# Close parent issue when all sub-tasks are closed

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## Features used to implement the example

- Condition and validation on sub-tasks
- . Boolean condition and validator with math. date-time or text-string terms
- Copy parsed text to a field

## Example: Close parent issue when all sub-tasks are closed

We want to automatically **close parent** issue when the **all subtasks** has been **closed**. We are going to describe two different solutions to implement this behavior

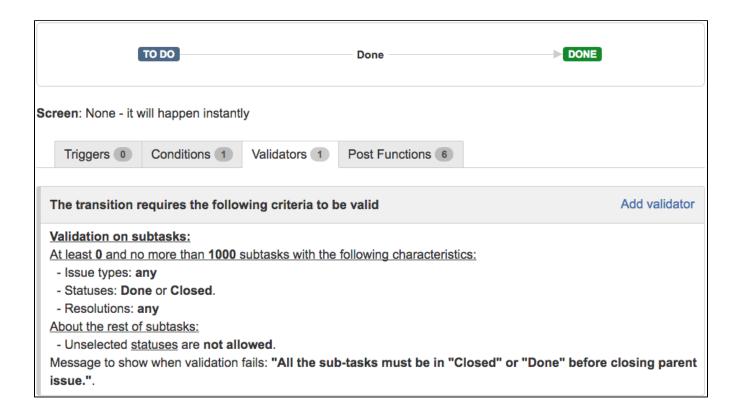
This solution consist on a validator in parent's workflow, and a post-function in sub-tasks workflow:

A **validation** in **parent issue workflow** to prevent parent issue from being closed manually whenever there still are open sub-tasks. To do it we use **C ondition and validation on sub-tasks** in transition "**Done**" or "**Close Issue**" on **parent's workflow** with the following configuration:

Subtask's issue types:	QA Sub-task	?
	□ Sub-task	
	Selected issue types will be allowed. Nevertheless, if you didn't select any issue type, and checked "Allow unselected issue types", there won't be applied any filter by iss type, i.e., every issue type will be allowed.	sue
Subtask's statuses:	□ → Open	
	□	
	□ ♣ Reopened	
	Resolved	
	✓ Closed	
	□ → To Do	
	✓ A Done	
	□ ♣ Acceptance	
	□ ♣ Fail	
	Pass	
	Retest	
	Active	
	□ • Inactive	
	Subtasks in selected statuses will be allowed. Nevertheless, if you didn't select any issue status, and checked "Allow unselected statuses", there won't be applied any filtress status, i.e., every issue status will be allowed.	er by
Subtask's resolutions:	UNRESOLVED, i.e. no resolution value	
	□ Fixed	
	□ Won't Fix	
	Duplicate	
	□ Incomplete	
	Cannot Reproduce	
	Subtasks with selected resolutions will be allowed. Nevertheless, if you didn't select any issue resolution, and checked "Allow unselected resolutions", there won't be app any filter by resolution, i.e., every resolution will be allowed.	lied

Filtering by field values: Optional boolean expression that should be satisfied by subtasks. (Syntax	1	
Specification)	Leave field empty for no filtering. [Line 1 / C	ol 1 ]
	Logical connectives: or, and and not. Alternatively you can also use  , & and 1.  Comparison operators: =, !=, >, >=, < and <=. Operators ~, !~, in, not in, any in and none in can be used with strings, multi-valued fields and lists.	ах
	Logical literals: true and false. Literal null is used with = and != to check whether a field is initialized, e.g. {00012} != null checks whether Due Date is initialized.	
	String Field Code Injector:  Summary - [Text] - %{00000}	
	Field Code for <b>Current</b> Issue Field Code for <b>Subtasks</b>	
	Numeric/Date Field Code Injector:  Original estimate (minutes) - [Number] - {00068}	
	Field Code for Current Issue  Example 1: {00012} <= ^{00012} will require that subtasks have Due Date equal or later than current issue's Due Date.  Example 2: \${00074} ~ ^\${00074} AND ^\${00017} in ["Blocker", "Critical"] will require that subtasks have Fixed versions contained in current issue's Fixed versions and Priority is Blocker or Critical.	
Minimum required number of subtasks:	O  Minimum number of subtasks requiered to satisfy selected filtering conditions (issue type, status, resolution and field values).	
Maximum allowed number of subtasks:	1000  Maximum number of subtasks allowed to satisfy selected filtering conditions (issue type, status, resolution and field values).	
Allow unselected issue types:	Subtasks in unselected issue types will be ignored, i.e., they will be allowed regardless of their status, resolution, field values and number. Nevertheless, if none of the issue types are selected, checking this option will make the condition behave as if you had selected every issue type.	е
Allow unselected statuses:	Subtasks in unselected statuses will be ignored, i.e., they will be allowed regardless of their resolution, field values and number. Nevertheless, if none of the statuses are selected, checking this option will make the condition behave as if you had selected every status.	
Allow unselected resolutions:	Subtasks in unselected resolutions will be ignored, i.e., they will be allowed regardless of their field values and number. Nevertheless, if none of the resolutions are selected checking this option will make the condition behave as if you had selected every resolution.	d,
Allow unsatisfied condition on field values:	Subtasks not satisfying filter by field values will be ignored, i.e., they will be allowed regardless of their number.	
Skip validation when: Inhibit the validator under selected circumstances.	<ul> <li>□ Transition is triggered by a bulk operation.</li> <li>□ Transition is triggered by a JIRA Workflow Toolbox post-function.</li> <li>□ Current issue is being created by cloning. Only makes sense in <i>Create Issue</i> transition.</li> </ul>	
Message to show when validation fails:	All the sub-tasks must be in "Closed" or "Done" before closing parent issue.  Field code injector:  Summary - [Text] - %(00000)  Field codes with format %(nnnnn) can be inserted in the failure message and its translations, and they will be replaced with actual field values at runtime.  Set translations for installed languages	

Once configured, transition "Close Issue" in parent's workflow will look like this:



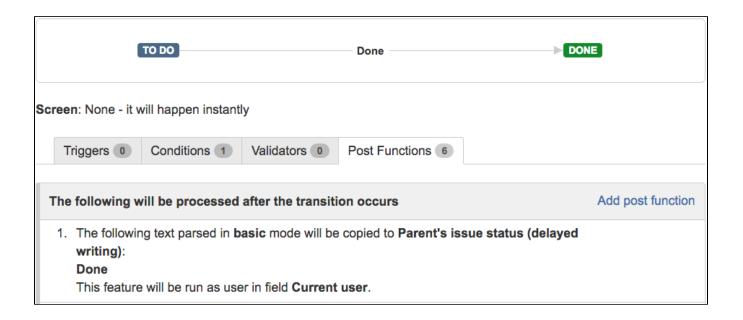
Alternatively, we can use Boolean condition and validator with math. date-time or text-string terms with the following boolean expression:

count(subtasks()) = count(filterByStatus(subtasks(), "Closed, Done"))

We add a **post-function** in **sub-task's workflow** for trying to close parent issue each time a sub-task is closed. To implement it we use post-function **Copy parsed text to a field** in transition "**Done**" or "**Close Issue**" on **sub-task's workflow** with the following configuration:



Once configured, transition "Done" or "Close Issue" in sub-task's workflow will look like this:



**Note**: If you are using Jira **7.0** or higher with versions of **Jira Workflow Toolbox** older than **2.2.8**, you should input the following boolean expression in parameter **Conditional execution**:

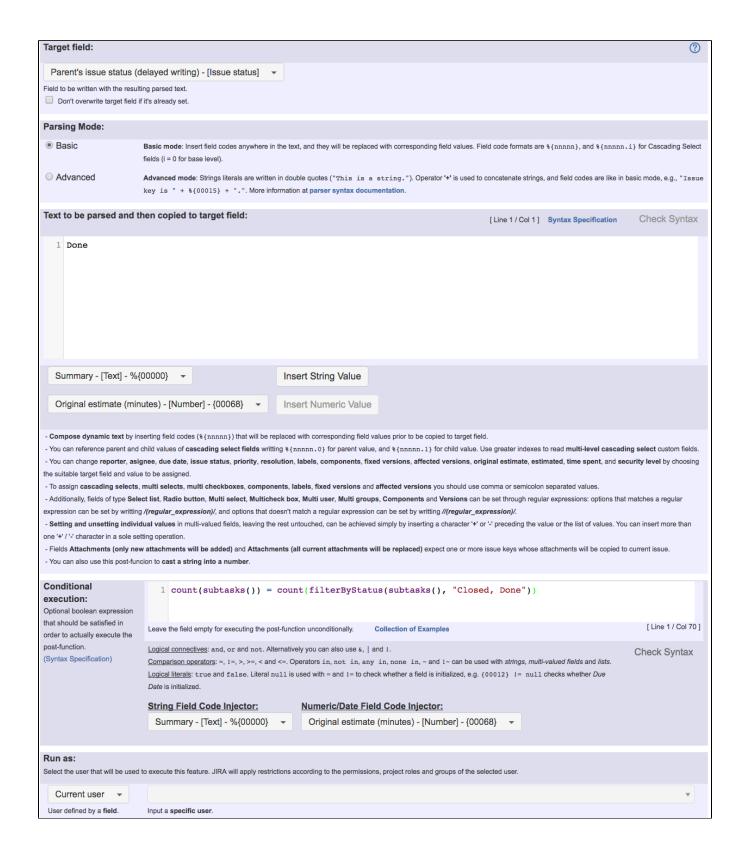
count(filterByStatus(siblingSubtasks(), "Closed, Done")) = count(siblingSubtasks())

This way we are preventing transition from being executed whenever the validation is not satisfied.

## Alternative implementation

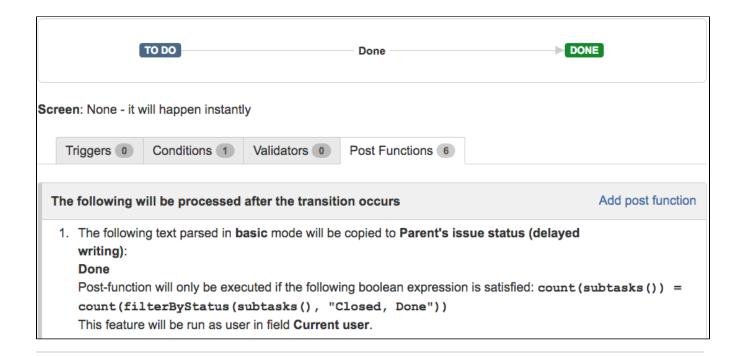
Using only a post-function in sub-tasks workflow, the other implementation is usually preferred since it also prevents parent issue from being closed until all sub-tasks are closed, even if you try to do it by manually triggering transition "Done" or "Close Issue". Anyway, sometimes you may want to allow manually overriding parent closing, even if there still are open sub-tasks.

This solution uses a post-function Copy parsed text to a field in transition "Done" or "Close Issue" in sub-task's workflow with the following configuration:



Conditional execution: count(subtasks()) = count(filterByStatus(subtasks(), "Closed, Done"))

Once configured, transition "Close Issue" in sub-task's workflow will look like this:



## Other examples of that functions

#### Condition and validation on sub-tasks

Page: Close parent issue when all sub-tasks are closed

Page: Enforce certain type of sub-tasks to be "Resolved" to allow

executing a transition

Page: Make linked issues, sub-tasks and JQL selected issues progress

through its workflows

Page: Make parent issue progress through its workflow

Page: Proceed with a task only when all sub-tasks are completed

Page: Transition parent issue only when certain issue sub-task types

are done

## Boolean condition and validator with math. date-time or text-string

Page: Block a transition until all sub-tasks have certains fields populated

Page: Block an epic's transition depending on linked issues status and

Page: Block or hide a transition for an issue depending on its issue links Page: Block or unblock a transition after an issue rested a specific time

Page: Block transition until all sub-tasks are in a specific status category

Page: Close parent issue when all sub-tasks are closed

Page: Enforce a field (Select List) to be set when another field (Radio

Button) has a certain value (works with any kind of field type)

Page: Ensure that all issues linked with a certain issue link type have "Due Date" field set

Page: If field A is populated then, field B must also be populated

Page: Limit issue creation per role and issue type

Page: Limit the number of hours a user can log per day

Page: Limit valid dates for work logs

Page: Make "Time Spent" field required when there is no time logged in

Page: Make a custom field mandatory when priority is "Critical" or "Blocker" and issue type is "Incident"

Page: Make attachment mandatory depending on the value of certain custom field

Page: Make different fields mandatory depending on the value of a Select List custom field

Page: Make linked issues, sub-tasks and JQL selected issues progress through its workflows

### Related Usage Examples

- · Validation on sibling sub-tasks depending on issue type and status
  - o example
  - o validator
  - o sub-task o transition
- · Block a transition until all sub-tasks have certains fields populated
  - o example
  - o condition
  - o validator
  - o sub-task
  - o transition
- Transition sub-tasks when parent is transitioned
  - o example
  - o post-function
  - o sub-task
  - transition
  - outdated
- Transition only a sub-task among several ones
  - example
  - post-function
  - o sub-task transition

  - o outdated
- Moving sub-tasks to "Open" status when parent issue moves to "In Progress"
  - o example
  - o post-function
  - o sub-task
  - o transition
  - outdated
- · Moving story to "Ready for QA" once all its sub-tasks are in "Ready for QA" status
  - o example
  - post-function
  - o sub-task
  - transition
  - outdated
- Automatically close resolved sub-tasks when parent issue is closed
  - o example

Page: Make parent issue progress through its workflow

Page: Prevent issue creation if another issue with same field value already exists

Page: Reject duplicated file names in attachments

Page: Require at least one sub-task in status "Resolved" or "Closed"

when "Testing required" is selected in Check-Box custom field

Page: Require issue link when resolving as duplicate

Page: Restrict parent issue from closing if it has sub-tasks that were created during a given parent issue status

Page: Restrict sub-task type creation depending on parent issue status

Page: Restrict sub-task type creation depending on parent issue type

Page: Set a condition in a global transition which only applies in a certain status

Page: Validate a custom field "Story Points" has been given a value in Fibonacci sequence

Page: Validate compatible values selection among dependent custom fields

Page: Validate only issue links created in transition screen

Page: Validate that multi-user picker custom field A does not contain any user in multi-user picker custom field B

Page: Validation and condition based on time expressions

Page: Validation based on the value of a date type project property

Page: Validation on issue attachments

Page: Validation on MIME types of issue attachments

Page: Validation on sibling sub-tasks depending on issue type and status

Page: Validation on the value of a Cascading Select field

### Copy parsed text to a field

Page: Add all assignees of certain sub-task types to a "Multi-User Picker" custom field

Page: Add and remove a single or a set of items from multi valued fields

Page: Add current user to comment

Page: Add or remove request participants

Page: Add watchers from a part of the issue summary: "Summary\_text watcher1, watcher2, watcher3, ...

Page: Assign issue based on the value of a Cascading Select custom

Page: Assign issue to last user who executed a certain transition in the workflow

Page: Automatically close resolved sub-tasks when parent issue is

Page: Automatically reopen parent issue when one of its sub-tasks is

Page: Calculate the time elapsed between 2 transition executions

Page: Close parent issue when all sub-tasks are closed

Page: Combine the values of several Multi-User picker fields

Page: Compose a parsed text including the "full name" or a user selected in a User Picker custom field

Page: Compose dynamic text by inserting field values in a text template

Page: Copy issue labels to a custom field

Page: Copy the value of a user property into a user picker

Page: Create a comment in sub-tasks when parent transitions

Page: Execute transition in epic

Page: Getting the number of selected values in a custom field of type Multi Select

Page: Limit the number of hours a user can log per day

Page: Make a sub-task's status match parent issue's current status on

Page: Make parent issue progress through its workflow

Page: Moving story to "In Progress" when one of its sub-tasks is moved to "In Progress"

Page: Moving story to "Ready for QA" once all its sub-tasks are in "Ready for QA" status

Page: Parse Email adresses to watchers list

Page: Parsing text from last comment and appending it to issue's summary

Page: Remove versions selected in a version picker custom field

Page: Replace certain issue link types with different ones

Page: Restrict parent issue from closing if it has sub-tasks that were created during a given parent issue status

Page: Set a Select or Multi-Select field using regular expression to express the values to be assigned

Page: Set assignee depending on issue type

Page: Set field depending on time passed since issue creation

Page: Set priority for issues that have been in a certain status for longer than 24 hours

- post-function
- o sub-task
- transition o outdated
- · Change parent's status depending on sub-task's summary
  - example
  - o post-function
  - o sub-task
  - o transition outdated
- Moving story to "In Progress" when one of its sub-tasks is moved to "In Progress'
  - o example
  - o post-function
  - o sub-task
  - o transition
  - o outdated
- Close parent issue when all sub-tasks are closed
  - o example
  - o condition
  - o validator
  - o post-function
  - o sub-task

  - o transition
- Proceed with a task only when all sub-tasks are completed
  - example
  - o condition
  - o validator
  - o sub-task
  - o transition
- · Prevent transitioning when there is a blocking issue
  - o example
  - o validator
  - o issue-links
  - o sub-task
  - o transition
- Transition parent issue only when certain issue sub-task types are done
  - o example
  - validator
  - o sub-task
  - o transition
- · Enforce certain type of sub-tasks to be "Resolved" to allow executing a transition
  - o example
  - validator
  - o sub-task
  - o transition
- Restrict parent issue from closing if it has sub-tasks that were created during a given parent issue status
  - o example
  - validator
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  - o sub-task
  - o transition

Page: Block a transition until all sub-tasks have certains fields populated Page: Block an epic's transition depending on linked issues status and due date

Page: Block or hide a transition for an issue depending on its issue links Page: Block or unblock a transition after an issue rested a specific time in a status

Page: Block transition until all sub-tasks are in a specific status category

Page: Cascading select comparer

Page: Check project property

Page: Close parent issue when all sub-tasks are closed

Page: Condition and validation based on JQL query

Page: Condition and validation based on regular expression

Page: Condition and validation on linked issues

Page: Condition and validation on sub-tasks

Page: Enforce a field (Select List) to be set when another field (Radio Button) has a certain value (works with any kind of field type)

Page: Ensure that all issues linked with a certain issue link type have "Due Date" field set

Page: Except users in field

Page: Expression Parser

Page: If field A is populated then, field B must also be populated

Page: JWT Release Notes 2.1.26

Page: Set security level based on groups and project roles the reporter or creator are in

Page: Transition linked issues in currently active sprint Page: Transition only a sub-task among several ones

Page: Transition parent issue only when certain issue sub-task types are done

Page: Update Cascading Select custom field with a value of the field in parent issue

Page: Update checkboxes custom field if a file has been attached during a transition

Page: Validation on issue attachments

Page: Validation on MIME types of issue attachments

Page: Writing a comment to blocked issues when blocking issues are

resolved

Page: JWT Release Notes 2.1.29 Page: JWT Release Notes 2.2.8

Page: Limit issue creation per role and issue type Page: Limit the number of hours a user can log per day

Page: Limit valid dates for work logs

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Page: Make parent issue progress through its workflow

Page: Only users in a field

Page: Prevent issue creation if another issue with same field value already exists

Page: Project Properties
Page: Read a project property
Page: Read user property

Page: Reject duplicated file names in attachments

Page: Require at least one sub-task in status "Resolved" or "Closed" when "Testing required" is selected in Check-Box custom field

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Page: Virtual Fields