Ruby master - Bug #7040

gem install で特定の gem がインストールできない

09/20/2012 10:29 AM - hsbt (Hiroshi SHIBATA)

Status: Closed
Priority: Normal
Assignee: nagachika (Tomoyuki Chikanaga)
Target version: 2.0.0
ruby -v:
ruby 2.0.0dev (2012-09-20 trunk 36993) [x86_64-darwin12.2.0]

Description
trunk で特定の gem(例えば libv8等)をインストールしようとすると必ず失敗してしまいます。
% gem i libv8
ERROR:  While executing gem ... (Zlib::BufError)
buffer error

Twitter で nagachika さん Zlib を GVL 対応していないとコメントを頂きましたが、上記のエラー表示以降は調査しきれていません。

Associated revisions
Revision f21ac99e - 10/08/2012 04:40 PM - nagachika (Tomoyuki Chikanaga)

- ext/zlib/zlib.c (zstream_run_func): don't call inflate() when z->stream.avail_in == 0. it return Z_BUF_ERROR. but deflate() could be called with z->stream->avail_in == 0 because it has hidden buffer in z->stream->state (opaque structure). fix for gem install error. [ruby-dev:46149] [Bug #7040]

git-svn-id: svn+ssh://ci.ruby-lang.org/ruby/trunk@37119 b2dd03c8-39d4-4d8f-98ff-823fe69b080e

Revision 37119 - 10/08/2012 04:40 PM - nagachika (Tomoyuki Chikanaga)

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Hello,

I'd like to switch to ruby-core, but I don't know how to do it on redmine...

Anyway, I've found that zstream_run_func() leaks Z_BUF_ERROR because inflate() could return Z_BUF_ERROR even when z->stream.avail_out > 0.

My tiny patch below prevent the exception, but I'm not confident at all it's right way to fix this issue.

```c
if (z->stream.avail_out > 0) {
  z->flags |= ZSTREAM_FLAG_IN_STREAM;
  err = Z_OK;         break;     }
```

I think Eric (a.k.a drbrain) should have any idea, so I'll assign this ticket to him.

thakns,

#2 - 10/08/2012 12:29 AM - nagachika (Tomoyuki Chikanaga)

- File zlib_inflate_buf_error.patch added
- Category changed from core to ext
- Assignee changed from drbrain (Eric Hodel) to nagachika (Tomoyuki Chikanaga)

Hello,

I've investigated this little more deeper.

If inflate() (aka z->func->run()) return under condition which z->stream.avail_in == z->stream.avail_out == 0, current zstream_run_func() call inflate() once more even though there's no input available. In that case inflate() return Z_BUF_ERROR.

However, deflate() have hidden input buffer in z->stream.state (opaque structure) and should be called even when z->stream.avail_in == 0 (while z->stream.avail_out == 0).

I think zstream_run_func() should break from while loop when zstream->avail_in == 0 only if z->func->run == inflate.

I will commit an attached patch tomorrow if there's no objection.

ruby-dev TableWidgetItem

zstream_run_func(z->func->run()) inflate() (z->func->run()) z->stream.avail_in == z->stream.avail_out == 0) 

zstream_run_func inflate() z->stream.state (opaque structure) deflate() z->stream.avail_in == 0 (while z->stream.avail_out == 0).

zstream_run_func() should break from while loop when zstream->avail_in == 0 only if z->func->run == inflate.

I will commit an attached patch tomorrow if there's no objection.
Hiroshi, thank you for reporting this issue.
Your contribution to Ruby is greatly appreciated.
May Ruby be with you.

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Files

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<thead>
<tr>
<th>File</th>
<th>Size</th>
<th>Date</th>
<th>Author</th>
</tr>
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<tbody>
<tr>
<td>zlib_inflate_buf_error.patch</td>
<td>634 Bytes</td>
<td>10/08/2012</td>
<td>nagachika (Tomoyuki Chikanaga)</td>
</tr>
</tbody>
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