Structure 4.5 Release Notes

> ⓘ **28th of December, 2017**
>
> This version introduces duplicate items highlighting, which makes it much easier to find, review and delete duplicate issues in a structure. This version also includes several performance improvements and bug fixes.

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Structure Demo Server

1. Version Highlights

- Duplicate items highlighting
- Several performance improvements and fixes
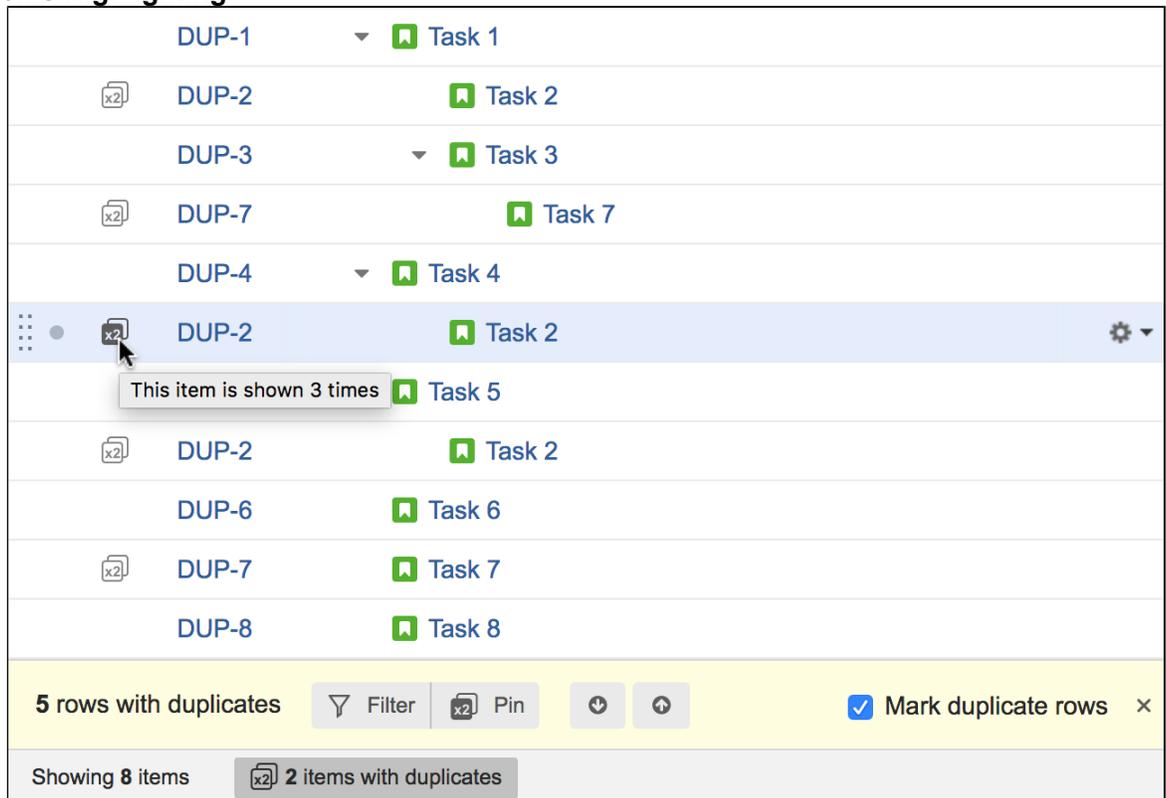
2. Changes in Detail

2.1. Duplicate Items Highlighting

Issues can appear in structure more than once both when added manually or automatically. You can now quickly find, highlight and switch between such issues in a structure. This makes working with d uplicates much simpler. For example, if necessary, you can delete manually added duplicates or adjust automation settings to make sure automation only adds one instance of an issue.

Documentation: Ident ifying Duplicate Items

2.2. Notable Fixes and Improvements

- When the issue details panel is closed, previous layout is restored
- Fixed: Performance Audit Log throws an error if Jira saved filters are used in generators
- Fixed: Level option is not saved when quick transformations are created
- Fixed: Unresolved issues from closed sprints do not show under Backlog when grouped by sprint
- Fixed: Browser search prompt changes drag and drop behavior in Structure to Copy when Move is expected
- Fixed: Show Results button does not appear when backing up Structure in a Jira Data Center instance
- Fixed: Text Search inserter moves modified issues to the bottom
- Various performance improvements

3. Supported Versions

Structure 4.5 and all extensions support Jira versions from 7.2 to 7.6. All editions of Jira (Jira Core, Jira Software, Jira Service Desk) are supported. Jira Data Center is supported.

With respect to other add-ons and custom integrations, this release is backwards-compatible with Structure 3.4–4.4. Structure.Testy extension, Colors plugin and integrations with third-party add-ons should work.

4. Installation and Upgrade

4.1. Installing Structure

If your Jira server does not have Structure yet, the installation is simple:

1. Download and install Structure add-on, either from Atlassian Marketplace or from Download page. Pick the correct version based on your Jira version!
2. When Add-on Manager reports the successful installation, click Get Started to visit a page with important guidance for the Jira administrator. You may want to also check out the user's Get Started page, available under "Structure" top-level menu.
3. ⚠️ If you have Structure.Pages installed, make sure you've upgraded to version 1.3 or later, both on Jira and on Confluence side. If your Confluence version is not compatible with Structure Helper 1.3, you should stay with version 1.2 for .Pages and Helper add-on, but please, note that there are limitations to its compatibility with Structure 4.2 and higher, so Confluence upgrade to version 6.1 or better is recommended.
4. Monitor `catalina.out` or `jira-application.log` for log messages from Structure.

4.2. Upgrading Structure

> ⚠️ If you're upgrading from version 2.11.2 or earlier, please read Structure 3.0.0 Release Notes.

Upgrade procedure from versions 3.x–4.4 is simple:

1. Consider backing up Jira data. Use **Administration | System | Backup System**. (If you have a large instance and have proper backup strategy in place, you may skip this step.)
2. Back up Structure data. Use **Administration | Structure | Backup Structure** menu item. If you have a lot of structures and a large Jira, consider turning off "**Backup History**" option to avoid long backup process.
3. Install the new version of the plugin.
4. Monitor `catalina.out` or `jira-application.log` for warnings or errors.

5. Enterprise Deployment Notes

Structure 4.5 has a number of changes that are particularly important for large installations and Jira Data Center instances.

5.1. Extender Performance Optimizations

Big and deep structures built with multiple extenders have been a source of performance problems for some of our customers. Structure 4.5 contains numerous optimizations aimed at reducing both the generation time and memory consumption for such structures.

The changes to the extender implementations and the automation engine are quite substantial, so if you rely on large structures (10,000 issues or more) built with extenders, we advise you to perform load and stress testing on a staging environment before upgrading.

5.2. Other Changes

A fix in the Sprint grouper required it to load more data from Lucene. We do not expect this to be a problem, but if you rely on the Sprint grouper, it might make sense to test it before upgrading.

We have also optimized the attribute sub-system to speed up aggregate calculations on large, deep structures.

5.3. Testing on Staging Environment

Given the changes described above, you can test the following scenarios:

- Create a large, deep structure built with one or more extenders, for example, 10,000 issues or more, organized into 5 or more levels of hierarchy. Change one or more issues in the structure — add or remove issue links, change sub-task parents, etc., depending on the extenders you are using.
- While the structure described above is open, add one or more aggregate columns to your view (e.g. "Count Leaves" or a sum of a numeric field).
- Create a large structure (10,000 issues or more) consisting of a JQL inserter and a Sprint grouper (make sure most of the issues in the structure belong to one or more sprints). Move one or more issues to a different sprint.

Watch the log files for errors and warnings while running these experiments.

The usual load and stress testing can also be applied.

> ⓘ Should you have any questions on Enterprise Deployment, let us know at support@almworks.com.