# **Integrity Checker**

- Integrity CheckerTest Runs

  - Test Steps
  - Xray Issue Links
  - Archived and unarchived entities
     Calculated Custom Field Values
  - - Requirement Status Cache

    - Test Run Status Custom Field
       Manual Steps Count Custom Field
       Test Set Test Count and Test Plan Test Count
    - Test Execution Defects Custom Field
  - Automated Steps Library
     Missing Test Steps

    - Missing Pre-Condition Steps
  - Orphan automated Steps and Labels
     Hierarchical Test Organization

  - Cluster Lock

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## Integrity Checker Select one or more actions from the list below to check for out of date information in Xray.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 ☐ 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 for invalid Test Step Results ☐ Check Xray issue links Check for invalid issue links Check for invalid screens configurations ☐ Check for duplicated Custom Fields in screen ☐ Check for invalid archived/unarchived entities Check for invalid archived/unarchived Test Runs $\ \Box$ Check for invalid archived/unarchived Tests in Test Repositories and Test Plan Boards Check 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 Project DEMO ☐ Check All ☐ Check for missing Test Steps ☐ Check for missing Pre-Condition Steps Check for orphan automated Steps and Labels Check Integrity of Hierarchical Test Organization □ All ☐ Test Repositories

## Integrity Checker

Fix

☐ Test Plan Boards

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

Integrity Checker

	Check All	
•	Check 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	
	TAGGED. Greek for depredated rest Name	
	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

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

#### Calculared 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.

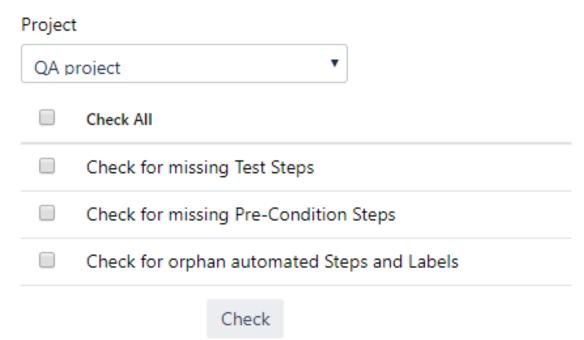
#### **Missing Pre-Condition Steps**

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**



## Hierarchical Test Organization

Due to errors or misusage, 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.

Integ	rity of Hierarchical Test Organization
	All
	Test Repositories
	Test Plan Boards
	Fix
Cluste	er Lock
Therefore	ter lock mechanism was designed to work with statically-named locks. The implementation stores each lock in the database permanently. e using dynamically generated lock names, such as "lock_for_task_" + taskld, causes rows to pile up in large numbers in the clusterlockstatus tablere 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.
Clus	ster Lock
	Check for high number of unused Xray cluster locks

You can find more info here: Usage tips to improve performance on Data Center Tips

Check