

## Redmine - Defect #7335

### Sorting issues in gantt by date, not by id

2011-01-15 00:28 - Eli Stevens

<b>Status:</b>	Closed	<b>Start date:</b>	2011-01-15
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assignee:</b>	Toshi MARUYAMA	<b>% Done:</b>	90%
<b>Category:</b>	Gantt	<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>	2.4.0	<b>Affected version:</b>	1.1.0
<b>Resolution:</b>	Fixed		

#### Description

I can't tell if the prior issues (see below) related to gantt chart issue sorting are about new- or old-style gantt charts. I do know that the default 1.1.0 isn't very useful, since they're sorted by root\_id (ie. parent issue id). That has little relation to the order that the issues need to be worked on in. I made a one-line change that worked for me:

1. TODO: top level issues should be sorted by start date

```
def gantt_issue_compare(x, y, issues)
  [(x.root.start_date or x.start_date or Date.new()), (x.start_date or Date.new()), x.root_id, x.lft] <=> [(y.root.start_date or
  y.start_date or Date.new()), (y.start_date or Date.new()), y.root_id, y.lft]
  #if x.root_id == y.root_id # x.lft <=> y.lft
  #else # #x.root_id <=> y.root_id
  #end
end
```

I'm not 100% certain if it works in all cases, but for my DB (multi-project, multi-version, single nesting level issues), it works fine.

#### Related issues:

Related to Redmine - Patch #5438: Patch repairing rendering of subtasks in ga...	<b>Closed</b>	<b>2010-05-04</b>	<b>2010-05-04</b>
Related to Redmine - Patch #7456: Gantt filters	<b>New</b>	<b>2011-01-26</b>	
Related to Redmine - Feature #6276: Gantt Chart rewrite	<b>Closed</b>	<b>2010-09-03</b>	
Related to Redmine - Patch #12730: Fix sorting and PDF output of Gantt diagra...	<b>New</b>		
Related to Redmine - Defect #7128: New gantt chart does not render subtasks u...	<b>Closed</b>	<b>2010-12-18</b>	
Related to Redmine - Feature #8897: Be able to reorder tasks/issues in the Ga...	<b>New</b>	<b>2011-07-25</b>	
Related to Redmine - Defect #7579: Gantt tab gives internal error.	<b>Closed</b>	<b>2011-02-08</b>	
Related to Redmine - Feature #14397: Gantt sorting as a configurable setting	<b>New</b>		
Has duplicate Redmine - Feature #7968: Order tasks by time on Gannt	<b>Closed</b>		
Has duplicate Redmine - Defect #8480: gantt sorting in redmine 1.2	<b>Closed</b>	<b>2011-05-31</b>	
Has duplicate Redmine - Feature #13238: Sorting in Gantt	<b>Closed</b>		
Has duplicate Redmine - Defect #6968: Sorting of issues in Gantt	<b>Closed</b>	<b>2010-11-24</b>	
Has duplicate Redmine - Defect #8366: Gantt Version Ordering	<b>Closed</b>	<b>2011-05-13</b>	

#### Associated revisions

##### Revision 11724 - 2013-04-19 07:14 - Toshi MARUYAMA

add TODO comment about gantt issues sort (#7335)

Sorting by date was dropped by r4581 (#7128).

##### Revision 11769 - 2013-05-03 00:44 - Toshi MARUYAMA

Merged r11724 from trunk to 2.3-stable.

Add TODO comment about gantt issues sort (#7335).

Sorting by date was dropped by r4581 (#7128).

##### Revision 11855 - 2013-05-18 00:59 - Toshi MARUYAMA

gantt: change sort method to class method (#7335)

**Revision 11856 - 2013-05-18 00:59 - Toshi MARUYAMA**

gantt: add test to sort issues by current logic (#7335)

**Revision 11897 - 2013-05-21 15:42 - Toshi MARUYAMA**

gantt: sort issues by start date (#7335)

**Revision 11898 - 2013-05-21 15:42 - Toshi MARUYAMA**

gantt: sort versions by start date (#7335)

**Revision 12247 - 2013-11-09 09:54 - Jean-Philippe Lang**

Gantt: sort versions like on the roadmap (#7335).

**History**

---

**#1 - 2011-01-15 00:29 - Eli Stevens**

Hum, apparently I can't add related issues. They should be:

[#5438](#)

[#6968](#)

**#2 - 2011-01-17 15:33 - Guillaume Pellegrin**

Hi Eli,

And thanks for your patch. Worked fine for me. I'll post here in case this breaks some use cases. Hope this change will be made available in the next release.

Regards,  
Guillaume

**#3 - 2011-01-19 19:16 - Eli Stevens**

Update: the first line didn't work in all cases for me. This one seems to be behaving better:

```
[(x.root.start_date or x.start_date or Date.new()), x.root_id, (x.start_date or Date.new()), x.lft] <=> [(y.root.start_date or y.start_date or Date.new()), y.root_id, (y.start_date or Date.new()), y.lft]
```

**#4 - 2011-01-25 12:27 - Sebastian Buckpesch**

Hi,  
where do I enter this line of code or apply this patch?

Thanks,  
Sebastian

**#5 - 2011-01-25 14:13 - Etienne Massip**

lib/redmine/helpers/gantt\_helper.rb (gantt\_issue\_compare()) ?

**#6 - 2011-01-25 14:45 - Sebastian Buckpesch**

thanks. Works fine.

**#7 - 2011-01-25 22:47 - E M**

Anyone knows if we can also sort by name? Or if the above patch could be easily modified to sort by top level issue name (instead of id like current or start date like this fix)?

feel free to move this to a new issue if you feel it's necessary.

**#8 - 2011-02-17 19:59 - Fernando Hartmann**

+1

**#9 - 2011-02-23 11:40 - Carlos Serrano**

thanks. Works fine.

**#10 - 2011-03-23 15:05 - Cassiano Monteiro**

+1

**#11 - 2011-08-16 23:28 - Lukas Elmer**

+1, related with [#8480](#)

**#12 - 2011-12-05 20:03 - Felipe Ribeiro**

- File `sort_issues_from_start_date.diff` added

- File `sort_issues.rb` added

I solved this by changing the way to insert issues in the Data Base. I just insert them already in the correct order. But also I had to change the values of `rgt` and `lft` directly on the Data Base, because there were projects already inserted in the system, and doing this I guarantee that all projects will be sorted correctly.

Is attached the diff file and the new script i had to create.

**#13 - 2012-03-08 18:20 - Svein-Tore Griff With**

+1

**#14 - 2012-03-10 13:33 - Imerl andeson**

- Assignee set to *Mischa The Evil*

**#15 - 2012-10-23 00:48 - Toshi MARUYAMA**

- Assignee deleted (*Mischa The Evil*)

**#16 - 2012-10-24 15:32 - Toshi MARUYAMA**

- File `redmine-trunk-r10713.png` added

- File `redmine-trunk-r10713-patch.png` added

- File `gantt-sort-r10713.diff` added






This is a patch for trunk [r10713](#).

This patch sort start date algorism is referred from [Redmine Better Gantt Chart Plugin](#)

[https://github.com/kulesa/redmine\\_better\\_gantt\\_chart/blob/50c323fe8b6ac667c88b/lib/redmine/helpers/better\\_gantt.rb#L692](https://github.com/kulesa/redmine_better_gantt_chart/blob/50c323fe8b6ac667c88b/lib/redmine/helpers/better_gantt.rb#L692)

But, issues tree structure is broken by start date sorting.

**Redmine trunk [r10713](#)**

-  Bug #8: Rails 3 support
-  Bug #9: SCM command availability automatic check in ...
-  Bug #28: Confusing revisions links on repository ...
-  Bug #10: character encoding for attachment file
-  Bug #11: Revision detail silently truncated



**Patch applied**

**`redmine-trunk-r10713-patch.png`**

**#17 - 2012-10-24 19:16 - Etienne Massip**

FTR the patch in [#7456](#) originally implemented some sorting too.

**#18 - 2013-01-05 05:39 - Jonathan Vargas**

Hi guys.

I just required the sort by start date and then applied manually the first chunk mentioned on [sort\\_issues\\_from\\_start\\_date.diff](#), to my 2.2.0 version, and it worked as expected.

So, could it be possible to apply it on 2.2's trunk or next versions? I see that a default sorting by `start_date` first has more sense than by `issue_id`.

Thanks in advance.

**#19 - 2013-01-05 09:30 - Toshi MARUYAMA**

New patch is posted at [#8366#note-2](#).

**#20 - 2013-03-31 08:51 - Toshi MARUYAMA**

- File *gantt-sort-trunk-r11692.diff* added
- File *gantt-sort-trunk-r11692.png* added

I confirmed [#8366 Change-Gantt-default-sorting-to-start\\_date-instead-of-id.patch](#) fixes note-16 problem.  
I re-post it as [gantt-sort-trunk-r11692.diff](#) .



**#21 - 2013-04-19 04:26 - Yuhki ISHIGURO**

Thank you for your patch, Toshi.

I applied your patch, and it looked working correctly, first.  
However, note-16 problem is still happen to issues which added after your patch applied.

**#22 - 2013-04-19 07:03 - Toshi MARUYAMA**

- File *gantt-sort-trunk-r11723.diff* added

Yuhki Ishiguro wrote:

Thank you for your patch, Toshi.

I applied your patch, and it looked working correctly, first.  
However, note-16 problem is still happen to issues which added after your patch applied.

Thank you for your trying.  
Could you try this patch using another logic.

This logic is from here (in Japanese).  
<http://d.hatena.ne.jp/itto100pen/20121202>

**#23 - 2013-04-22 03:08 - Yuhki ISHIGURO**

- File *gantt.jpg* added

Umm... I tried new patch. And, same things happen.

I show you my Test project.  
426 wasn't added correctly, but after adding 428, it was solved.

gantt.jpg

**#24 - 2013-04-22 09:34 - Toshi MARUYAMA**

- File *gantt-sort-trunk-r11740.diff* added

I got a suggestion from patch author.  
[https://twitter.com/nobu\\_toyofuku/status/326227862808064000](https://twitter.com/nobu_toyofuku/status/326227862808064000)

Could you try this patch?

**#25 - 2013-04-22 09:54 - Yuhki ISHIGURO**

I tried gantt-sort-trunk-r11740.diff, and it seems working correctly!  
Thank you !!

Regards,  
Yuhki ISHIGURO

**#26 - 2013-04-23 17:45 - Toshi MARUYAMA**

- File [gantt-sort-trunk-r11744.diff](#) added

[gantt-sort-trunk-r11740.diff](#) does not sort root issues.  
This patch fixes it.

**#27 - 2013-04-25 04:37 - Yuhki ISHIGURO**

Toshi MARUYAMA wrote:

[gantt-sort-trunk-r11740.diff](#) does not sort root issues.  
This patch fixes it.

I greatly appreciate for you contribution.  
I tried your new patch [gantt-sort-trunk-r11744](#).  
It works fine, and I think it solves this issue.

Regards,  
Yuhki ISHIGURO

**#28 - 2013-05-01 17:12 - David Dupont**

Hi,

I tried to apply patch but errors occurred :

```
root@linus:/var/www/redmine# patch -p0 < gantt-sort-trunk-r11744.diff
patching file b/lib/redmine/helpers/gantt.rb
Hunk #1 FAILED at 675.
1 out of 1 hunk FAILED -- saving rejects to file b/lib/redmine/helpers/gantt.rb.rej
patching file b/lib/redmine/helpers/gantt.rb
Hunk #1 FAILED at 687.
1 out of 1 hunk FAILED -- saving rejects to file b/lib/redmine/helpers/gantt.rb.rej
patching file b/lib/redmine/helpers/gantt.rb
Hunk #1 FAILED at 686.
1 out of 1 hunk FAILED -- saving rejects to file b/lib/redmine/helpers/gantt.rb.rej
patching file b/lib/redmine/helpers/gantt.rb
Hunk #1 FAILED at 220.
Hunk #2 FAILED at 694.
2 out of 2 hunks FAILED -- saving rejects to file b/lib/redmine/helpers/gantt.rb.rej
```

Some help please ?

Thanks.

Version Info :

```
Environment:
Redmine version      2.3.0.devel.11744
Ruby version         1.8.7 (x86_64-linux)
Rails version        3.2.13
Environment          production
Database adapter     MySQL
Redmine plugins:
due_date_reminder   0.3.1
```

**#29 - 2013-05-01 17:26 - Toshi MARUYAMA**

David Dupont wrote:

Some help please ?

Use -p1 instead of -p0.

```
patch -p1 < gantt-sort-trunk-r11744.diff
```

And this patch is for trunk [r11744](#), not 2.3.0.

**#30 - 2013-05-02 12:22 - David Dupont**

Thanks for the answer !

So i can't install it ?

Even if i change the file manually ? Is there too many difference between the trunk and 2.3.0 ?

**#31 - 2013-05-03 00:55 - Toshi MARUYAMA**

David Dupont wrote:

Is there too many difference between the trunk and 2.3.0 ?

There is no difference between trunk [r11768](#) and 2.3-stable [r11769](#) for this patch.  
You can apply this patch to 2.3-stable.

**#32 - 2013-05-18 01:36 - Toshi MARUYAMA**

- File *gantt-sort-trunk-r11856.diff* added

This is patch for trunk.  
There is no logic change from note-26 patch.

**#33 - 2013-05-21 16:02 - Toshi MARUYAMA**

- Target version set to 2.4.0  
- % Done changed from 0 to 100

**#34 - 2013-07-02 08:31 - Toshi MARUYAMA**

- Related to Defect #7579: Gantt tab gives internal error. added

**#35 - 2013-07-08 05:31 - Toshi MARUYAMA**

- Related to Feature #14397: Gantt sorting as a configurable setting added

**#36 - 2013-07-15 19:10 - Filou Centrinov**

- File *gantt-sort-version-trunk-r11898.diff* added

Please correct `sort_version_logic()`. Only "version.effective\_date" contains the start date of a version. Otherwise the versions won't sorted by start date as expected.

**#37 - 2013-07-19 13:32 - Filou Centrinov**

- % Done changed from 100 to 90

**#38 - 2013-08-14 04:56 - Mischa The Evil**

- Assignee set to Toshi MARUYAMA

Filou Centrinov wrote:

Please correct `sort_version_logic()`. Only "version.effective\_date" contains the start date of a version. Otherwise the versions won't sorted by start date as expected.

Toshi, can you look into this? Seems there might be something wrong with the tests because this does not trigger test failures.

**#39 - 2013-10-13 10:02 - Jean-Philippe Lang**

- Target version changed from 2.4.0 to Candidate for next major release

2.4 feature freeze

**#40 - 2013-10-13 10:24 - Toshi MARUYAMA**

- Target version changed from Candidate for next major release to 2.4.0

I think note 36 patch need to check in [2.4.0](#).

**#41 - 2013-10-14 18:44 - Jean-Philippe Lang**

Filou Centrinov wrote:

Please correct `sort_version_logic()`. Only "version.effective\_date" contains the start date of a version. Otherwise the versions won't sorted by

start date as expected.

A better option would be to sort versions by `version.effective_date || version.start_date`. A version may not have an `effective_date` but some issues with start dates assigned to it.

Versions with no `start_date` nor `effective` should be listed at the very end. I'm not this is the case with `|| Date.new`.

#### #42 - 2013-10-16 08:51 - Etienne Massip

If it can help, here's an excerpt from [#7456](#) where the idea was also to display shared version before concerned projects:

The shared version is tied to the selected project (also valid for "all projects" Gantt):

```
parent project -> shared version -> subproject -> shared version issues (including parent project issues)
```

The shared version is tied to a not-visible-parent project of the selected project:

```
subproject -> shared version -> shared version issues (excluding parent project issues)
```

Issue sorting code within a version+project scope:

```
# Compare issues for rendering order
def gantt_issue_compare(x, y)
  if x.parent_id == y.parent_id
    # Same level in issue hierarchy
    basic_gantt_issue_compare(x, y)
  elsif x.root_id == y.root_id || x.root_id == y.id || y.root_id == x.id
    # Same issue hierarchy
    x.lft <=> y.lft
  else
    # Distinct hierarchies
    x.root_id <=> y.root_id
    # TODO : advanced sort between issues when ancestors have been filtered out by query
  end
end
```

```
def basic_gantt_issue_compare(x, y)
  if x.start_date == y.start_date
    x.id <=> y.id
  elsif x.start_date.nil?
    1 # null date appears at the end
  elsif y.start_date.nil?
    -1
  else
    x.start_date <=> y.start_date
  end
end
```

#### #43 - 2013-11-09 09:56 - Jean-Philippe Lang

- Subject changed from *Sorting issues in new gantt (v1.1.0) to Sorting issues in gantt by date, not by id*

- Status changed from *New to Closed*

- Resolution set to *Fixed*

Toshi MARUYAMA wrote:

I think note 36 patch need to check in [2.4.0](#).

Versions are now sorted by `effective_date` ([r12247](#)).

#### Files

<a href="#">sort_issues_from_start_date.diff</a>	1.55 KB	2011-12-05	Felipe Ribeiro
<a href="#">sort_issues.rb</a>	782 Bytes	2011-12-05	Felipe Ribeiro
<a href="#">redmine-trunk-r10713.png</a>	21.5 KB	2012-10-24	Toshi MARUYAMA
<a href="#">redmine-trunk-r10713-patch.png</a>	39.6 KB	2012-10-24	Toshi MARUYAMA
<a href="#">gantt-sort-r10713.diff</a>	1.16 KB	2012-10-24	Toshi MARUYAMA
<a href="#">gantt-sort-trunk-r11692.diff</a>	1.78 KB	2013-03-31	Toshi MARUYAMA
<a href="#">gantt-sort-trunk-r11692.png</a>	20 KB	2013-03-31	Toshi MARUYAMA

gantt-sort-trunk-r11723.diff	3.12 KB	2013-04-19	Toshi MARUYAMA
gantt.jpg	65.4 KB	2013-04-22	Yuhki ISHIGURO
gantt-sort-trunk-r11740.diff	3.09 KB	2013-04-22	Toshi MARUYAMA
gantt-sort-trunk-r11744.diff	4.04 KB	2013-04-23	Toshi MARUYAMA
gantt-sort-trunk-r11856.diff	2.34 KB	2013-05-17	Toshi MARUYAMA
gantt-sort-version-trunk-r11898.diff	438 Bytes	2013-07-15	Filou Centrinov