

Redmine - Defect #34999

The result of Attachment.latest_attach is unstable if attachments have the same timestamp

2021-04-01 21:42 - Pavel Rosický

Status:	Closed	Start date:	
Priority:	Normal	Due date:	
Assignee:	Go MAEDA	% Done:	0%
Category:	Attachments	Estimated time:	0.00 hour
Target version:	4.2.1	Affected version:	4.2.0
Resolution:	Fixed		
Description			
refs #27780			
test_latest_attach_should_support_unicode_case_folding			
Failure:			
AttachmentTest#test_latest_attach_should_support_unicode_case_folding [c:/redmine/test/unit/attachment_test.rb:488]:			
Expected: #<Attachment id: 1990, container_id: nil, container_type: nil, filename: "ä.txt", disk_filename:			
"210401211700_8b8e5a4d7605340440caaf5211ac5124.TXT", filesize: 32, content_type: "text/plain", digest:			
"c62e4615bd39e222572f3a1bf7c2132ea1e65b17ec805047bd...", downloads: 0, author_id: 1, created_on: "2021-03-31			
19:17:00.000000000 +0000", description: nil, disk_directory: "2021/03">			
Actual: #<Attachment id: 1989, container_id: nil, container_type: nil, filename: "Ã.TXT", disk_filename:			
"210401211700_8b8e5a4d7605340440caaf5211ac5124.TXT", filesize: 32, content_type: "text/plain", digest:			
"c62e4615bd39e222572f3a1bf7c2132ea1e65b17ec805047bd...", downloads: 0, author_id: 1, created_on: "2021-03-31			
19:17:00.000000000 +0000", description: nil, disk_directory: "2021/03">			
on some platforms, sort_by isn't stable			
https://bugs.ruby-lang.org/issues/1089			
Note that these two attachments have exactly the same timestamp.			
https://github.com/redmine/redmine/blob/3e36b5c452210da457cb6c16385551414071693f/app/models/attachment.rb#L373			
however, the spec depends on the exact order and it fails if otherwise. Let's make it deterministic. This change doesn't affect the purpose of the test.			

Associated revisions

Revision 20923 - 2021-04-07 07:30 - Go MAEDA

The result of Attachment.latest_attach is unstable if attachments have the same timestamp (#34999).

Patch by Pavel Rosický.

Revision 20924 - 2021-04-07 07:51 - Go MAEDA

Merged r20923 from trunk to 4.2-stable (#34999).

History

#1 - 2021-04-01 21:42 - Pavel Rosický

- File `fix_attachment_test.diff` added

#2 - 2021-04-04 10:05 - Go MAEDA

Thank you for pointing it out.

My understanding is that the root cause is that `Attachment.latest_attach` is unstable when two or more attachments have the same timestamp.

How about changing the code to sort by `id` instead of `created_on`? Even if multiple attachments have the same timestamp, `latest_attach` will return the expected result.

Index: `app/models/attachment.rb`

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--- `app/models/attachment.rb` (リビジョン 20904)

+++ `app/models/attachment.rb` (□□ コピー)

@@ -370,7 +370,7 @@

```
def self.latest_attach(attachments, filename)
  return unless filename.valid_encoding?
```

```
- attachments.sort_by(&:created_on).reverse.detect do |att|
```

```
+ attachments.sort_by(&:id).reverse.detect do |att|
```

```
  filename.casecmp?(att.filename)
```

```
end
```

```
end
```

#3 - 2021-04-04 14:02 - Pavel Rosický

- File `fix_attachment_test2.diff` added

I don't think the ID column should be used as a timestamp, but I'm ok with using it as a second option, in case both timestamps are exactly the same.

attachment:"`fix_attachment_test2.diff`" is an alternative to the original patch

#4 - 2021-04-05 03:12 - Go MAEDA

- Subject changed from *Make case-insensitive matching test more deterministic* to *The result of `Attachment.latest_attach` is unstable if attachments have the same timestamp*

- Target version set to `4.2.1`

Pavel Rosický wrote:

```
| I don't think the ID column should be used as a timestamp, but I'm ok with using it as a second option, in case both timestamps are exactly the same.
```

Thank you, I will commit attachment:`fix_attachment_test2.diff`.

Setting the target version to `4.2.1`.

#5 - 2021-04-07 07:30 - Go MAEDA

- Status changed from New to Closed
- Assignee set to Go MAEDA
- Resolution set to Fixed

Committed the fix. Thank you.

Files

fix_attachment_test.diff	696 Bytes	2021-04-01	Pavel Rosický
fix_attachment_test2.diff	615 Bytes	2021-04-04	Pavel Rosický