

## Redmine - Defect #34999

### The result of Attachment.latest\_attach is unstable if attachments have the same timestamp

2021-04-01 21:42 - Pavel Rosický

<b>Status:</b>	Closed	<b>Start date:</b>	
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assignee:</b>	Go MAEDA	<b>% Done:</b>	0%
<b>Category:</b>	Attachments	<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>	4.2.1	<b>Affected version:</b>	4.2.0
<b>Resolution:</b>	Fixed		
<b>Description</b>			
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			
<a href="https://bugs.ruby-lang.org/issues/1089">https://bugs.ruby-lang.org/issues/1089</a>			
Note that these two attachments have exactly the same timestamp.			
<a href="https://github.com/redmine/redmine/blob/3e36b5c452210da457cb6c16385551414071693f/app/models/attachment.rb#L373">https://github.com/redmine/redmine/blob/3e36b5c452210da457cb6c16385551414071693f/app/models/attachment.rb#L373</a>			
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

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