

Redmine - Defect #31549

LF line terminators cause misparse of a multi-part email when rdm-mailhandler.rb is invoked from /etc/aliases

2019-06-11 04:44 - Yuichi HARADA

Status:	Closed	Start date:	
Priority:	Normal	Due date:	
Assignee:	Go MAEDA	% Done:	0%
Category:	Email receiving	Estimated time:	0.00 hour
Target version:	4.1.0	Affected version:	
Resolution:			
Description			
The issue's description will be garbled if you receive the following email.			
<ul style="list-style-type: none">- The multi-part mail.- The charset of the text-part is UTF-8.- The text-part contains multibyte-character .- File is attached.- Line terminator is LF (0x0a) .			
Related issues:			
Related to Redmine - Defect # 31900: Problem with tickets issued by rdm-mailh...			New

Associated revisions

Revision 18317 - 2019-06-26 01:38 - Go MAEDA

LF line terminators cause misparse of a multi-part email when rdm-mailhandler.rb is invoked from /etc/aliases (#31549).

Patch by Yuichi HARADA.

Revision 18544 - 2019-09-26 15:01 - Go MAEDA

Incoming emails may cause "invalid byte sequence" error depending on the default external encoding, due to r18317 (#31549).

History

#1 - 2019-06-11 05:09 - Yuichi HARADA

- File *fixed-31549.patch* added

I created a patch, so I will attach it.

#2 - 2019-06-11 05:30 - Go MAEDA

- Status changed from *New* to *Confirmed*

- Target version set to *Candidate for next minor release*

#3 - 2019-06-11 10:40 - Pavel Rosický

have you encountered with this problem for real? according to <https://tools.ietf.org/html/rfc6152> line-endings should be always CRLF

but test fixtures could be saved with different line-endings. On the other hand this change could break emails with binary encodings (attachments), that's why I don't think the patch should be applied.

see related discussion

<https://github.com/mikel/mail/pull/1113>

and

<https://github.com/mikel/mail/pull/1168>

#4 - 2019-06-13 07:23 - Yuichi HARADA

- File fixed-31549-v2.patch added

Pavel Rosický wrote:

| have you encountered with this problem for real? according to <https://tools.ietf.org/html/rfc6152> line-endings should be always CRLF

Thank you for the feedback.

I confirmed the situation. The cause was that when forwarding mail from Postfix to Redmine using rdm-mailhandler.rb, CRLF was replaced with LF. I think that you are configuring Postfix referring to `[[RedmineReceivingEmails#Forwarding emails from your email server|Forwarding emails from your email server]]`.

I rewrote the patch of rdm-mailhandler.rb. Please delete the previous patch. (attachment:fixed-31549.patch)

#5 - 2019-06-20 08:43 - Yuichi HARADA

- File fixed-31549-v3.patch added

Yuichi HARADA wrote:

| I rewrote the patch of rdm-mailhandler.rb. Please delete the previous patch. (attachment:fixed-31549.patch)

I didn't need encoding, so I rewrote the patch.

#6 - 2019-06-20 11:49 - Go MAEDA

- Target version changed from Candidate for next minor release to 4.0.5

Using the same regular expression as [Mail::Utilities.binary_unsafe_to_crlf](#) is faster.

```
diff --git a/extra/mail_handler/rdm-mailhandler.rb b/extra/mail_handler/rdm-mailhandler.rb
index 51a0a5afb..16816689f 100644
--- a/extra/mail_handler/rdm-mailhandler.rb
+++ b/extra/mail_handler/rdm-mailhandler.rb
@@ -153,7 +153,7 @@ END_DESC
```

```
headers = { 'User-Agent' => "Redmine mail handler/#{VERSION}" }
```

```
- data = { 'key' => key, 'email' => email,
+ data = { 'key' => key, 'email' => email.gsub(/(<!\r)\n|\r(?:!\n)/, "\r\n"),
```

```
'allow_override' => allow_override,  
'unknown_user' => unknown_user,  
'default_group' => default_group,
```

Benchmark script:

```
require 'benchmark/ips'  
  
str = "0123456789\r0123456789\r\n0123456789\n" * 1000  
  
Benchmark.ips do |x|  
  x.report('\r?\n|\r\n?/') do  
    str.gsub(/\r?\n|\r\n?/, "\r\n")  
  end  
  
  x.report('/(<\r)\n|\r(?!\n)/') do  
    str.gsub(/(<\r)\n|\r(?!\n)/, "\r\n")  
  end  
  
  x.compare!  
end
```

Result:

```
Warming up -----  
  \r?\n|\r\n?/  56.000 i/100ms  
/(<\r)\n|\r(?!\n)/  73.000 i/100ms  
Calculating -----  
  \r?\n|\r\n?/  559.559 (± 3.6%) i/s - 2.800k in 5.011150s  
/(<\r)\n|\r(?!\n)/  731.531 (± 3.0%) i/s - 3.723k in 5.094019s  
  
Comparison:  
/(<\r)\n|\r(?!\n)/: 731.5 i/s  
  \r?\n|\r\n?/: 559.6 i/s - 1.31x slower
```

#7 - 2019-06-20 13:05 - Go MAEDA

- Subject changed from *When the line feed code is LF, multi-part mail is misrecognized as single-part mail to Line terminators in an email are LF instead of CRLF when rdm-mailhandler.rb is invoked from /etc/aliases and it causes misparse of the email*

#8 - 2019-06-26 01:39 - Go MAEDA

- Subject changed from *Line terminators in an email are LF instead of CRLF when rdm-mailhandler.rb is invoked from /etc/aliases and it causes misparse of the email to LF line terminators cause misparse of a multi-part email when rdm-mailhandler.rb is invoked from /etc/aliases*
- Status changed from *Confirmed to Closed*
- Assignee set to *Go MAEDA*
- Target version changed from *4.0.5 to 4.1.0*

Committed the patch. Thank you for your contribution.

#9 - 2019-09-04 03:36 - Go MAEDA

- Related to Defect #31900: Problem with tickets issued by rdm-mailhandler on redmine 4.0.4 added

#10 - 2019-09-25 18:32 - Sylvain Tissot

- File mail_to_redmine added

Using Postfix 3.3.0 alias to forward pipe the attached message using the latest rdm-mailhandler, I have the opposite problem: it used to work before the patch, but since the patch I have the error:

```
Status: 5.3.0
Diagnostic-Code: x-unix; /etc/postfix/rdm-mailhandler.rb:156:in `gsub': invalid
byte sequence in US-ASCII (ArgumentError) from
/etc/postfix/rdm-mailhandler.rb:156:in `submit' from
/etc/postfix/rdm-mailhandler.rb:215:in `'
```

The message piped by Postfix is UTF-8, with LF endings

If I manually convert the message from LF to CRLF before piping to rdm-mailhandler, it works.

```
cat mail_in_utf8_with_lf.eml | unix2dos | /etc/postfix/rdm-mailhandler.rb --project test --url https://redmine.example.com --key *****
--tracker=Maintenance --allow-override=project,tracker,category,priority,status
```

I've tried the following `/etc/aliases` config but it doesn't work (same error with gsub:156):

```
support: "|unix2dos | /etc/postfix/rdm-mailhandler.rb --project test --url https://redmine.example.com --key ***** --tracker=Maintenance
--allow-override=project,tracker,category,priority,status"
```

#11 - 2019-09-25 18:40 - Go MAEDA

- Status changed from Closed to Reopened

#12 - 2019-09-26 04:40 - Go MAEDA

- Status changed from Reopened to Needs feedback

Sylvain Tissot wrote:

Using Postfix 3.3.0 alias to forward pipe the attached message using the latest rdm-mailhandler, I have the opposite problem: it used to work before the patch, but since the patch I have the error:

[...]

Thank you for reporting the error.

Maybe it is because the value of LANG environment variable on your server is set to the locale which does not support UTF-8. A possible value is "C".

Ruby's `Encoding.default_external` respects LANG (see <https://docs.ruby-lang.org/en/2.6.0/Encoding.html#class-Encoding-label-External+encoding>). If the LANG is "C", Ruby considers the encoding of the content of files as US-ASCII, not UTF-8.

Could you try again after applying the following patch against the latest `rdm-mailhandler.rb`?

```
diff --git a/extra/mail_handler/rdm-mailhandler.rb b/extra/mail_handler/rdm-mailhandler.rb
index b7284841d..62c658e09 100644
--- a/extra/mail_handler/rdm-mailhandler.rb
+++ b/extra/mail_handler/rdm-mailhandler.rb
@@ -153,7 +153,7 @@ END_DESC
```

```
headers = { 'User-Agent' => "Redmine mail handler/#{VERSION}" }

- data = { 'key' => key, 'email' => email.gsub(/(?<\r\n|\r(?!\n)/, "\r\n"),
+ data = { 'key' => key, 'email' => email.b.gsub(/(?<\r\n|\r(?!\n)/, "\r\n"),
          'allow_override' => allow_override,
          'unknown_user' => unknown_user,
          'default_group' => default_group,
```

#13 - 2019-09-26 12:14 - Sylvain Tissot

- File `email_UTF8_with_emoji.eml` added

Hi Go MAEDA,

The LANG environment on the server is `en_US.utf8`

```
root@mail:/etc/postfix# echo $LANG
en_US.utf8
```

Thanks for your help, I applied the patch in on the latest `rdm-mailhandler.rb` and tried with a bunch of different emails. Messages in UTF-8 are now working, as well as attachments.

Only the attached message containing an unicode pizza U+1F355 is bouncing with this error:

```
permission denied. Command output: Request was denied by your Redmine
server. Possible reasons: email is sent from an invalid email address or is
missing some information.
```

#14 - 2019-09-26 15:05 - Go MAEDA

- Status changed from Needs feedback to Closed

Sylvain Tissot wrote:

```
| Thanks for your help, I applied the patch in on the latest rdm-mailhandler.rb and tried with a bunch of different emails. Messages in UTF-8 are now
| working, as well as attachments.
```

Thank you for your helpful feedback. I have just committed the fix in r18544.

|

2022-10-04

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| Only the attached message containing an unicode pizza U+1F355) is bouncing with this error:

I think the error is irrelevant to this issue. Please open a new issue.

Files

fixed-31549.patch	3.22 KB	2019-06-11	Yuichi HARADA
fixed-31549-v2.patch	604 Bytes	2019-06-13	Yuichi HARADA
fixed-31549-v3.patch	621 Bytes	2019-06-20	Yuichi HARADA
mail_to_redmine	562 Bytes	2019-09-25	Sylvain Tissot
email_UTF8_with_emoji.eml	436 Bytes	2019-09-26	Sylvain Tissot