

## 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

<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>	Email receiving	<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>	4.1.0	<b>Affected version:</b>	
<b>Resolution:</b>			
<b>Description</b>			
The issue's description will be garbled if you receive the following email.			
<ul style="list-style-type: none"><li>• The multi-part mail.</li><li>• The charset of the text-part is UTF-8.</li><li>• The text-part contains <b>multibyte-character</b> .</li><li>• File is attached.</li><li>• Line terminator is <b>LF (0x0a)</b> .</li></ul>			
<b>Related issues:</b>			
Related to Redmine - Defect #31900: Problem with tickets issued by rdm-mailha... <b>New</b>			

#### 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 [Forwarding emails from your email server](#).

I rewrote the patch of rdm-mailhandler.rb. Please delete the previous patch. ([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. ([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 `<main>'
```

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 differents 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 differents 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](#).

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