# **JWT** expression editor

JWT provides a huge set of functionalities to read and manipulate data from Jira issues, users, projects, and more.

The "expressions" that are being evaluated by the expression parser are composed and tested in the **J WT** expression editor.

Depending on what you are doing, you will be presented with different options and functionalities, but in the end it always comes down to **writing an expression**, which will be evaluated on runtime.



### What is an expression?

Expressions are a fundamental concept within Jira Workflow Toolbox: every input into the JWT expression editor is considered an expression and will be interpreted by the JWT expression parser against the selected parsing mode. They are used in workflow functions, automation rules, and calculated fields.

Expressions range from simple text, e.g. Hello world!, over mathematical calculation, e.g. 3 + 4, to the extensive usage of expression parser functions, and beyond.



## Syntax check

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- 1. As you type in your expression the syntax check button is synchronized with your expression and you can see if your expression is valid or
- not. 2. Click on the **syntax check** button to review your expression.

Output	Description
Ø	Valid expression: The parser expression entered is valid.
•	<ul> <li>Parsing error: The parser expression entered is not valid and you can do the following to fix the issue:</li> <li>Check your selected Parsing mode</li> <li>Try an example configuration from the right hand side of the configuration interface</li> </ul>

## Parsing mode selector

A parsing mode determines how the JWT expression parser interprets an expression.

The **available** parsing modes depend on the **context** you are using the expression in. As an example, only the Logical mode is available if you configure a **conditional execution** in a workflow post function or that you can only use the Numeric mode if you want to set a number field using a parser expression.

expression

Read more about all available parsing modes.

## Field code injector

The field code injector is a dynamic select list that lists all available field codes. The fields, or their values, will be be replaced with actual values at r untime.

The available fields and their notation depend on the selected Parsing mode. Depending on the parsing mode, numeric fields (including dates) can be either inserted as **text** or a **number**.

Choose a parsing mode	Add a field					
Advanced text 🗸	due	~	Examples	~		?
1	Due Date Custom	~		[Line 1 / Col 0 ]	Try your e	expression
Enter plain text and optionally use field c	Due date	~				
	from current issue %{issue.dueDate}	Abc 123				
	<pre>p from current issue s parent %{parent.dueDate}</pre>	(Abc) (123)				

## Example injector

				Choose an example	
0	Aa Basic text 🗸 🗸	Add field	~	Examples 🗸	▶ ?
1	Hey [~%{issue.reporte	er}],		A simple text	
3	please take a look in	to %{issue.key}.		Mentioning the reporter	
					your expression

Enter plain text and optionally use field codes, e.g. %{issue.summary}, to insert field values.

Need inspiration? Each parsing mode comes with **built-in example expressions**. If you choose an example from the dropdown menu, the expression will be automatically added to the **editing area** of the expression editor.

#### Run button

🚹 🗛 Basic text 🗸 🗸 Add field	~	Examples 🗸		?
<pre>1 What is my parent? Ahhhh, it's %{parent.key}</pre>				expression

By clicking the Run button, a test expression panel is displayed below your expression. To test your expression, do the following:

- 1. Select an issue that you want to test your expression with (as the current issue)
- 2. Click Run again

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### Handbook

Help is just one click away. If you click on the Help button, an in-line handbook will pop up, which provides information about almost any feature of JWT, from field codes, to Parsing modes, and JWT expression parser functions.

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#### Expression area

This is where the magic happens. Enter a plain text, Field codes, and JWT expression parser functions.

Which options you will actually have, depend on the selected Parsing mode.

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Head over to the Use case library to see what's possible with the power of the JWT expression editor.

#### Auto-complete

#### Tech tip: Auto-complete

The expression editor comes with a built-in auto-complete feature.

Simply press <CTRL> + <space> to get a searchable list of JWT expression parser functions and available field codes.



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