

# Integrity Checker

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The Integrity Checker allows you to check and fix invalid or duplicated values in the Xray data. It also enables you to clear Xray-calculated custom fields, import automated steps from existing issues to the Automated Steps Library and fix integrity of Test Repositories and Test Plan Boards.

## Integrity Checker

Select one or more actions from the list below to check for out of date information in Xray.

### Integrity Checker

<input type="checkbox"/>	Check All
<input type="checkbox"/>	Check Test Runs <ul style="list-style-type: none"><li><input type="checkbox"/> Check for invalid Test Runs</li><li><input type="checkbox"/> Check for duplicated Test Runs</li></ul>
<input type="checkbox"/>	Check Test Steps <ul style="list-style-type: none"><li><input type="checkbox"/> Check for invalid Test Steps</li><li><input type="checkbox"/> Check for invalid Mementos</li><li><input type="checkbox"/> Check for invalid Test Step Results</li></ul>
<input type="checkbox"/>	Check Xray issue links <ul style="list-style-type: none"><li><input type="checkbox"/> Check for invalid issue links</li></ul>
<input type="checkbox"/>	Check for invalid screens configurations <ul style="list-style-type: none"><li><input type="checkbox"/> Check for duplicated Custom Fields in screen</li></ul>
<input type="checkbox"/>	Check for invalid archived/unarchived entities <ul style="list-style-type: none"><li><input type="checkbox"/> Check for invalid archived/unarchived Test Runs</li><li><input type="checkbox"/> Check for invalid archived/unarchived Tests in Test Repositories and Test Plan Boards</li></ul>

Check

### Calculated Custom Field Values

<input type="checkbox"/>	Clear all
<input type="checkbox"/>	Clear Requirement Status Cache
<input type="checkbox"/>	Clear Test Run Status Custom Field
<input type="checkbox"/>	Clear Manual Steps Count Custom Field
<input type="checkbox"/>	Clear Test Set Test Count and Test Plan Test Count Custom Field
<input type="checkbox"/>	Clear Test Execution Defects Custom Field

Clear

### Automated Steps Library

Project

DEMO ▾

<input type="checkbox"/>	Check All
<input type="checkbox"/>	Check for missing Test Steps
<input type="checkbox"/>	Check for missing Pre-Condition Steps
<input type="checkbox"/>	Check for orphan automated Steps and Labels

Check

### Integrity of Hierarchical Test Organization

<input type="checkbox"/>	All
<input type="checkbox"/>	Test Repositories
<input type="checkbox"/>	Test Plan Boards

Fix

## Integrity Checker

This section allows you to fix invalid Xray values that are stored in the database.

## Integrity Checker

☐ **Check All**

- ☒ Check Test Runs
  - ☒ Check for invalid Test Runs
  - ☒ Check for duplicated Test Runs

- ☐ Check Test Steps
  - ☐ Check for invalid Test Steps
  - ☐ Check for invalid Mementos

- ☐ Check Xray issue links
  - ☐ Check for invalid issue links

Check

## Integrity Checker

### Check Test Runs

**PASSED:** Check for invalid Test Runs  
**PASSED:** Check for duplicated Test Runs

### Check Test Steps

Check for invalid Test Steps  
Check for invalid Mementos

### Check Xray issue links

Check for invalid issue links

Back

## Test Runs

You can check and fix invalid or duplicated Test Runs.

- ☒ Check Test Runs
  - ☒ Check for invalid Test Runs
  - ☒ Check for duplicated Test Runs

## Test Steps

You can check and fix invalid Test Steps and Mementos. A Memento is a copy of a Test Run so that when a Test is changed, the Test Run keeps the state prior to the Test changes.

- ☐ Check Test Steps
  - ☐ Check for invalid Test Steps
  - ☐ Check for invalid Mementos

## Xray Issue Links

You can check and fix Invalid Issue Links. These links can be of type Test Set <-> Test and Test <-> Precondition.

- ☐ Check Xray issue links
  - ☐ Check for invalid issue links

## Archived and unarchived entities

You can check and fix invalid archived and unarchived entities (Test Runs and Tests in Test Repositories and Test Plan Boards).

An invalid archived Xray entity is the one whose Jira issue is active and an invalid unarchived Xray entity is the one whose Jira issue is archived.

Example of incoherent states fixed by these options:

- A Test Run is wrongly archived if the Test Execution and Test issues are active
- A Test Run is wrongly unarchived if the Test Execution and Test issues are archived
- An archived Test should never be displayed in the Test Repository

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- ☐ **Check for invalid archived/unarchived entities**
- ☐ **Check for invalid archived/unarchived Test Runs**
  - ☐ **Check for invalid archived/unarchived Tests in Test Repositories and Test Plan Boards**
- 

## Calculated Custom Field Values

Starting from version 2.0.0 of Xray, the following Xray custom fields are recalculated upon any change and stored to be used when necessary. This means the value for a custom field is not calculated every time it is displayed. This improves performance considerably for several Xray screens and queries.

Because Jira does not provide the appropriate mechanisms and notifications for certain events like issue link events (<https://jira.atlassian.com/browse/JRA-8505>), Xray needs to intercept all requests that might change links and perform the appropriate calculations on its custom fields. Despite our best effort, there might be certain use cases where the custom fields are not updated, resulting in outdated values. When this happens, we provide the ability to remove the value of all custom fields. The value will then be calculated upon first access, or when a Jira re-index operation is performed.

Aside from being able to clear the custom field values, you can do bulk operations for:

- Resetting the value of the **Requirement Status** custom field on Requirement issues
- Resetting the value of the **TestRunStatus** custom field on Test issues

Additionally, Xray provides some specific issue operations that allow you to clear the custom field values individually:

- Resetting the **Requirement Status** custom field for a Requirement issue
- Resetting the **TestRunStatus** custom field for a Test issue
- Resetting the **Test Execution Defects Count** custom field for a Test Execution and Sub-Test Execution issue.

The Xray calculated custom fields that you can clear are:

- **Requirement Status Cache**

Cache that contains all the Requirement Status that were previously calculated

- **Test Run Status Custom Field**

Calculated Custom Field that has the Test Run Status for a Test

- **Manual Steps Count Custom Field**

Calculated Custom Field that has the number of Manual Steps of a Test

- **Test Set Test Count and Test Plan Test Count**

Calculated Custom Field that has the number of Test Sets and Test Plans of a Test

- **Test Execution Defects Custom Field**

Calculated Custom Field that has the number of defects created in the context of a Test Execution

## Calculated Custom Field Values

- ☐ **Clear all**
- ☐ Clear Requirement Status Cache
- ☐ Clear Test Run Status Custom Field
- ☐ Clear Manual Steps Count Custom Field
- ☐ Clear Test Set Test Count and Test Plan Test Count Custom Field
- ☐ Clear Test Execution Defects Custom Field

Clear

## Automated Steps Library

From Xray version 3.2, you have access to the Automated Steps Library. When upgrading from previous versions you may want to import your existing Cucumber steps to the steps library of your project.

### Missing Test Steps

Cucumber Test Steps that are not currently in the Automated Steps Library.

### Missing Pre-Condition Steps

Cucumber Pre-Condition Steps that are not currently in the Automated Steps Library.

### Orphan automated Steps and Labels

Automated Steps that are not associated with any Test or Pre-Condition issues and automated Labels that are not associated with any step.

## Automated Steps Library

### Project

QA project ▼

- ☐ **Check All**
- ☐ Check for missing Test Steps
- ☐ Check for missing Pre-Condition Steps
- ☐ Check for orphan automated Steps and Labels

Check

# Hierarchical Test Organization

Due to errors or misuse, a Test Repository may end up with references to Issues that are no longer Tests of that project, or, in the case of a Test Plan Board, references to issues that are no longer Tests of that Test Plan. These errors can be fixed in this section and you may select the repository types you want to fix.

## Integrity of Hierarchical Test Organization

☐ All

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☐ Test Repositories

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☐ Test Plan Boards

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Fix

# Cluster Lock

The cluster lock mechanism was designed to work with statically-named locks. The implementation stores each lock in the database permanently. Therefore using dynamically generated lock names, such as "lock\_for\_task\_" + taskId, causes rows to pile up in large numbers in the clusterlockstatus table, and there is no mechanism to prune them. So, in certain circumstances, you can prune them:

- Having more than 100.000 cluster locks created by Xray and having the com.xpandit.raven.clearClusterLockOnIntegrityChecker dark feature enabled.

## Cluster Lock

☐ Check for high number of unused Xray cluster locks

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Check

You can find more info here: [Usage tips to improve performance](#) on Data Center Tips