

## Ruby trunk - Bug #9737

### Non-ASCII characters in the path to ruby executable break require paths

04/13/2014 03:01 AM - spatulasnout (B Kelly)

<b>Status:</b> Open	
<b>Priority:</b> Normal	
<b>Assignee:</b> cruby-windows	
<b>Target version:</b>	
<b>ruby -v:</b> ruby 2.2.0dev (2014-04-12 trunk 45576) [i386-mswin32_100]	<b>Backport:</b> 2.0.0: UNKNOWN, 2.1: UNKNOWN

#### Description

Hi,

On Windows, if non-ASCII characters exist the path on which the ruby interpreter is invoked, the character encoding is not handled properly when the require paths in \$: are created, making ruby unable to require libraries in its standard lib paths.

In the first two examples, the working directory of the shell is not a factor; what matters is the path by which the ruby interpreter is invoked.

Here we invoke ruby using a path containing non-ASCII characters:

```
$ M:\dev\ruby-build\zz-können2\bin\ruby.exe -v --disable-gems -e "p $:.first.encoding, $:.first; require 'uri'"
ruby 2.2.0dev (2014-04-12 trunk 45576) [i386-mswin32_100]
#<Encoding:ASCII-8BIT>
"M:/dev/ruby-build/zz-k\xF6nnen2/lib/ruby/site_ruby/2.2.0"
-e:1:in `require': cannot load such file -- uri (LoadError)
    from -e:1:in `<main>'
```

Here we invoke ruby in the same location, but instead using the NTFS "short" name on the path so that it is ASCII only:

```
$ M:\dev\ruby-build\ZZ-KNN~2\bin\ruby.exe -v --disable-gems -e "p $:.first.encoding, $:.first; require 'uri'"
ruby 2.2.0dev (2014-04-12 trunk 45576) [i386-mswin32_100]
#<Encoding:IBM437>
"M:/dev/ruby-build/ZZ-KNN~2/lib/ruby/site_ruby/2.2.0"
```

In the second two examples, we change the working dir instead of specifying the interpreter path directly. The results are the same:

```
# working dir: M:\dev\ruby-build\zz-können2\bin
$ .\ruby.exe -v --disable-gems -e "p $:.first.encoding, $:.first; require 'uri'"
ruby 2.2.0dev (2014-04-12 trunk 45576) [i386-mswin32_100]
#<Encoding:ASCII-8BIT>
"M:/dev/ruby-build/zz-k\xF6nnen2/lib/ruby/site_ruby/2.2.0"
-e:1:in `require': cannot load such file -- uri (LoadError)
    from -e:1:in `<main>'
```

```
# working dir: M:\dev\ruby-build\ZZ-KNN~2\bin
$ .\ruby.exe -v --disable-gems -e "p $:.first.encoding, $:.first; require 'uri'"
ruby 2.2.0dev (2014-04-12 trunk 45576) [i386-mswin32_100]
#<Encoding:IBM437>
"M:/dev/ruby-build/ZZ-KNN~2/lib/ruby/site_ruby/2.2.0"
```

I'm guessing this will be related to the GetModuleFileName() call in:

```
win32/stub.c: lenexe = (size_t)GetModuleFileName(NULL, exename, sizeof exename);
```

which would presumably need to become the Unicode GetModuleFileNameW() version instead?

Regards,

Bill

## History

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**#1 - 04/15/2014 08:28 AM - nobu (Nobuyoshi Nakada)**

- *Description updated*

WIP, no tests yet: <https://github.com/nobu/ruby/compare/win32-utf8-loadpath?expand=1>