Redmine - Defect #30441

Attachments with Unicode uppercase names are not shown in wiki pages

2019-01-16 13:49 - Evgeny Seliverstov

Status:	Closed	**Start date:**	
Priority:	Normal	**Due date:**	
Assignee:	Go MAEDA	**% Done:**	0%
Category:	Attachments	**Estimated time:**	0.00 hour
Target version:	4.0.4		
Resolution:	Fixed	**Affected version:**	3.4.7

Description

Attachments with Unicode upper-case filenames (like TestТест.png aka Test\xd0\xa2\xd0\xb5\xd1\x81\xd1\x82.png) are not shown when included in wiki inline image macro.

Steps to reproduce:
1. Make a wiki page
2. Attach a file named TestТест.png
3. Write in a wiki page a macro !TestТест.png!

Expected:
- The image is shown as an attachment

Actual:
- The image is not shown because an attachment is not found
- The 404 error is in logs because Redmine tries to extract a generic resource, not an attachment

I have investigated this issue and it seems that the ApplicationHelper#parse_inline_attachments method downcases filenames and then those names are compared against the database in Attachment#latest_attach using String#casecmp. The casecmp method (do not confuse with a newer String#casecmp? method!) cannot deal with Unicode so the comparison fails. This bug can or can not be seen if an attachment name is downcased because casecmp can successfully compare downcased strings because their byte representation is the same.

The problem can be fixed easily just by avoiding calling String#downcase in ApplicationHelper#parse_inline_attachments.
Comparing ASCII filenames with any cases should still work without changes (because of casecmp).
Comparing Unicode filenames should work fine because we do not bother with changing filename at all.

I wrote a patch consisting of:
1. Test AttachmentTest#test_latest_should_get_with_unicode_downcase that reproduces a problem with an attachment search (passes before and after the fix).
2. Test ApplicationHelperTest#test_attached_images_with_textile_and_uppercase_non_ascii_filename that reproduces a problem with inline image macro (passes after the fix).
3. Small fix to ApplicationHelper#parse_inline_attachments that avoids calling downcase.

Related issues:
- #27780 can fix the problem just by calling String#casecmp? but it is ruby-2.4 only
- #20369 introduced the problem in 3.2.0

About system:

```
Environment:
  Redmine version                3.4.7.stable
  Ruby version                   2.4.4-p296 (2018-03-28) [x86_64-darwin17]
  Rails version                  4.2.11
  Environment                    production
  Database adapter               SQLite
SCM:
  Subversion                     1.10.0
  Mercurial                      4.8.2
  Git                            2.20.1
  Filesystem
Redmine plugins:
```

```
  no plugin installed
```

Related issues:

Related to Redmine - Defect #27780: Case-insensitive matching fails for Unico...	**Closed**

Associated revisions

Revision 18057 - 2019-04-12 07:25 - Go MAEDA

Attachments with Unicode uppercase names are not shown in wiki pages (#30441).

Patch by Evgeny Seliverstov.

Revision 18058 - 2019-04-12 07:42 - Go MAEDA

Test for r18057 (#30441).

Patch by Go MAEDA.

Revision 18060 - 2019-04-18 16:31 - Go MAEDA

Merged r18057 and r18058 from trunk to 4.0-stable (#30441).

History

#1 - 2019-04-02 18:01 - Go MAEDA

- Target version set to Candidate for next minor release

#2 - 2019-04-02 18:02 - Go MAEDA

- Related to Defect #27780: Case-insensitive matching fails for Unicode filenames when referring to attachments in text formatting added

#3 - 2019-04-11 01:30 - Go MAEDA

Evgeny Seliverstov wrote:

> The problem can be fixed easily just by avoiding calling String#downcase in ApplicationHelper#parse_inline_attachments.
> Comparing ASCII filenames with any cases should still work without changes (because of casecmp).
> Comparing Unicode filenames should work fine because we do not bother with changing filename at all.

I agree. The downcase method in ApplicationHelper#parse_inline_attachments is not necessary because the case-insensitive match is performed for filename variable in Attachment#latest_attach. I think the downcase method should have been removed when implementing [#20369](#20369).

#4 - 2019-04-12 06:30 - Go MAEDA

- File test-30441.patch added

- Target version changed from Candidate for next minor release to 4.0.4

Rewrote the test.

#5 - 2019-04-12 07:43 - Go MAEDA

- Subject changed from Attachments with unicode uppercase names are not shown in wiki to Attachments with Unicode uppercase names are not shown in wiki pages

- Status changed from New to Resolved

- Assignee set to Go MAEDA

- Resolution set to Fixed

Committed the patches. Thank you for reporting and fixing the issue.

#6 - 2019-04-18 16:32 - Go MAEDA

- Status changed from Resolved to Closed

Files

attachments-unicode-case.diff	4.32 KB	2019-01-16	Evgeny Seliverstov
test-30441.patch	2.53 KB	2019-04-12	Go MAEDA