Get started with calculated fields

JWT ships with **three** custom field types to **calculate** field values, **display live data**, or even pull data from online service providers such as Google.

Each custom field type, from **number** to **text**, or **date-time** fields, comes with a different set of options that let you define exactly what you want to see as a result using the full power of the JWT expression editor.

Last but not least, you can individually define **how** the **result** of the calculation should **appear**, from different time formats to currency symbols, by configuring individual Display formats.

Calculated date-time fields

This type of **read-only** custom field contains a value which is dynamically calculated from a custom math/time expression. It can be used to obtain a **date-time** value depending on the value of the **current issue** or in **other issues.**

Calculated number fields:

This type of **read-only** custom field has a value which is dynamically calculated from a custom math/numeric expression. It can be used to obtain a **numeric** value depending on the value of other fields in the **current issue** or in any **other issues**.
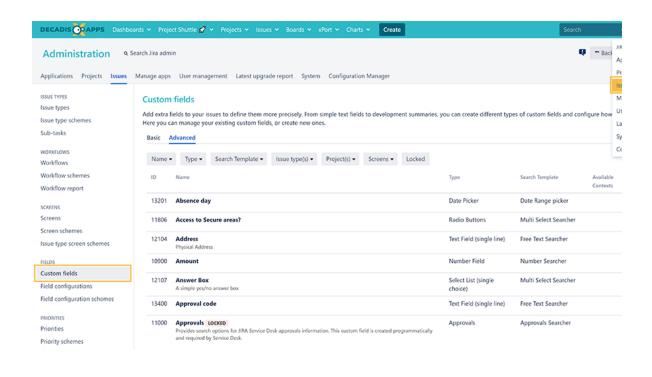
Calculated text fields

This type of **read-only** custom field has a value which is dynamically calculated from a custom text expression. It can be used to show a text composed from one or more field values returned by field codes.

First steps

1
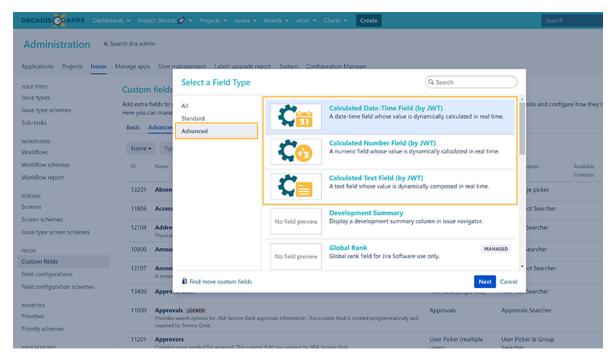
After installing JWT, head over to **Administration Issues**

Then browse to **Custom fields**

2. Create your first custom field

from the **Custom fields** admin section, head over to **Add custom Field Advanced** then add the desired field offered by JWT:

- JWT calculated date-time fields
- JWT calculated number fields
- JWT calculated text fields

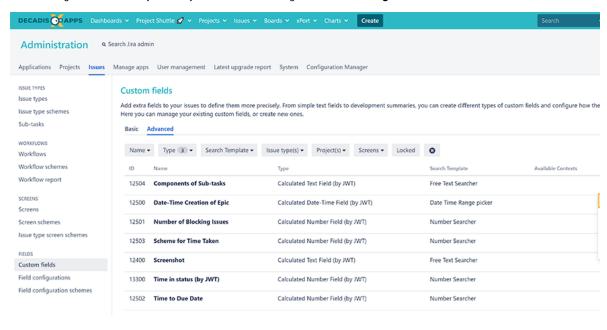**JWT calculated fields can't be manually updated on any screen.**

Therefore they **won't be displayed on create, edit and transition screens**, even if you added them explicitly to those screens.

Configure your custom field

1

On the configuration screen of your newly created custom field go to **Actions Configure**

2

Start by adding an **expression** that is used to calculate the field.

A non-optimized expression can cause performant problems when re-indexing, to avoid this kind of problems there are some tips to keep in mind:

- When using field codes in the expression, if their value is null it can add some delay to the re-indexing because of the errors thrown. To avoid this it's recommendable to check with a **ternary operator** if the field code's value is null or not to make the calculation or not.
- When the value depends on fields belonging to issues different from current issue, for example its linked issues or issues returned by a JQL query, problems will be faced when using it in a **JQL search**. This happens because its index is **only updated** when the current issue is updated, so the value indexed might not be updated if those different issues have not been updated, even if the value is displayed correctly. It would be necessary to re-index before executing the *JQL search*.

3

Optionally: Customize the **display format**.

4

Configure the **field context**

Configure Custom Field: Date-Time Creation Of Epic

Below are the Custom Field Configuration schemes for this custom field. Schemes are applicable for various issues types in a particular context. You can configure a custom field differently for each project context or in a global context. Moreove over-ride global ones.

- Add new context
- View Custom Fields

Default Configuration Scheme for Date-Time Creation Of Epic
Default configuration scheme generated by Jira

Applicable contexts for scheme: [Edit Configuration]

Issue type(s):
Global (all issues)

Expression:

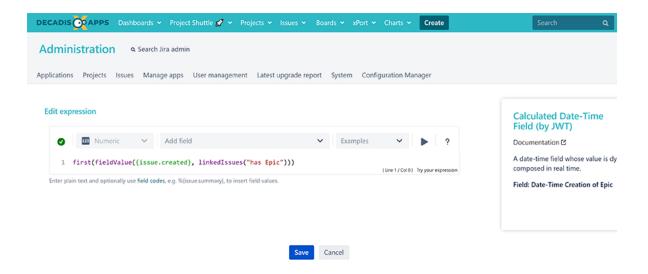✅ 123 `first(fieldValue({issue.created}, linkedIssues("has Epic")))`

Edit expression

Display format: Format: **Date time picker**

Example: 17/May/21 12:45 PM

Timezone: **Server timezone**

Edit display format

Modify configuration scheme context

Configuration contexts enable the custom field for that particular set of issues and each context can have its own configuration set (e.g. different default values, options).

Custom Field Date-Time Creation Of Epic

Configuration scheme label | Default Configuration Scheme for Date-Time Creation Of Epic
Label for this context

Description | Default configuration scheme generated by Jira

Optional description for this context

Choose applicable issue types

Please select the applicable issue types. This will enable the custom field for these issues types in the context specified below.

Issue types
- Any issue type
- Epic
- Story
- Task
- Bug

Apply for all issues with any selected issue types

Choose applicable context

Please choose the contexts where this configuration will be applicable. Note that this will apply to only issues with the selected issue type as above.

○ **Global context**. Apply to all issues in Jira.
◉ Apply to issues under selected projects

Projects
- Documentation
- Globally Accesible Project
- Service Desk Test

Apply for all issues in any selected projects

[Modify] Cancel

The **field context configuration** allows to decrease the number of issues in which the calculated field should be calculated and displayed, so making a good use of it will improve the performance of the field and of the re-indexing.

5 Check out the result

Your browser does not support the HTML5 video element

To learn more about configuring the **display formats**, check out the following page.

Been there, done that? If you need even more inspiration, make sure to check out these useful use cases that will definitely get you started.

If you still have questions, feel free to refer to our support team.