Introducing Remaining Time field as method to track the remaining time to complete an issue

Redmine - Feature #24277

Currently, Redmine offers the possibility to estimate an issue and track the time spent on that issue using the log time module. Regarding the progress made on an issue, the only possibility is to use the "Done ratio" field, but there are some major disadvantages from our point of view:

1. update action requires multiple clicks
2. is not so accurate because if you calculate the remaining time using the formula "done ratio * estimated time" it means that the remaining time can't be greater than estimated time.

Having the following scenario:

- Issue with estimated time set to 4h
- During the development you discover that more hours (6h for example) are required

In order to correctly register the remaining time, you need to change the estimation from 4h to 6h and let the done ratio to 0%. Otherwise, the remaining time will be still 4h.

3. there is no relation between the log time and the done ratio field

Attached there are 2 patches:

1. 01_add_remaining_hours_field_15945.patch:
   - adds a new core field named "Remaining time" which behave almost like the Estimated time field
   - automatically set the remaining time equal with estimated time when the remaining time is null and estimated time > 0.
   - automatically set the remaining time to 0h when closing the issue.

2. update_issue_remaining_time.patch: the user can decide in the log time form to update or not the issue remaining hours. There are 3 options available:
   - [default] adjust automatically: issue remaining time will be decreased with the logged number of hours.
   - set to x hours
   - do no update remaining time.

In this way, the issue remaining time can be tracked easily.

Also, we have in plan the following improvements:
- a new option for "Done Ratio" field to be calculated using the estimated time and remaining time
- better time tracking details in the version page.

There are multiple issues related to this feature:

- [[DoneRatio_issues_overview]] - Section "Requests (and patch) for adding 3rd option "Use the logged and estimated time"
- #22326 (implemented by the first patch)

Related issues:

- Related to Redmine - Feature # 22326: New 'Remaining Time' field -- NOT relat... New
- Related to Redmine - Feature # 12762: Add option to calculate done ratio with... New
- Related to Redmine - Patch # 1671: Show a breakdown of estimated/spent/remain... New 2008-07-21
- Related to Redmine - Patch # 13400: Calculate %done based on estimated and lo... New
Please fix the following typos in the description:
- "can decide it the log time form what to updated or not the issue" -> "can decide in the log time form to update or not the issue"
- "issue remaining time with be decreased" -> "issue remaining time will be decreased"

Added last two patches on this topic.

03_calculate_done_ratio_using_time.patch

Option to calculate the done ratio based on estimated and remaining hours. If the setting "calculated from subtasks" is set, the done ratio is calculated based on total estimated and total remaining hours.

04_add_remaining_time_to_version.patch

Add remaining time under the estimated time in version page. This info is very useful especially when you use the versions as sprints and you need to move unfinished issues from a version to another version.

For example:

Version 1 at the beginning:

<table>
<thead>
<tr>
<th>Issue</th>
<th>Estimated</th>
<th>Remaining</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10h</td>
<td>10h</td>
<td>New</td>
</tr>
<tr>
<td>2</td>
<td>15h</td>
<td>15h</td>
<td>New</td>
</tr>
<tr>
<td>3</td>
<td>15h</td>
<td>15h</td>
<td>New</td>
</tr>
<tr>
<td>4</td>
<td>14h</td>
<td>14h</td>
<td>New</td>
</tr>
</tbody>
</table>

Version estimated time: 54h.
Version remaining time: 54h.

At the end of the version, only Issue 1 and Issue 2 are finalized and Issue 3 and Issue 4 moved in version 2.

Version 1 at the final:

<table>
<thead>
<tr>
<th>Issue</th>
<th>Estimated</th>
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<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10h</td>
<td>0h</td>
<td>Closed</td>
</tr>
<tr>
<td>2</td>
<td>15h</td>
<td>0h</td>
<td>Closed</td>
</tr>
<tr>
<td>3</td>
<td>15h</td>
<td>4h</td>
<td>In Progress</td>
</tr>
<tr>
<td>4</td>
<td>14h</td>
<td>4h</td>
<td>In Progress</td>
</tr>
</tbody>
</table>

Version estimated time: 54h.
Version remaining time: 8h.

Version 2 at the beginning:

<table>
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<th>Remaining</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>15h</td>
<td>4h</td>
<td>In Progress</td>
</tr>
<tr>
<td>4</td>
<td>14h</td>
<td>4h</td>
<td>In Progress</td>
</tr>
<tr>
<td>5</td>
<td>10h</td>
<td>10h</td>
<td>New</td>
</tr>
<tr>
<td>6</td>
<td>10h</td>
<td>10h</td>
<td>New</td>
</tr>
</tbody>
</table>

Version estimated time: 49h (which is the sum of initial estimations).
Version remaining time: 28h (which is the real required time to finish the version).
#6 - 2017-03-16 17:35 - Chris Russo

+5!

#7 - 2017-03-16 18:19 - Kosta H

Marius, these patches look great! Unfortunately they don't apply cleanly to Redmine 3.3.2, 3.3.1 or to 'master'. If you have a git branch and publish it, I could help with rebasing. Would love to see this make it into core.

#8 - 2017-04-07 19:03 - Marius BALTEANU

Kosta H wrote:

Marius, these patches look great! Unfortunately they don't apply cleanly to Redmine 3.3.2, 3.3.1 or to ‘master’. If you have a git branch and publish it, I could help with rebasing. Would love to see this make it into core.

I'll upload a new version of the patches after the release of Redmine 3.4.0.

#9 - 2017-07-10 19:55 - Marius BALTEANU

- File 01_add_remaining_hours_field_3.4.1.patch added
- File 02_add_remaining_time_to_log_time_3.4.1.patch added
- File 03_calculate_done_ratio_using_time_3.4.1.patch added
- File 04_add_remaining_time_to_version_3.4.1.patch added

I've updated the patch series to apply cleanly to the latest Redmine version (version:3.4.1) and current trunk (r16811).

For us (Zitec) it is a very important feature, so any feedback regarding the implementation is welcome. I'll be very happy to discuss the changes required to implement this feature in the core.

#10 - 2017-08-09 16:15 - Kosta H

Thanks so much Marius! Could the maintainers please weigh in on whether this might make it into 3.4.x or 3.5.x? I'd very much like to use these patches on my organization's Redmine instance but am hesitant to without knowing if they'll make it into the upstream branch.

#11 - 2017-11-24 00:59 - Sudeep Halappa

This is exactly the feature I am looking for.

Apologies for the naive question. Will this feature work for Redmine 3.3.3.stable? That is the version we are currently using.

#12 - 2017-11-24 12:08 - Marius BALTEANU

Sudeep Halappa wrote:

This is exactly the feature I am looking for.
Apologies for the naive question. Will this feature work for Redmine 3.3.3.stable? That is the version we are currently using.

I didn't test the patches against 3.3.3.stable, but you could try to apply the first version (uploaded by me in 2016).

#13 - 2017-12-13 21:20 - Anders Thomsen

+1

#14 - 2018-01-10 08:48 - Marius BALTEANU
- Related to Feature #12762: Add option to calculate done ratio with the data from time tracking added

#15 - 2018-02-25 17:44 - Marius BALTEANU
- Related to Patch #1671: Show a breakdown of estimated/spent/remaining time for a version added

#16 - 2018-06-14 23:12 - Marius BALTEANU
- Description updated

#17 - 2018-07-14 07:32 - Go MAEDA
- Related to Patch #13400: Calculate %done based on estimated and logged time added

#18 - 2019-06-02 04:26 - Go MAEDA
- Target version set to Candidate for next major release

#19 - 2019-12-04 09:18 - Anders Thomsen

Marius, are you still determined to have this feature added? I'm evaluating if we should apply the patch to our own instance but will avoid if we have to maintain it for all future versions.

If so, do you plan to provide a patch for 4.1?

#20 - 2019-12-04 09:40 - Marius BALTEANU

Anders Thomsen wrote:

Marius, are you still determined to have this feature added? I'm evaluating if we should apply the patch to our own instance but will avoid if we have to maintain it for all future versions.

Yes, I still think that it’s a good improvement for Redmine, but the decision is at Jean-Philippe.

If so, do you plan to provide a patch for 4.1?

4.1 for sure, but I cannot say about other future versions.

Files

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<th>Size</th>
<th>Date</th>
<th>Author</th>
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