Automatic work log with start and stop work transitions

On this page

- Features used to implement the example
- Example: Automatic work log with start and stop work transitions
- Alternative implementation
- Other examples of that function
- Related Usage Examples

Features used to implement the example

- **Log work**
- **Mathematical and date-time expression calculator**

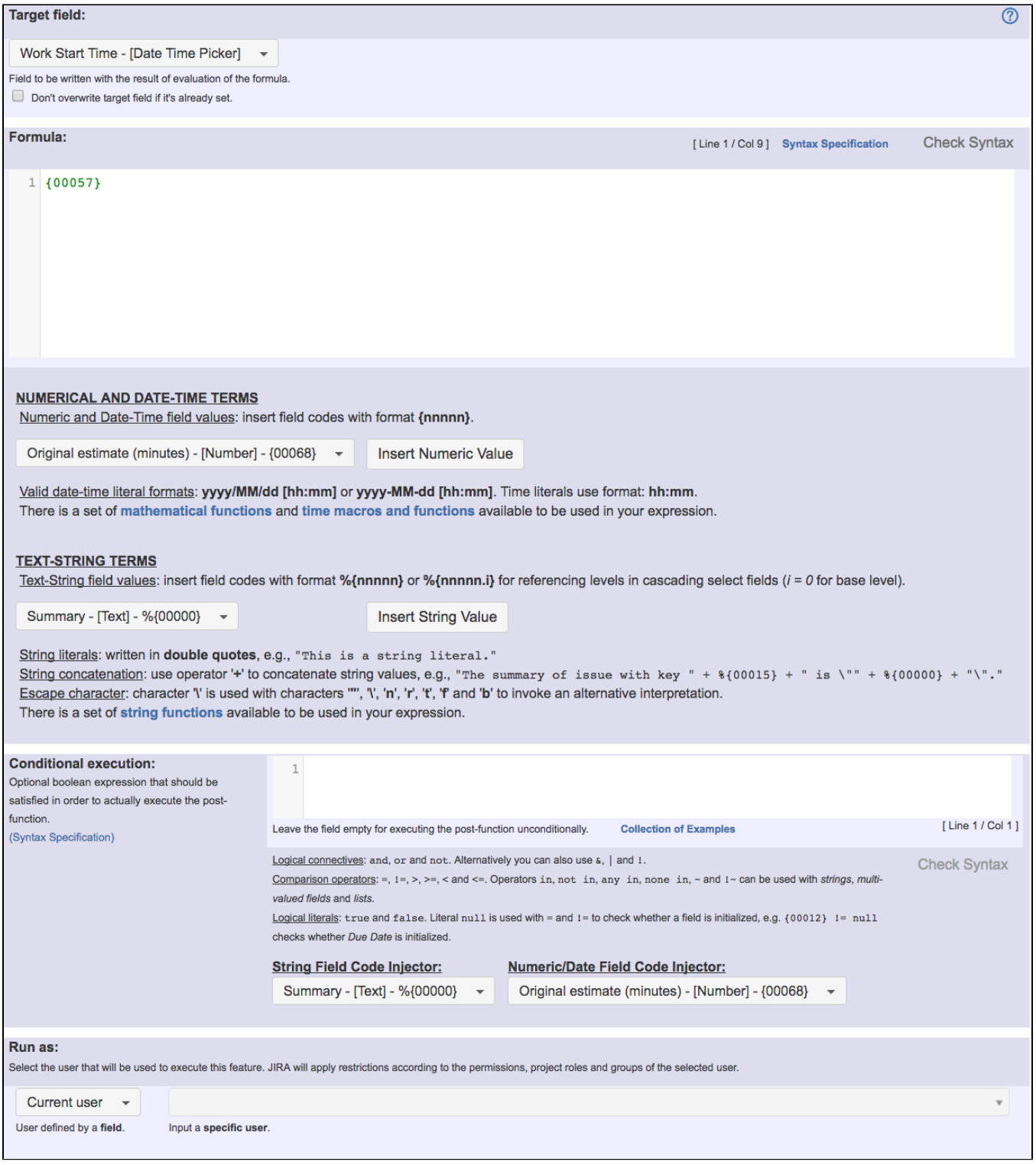
To implement this functionality we will use **two custom fields** and **two post-functions**

- Create a Date Time Picker type custom field called "**Work Start Time**". In this example the field code for this custom field is **{10002}**.
- virtual field "**Current date and time**", the field code is **{00057}.**
- Use post-function **Mathematical and date-time expression calculator** in transition "**Start Progress**" in order to store current date and time in custom field "**Work Start Time**".
- Use post-function **Log work** in transition "**Stop Progress**" in order to insert a work log for the minutes elapsed between date-time stored in custom field "**Work Start Time**" and current date and time.

Example: Automatic work log with start and stop work transitions

We want to automatically insert a work log for the time passed since triggering of "**Start Progress**" transition to triggering of "**Stop Progress**" transition.

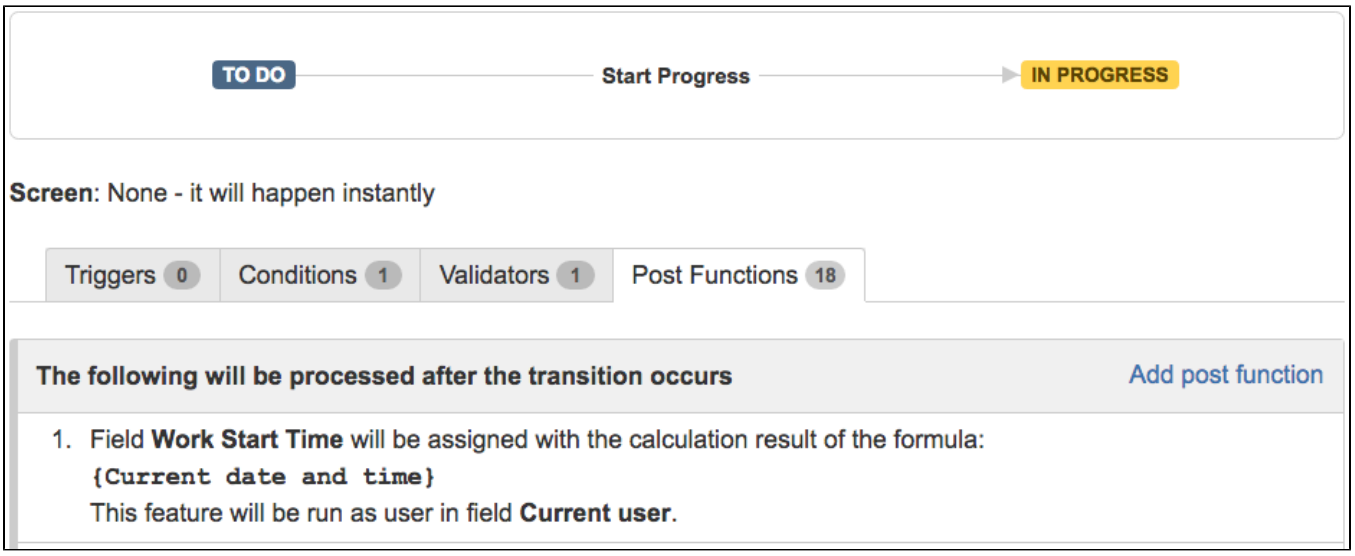
Insert post-function **Mathematical and date-time expression calculator** into transition "**Start Progress**" to set custom field "**Work Start Time**" with the value of virtual field "**Current date and time**":



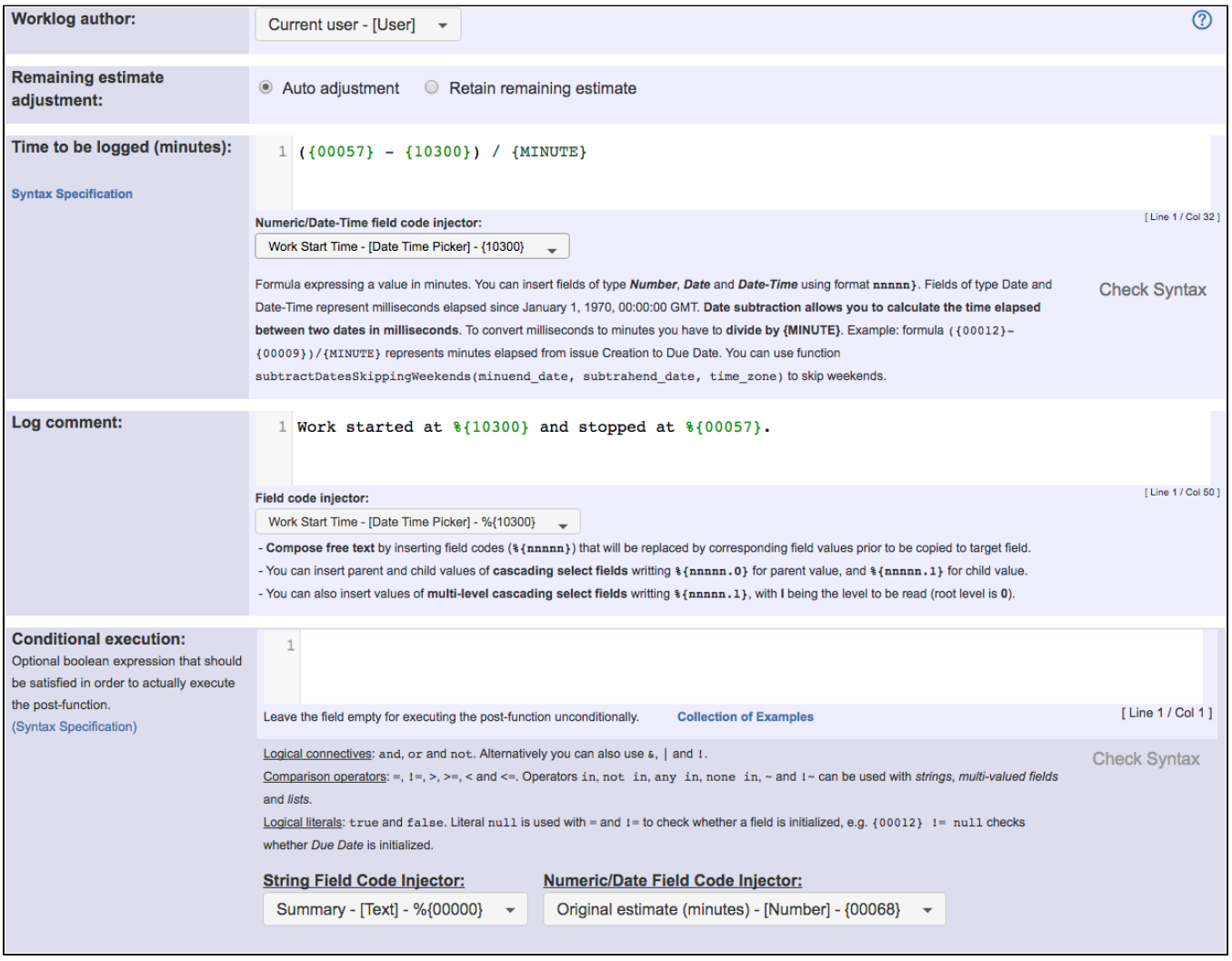
Note that:

- **{00057}** is field code for numeric value of virtual field "**Current date and time**"

Once configured, transition "**Start Progress**" looks like this:



Insert post-function **Log work** into transition "**Stop Progress**", using a time formula to calculate the number of minutes elapsed between "**Start Progress**" and "**Stop Progress**" transitions:

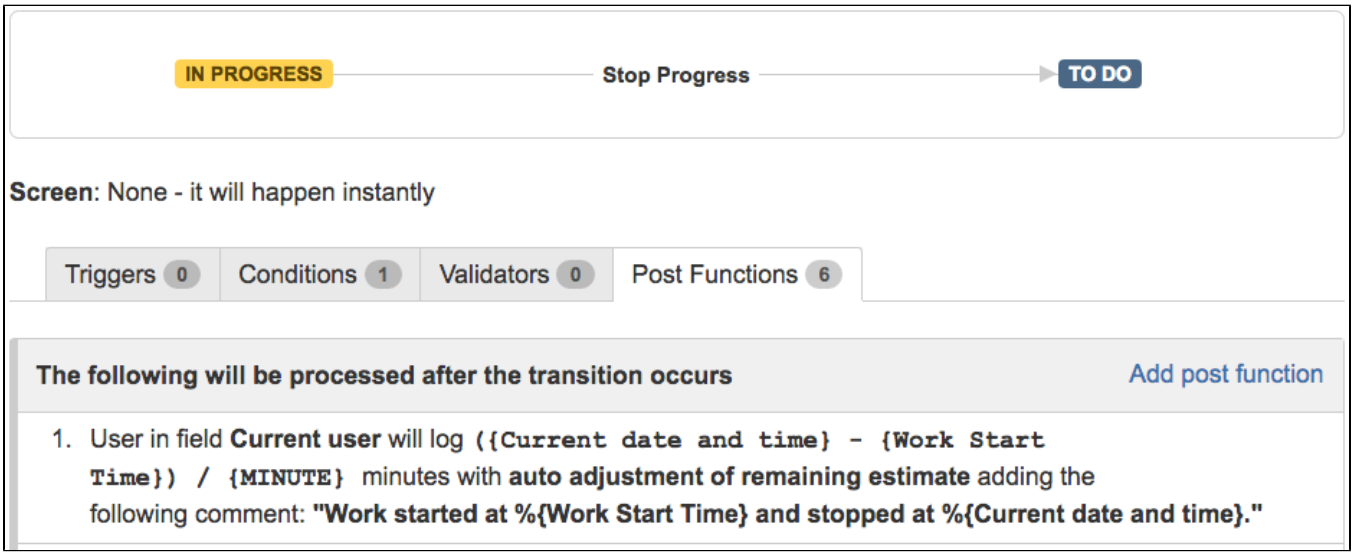


Math expression for obtaining the time elapsed in minutes: **`({00057} - {10300}) / {MINUTE}`**

Note that:

- **{00057}** is field code for numeric value of virtual field "**Current date and time**"
- **{10300}** is field code for numeric value of custom field "**Work Start Time**". This code is dependent on each particular Jira instance
- When we want a string representation of a date-time field, we use the **string value** field code, i.e., **%{00057}** and **%{10300}**

Once configured, transition "**Stop Progress**" looks like this:



Alternative implementation

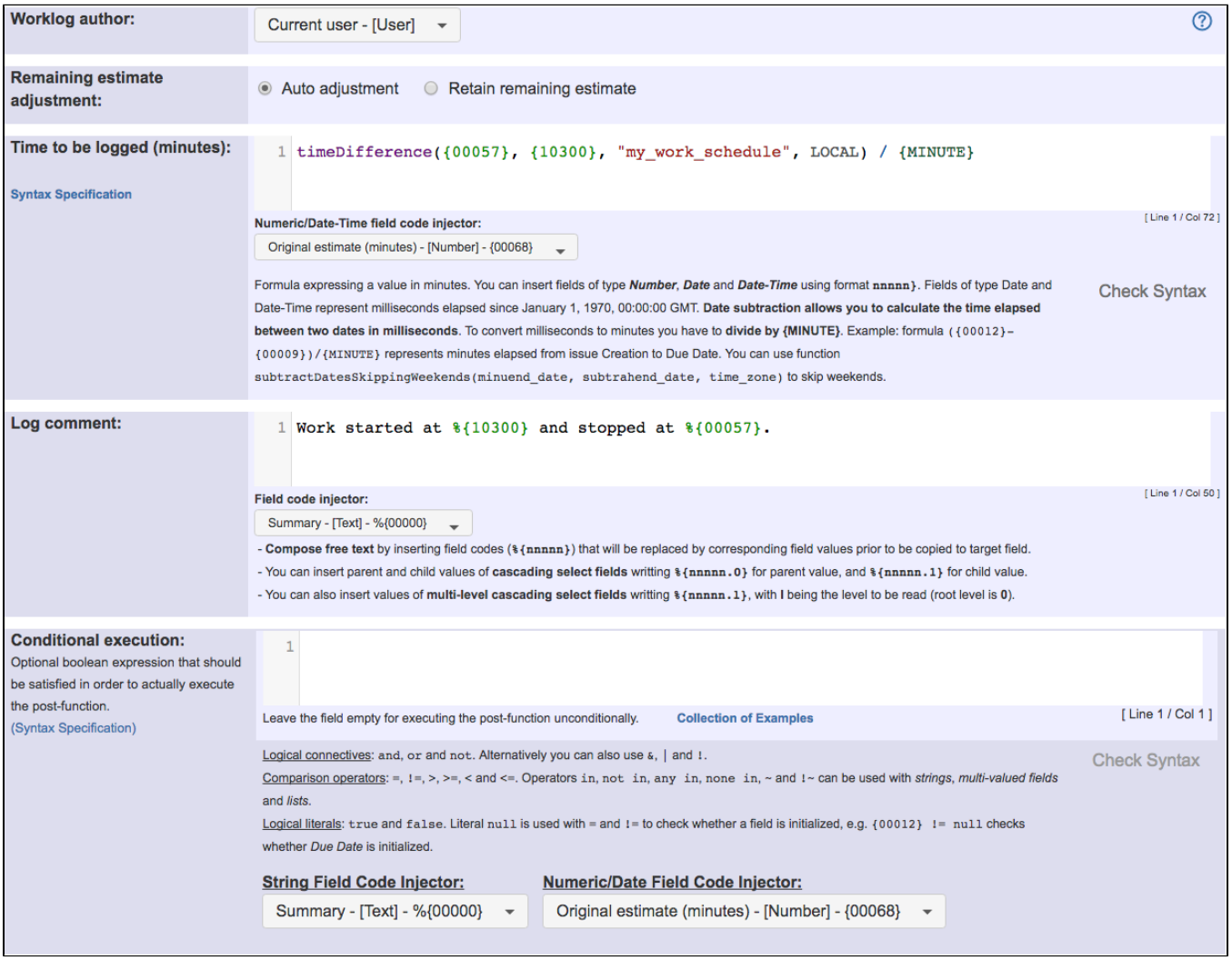
Support for Custom Schedules (since version 2.2.39)

You can also implement the above use case but only considering the actual work time in your organization. To do it you should define your custom work-schedule using **Schedules Definition Grammar** at `Administration > Add-ons > JIRA WORKFLOW TOOLBOX > Schedule`

Let's consider the following work-schedule called **"my_work_schedule"**:

```
# Winter Schedule
MON - THU {
   08:00 - 15:00,
   16:00 - 20:00;
}

FRI {
    08:00 - 15:00;
}

# Summer Schedule
JUN/15 - SEP/15 {
    MON - FRI {
        08:00 - 14:30;
    }
}

# Annual Holidays
JAN/1, MAY/1, NOV/1, DEC/25 {;}

# 2017 Holidays
2017/JAN/12, 2017/APR/13, 2017/APR/14, 2017/NOV/23 {;}
```

In order to use this custom work-schedule we should use the following configuration in post-function **Log work**:



Formula is: **`timeDifference({00057}, {10300}, "my_work_schedule", LOCAL) / {MINUTE}`**

Other examples of that function

Log work

Page: Automatic work log with start and stop work transitions
Page: Log absence time on another issue
Page: Log absence time on another issue

Mathematical and date-time expression calculator

Page: Automatic work log with start and stop work transitions
Page: Automatically log work time when the user uses a "Stop Progress" transition
Page: Calculate the time elapsed between 2 transition executions
Page: Getting the number of selected values in a custom field of type Multi Select
Page: Implement a form with a series of questions and calculate a numeric value based on the answers

Related Usage Examples

- Limit the number of hours a user can log per day
  - example
  - validator
  - post-function
  - work-log
- Make "Time Spent" field required when there is no time logged in the issue
  - example
  - validator
  - work-log
- Limit valid dates for work logs
  - example
  - validator
  - work-log
- Log absence time on another issue
  - example
  - post-function
  - work-log

Page: Increment a field or set to 1 if it's not set
Page: Set "Date-Time Picker" custom field with current date-time
Page: Set "Due date" 6 natural days (or work days) earlier than a "Date Picker" custom field
Page: Set "Due date" to a specific day of next week no matter of date of creation this week
Page: Set "Due date" with certain time offset from current date
Page: Set "Total time spent" to "Current date and time - date and time of last update"
Page: Set a custom field "Urgency" depending on a combined value of issue's priority and "Impact" custom field
Page: Sum "Time Spent" in all sub-tasks of issues linked with issue link types "LinkA", "LinkB", "LinkC"
Page: Triage Jira Service Desk email requests (Move issues)
Page: Using project properties to calculate custom sequence numbers

- Set "Total time spent" to "Current date and time - date and time of last update"
  - example
  - post-function
  - work-log
- Sum "Time Spent" in all sub-tasks of issues linked with issue link types "LinkA", "LinkB", "LinkC"
  - example
  - post-function
  - issue-links
  - sub-task
  - work-log
- Automatic work log with start and stop work transitions
  - example
  - post-function
  - work-log
- Automatically log work time when the user uses a "Stop Progress" transition
  - example
  - post-function
  - custom-field
  - work-log
- Sum sub-task's "Time Spent" (work logs) and add it to a certain linked issue
  - example
  - post-function
  - issue-links
  - sub-task
  - work-log