

# Agile Enhancements

Since Xray 2.0, Xray integrates with Agile to give you a flexible way of viewing, managing and reporting some Xray issue types.

Agile boards are an excellent way to visually keep track of the progress of project's tasks.

Usually, you use Agile boards to manage sprint-related issues, such as user stories, tasks and defects.

You can extend the usage of Agile boards to make them also testing-aware.

Agile boards are great, but they do not replace other types of reports where more information may be consulted and analyzed.

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## Using Xray issues in Agile boards

Since Xray uses Jira issue types for most of its entities, in theory, you're able to include them in your boards. However, the reason may be different for each one of them.

Having in mind that **Tests** and **Pre-Conditions** are like test case templates, including them in a board does not make sense unless you want to track the specification progress, in case you have a specific workflow implemented for that purpose. The same applies to **Test Sets**. Some may prefer to use one or more Task issue(s) for dealing with the specification effort of Tests and/or Test Sets.

Including individual Test Runs would not be that useful. Since a Test may have multiple runs, your board would be over-populated. Moreover, Test Runs are not issue types so they cannot be included in Agile boards.

**Test Executions** may be assigned to a sprint and may be tracked on a board. However, this may not scale if Continuous Integration is being used, due to the potential huge amount of Test Executions that may be created.

**Sub-Test Executions** are an excellent way to visually identify the associated Test Executions that validate a given requirement, since they're created as sub-tasks for the requirement issue and will appear accordingly in the board. A limitation is that a Sub-Test Execution is a sub-task of only one issue, in this case a requirement. Sometimes, this may not be applicable because it may be necessary to have Test Executions with Tests associated with multiple requirements.

A **Test Plan** tracks a group of Tests, regardless of the number of Test Executions for a given version of the SUT. Test Plans may be used to group the Tests in the scope a given sprint and thus, consolidate the test results.

In sum, you may extend Agile boards for testing purposes to address two points:

- specification & organization
- planning & execution

	Use case	Notes
Test	<ul style="list-style-type: none"><li>• track the test specification progress/lifecycle (e.g., a specific workflow is being monitored for reviewing purposes)</li></ul>	
Pre-Condition	<ul style="list-style-type: none"><li>• track the test specification progress/lifecycle (e.g., a specific workflow is being monitored for reviewing purposes)</li></ul>	
Test Set	<ul style="list-style-type: none"><li>• track the test specification progress/lifecycle (e.g., a specific workflow is being monitored for reviewing purposes)</li></ul>	

<b>Test Execution</b>	<ul style="list-style-type: none"> <li>track the daily execution-related tasks</li> <li>including "Test Execution Status" custom field provides a quick overview of all the Tests that are part of the Test Execution</li> </ul>	<ul style="list-style-type: none"> <li>hard to scale, specially if CI is being adopted</li> </ul>
<b>Sub Test Execution</b>	<ul style="list-style-type: none"> <li>per each requirement, track the execution of the related Tests</li> <li>including "Test Execution Status" custom field provides a quick overview of all the Tests that are part of the Sub-Test Execution</li> </ul>	<ul style="list-style-type: none"> <li>hard to scale with multiple executions</li> </ul>
<b>Test Plan</b>	<ul style="list-style-type: none"> <li>using scoped Test Plans (i.e., in a context of a sprint) quickly provides an overview of the progress of the execution of your Tests</li> <li>including "Test Plan Status" custom field provides a quick overview of all the Tests that are part of the Test Plan</li> </ul>	<ul style="list-style-type: none"> <li>requires adding the "Sprint" field to the Test Plan</li> </ul>

## Usage scenarios

A typical concern with Agile boards is having them as clear and as "non-polluted" as possible, so you can focus on what's important.

Some relevant and high-level information may be obtained from specific custom fields associated with requirements, or (Sub) Test Executions, or Test Plans. These fields may be included in the board cards.

Note that you are limited on the number of fields (3) you're able to include in each card on the board.

Next, you may find some possible scenarios for integrating testing into your Agile boards, although you're free to adapt each one to your needs.

## Requirement Status on Agile Board

You can add the **Requirement Status** custom field to the requirement issues in the Active Sprint. It's actually a useful feature provided by Jira. It gives you the ability to add custom fields in both views: Active Sprint and Backlog. Adding certain Xray custom fields, such as the Requirement Status, may be a good for your testing teams because it provides a quick overview of the current statuses of the requirement issues.

To add the Requirement Status to the Agile Board, perform the following steps:

**Step 1:** Open the Agile Board you wish to add the Requirement Status.

**Step 2:** Click the **Board** button and then click the **Configure** button.

The screenshot shows a Jira Agile Board for 'XPack Sprint 2'. The board is divided into four columns: 'To Do', 'In Progress', 'Testing', and 'Done'. Each column contains several cards representing user stories or tasks. The 'Testing' column is currently active. In the top right corner, there is a 'Board' dropdown menu, and the 'Configure' option is highlighted with a red circle. The board also shows a '9 days remaining' timer and a 'Complete Sprint' button.

**Step 3:** Click the **Card Layout** and add the **Requirement Status** to the **Backlog** and **Active Sprint**.

Configure XPack

CONFIGURATION

- General
- Columns
- Swimlanes
- Quick Filters
- Card colors
- Card layout**
- Estimation
- Working days
- Issue Detail View

Card layout

Cards can be configured to show up to three extra fields.

**Backlog**

Field Name

Affects Version/s

Add

Requirement Status

Delete

**Active sprints**

Field Name

Requirement Status

Add

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**Step 4:** The Backlog View and the Active Sprint View now have the **Requirement Status** custom field.

## 1. Backlog View

XPack

Backlog

QUICK FILTERS: Only My Issues Recently Updated

XPack Sprint 2 12 issues

12/Jun/16 11:27 AM - 26/Jun/16 11:27 AM

XP-1 As a user, I can login into the app using the fingerprint scanner

NOT RUN

XP-4 As a user, I can login into the app using Facebook authentication

NOT RUN

XP-17 As a user, I can access my JIRA projects from the app

UNCOVERED

XP-46 As an admin, I can give special permissions to users

OK

XP-19 As a user, I can view the Company News in the main page

UNCOVERED

XP-18 As a user, I can create JIRA issues from the app

UNCOVERED

XP-2 As a user, I can login into the app using Google+ authentication

OK

XP-25 As a user, I can search for JIRA issues using JQL

UNCOVERED

XP-26 As a user, I can export JIRA issues to PDF

NOT RUN

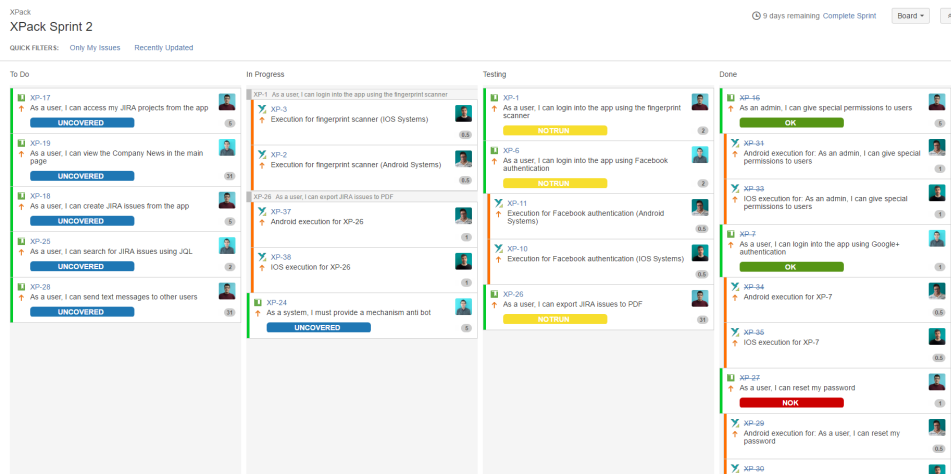
XP-24 As a system, I must provide a mechanism anti bot

UNCOVERED

XP-27 As a user, I can reset my password

NOK

## 2. Active Sprint View

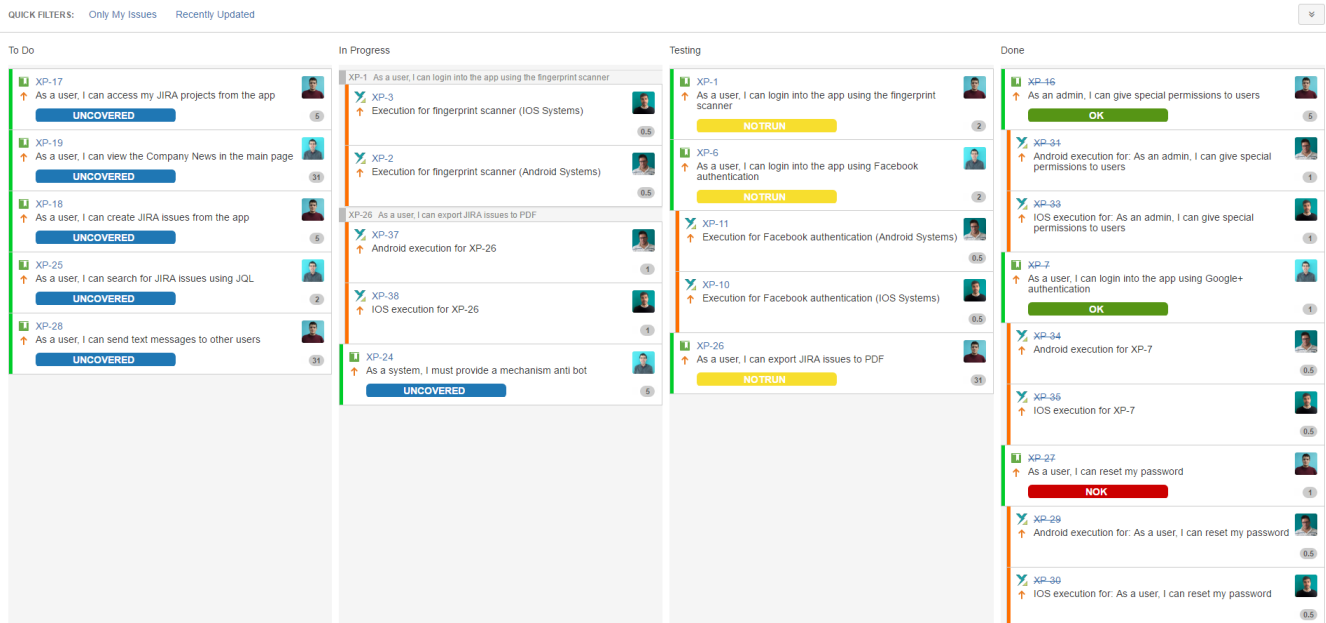


As a suggestion, you may also add the **Test Environments** custom field. It may be useful to have different **Sub-Test Executions** to test the requirement in different environments.

## Quick view of Executions for Requirements from Agile Board

Creating a [Sub-Test Execution](#) from the Requirement Issue will let you track related executions on the Agile Board, so you will see all work that needs to be done to “finish” a requirement, either by developers or testers.

You can have a quick view of all test executions of a requirement, directly from the Jira Agile board, as long as the executions are created as [Sub-Test Execution](#) issues.



## Test Plans as a way to consolidate test results

You may create one or more Test Plans and associate them with a given Sprint.

By including the **Test Plan Status** custom field, you are able to see right away the overall progress of your Test Plans.

You may also include the **Test Execution Status** custom field in your cards; thus, Sub-Test Executions progress may be promptly visualized.

**Requirement Status** may also be included in the card configuration, allowing you to assess the coverage status of the requirements present on the board.

## Sprint 1

**QUICK FILTERS:**   [Only My Issues](#)   [Recently Updated](#)

## To Do

The screenshot displays the JIRA interface for two test cases. The first test case, CALC-838, is in the 'Not Run' state, indicated by a yellow bar. The second test case, CALC-954, is in the 'Partially Executed' state, indicated by a green bar followed by a grey bar. The interface includes a header with the JIRA logo and a search bar, and a sidebar with navigation links.

Test Case ID	Execution Status	Progress Bar
CALC-838	Not Run	Yellow bar
CALC-954	Partially Executed	Green bar followed by grey bar

In Progress

```
graph TD; A["CALC-970  
plan for v3.0, sprint 1"] --> B["CALC-962  
As a user, I can calculate the multiplication of 2 numbers"]; B --> C["CALC-966  
Sub Test Execution for CALC-962"]; C --> D["CALC-967  
As a user, I can subtract 2 numbers"]; D --> E["CALC-969  
Sub Test Execution for CALC-967"];
```

The diagram illustrates the execution flow of a test suite. It starts with a test case labeled **CALC-970** with the description "plan for v3.0, sprint 1". This leads to a test case labeled **CALC-962** with the description "As a user, I can calculate the multiplication of 2 numbers". This leads to a test case labeled **CALC-966** with the description "Sub Test Execution for CALC-962". This leads to a test case labeled **CALC-967** with the description "As a user, I can subtract 2 numbers". This leads to a test case labeled **CALC-969** with the description "Sub Test Execution for CALC-967". The flow is indicated by arrows and colored boxes: green for "OK" and red for "NOK".

- CALC-970** (plan for v3.0, sprint 1) → **CALC-962** (As a user, I can calculate the multiplication of 2 numbers) → **CALC-966** (Sub Test Execution for CALC-962) → **CALC-967** (As a user, I can subtract 2 numbers) → **CALC-969** (Sub Test Execution for CALC-967)

The flow is indicated by arrows and colored boxes: green for "OK" and red for "NOK".

Done

The screenshot displays the Test Runner interface. At the top, a test case is identified by a grey square icon with a white 'C', the text 'CALC-964', and a blue circular icon with a white 'C'. Below this, a red upward-pointing arrow icon is followed by the text 'As a user, I can calculate the division of 2 numbers'. A green bar with the text 'v3.0 - OK' is positioned below the description. Further down, a green bar with a white right-pointing arrow icon is followed by the text 'CALC-964'. Below this, a red upward-pointing arrow icon is followed by the text 'Sub Test Execution for CALC-961'. A green bar is positioned below the text 'Sub Test Execution for CALC-961'. The interface is set against a light grey background.