

# Jira Smart Work Log

please create a Chrome plugin (plan is to later add Safari plugin as well)- similar to Jjira Assistant, that automatically logs Jira hours

plugin doesn't need a login, it relies that you have already logged in to Jira in the same browser, just like Jira assistant

here is Jira Assistant plugin for reference - <https://github.com/shridhar-tl/jira-assis>

Screenshot from initial UI prototype

TASK	MON 01	TUE 02	WED 03	THU 04	FRI 05	SAT 06	SUN 07	MON 08	TUE 09	WED 10	TOTAL
VACATIONS & DAYS OFF											
Vacation / Day Off	8h	8h		4h							20h
MEETINGS											
MEET-123 Stand-up (Daily)		15m	15m	15m				15m	15m	15m	1h 30m
MEET-124 Retrospective				1h							1h
+ Add meeting											
WORKED ON											
JIRA-1872 - Implement new dashboard		2h	3h								5h 45m
JIRA-2337 - Fix login button style				1h	2h			3h			6h
JIRA-2710 - Update CTA on homepage								5h	7h 45m	7h 45m	20h 45m
JIRA-2805 - Research new chart libraries				1h							1h
+ Add Jira task											
Total (work)	0h	8h 15m	3h	5h 15m	3h			8h 30m	8h	8h	36h
Difference	0h	+15m	-5h	-2h 45m	-1h			+30m	0h	0h	-6h

note: in the example screenshot from Jira Assistant there is epic in front of and jire numeras well, but no need - just jira item type icon (preferably icon would not be coloured like this, but one colour from the ) and name; this is just an example from similar plugin

## # general

everything should be ideally one scrollable table with subsections subsections:

- vacations (and days off) - can be just one row, no need to add multiple different vacation rows, could be just always there
- meetings (and other fixed time tasks) - actions: add meeting - essentially just adding a special row with the
- "worked on" tasks (for distribution of remaining hours)

subsections should be the same table, just very minimalistic title of the subsection

possible to select period, selector should have options: This month (default), Prev month, This week, Prev week, 2 weeks, Prev 2 weeks, Custom Range

in settings it's possible to change the default period

## ## scrolling

header (dates) sticks when scrolling down  
subsection header sticks when scrolling down, if it has any items; if it doesn't have items, then it doesn't stick

if you scroll down, then underneath the subsection separator there will be line which has three dots "...". where the jira item number and name are and for each date it displays the sum of hidden jira item rows hours;

if you scroll down so that none of the subsection rows are visible, then it displays sum of all subsection items in the header row  
sub-section would not disappear totally

### **## sum of hours**

if the sum of jira item hours does not match the full working hours (considering, days off, existing jira hours etc) for a day, then this day should be highlighted and possible to see how many hours are missing or is over

if the sum of jira item hours does not match the full working hours (considering, days off, existing jira hours etc) for the whole selected period, then it should be highlighted and possible to see how many hours are missing or is over

### **# design**

design is minimalistic, but cutting edge front-end technology, goal is to make it as easy for the user to fill jira hours as possible

### **# vacations (and days off)**

vacations are usually not logged (meaning saved) to jira, so this is just for calculating correct remaining time

if click on a day, then marks this all day off (8h)

- possible to remove the vacation from any day
- possible to change the duration of the day off (for example if missing only 3 hours, then would mark 3h there)
- clicking on date that does not have any day off's, will add full day off
- possible to drag the duration of the vacation to longer and shorter (like in "worked on" item)

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## # meetings (and other fixed time tasks)

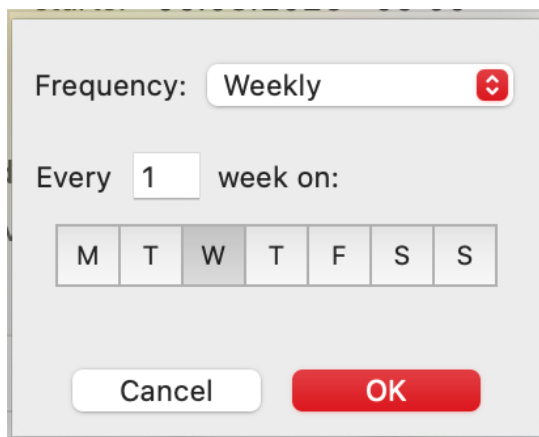
possible to add several meeting rows for the same jira item (for example all meetings: stand-ups and retros are tracked under one jira item)

possible to name the meeting: for example stand-up or retro etc - name is optional

possible to mark the duration of the meeting in minutes or hours (15m or 2h etc) - default is 1h

possible to mark the meeting repeating:

- daily
- weekly

A screenshot of a dialog box for setting meeting frequency. It has a title bar. Inside, there's a label 'Frequency:' followed by a dropdown menu showing 'Weekly' with a red up/down arrow icon. Below that, it says 'Every' followed by a text input field containing '1', then 'week on:'. Underneath is a row of seven buttons labeled 'M', 'T', 'W', 'T', 'F', 'S', 'S'. The 'W' button is highlighted with a grey background. At the bottom are two buttons: 'Cancel' and 'OK' (which is red).

possible to edit meeting times, including repetitive ones manually

- possible to remove the meeting from any day
- possible to change the duration of the meeting
- clicking on date that does not have that meeting yet, adds this meeting with it's duration to this day

as meeting tend to repeat, each month, then they are preserved - no need to have them in settings, just keeping them on the main form without deleting them, even when rest of the form is cleared

in settings there should be possible to toggle if meetings are shown (default is yes)

## ## removing meeting section

it's possible to remove the entire meetings section (if user doesn't log meeting separately)

if user had meetings

- confirmation is asked with the following info
  - all meetings will be deleted
  - you can add meeting block back from settings, but

- meetings are lost  
if user did not have any meetings, then
- section is removed without asking additional confirmation,
  - after removal user sees informational modal that says
    - meeting section has been removed
    - you can add it back from settings
- 

## **# "worked on" tasks**

for each day of the selected period finds jira items that had some activity from me - this list is displayed initially (see section "# jira items that had some activity from me")

jira items are ordered so that the ones with the latest activity from me is at the bottom and older ones are at the top

possible to add jira tasks that were not detected

possible to manually recalculate by pressing "distribute based on activity" or "distribute evenly" button again or clear all "worked on" hours by pressing "Clear" button

## **## already saved jira hours**

jira items with already saved jira hours for some days are displayed in the same subsection as "worked on" items

it should be clearly distinguishable what jira hours are coming from jira

- design: if cell has been saved to Jira then there is green line underneath the cell

it is possible to edit/ remove add hours for already saved jira hours even if the hours have been moved or edited, it should be visible that this jira item has some hours logged for this day in jira

- design: if cell was edited that has saved jira hours, then there is half green, half yellow line underneath the cell

## **# automatic fill**

### **## exclude possibilities**

possible to exclude jira items - so that they would not be automatically taken for time logging

- jira item types: default epics (selectable by user in settings)
- projects (selectable by user in settings)

at the moment our plugin supports only one client, but in the future we might add multi client support - in this case jira item types and projects are configured per client

### **## distribute evenly**

for each day finds jira items that had some activity (added a comment, changed a status etc) from me (see section "# jira items that had some activity from me")

divides the not logged time equally between jira items

starts to log time for each jira item so that each jira item has only continuous work; for example each jira item gets 9h 30 min, then (assuming no off time, already logged time and no meetings)

- 1st jira item, 1st day of the period - 8h
- 1st jira item, 2nd day of the period - 1h 30m
- 2nd jira item, 2nd day of the period - 6h 30m
- 2nd jira item, 3rd day of the period - 3h
- etc...

when adding hours, then jira tasks are sorted so that the most recent activities from me are getting filled the latest and are at the end of the period

### **## distribute based on activity**

for each day finds jira items that had some activity (added a comment, changed a status etc) from me (see section "# jira items that had some activity from me")

checks for my activity: commenting or changing status for each day  
if no jira items with my activity for this day, then takes jira items from last day where I had activity

### **## calculations** (for evenly and activity based distributions)

calculating available time for a day:

- deduct day off hours (if full day off/ vacation, then no available time for this day)
- deducts all meeting times for this day
- deducts already saved hours in Jira for this day
- deducts already logged, but not saved hours for this day
- remainder is the available time for logging
- for example shortened day (3h off/ vacations, so 5 hour day), one 15 min meeting, another 1h meeting, 1h 30m already logged and saved to jira, 30 min added to this day, but not saved to jira
  - available time:  $8h - 3h - 15m - 1h - 1h30m - 30m = 1h\ 45\ m$

### **## calculating hours for jira item** (for activity based distributions)

- divides available time equally between same day jira items (if only one jira item, then all available time)
- uses 5 minutes accuracy (so never logs 3 min or 54 min etc):
  - always round down except last item which takes residual minutes
  - Edge case: if available time < number of active issues × 5 min then: set minimum 5 min to first N issues
- for example three jira items for full working day (without meetings, vacations or already logged hours)
  - 1st jira item: 2h 40m
  - 2nd jira item: 2h 40m
  - 3rd jira item: 2h 40m
- for example two tasks, for shortened day (3h off/ vacations, so 5 hour day), one 15 min meeting, another 1h meeting, 2 h already logged
  - available time: 8h-3h-15m-1h-2h= **1 h 45 m**
  - theoretical time for jira hour: 1h45m/2= **52 m 30 s**
  - 1st jira item: 50m
  - 2nd jira item: 55m

full working day length is configured in settings

## # finding "Worked on" jira items

there are two options to calculate this list

1. first option is " "Worked on" list from my profile" - in Jira, when selecting "My profile", there is a list of items displayed as "Worked on" - this is the same list as this:
2. second option is "changed status or commented " - this is more restrictive

Query logic

1. "Worked on" list from my profile (in Jira, when selecting "My profile", there is a list of items displayed as "Worked on", which has following query):
  - (currentUser() value is for example: 712020:c96fb61d-6a43-4ee4-b7ac-f6e4db51efdd)
  - JQL: updated >= "{START\_DATE}" AND updated <= "{END\_DATE}" AND (assignee in (currentUser()) OR reporter in (currentUser()) OR creator in (currentUser()) OR watcher in (currentUser())) ORDER BY updated DESC
2. changed status or commented (less items):

- first takes the "Worked on" list from my profile
- then goes through each item and keeps only the ones where user has commented or changed status in this period

possible to mark in settings if jira list should be

- "Worked on" list from my profile (selected by default)
- changed status or commented (less items)

## # recalculation

automatically recalculates at every change

possible manually recalculate by pressing the button again or do a different calculation by pressing other calculation button

system remembers which cells have been manually edited (hours added, edited or removed);

when automatically recalculating, then it

- does not recalculate edited cells (so essentially treats them as if they would be already saved to jira)
- if some cells that are already saved to Jira were edited, then considers manually edited value, not what is saved to jira
- row edits (jira items) are also preserved and considered
  - removed jira items are still not visible and not considered
  - manually added jira items will stay visible and are considered
  - when distributing hours, it distributes to all visible jira items, considering what user has removed or added

if user wants "fresh calculation" he/ she needs to press "Clear" button first and then calculation button, otherwise only non-edited cells are recalculated

## # clearing

asks for confirmation

in the confirmation modal there are

- "reset 'Worked on' list" checkbox (by default unchecked)
- "remove all jira items" checkbox (by default unchecked)

if "remove all jira items" was not selected, then

- clears all "worked on" hours - automatically generated and manually edited/ added
- clears all manual edits from meetings
- clears all vacations

- if "reset 'Worked on' list" was selected, then
    - restores regular item jira list according to settings
- if "remove all jira items" was selected, then
- removes all jira items from meetings
  - removes all jira items from "worked on" tasks

## # changing time period

when changing time period

- all manual changes to cells are preserved
- all manually added jira items remain in the list and all manually deleted jira items remain deleted
- automatically added jira list is updated according to new period (new periods "Worked on" list based on Jira)
- hours are recalculated (regular recalculation, which preserves manually edited values)
- all changes to days that are not anymore visible are preserved, so that if period is changed again, changes can be displayed
- when saving all changes, then it saves only days that are visible and within the selected time period; it does not save hours for the days that might have been manually edited/ added, but are not visible in currently selected period

## # manual editing

- when clicking on the cell that has jira hours in it, then it makes it editable and selects the value, so that user could right away type in new value;
- clicking away or pressing enter will save the value (to the plugin, not yet to Jira)
- pressing escape will revert to previous value and field is not editable
- when clicking on the empty cell (cell that doesn't have jira hours in it), it automatically adds hours so that given day would be filled (8h for regular day, if some meetings or half day off, or other jira items already have hours this day, then remaining hours); and it doesn't make the cell editable
  - if this day already has full working hours and some other "worked on" item has hours for this (so it's not just meetings or day off) then it divides remaining working hours by jira item count for this day (including just added



jira item) and fills in hours for clicked cell, as well as changes other "worked on" item(s) hours for this day: for example day has one 1h meeting and 7 hours of one jira item - when clicking on some other jira item on this day, then it sees that day is full, so it takes remaining hours (8 - 1h meeting = 7h), divides this with new jira count 2 and logs for the new jira item 3h 30 m and changes the existing jira item hours from 7 to 3h 30 m; it briefly animates the other jira cell that was changed as well, so that it would be clear that something was changed

keyboard commands (standard)

- tab will move to next cell
- enter will make the cell not editable and saves locally (not to jira)
- escape will discard the latest changes and field is not editable anymore

units

- for displaying and editing both, the default unit is "h" (hours) - this is not displayed - "8h" is displayed as "8" and when adding/ editing cell, then inserting only number means hours, but it's possible to add also minutes with the "m" suffix and 1d, which is 8h

edited cells distinguishable

- edited cells (hours added, edited, or removed) are visually distinguishable, so the user knows at a glance which cells are "protected" from auto recalculations
  - design: if cell was edited then there is yellow line underneath the cell
  - design: if cell was edited that has saved jira hours, then there is half green, half yellow line underneath the cell

saving

- possible to save all the table (main scenario)
- possible to save the row to jira - save one jira item hours only (not the main use case, but should be possible)

adding removing rows

- possible to add rows to "worked on" item section
- rows manually added are distinguishable from automatically added rows in "Worked on" jira list (not in meetings)
  - design: : if row was manually added it has yellow vertical line in front of it
- possible to remove row from "worked on" item section (if jira item has saved hours in jira for this period, then it's not possible to remove it)

## **## dragging**

possible to add hours by dragging (hold mouse button down and move to left or right)

possible to drag left or right

possible to drag from the starting cell or the ending cell

- if dragging starts from the first cell of the range and dragging right, then hours will be removed from dragged cells
- if dragging starts from the last cell of the range and dragging left, then hours will be removed from dragged cells

which hours are populated on dragging

- if dragging starts from empty cell, then full day hours are added to each cell
- if dragging starts from cell with existing value, then following cells get this existing value (or full day hours if it would be more)
- when dragging no day will get more than full working day considering meetings, half day offs and other jiras

## **# loading the plugin**

when plugin is loading initial page and user is not authenticated (user has not logged in to jira from the same browser), then we display message that please log in to your jira from the same browser different tab;

we will then periodically check if user has logged in, so that user would not need to refresh when he has logged in

when plugin is loading initial page, then it does automatic distribution - depending on user settings

in settings there is possible to mark which logic is used by default

- "distribute evenly" (default)
- "distribute based on activity"

- “no initial automatic distribution”

## # error handling & offline

Add optimistic-UI + retry queue; visual toaster for failed saves; local backup in chrome.storage.local.

## # performance & memory

Consider for virtualised table (e.g. React-Window), worker thread for calculations

## # internationalisation

Use Jira user locale to format numbers; externalise strings early.

## # settings page

- Standard working-day length
  - Control: Numeric input (hours, allow decimals)
  - Default: 8 h
  - Notes: Used in all “full day” and highlighting calculations.
- Period selector options
  - Control: Dropdown
  - Default: This week
  - Notes: Options: This month, Prev month, This week, Prev week, 2 weeks, Prev 2 weeks, Custom Range.
- Show “Meetings & fixed-time tasks” subsection
  - Control: Toggle switch
  - Default: ON
  - Notes: Turning it OFF hides the Meetings block; can be re-enabled here.
- Exclude issue types from auto-fill
  - Control: Multi-select list (chips)
  - Default: Epics
  - Notes: User can exclude any issue types from automatic distribution.
- Exclude projects from auto-fill
  - Control: Multi-select list (chips)
  - Default: None
  - Notes: User can exclude any projects from automatic distribution.
- Source of “Worked on” issue list
  - Control: Radio group

- Default: Worked on list from My Profile
- Notes: Options: • Worked on list from My Profile • Changed status or commented.
- Default initial distribution logic
  - Control: Radio group
  - Default: Distribute evenly
  - Notes: Options: • Distribute evenly • Distribute based on activity • No initial automatic distribution.

#### Data-persistence note

All settings are stored in chrome.storage.local under a single settings key ( $\leq 5$  MB).