Ruby master - Bug #11206
short file name match incompatibility

06/01/2015 05:54 PM - naruse (Yui NARUSE)

Status: Closed
Priority: Normal
Assignee: nobu (Nobuyoshi Nakada)
Target version:
ruby -v: 2.0.0: DONTNEED, 2.1: DONTNEED, 2.2: UNKNOWN

Description
When I develop a foo.gem, my working directory has foo.gemspec and foo.gem.
If I run gem install -l foo, it fails as following:
ERROR: While executing gem ... (Gem::Package::FormatError)
package metadata is missing in foo.gemspec
Because gem command tries to traverse the current directory with Dir["*.gem"],
and it include *.gemspec.

Another example, Rakefile has rake clean task and it is specified by CLEAN constant.
if I specify CLEAN.include("*.gem"), it removes *.gemspec.

Related issues:
Related to Ruby master - Bug #10819: can't glob win32 short pathname
Closed 02/02/2015

Associated revisions
Revision 9375ff5b - 06/03/2015 10:12 PM - nobu (Nobuyoshi Nakada)
dir.c: FNM_SHORTNAME
  ● dir.c (dirent_match): match short names only when FNM_SHORTNAME flag is given, for the backward compatibility, and the new behavior is often dangerous. [ruby-core:69435] [Bug #11206]
git-svn-id: svn+ssh://ci.ruby-lang.org/ruby/trunk@50760 b2dd03c8-39d4-4d8f-98ff-823fe69b080e

Revision 50760 - 06/03/2015 10:12 PM - nobu (Nobuyoshi Nakada)
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History

#1 - 06/02/2015 02:49 AM - nobu (Nobuyoshi Nakada)
Conflict with #10819.
Can these reach a compromise?

#2 - 06/02/2015 05:43 AM - nobu (Nobuyoshi Nakada)
Running these commands as the administrator would fix the problem:
1. fsutil 8dot3name set 1
2. fsutil 8dot3name strip /s /f c:

#3 - 06/02/2015 12:18 PM - nobu (Nobuyoshi Nakada)
For better or worse, extension names are something special things on Windows, so what about matching extension of long names, but not short names?

diff --git i/dir.c w/dir.c
index a6934bd..2b03a72 100644
--- i/dir.c
+++ w/dir.c
@@ -1596,7 +1596,21 @@
 dirent_match(const char *pat, rb_encoding *enc, const char *name, const struct dirent *) { 
   if (fnmatch(pat, enc, name, flags) == 0) return 1;
+   ifndef _WIN32
+     if (dp->d_altname) {
+       const char *altname = dp->d_altname;
+       long altextlen = strlen(dp->d_altname);
+       const char *altext = ruby_enc_find_extname(altname, &altextlen, enc);
+       if (altext) {
+         long extlen = NAMLEN(dp);
+         const char *ext = ruby_enc_find_extname(name, &extlen, enc);
+         if (ext) {
+           char *tmpname = ALLOCA_N(char, altext + altextlen + 1);
+           memcpy(tmpname, altext, altext - altname);
+           memcpy(tmpname + (altext - altname), ext, extlen);
+           tmpname[altext - altname + extlen] = '\0';
+           altname = tmpname;
+         }
+       }
+     }
+   }
+   if (fnmatch(pat, enc, altname, flags) == 0) return 1;
 #endif
 return 0;

#4 - 06/02/2015 12:29 PM - usa (Usaku NAKAMURA)
IMO, ruby should offer an option to users to select matching short names or not. (maybe File::FNM_SHORTNAME, or somehow.)
And, the default should not match short names.

#5 - 06/03/2015 08:17 AM - nobu (Nobuyoshi Nakada)
https://github.com/ruby/ruby/compare/trunk...nobu:bug/11206-fnm_shortname

#6 - 06/03/2015 09:14 AM - usa (Usaku NAKAMURA)
Seems good.
Thank you, nobu. Commit it, please.

#7 - 06/03/2015 10:12 PM - nobu (Nobuyoshi Nakada)
- Status changed from Assigned to Closed

Applied in changeset r50760.
dir.c (dirent_match): match short names only when FNM_SHORTNAME flag is given, for the backward compatibility, and the new behavior is often dangerous. [ruby-core:69435] [Bug #11206]

#8 - 06/03/2015 10:19 PM - usa (Usaku NAKAMURA)
- Related to Bug #10819: can't glob win32 short pathname added

#9 - 06/03/2015 10:19 PM - usa (Usaku NAKAMURA)
- Backport changed from 2.0.0: UNKNOWN, 2.1: UNKNOWN, 2.2: UNKNOWN to 2.0.0: DONTNEED, 2.1: DONTNEED, 2.2: UNKNOWN