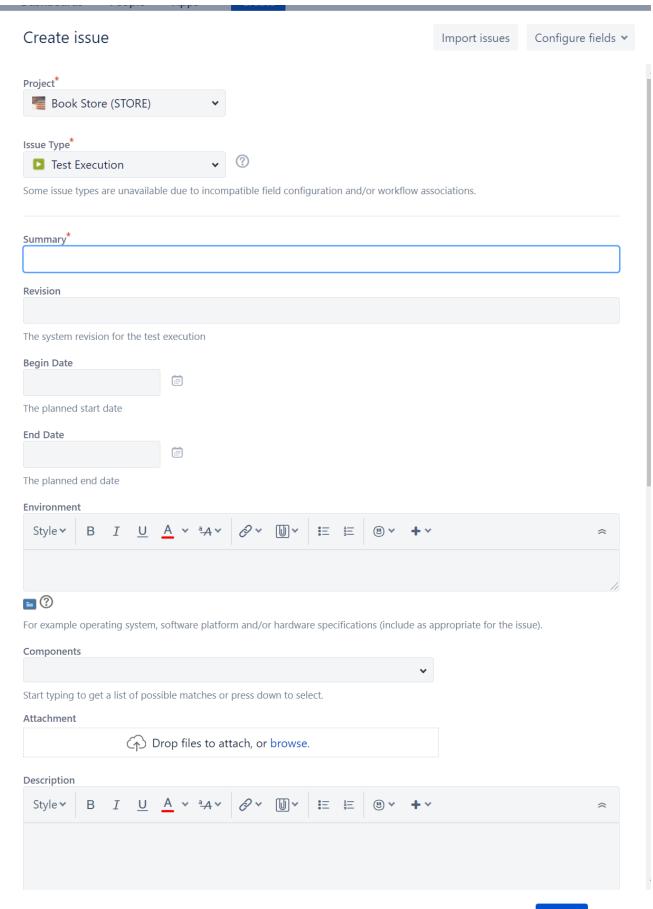
To create a new Test Execution Issue,

Step 1: Click Create at the top of the screen to open the Create Issue dialog box / page or by pressing the key "C" on the keyboard.



- Step 2: Select Project and on Issue Type, select Test Execution.
- Step 3: Type a Summary for the test execution and fill all appropriate fields mandatory fields are marked with an asterisk.
- Step 4: In the Create Issue dialog you can populate the Test Execution custom fields provided by Xray, namely, the Begin/End date and the Revisi
- Optional: To create a series of similar test executions within the same Project check Create another at the bottom of the dialog.
- Step 5 : When you are satisfied with the content of your test execution, click Create.

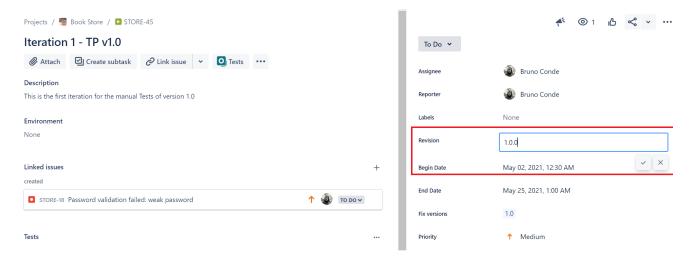
Step 5a: If you checked Create another, a new Create Issue dialog appears. This issue is automatically pre-populated with your previous test execution details, with the Summary field blank.



Edit

The Edit Issue dialog box / page is similar to the Create Issue dialog box / page:

- Step 1: Locate the Test Execution you want to edit.
- Step 2: Hover over a field and click on it to edit it inline.

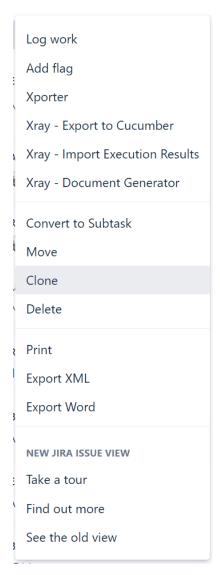


- **Step 3**: Modify your Test Execution details in the appropriate fields.
- Step 4: Click out of the edit field to save it.

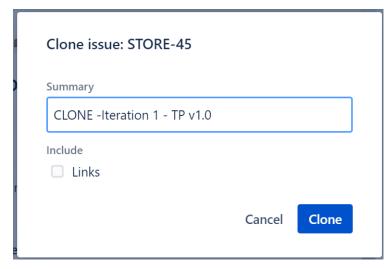
Clone

When cloning a Test Execution issue, all the Test issue associations will also be cloned. However, a new Test Run is created for each Test so that the new Test Execution issue has no execution state.

Test Environment associations will be cloned as well.



After this, an additional dialog will be shown.



And after the issue is created, its page will be opened.

On some occasions the cloned issue page may open before the Xray information is actually cloned and as a result the new Test Execution will appear empty.

When this happens the following information will be shown:



Test details not up-to-date



This issue might have been cloned and the information being presented is not up-to-date. Please refresh the issue.

Refresh issue

est Status for the following scopes.

Adding Tests

Tests and Test Sets can be associated with Test Execution issues.

- Add Tests
- Add Tests from Test Sets

Add Tests

To add Test issues to a Test Execution:

- Step 1: Open the Test Execution you wish to associate a Test with.
- Step 2: Select Add Tests > Existing Tests (under the Tests section on the view page) to open the Add Tests dialog box.

Tests Add Tests 💌 **Existing Tests Status** Tests from Test Sets New Test PASSED FAILED **EXECUTING TOTAL TESTS: 3** Filters Columns Dataset Status Actions Rank Key Summary : Test Type STORE-**=== PASSED** ΞD 1 Test visitors can Manual ••• 27 unsubscribe from the book store Newsletter **## EXECUTING** 2 STORE-Manual test of password Manual 37 reset procedure FAILED

Manual

##

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Total 3 issues

Step 3: Select or search the **Test** issues to be associated with the Test Execution:

Manual test of strong

password validation

3

Prev

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STORE-

38

Next

To select the Tests to be associated, you can, under the **Select** tab:

- Input the desired Test $\mbox{\bf Issue}~\mbox{\bf Key}$ on the $\mbox{\bf Tests}$ field.
- Click on the **Down Arrow** on the Tests field and select the Test from its **History Search** list.

Add Tests to Test Execution CAL-11

Select Search JQL

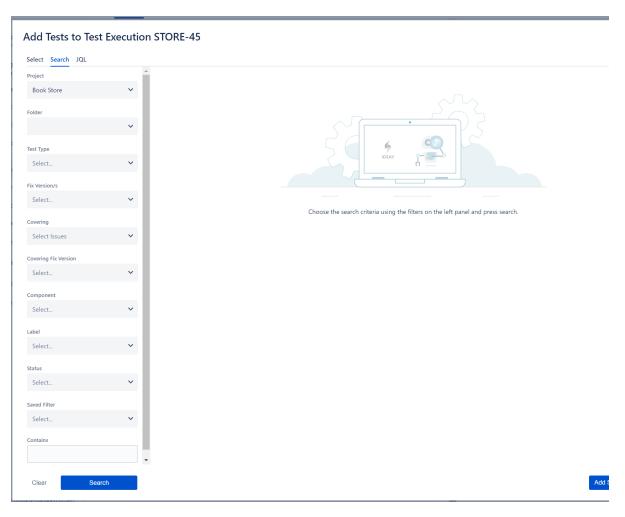
Start typing to get a list of possible matches or press down to select from a list of existing issues

Select Issues



To search for Tests to be associated, you can, under the **Search** tab:

- Select the desired **Project** and any other desired field such as **Contains, Label, Fix Version, Component, Covering, Covering Fix Version, Saved Filters** and **Workflow Status**
- Click on the **Search** button after filling the browse fields to get a list of matching entries



To search for Tests to be associated you can: under the \mathbf{JQL} tab:

- Write the desired JQL search
- Click on the Search button perform the JQL search and to get a list of the matching entries (more details about JQL here)

| JQL Search | | |
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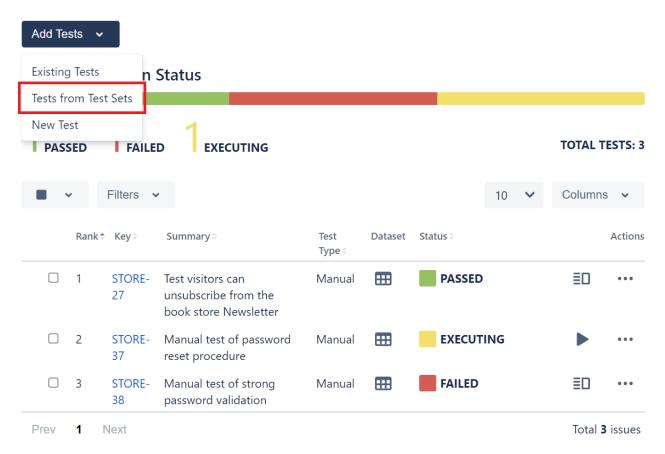
Step 4: Click Add Selected.

Add Tests from Test Sets

When adding a Test Set issue to a Test Execution, all the Test issues associated with that Test Set are added to the Test Execution. The Test Set issue is not directly associated with the Test Execution, so changes to the Test Set after it was added will not affect the Test Execution.

- **Step 1**: Open the Test Execution with which you want to associate a Test Set.
- Step 2: Select Add Tests> Tests from Test Sets (under the Tests tab on the view page) to open the Add Test Sets dialog box.

Tests ...



Step 3: Select or search the Test Set issues to be associated with the Test Execution.

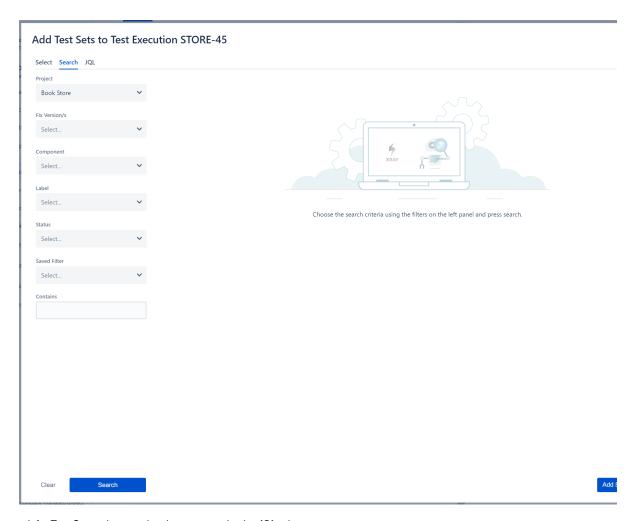
To select the Test Sets to be associated, you can, under the **Select** tab:

- Input the desired Test Set Issue Key on the Test Sets field.
- Click on the **Down Arrow** on the Test Sets field and select the Test Set from its **History Search** list.
- Click on the **Search** tab to use the **Find Jira issues** browser.

| | est Sets to Test Execution STORE-45 | | |
|---|--|---|--|
| | Search JQL | | |
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To search for Test Sets to be associated, you can, under the Search tab:

- Select the desired **Project** and any other desired field such as **Contains, Label**, **Fix Version, Component, Covering, Covering Fix Version, Saved Filters** and **Workflow Status**
- Click on the Search button after filling the browse fields to get a list of matching entries



To search for Test Sets to be associated you can: under the \mathbf{JQL} tab:

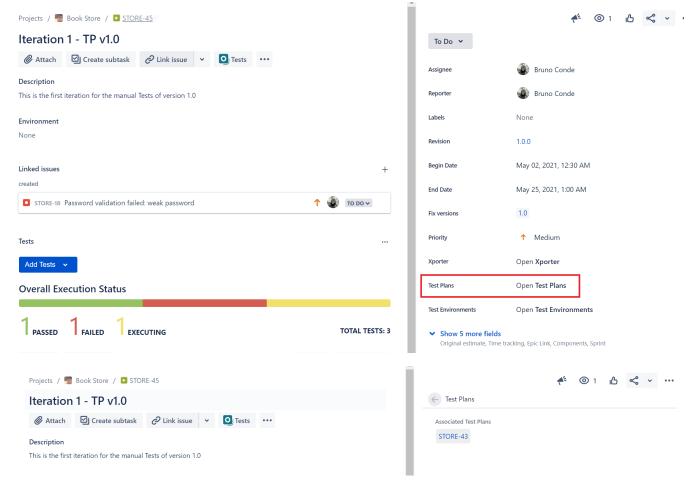
- Write the desired JQL search
- Click on the **Search** button perform the **JQL** search and to get a list of the matching entries (more details about JQL here)

| JQL Search | | | |
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| JQL Search | | | |
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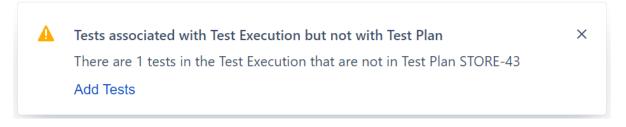
Step 4: Click Add Selected.

Associate with a Test Plan

You can associate Test Executions with Test Plans by editing the field **Test Plans** in the Test Plans section in Test Execution issue details. Note that with this method, only the Test Execution will be associated with the Test Plan; the Tests will not be associated. To inline edit the **Associated Test Plans** field, just hover over the field view area, click it and add or remove the Test Plans.



If the Test Execution is associated with a **Test Plan** and contains **Tests** that are not in the **Test Plan**, a warning message will be displayed telling you how many tests in the Test Execution are not in the **Test Plan**. A **Add Tests** button will be shown in case you want to add these tests to the **Test Plan**.

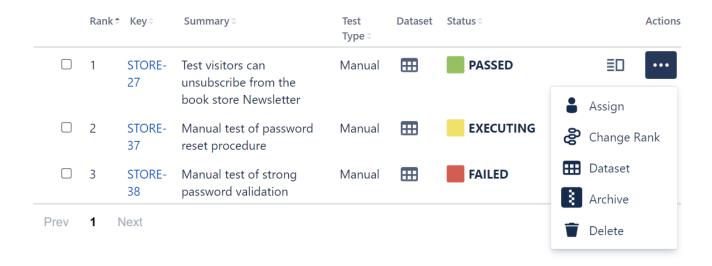


There will be one warning message for each **Test Plan** associated with the Test Execution that does not contain all the Tests in the Test Execution.

Remove Tests

To remove Tests from the Test Execution (i.e., delete Test Runs):

- Step 1: Open the Test Execution issue.
- Step 2 : Hover over the desired Test Run (under the Tests section on the view page)
- Step 3: Click the Actions button that appears in the last column. The actions menu should pop up with the available actions.
- Step 4: Click Delete. A confirmation message appears.
- Step 5: Click Remove to delete the Test Run or Cancel to abort this action.



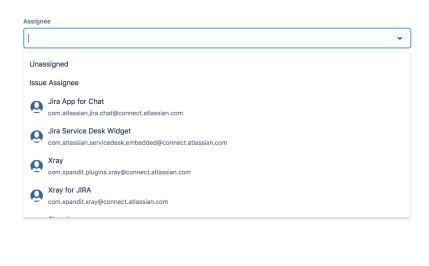
Assigning Work

There are two ways to distribute work between Testers.

- A Test Execution issue can be created per Tester by assigning the issue to a specific Tester, or
- Within a Test Execution issue, you can assign individual Test Runs to Testers. Test Runs are assigned to the Test Execution issue assignee by
 default. Only users with permission to assign the Test Execution issue can assign Test Runs.

To assign individual Test Runs to testers,

- Step 1: Open the Test Execution issue.
- Step 2: Hover over the desired Test Run (under the Tests section on the view page)
- Step 3: Click the Actions button that appears in the last column. The actions menu should pop up with the available actions.
- Step 4: Click the Assign action. The assign dialog appears.
- Step 5: Start typing to find the user to assign the Test Run. Click Assign to complete the action or Cancel to abort it. Assign Test Run





Cancel



After assigning a Test Run, an email notification is sent to the new assignee if the corresponding setting is enabled in the Global or Project Settings.

Change Test Run Rank

There are two ways to change the rank of a Test Run:

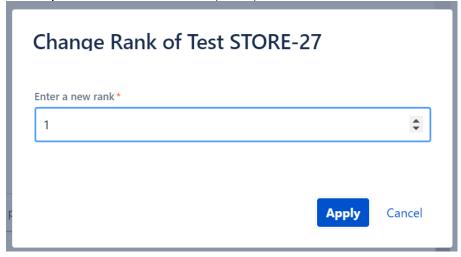
Drag-and-Drop

- Step 1: Open the Test Execution issue.
- Step 2: Hover over the desired Test Run row (under the Tests section on the view page) and the drag handle column.
- Step 3: Click the drag handle and move the Test Run up or down in the current page.

Change Rank Action

This action allows users to change the Rank of a Test run between pages.

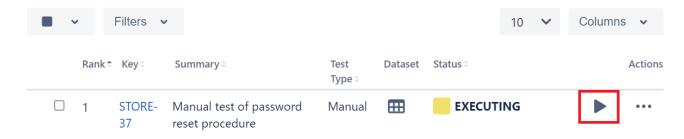
- Step 1: Open the Test Execution issue.
- Step 2: Hover over the desired Test Run (under the Tests section on the view page)
- Step 3: Click the Actions button that appears in the last column. The actions menu should pop up with the available actions.
- Step 4: Click the Change Rank action. The change rank dialog appears.
- Step 5: Enter the desired index number (1-based) and click OK.



Execute Test

To execute a Test from a Test Execution:

- Step 1: Open the Test Execution you want to run.
- Step 2: Hover over the desired Test Run (under the Tests section on the view page)
- Step 3: Click the Execute button that appears in the last column; it will open the Execution page.



You can see a detailed explanation of the execution screen here.

Note: If you do not have permission to execute the Test Run, the Run option will not be available.

Execute Test Inline

To execute Test Runs inline from the **Test Execution** view screen, this option must be enabled in the Xray administration page. The option to set 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.

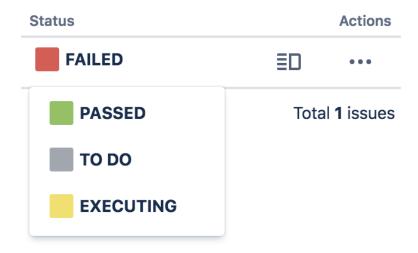
If the above options are enabled and you have permission to execute the Test, the context menu for executing Test Runs, accessed by the **Gear** button on each Test, will show the available transitions.

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 step statuses will be changed to PASS independent of their current status.
- FAIL: All step statuses will remain unchanged, even if they are all PASS. This is because a Test might fail due to a Precondition.
- TODO: All step statuses will be changed to TODO.
- 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 Execution issue you want to run.
- Step 2: Click on the status field located in the Status column of the Test Runs table and select one of the available statuses.



View Test Run Details

You can always view and modify the Test Run details after execution. If you do not have permission to execute the Test Run, you can still view the execution details in read-only mode, provided you have permission to browse the Test Execution issue.

To view the execution details from a Test Run:

- Step 1: Open the Test Execution you want to view.
- Step 2: Hover over the desired Test Run (under the Tests section on the view page).
- Step 3: Click the Execute button that appears in the last column; it will open the Execution page where you can view the details.



Bulk Operations

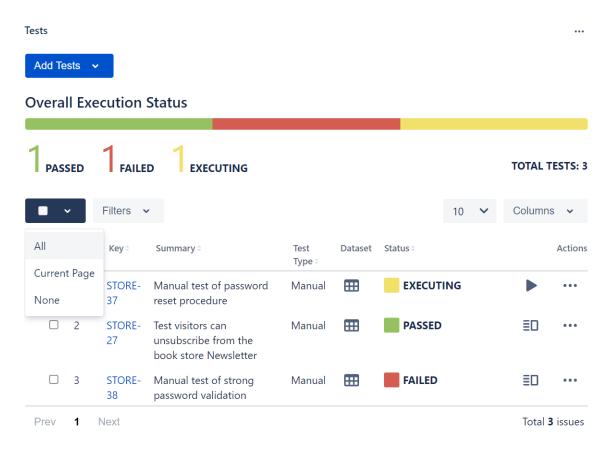
Xray provides the following bulk operations on the Test Runs table.

- Assign Assigns all the selected Test Runs to a particular user.
- Change Rank Changes the Rank of a Test Run between pages.
- Delete Deletes all the selected Test Runs.

To execute these bulk actions:

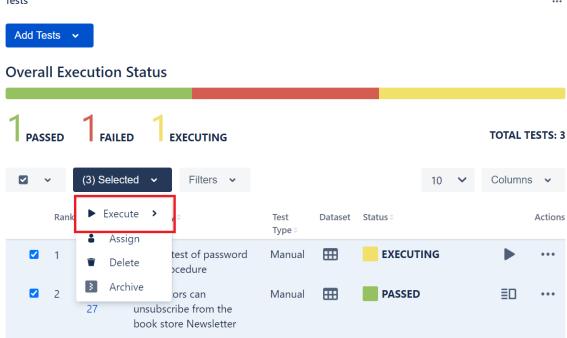
Step 1: Open the Test Execution issue.

Step 2: Select the desired Test Runs. This can be done by using the checkbox that appears on each Test Run row or by using the Bulk dropdown button options to select all Test Runs or the ones on the current page.



Step 3: Click the bulk actions located on the actions column header and choose one of the available actions.

Tests ···



Manual

FAILED

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Total 3 issues

Note: Bulk Execution of Test Runs is limited to a maximum of 100 Test Runs.

Filter Test Runs

Prev

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To filter the Test Runs table, select the desired filters in the filters section above the Test Runs table.

Manual test of strong

password validation

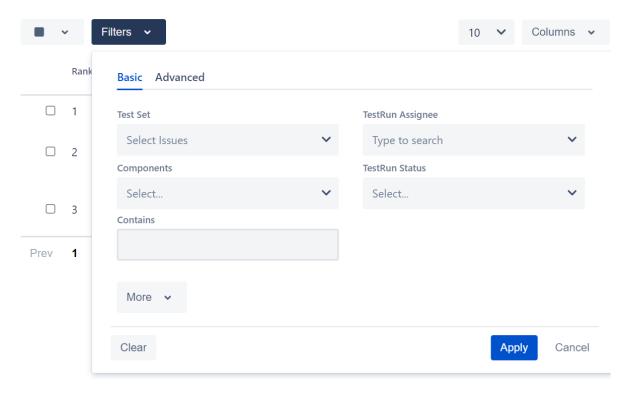
- Test Set show only Test Runs that are associated with a specific Test Set issue.
- Assignee show only Test Runs that are assigned to a specific user.
- Status show only Test Runs with a specific status.

STORE-

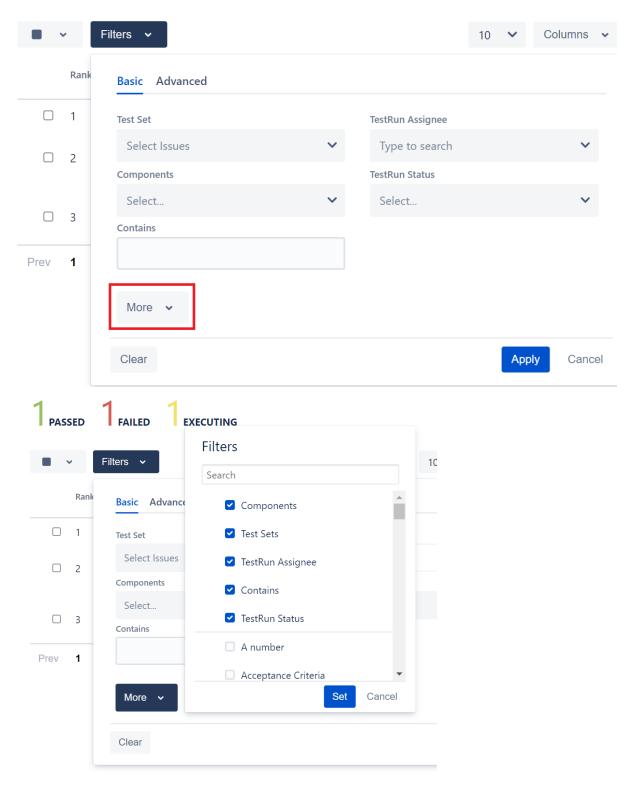
38

Next

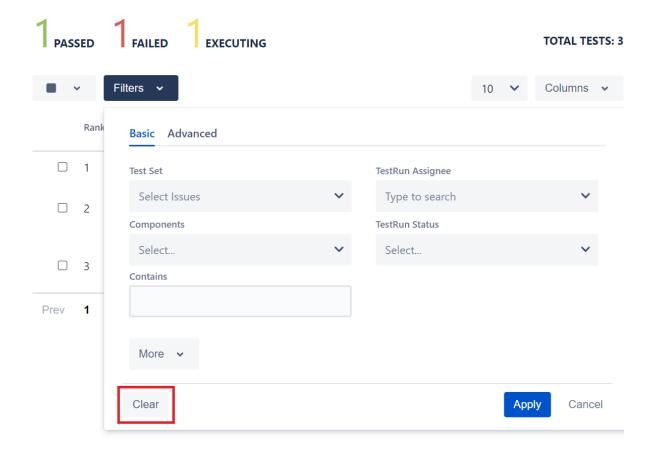
• Contains Text - show only Test Runs with Tests containing the entered text. This will query Test issues with the JQL keyword text ~ ...



To add more more fields to the filter you can click the **More** button.

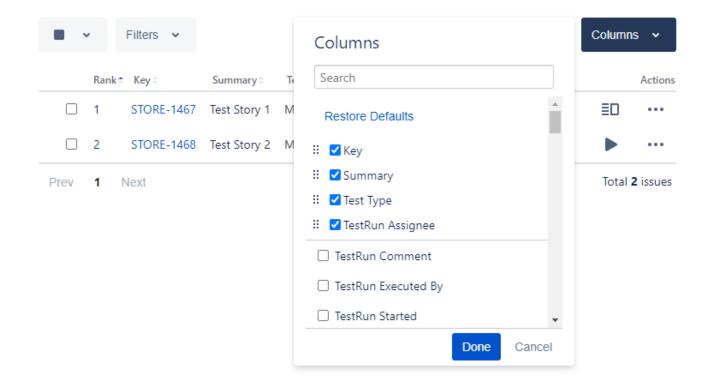


If you want, you can clear the filter in order to see all Test Runs once again. This will also reset the filters that are displayed back to the original.



Configure Test Run Columns

In the Columns menu, it's possible to choose the columns that will be seen in the table.



Columns of the respective Test issue of each Test Run can be added. Xray specific fields from the Test are also available, such as:

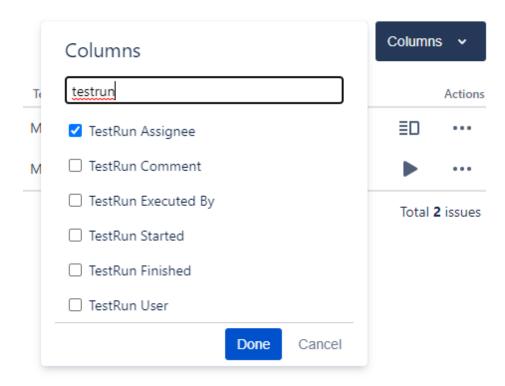
- Test Type: The Test Type of the Test Runs' Test
- Definition: The definition of the unstructured Test of the Test Run (if the Test Run's Test is of another kind other than unstructured, no value will be shown)

In addition, it's possible to add Test Run specific columns.

The following columns can be added:

- Test Run Assignee: Assignee of the Test Run
- Test Run Comment: Comment in the Test Run
- Test Run Executed By: User that executed the Test Run
- Test Run Started: Start date of the Test Run
- Test Run Finished: Finish date of the Test Run
- Test Run Progress: Status progress of the Test Run Steps or Iterations

Test Run custom fields can also be added, they are prefixed by "TestRun", so, for example, a Test Run custom field named "User", can be found under the name "TestRun User".



More info in Test Runs.

Export to Cucumber

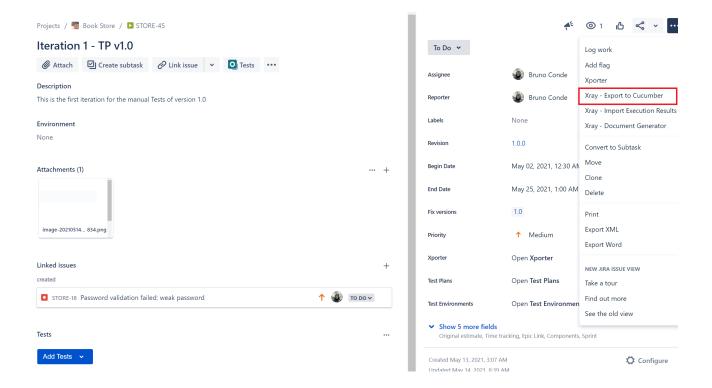
Cucumber Test Executions in Jira can be exported as .feature files ready to be executed in Cucumber. The generated .feature files follow the rules defined in Export Rules and take into account the context of the Jira Test Execution issue.

A single Cucumber **feature** file should be generated and prompted to be downloaded for the Cucumber Test contained on the Test Execution, unless the target Test Execution contains multiple Cucumber Tests or the Cucumber Test is associated with multiple **Requirements.** In this case, a **FeatureBundle** zip file will be generated containing a single Cucumber feature file for every Requirement associated with the target Cucumber Test contained on the Test Execution.

To export a Test Execution issue containing Cucumber Tests to .feature files,

Step 1: Open the Test Execution issue view page.

Step 2: Select ... > Xray - Export to Cucumber. The file will be downloaded from the browser.



Import Automated Test Results

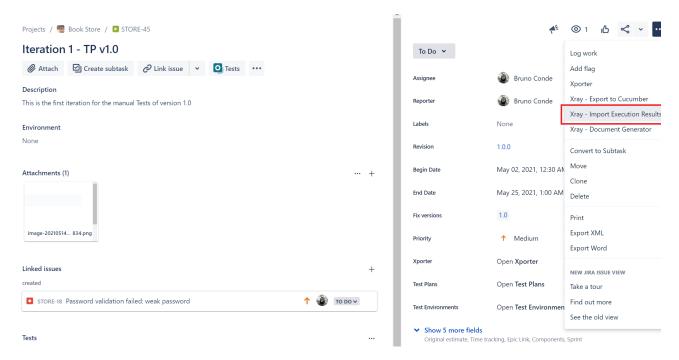
Importing from Test Execution view issue screen

Automated Test results can be imported back to Jira using the Test Execution view issue screen. The Test results can be imported from JSON/XML external files that must follow an Import Results specific scheme.

When importing results, only the Tests contained in the intersection between the Tests in the JSON/XML file and the Tests in the selected Test Execution are updated; all others, if any, are ignored. After importing, a new entry with the result of the operation is registered in the Activity Log of the Test Run.

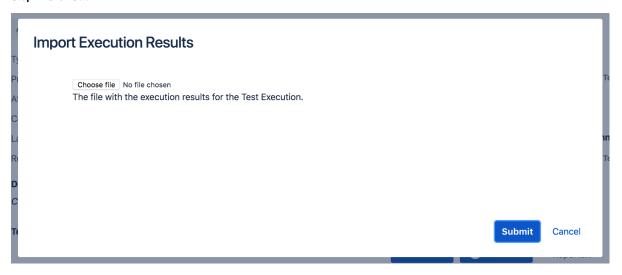
To import Automated Test results to a Test Execution issue containing automated Tests,

- Step 1: Open the Test Execution issue view page.
- Step 2: Select ... > Xray Import Execution Results. The Import Execution Results dialog will open.



Step 3: Click the Choose file button to navigate to the local disk and select the JSON/XML/ZIP file with the automated execution results for the Test Execution.

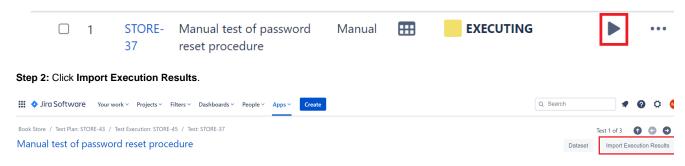
Step 4: Click Submit.



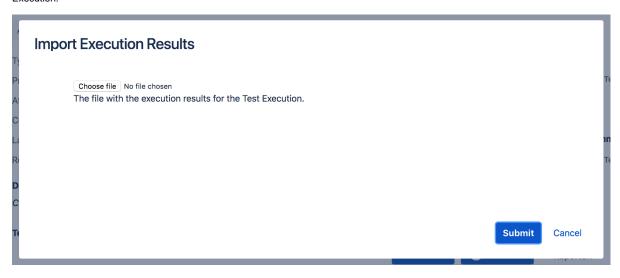
Importing from the Execution Details Page

You can also import the Execution Results from the Execution Details page:

Step1: From Test Execution view issue screen, go to the Execution Details page by clicking Execute.



Step 3: Click the Choose file button to navigate the local disk and select the JSON/XML/ZIP file with the automated execution results for the Test Execution.



Step 4: Click Submit.

Archive Test Runs

Xray provides you with a way to explicitly archive test runs one at a time or in bulk as well as way to check all the archived test runs for a specific test execution. For more information about Test Run Archive check here.

Archive a Single Test Run

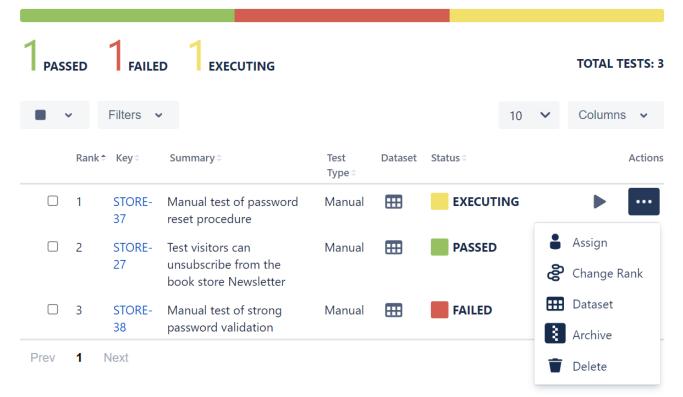
To archive a single Test Run,

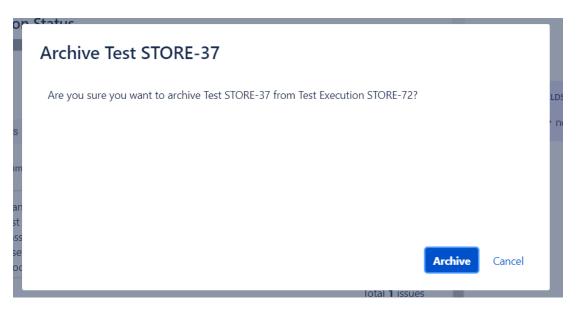
- Step 1: Click on the ... at the end of the row that contains the test run you wish to archive.
- Step 2: Click on the Archive option that appears.
- Step 3: Click the Archive button on the confirmation dialog.

Tests



Overall Execution Status





Bulk archive Test Runs

To archive multiple test runs at the same time,

- Step 1: Selected the test runs you wish to archive by clicking on the checkbox at the left of each test run.
- Step 2: Click on the bottom that appears at the top of the table and then Archive.

Step 3: Click the Archive button on the confirmation dialog.

Tests Add Tests 💌 **Overall Execution Status TOTAL TESTS: 3** (3) Selected Filters Columns Execute > Rank Test Dataset Status : **Actions** Type : Assign ✓ TO DO 1 test of password Manual Delete <u>ce</u>dure Archive 2 Manual TO DO ors can unsubscribe from the book store Newsletter

TO DO

Total 3 issues

Manual



View archived Test Runs

To view the archived test runs of a test execution,

3

1

Prev

STORE-

38

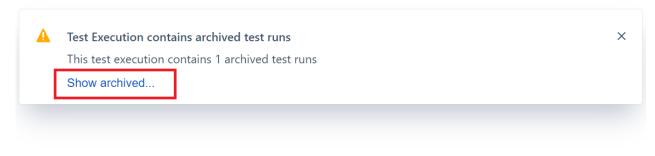
Next

Manual test of strong

password validation

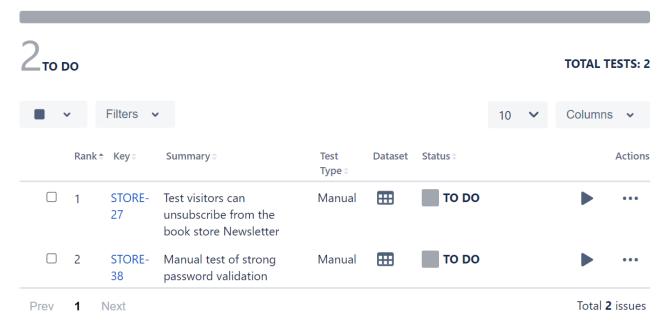
Step 1: Click on the Show Archived... that appears in warning message. After this a dialog will appear that shows all archived test runs for the test execution you are on.

Tests ...



Add Tests 🗸

Overall Execution Status



There are 2 actions that can be performed on the archived Test Runs:

- 1. **Restore** By clicking on the ... at the end of the archived test run row and then **Restore**.
- 2. **Delete** By clicking on the ... at the end of the archived test run row and then **Delete**.

Both of these actions can be performed in bulk by selecting the test runs using the checkbox on the left then

- Step 1: Selecting the archived test runs by clicking on the checkbox at the left of each test run.
- Step 2: Click on the bottom that appears at the top of the table and then the desired action.
- Step 3: Confirm the action on the dialog that appears.



Restore the archived Test Runs

Are you sure you want to restore the archived Test Runs?



Delete the archived Test Runs

Deleting the archived test runs will permanently remove the Test Runs, are you sure you want to delete the archived Test Runs?



Xray History

Any changes made to the Test Execution data are recorded on the Xray History section. These include:

- Linking the Test Execution with other entities (Tests and Test Plans)
 Changing Test Environments



Show: Comments History Work log Xray History

John Smith updated Tests September 11, 2020, 3:21 PM

Added: DEMO-352

John Smith updated Test Plans September 11, 2020, 3:22 PM

Added: DEMO-344, DEMO-340

John Smith changed the Test Environments September 11, 2020, 3:22 PM

Chrome → IOS