

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	Affected version:	3.4.7
Resolution:	Fixed		

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 Unic...

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.

#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