Ruby master - Bug #16680

[Breaking Change] Ruby 2.7 not support symlink folder in $LOAD_PATH to work with autoload.

03/07/2020 06:31 PM - zw963 (Wei Zheng)

<table>
<thead>
<tr>
<th>Status:</th>
<th>Open</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority:</td>
<td>Normal</td>
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<tr>
<td>Assignee:</td>
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<tr>
<td>Target version:</td>
<td>2.7.0</td>
</tr>
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<td>ruby -v:</td>
<td>2.7.0</td>
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<tr>
<td>Backport:</td>
<td>2.5: UNKNOWN, 2.6: UNKNOWN, 2.7: UNKNOWN</td>
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**Description**

Following is a full reproducible process, i will use a gem named 'looksee' to reproduce this.

1. gem install looksee

2. goto gem folder, copy lib content into /tmp/test_looksee
   so, for now, we have a folder like this:

   ```
   $ tree /tmp/test_looksee
   /tmp/test_looksee
   └── lib
       ├── looksee
       │   ├── adapter
       │       ├── base.rb
       │       ├── rubinius.rb
       │       └── adapter.rb
       │   └── clean.rb
       │       └── columnizer.rb
       │       └── core_ext.rb
       │       └── editor.rb
       │       └── help.rb
       │       └── inspector.rb
       │       └── lookup_path.rb
       │       └── mri.so
       │       └── version.rb
       └── looksee.rb
   ```

3. create a new symlinks to this folder.

   ```
   $ ln -s /tmp/test_looksee /tmp/test_looksee1
   $ ls -alhd /tmp/test_looksee*
   drwxr-xr-x 3 zw963 zw963 60 2020-03-08 01:39 /tmp/test_looksee/
   lrwxrwxrwx 1 zw963 zw963 13 2020-03-08 02:08 /tmp/test_looksee1 -> test_looksee/
   ```

4. run following command to reproduce this issue.

   ```
   $ ruby -I/tmp/test_looksee1/lib/ -rlooksee -e 'puts 100'
   Traceback (most recent call last):
   2: from /home/zw963/others/.rvm/rubies/ruby-2.7.0/lib/ruby/2.7.0/rubygems/core_ext/kernel_require.rb:72:in `require'
   1: from /home/zw963/others/.rvm/rubies/ruby-2.7.0/lib/ruby/2.7.0/rubygems/core_ext/kernel_require.rb:72:in `require'
   ```

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require.rb:72:in `require'
  2: from /home/zw963/others/.rvm/rubies/ruby-2.7.0/lib/ruby/2.7.0/rubygems/core_ext/kernel_require.rb:72:in `require'
  1: from /tmp/test_looksee1/lib/looksee/adapter.rb:1:in `<top (required)>'
/tmp/test_looksee1/lib/looksee/adapter.rb:2:in `<module:Looksee>': uninitialized constant Looksee::Adapter (NameError)

So, maybe you want to ask why use symlinks folder in $LOAD_PATH, but, i think this should be a quite common case, many ruby developer have local gem not manager by Rubygems or Bundler, it just use $LOAD_PATH to require/load it, it hard to ensure everyone folder is not a symlink.

I think this is a ** breaking change** , because all those code is work quite well before 2.7, because old code always following symlinks, following is a example from ruby 2.6.3, it working.

```
$ ruby -I/tmp/test_looksee1/lib/ -rlooksee -e 'puts 100'
```

As we can see, those breaking code come from autoload `Adapter, 'looksee/adapter', i suspect maybe nested autoload cause this new issue, but only a guess, please check, thank you.

Related issues:
Related to Ruby master - Bug #16462: Ruby 2.7 autoload not working with $RUBY... Closed

History
#1 - 03/07/2020 11:01 PM - hsbt (Hiroshi SHIBATA)
- Related to Bug #16462: Ruby 2.7 autoload not working with $RUBYLIB (maybe circular dependency error) added

Files
clipboard-202003080224-xglcq.png

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