

Smart number fields



The value of this **read-only** custom field is dynamically calculated from a custom mathematic or 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** (linked issues, sub-tasks, epics, stories, JQL selected issues, etc).

Configuration

Smart fields can be configured in two different ways. You can either use the [Template view](#) to choose from a set of preconfigured templates from our [use case library](#), or you can switch to the Expert mode where calculations can be configured freely with our [expression editor](#), best known from our Jira app [Jira Workflow Toolbox \(Cloud\)](#).

Template



The Template view is the default configuration view of Smart Fields for Jira. It provides a set of preconfigured templates which are represented by cards. Each card shows a short name describing its purpose and the icon of the template category.

From here, you can switch to the Expert mode at any time. If you had selected a template, its configuration is taken over to the Expert mode, where you can alter the corresponding parser expression. Be aware that you cannot switch back to the Template view once you have made any changes in the mode, even if you reverse them.

1


Select a use case from Template

Select a use case by **clicking on a template card** in the overview, or by clicking on **Select** at the button of the card. The selected card will be highlighted.

You can also **search for templates** by name or drill down in the overview by selecting a specific category, only showing templates from this category.

Search All categories


Expert mode ☐



Total story points of issues in an epic

EPICS


Selected



ICE Score

KPIS


Select



Number of affected versions

VERSIONS


Select



Number of attachments

ATTACHMENTS


Select



Number of comments

COMMENTS


Select



Number of incoming issue links

LINKS


Select



Number of issues in an epic

EPICS

Select



Number of labels

MISC

Select

< 1 2 >

Cancel Next

2

Some templates require more setup, like picking the source fields for your calculation. Based on the template you choose for your situation, you might need to click **Next** in the bottom right corner.

For instance, if you want to calculate the "total story point of an issue within an epic", you will need to pick the field that contains your story points.

Expert mode ☐

Parameters -	Value
Story Points*	Select field <input type="text"/>

3

Click **Save** in the bottom right corner to finish your configuration.

Expert mode



The Expert mode allows you to configure custom Smart fields with the [expression editor](#), best known from our best-rated Jira app [Jira Workflow Toolbox \(Cloud\)](#). You are free to edit the entire expression down to the logical elements.

You can choose a card from the Template view, switch to the mode and edit the underlying expression of this template, but you cannot switch back to the Template view once you have made any changes, even if you reverse them.

1

Select "Expert mode"

From the Template view, click the **Expert mode** button in the top right corner.

2

Enter a valid Expression

Add expression

[← Return to templates](#)

Expression *

✓

General

Add field

Examples

▶

?

1

[Line 1 / Col 0] Try your expression

Enter plain text and optionally use [field codes](#), e.g. `%{issue.summary}`, to insert field values.

Cancel

Save

Need some inspiration? We have prepared some really helpful use cases and expressions for you. Check them out here: [Use case library](#)

Want to learn more about Expressions? Check out these pages: [Expression Parser](#) & [Jira Expressions](#)

3

Select display format

Optionally, choose a **custom display format**. This is extremely useful to enhance usability for end users.

Read more about the available [Display formats](#).

4


Click **Save** in the bottom right corner to finish your configuration.

Use cases and examples

Use case	Built-in	Parsing mode	Expression
Average time since creation of sub-tasks		General	<pre>%{floor(avg(toNumberList(jiraExpression("issue.subtasks.map(i=>(Number(new Date())-Number(i.created))/1000/60/60/24)"))))}</pre>

Completion percentage by status	General	<pre> {%{issue.status} = "Open" ? 0 : (%{issue.status} = "Planning" ? 0.15 : (%{issue.status} = "In Progress" ? 0.6 : (%{issue.status} = "In Review" ? 0.6 : (%{issue.status} = "Implementing" ? 0.85 : 1)))) } </pre> <p>Please, replace the status names as well as the completion percentages with the ones of your choice. Any status not included in the sequence will return 1.</p>
Difference between the current day and the earliest sub-task due date	General	<pre> {%max(fieldValue({issue.dueDate},subtasks())) != null ? ceil((min (filterByValue(fieldValue({issue.dueDate},subtasks()),!=, null)) - {system.currentDateTime}) / DAY) : null} </pre>
Elapsed time between creation and resolution	General	<pre> %{{issue.resolutionDate} != null ? (({issue.resolutionDate} - {issue.created}) / DAY) : null} </pre> <p>The duration can be returned in years, weeks, days, hours or minutes if the DAY keyword is replaced in the above expression with the corresponding time constant.</p>
Highest value out of several fields	General	<pre> {%max([{issue.cfAAAAA}, {issue.cfBBBBB}, {issue.cfCCCCC}, {issue.cfDDDDD}, {issue.cfEEEEEE}])} </pre> <p>Please, replace the field codes with the ones of your choice.</p>
ICE score	Jira expression	<pre> (issue?.customfield_IIIII 0) * (issue?.customfield_CCCCC 0) * (issue?.customfield_EEEEE 0) </pre> <p>Replace the IDs with the ones of your number custom fields Impact (IIIII), Confidence (CCCCC) and Ease (EEEEEE).</p>
Months elapsed	General	<pre> %{{issue.cfnnnnn} != null ? ((year({system.currentDateTime}, RUN_AS_LOCAL) - year({issue.cfnnnnn}, RUN_AS_LOCAL))*12 + month ({system.currentDateTime}, RUN_AS_LOCAL) - (month({issue.cfnnnnn}, RUN_AS_LOCAL))) : null} </pre> <p>Please, replace both <i>nnnnn</i> in the above expression with the ID of your Date Picker custom field.</p>
Number of affected versions	General	<pre> {%issue.versions.length} </pre>
Number of assignee changes		



		Jira expressi on	<pre>issue.changelogs.filter(changelog => changelog.items.some(item => item.fieldId == 'assignee')).length</pre>
Number of attachment authors		Jira expressi on	<pre>issue.attachments.map(attachment => attachment.author.accountId). reduce((a, b) => a.includes(b) ? a : a.concat(b), []).length</pre>
Number of attachments		General	<pre>%{issue.attachments.length}</pre>
Number of attachments in sub-tasks		Jira expressi on	<pre>issue.subtasks.map(subtask => subtask.attachments.length).reduce((a, b) => a + b, 0)</pre>
Number of comment authors		Jira expressi on	<pre>issue.comments.map(comment => comment.author.displayName).reduce((a, b) => a.includes(b) ? a : a.concat(b), []).length</pre>
Number of comments		Jira expressi on	<pre>issue?.comments?.length</pre>
Number of components		Jira expressi on	<pre>issue.components.length</pre>
Number of days in previous status		Jira expressi on	<pre>let statusChangelogs = issue.changelogs.filter(changelog => changelog. items.some(item => item.fieldId == 'status')); statusChangelogs[0] ? (statusChangelogs[0].created.getTime() - (statusChangelogs[1] ? statusChangelogs[1].created : issue.created). getTime()) / (24*60*60*1000) : null</pre>
Number of fix versions		General	<pre>%{issue.fixVersions.length}</pre>
Number of incoming issue links		Jira expressi on	<pre>issue?.links?.filter(link => link.direction == "inward").length</pre>
Number of issues under epic		Jira expressi on	<pre>issue.stories?.length</pre>
Number of issues under epic including sub- tasks		General	<pre>%{%{issue.issueType} = "Epic" ? count(append(issuesUnderEpic(), subtasks(issuesUnderEpic()))) : null }</pre>
Number of issues with the same fix versions		General	<pre>%{%{issue.fixVersions} != null ? count(issuesFromJQL("fixVersion in ('" + jiraExpression("issue?.fixVersions?.map(v => v?.name).join (\'', '\\" ") + "') ") : null }</pre>

Number of labels	✓	General	<pre>%{issue.labels.length}</pre>
Number of linked issues	✓	General	<pre>%{issue.links.length}</pre>
Number of open child issues		General	<pre>%{count(issuesFromJQL("statusCategory in ('To Do','In Progress') and parent = " + %{issue.key}))}</pre>
Number of outgoing issue links		Jira expression	<pre>issue?.links?.filter(link => link.direction == "outward").length</pre>
Number of status changes		Jira expression	<pre>issue.changelogs.filter(changelog => changelog.items.some(item => item.fieldId == 'status')).length</pre>
Number of sub-tasks	✓	General	<pre>%{issue.subtasks.length}</pre>
Number of sub-tasks based on status		General	<pre>%{count(filterByStatus(subtasks(), "Done, Completed"))}</pre>
			Please, note that by changing "Done, Completed" into other statuses and resolutions you can adapt this use case for your needs.
Number of sub-tasks based on status and issue type		General	<pre>%{count(filterByIssueType(filterByStatus(subtasks(), "Done, Completed"), "Sub-task, Sub-story"))}</pre>
			Please, note that by changing "Done, Completed" into other statuses and "Sub-task, Sub-story" into other issue types, you can adapt this use case for your needs.
Number of times issue was changed to the current status		Jira expression	<pre>issue.changelogs.filter(changelog => changelog.items.some(item => item.fieldId == 'status' && item.toString == issue?.status?.name)).length</pre>
Number of times that a custom field has been changed		Jira expression	<pre>issue.changelogs.filter(changelog => changelog.items.some(item => item.fieldId == 'customfield_nnnnn')).length</pre>
			Please, replace <i>nnnnn</i> with the ID of your custom field in the above expression.
Number of times that an issue was			

rejected	Jira expression	<pre>issue.changelogs.filter(changelog => changelog.items.some(item => item.fieldId == 'resolution' && item.toString == 'Rejected')).length</pre>
		In case you have other statuses and resolutions, feel free to change these arguments: " item.fieldId == ' resolution ' && item.toString == ' Rejected '"
Number of unresolved blocking issues	General	<pre>%{count(filterByResolution(linkedIssues("is blocked by"), ""))}</pre>
Operations with field values from sub-tasks	Jira expression	<pre>issue.subtasks.length && issue.subtasks.map(s => (s.customfield_nnnnn 0) * (s.customfield_ppppp 0)).reduce((a, b) => a + b)</pre>
		Please, replace <i>nnnnn</i> and <i>ppppp</i> in the above expression with the IDs of the Number fields.
Priority assessment based on field values	General	<pre>%{sum([%{issue.cfnnnnn} = "Option 1" ? 1 : 0, %{issue.cfppppp} = "Option 1" ? 1 : 0])}</pre>
		Please, replace <i>nnnnn</i> and <i>ppppp</i> with the IDs of the custom fields, e.g. Select List (single choice).
Remaining budget	General	<pre>%{{issue.cfnnnnn} = null ? null : {issue.cfnnnnn} - sum(append(fieldValue({issue.cfppppp}, subtasks()), [0]))}</pre>
Sum of field values from issues in JQL query	General	<pre>%{sum(fieldValue({issue.cfnnnnn}, issuesFromJQL("project = DEMO and 'fieldName' is not empty")))}</pre>
		Please, replace <i>nnnnn</i> in the above expression with the ID of the Number custom field and <i>fieldName</i> with its name.
Sum of original estimates of issues under epic's parent	General	<pre>%{%{issue.issueType} = "Initiative" ? sum(append(fieldValue({issue.originalEstimate} , union(issuesFromJQL("issuekey in portfolioChildIssuesOf("+ %{issue.key} +")"), issuesUnderEpic(issuesFromJQL("issuekey in portfolioChildIssuesOf("+ %{issue.key} +")"))), [0])) / 60 : null}</pre>
		We consider the epic's parent to be a Initiative in this expression, but it could differ depending on the Advanced Roadmaps issue type hierarchy. To adapt to your issue type hierarchy change the following part of the expression: " %{issue.issueType} = "Your Custom Issue Type" "

Sum of story points of completed child issues	General	<pre>%{sum(fieldValue({issue.cfnnnnn},issuesFromJQL("statusCategory = Done AND 'parent' = "+%{issue.key})))}</pre>
		<p>Replace "nnnnn" with the ID of the story points field. Keep in mind, that this smart fields should be displayed on a parent issue.</p>
Sum of story points of completed sibling issues	General	<pre>%{sum(fieldValue({issue.cfnnnnn},issuesFromJQL("statusCategory = Done AND 'parent' = "+%{parent.key})))}</pre>
		<p>Replace "nnnnn" with the ID of the story points field. Keep in mind, that this smart fields should be displayed on a child issue.</p>
Sum of time spent of blocking issues	General	<pre>%{sum(append(fieldValue({issue.timeSpent},linkedIssues("is blocked by")), [0]))/60}</pre>
		<p>If the resulting number from the expression contains too many decimal numbers, feel free to select one of the available display formats or to configure it manually.</p>
Sum of time spent of epic and issues under it	General	<pre>%{%{issue.issueType} = "Epic" ? (sum(append(fieldValue({issue.timeSpent}, issuesUnderEpic()), [{issue.timeSpent}])) / 60) : null}</pre>
		<p>If the resulting number from the expression contains too many decimal numbers, feel free to select one of the available display formats or to configure it manually.</p>
Sum of time spent of issues under epic	General	<pre>%{%{issue.issueType} = "Epic" ? sum(append(fieldValue({issue.timeSpent}, issuesUnderEpic()), [0])) / 60 : null}</pre>
		<p>If the resulting number from the expression contains too many decimal numbers, feel free to select one of the available display formats or to configure it manually.</p>
Sum of time spent of linked issues	General	<pre>%{sum(append(fieldValue({issue.timeSpent}, linkedIssues()), [0])) / 60}</pre>
Sum of time spent of the current and linked issues	General	<pre>%{sum(append(fieldValue({issue.timeSpent}, union(linkedIssues(), issueKeysToIssueList(%{issue.key}))), [0])) / 60}</pre>
Time left until due date	General	<pre>%{{issue.dueDate} != null ? max({issue.dueDate} - {system.currentDateTime}, 0) / DAY : null}</pre>

Time since creation	General	<pre>%{floor(({system.currentDateTime} - {issue.created}))/DAY)}</pre>
<p>The duration can be returned in years, weeks, days, hours or minutes if the DAY keyword is replaced in the above expression with the corresponding time constant.</p>		
Time spent ratio	General	<pre>%{%{issue.originalEstimate} != null AND %{issue.timeSpent} != null ? {issue.timeSpent} / {issue.originalEstimate} * 100 : null}</pre>
Total attachment size in MB	Jira expression	<pre>issue.attachments.reduce((result, att) => result + att.size, 0) / 1024 / 1024</pre>
Total original estimate of blocking issues	General	<pre>%{sum(fieldValue({issue.originalEstimate}),linkedIssues("is blocked by"))/60}</pre>
<p>If the resulting number from the expression contains too many decimal numbers, feel free to select one of the available display formats or to configure it manually.</p>		
Total remaining estimate of blocking issues	General	<pre>%{sum(append(fieldValue({issue.remainingEstimate}),linkedIssues("is blocked by")),[0])/60}</pre>
<p>If the resulting number from the expression contains too many decimal numbers, feel free to select one of the available display formats or to configure it manually.</p>		
Total remaining estimate of issues under epic	General	<pre>%{%{issue.issueType} = "Epic" ? sum(append(fieldValue({issue.remainingEstimate}), issuesUnderEpic()), [0])) / 60 : null}</pre>
Total remaining estimate of issues under epic and sub-tasks	General	<pre>%{%{issue.issueType} = "Epic" ? sum(append(fieldValue({issue.remainingEstimate}), union(issuesUnderEpic(), subtasks(issuesUnderEpic()))), [0])) / 60 : null}</pre>
Total story points of issues in an epic	General	<pre>%{sum(fieldValue({issue.cfNNNNN}), issuesUnderEpic())}</pre>
<p>Replace the ID with the one of your 'Story Points' custom field.</p>		