

Ruby master - Feature #12659

Readline: expose rl_char_is_quoted_p setting

08/06/2016 01:01 AM - georgebrock (George Brocklehurst)

Status:	Closed
Priority:	Normal
Assignee:	
Target version:	

Description

I maintain an interactive Git shell [1](#) built in Ruby, which made extensive use of the Readline module. We found we outgrew the functionality provided by the module, so we built our own Gitsh::LineEditor module using Ruby's Readline module as a starting point and adding more GNU Readline features to it. I'd like to contribute the features I add back upstream to Ruby. This is the first of them.

This patch exposes `rl_char_is_quoted_p` [2](#) as `Readline.quoting_detection_proc`.

`rl_char_is_quoted_p` is used to specify a function that determines if a character is escaped. It's called with completer word break characters that would normally indicate the boundary between two arguments, so that Readline can determine how much text to pass to the completion proc. For example, if we were implementing a Unix shell in Ruby using Readline, and a user typed `ls some\fil<tab>` by default we'd get "fil" passed to our completion proc, but what we'd really want would be "some\fil". Setting `rl_char_is_quoted_p` allows us to implement this behaviour.

The C function we assign to `rl_char_is_quoted_p` is called with a char array and an index into it, we convert those into a Ruby string and character index and pass them on to the proc. The implementation accounts for multibyte characters.

There are tests included in the patch that demonstrate the feature, and here's a simple program that uses it:

```
require "readline"

completion_text = nil
Readline.completion_proc = -> (text) do
  completion_text = text
  ["completed"]
end

Readline.completer_word_break_characters = " "
Readline.completer_quote_characters = "\\\"'"
Readline.quoting_detection_proc = -> (text, index) do
  index > 0 && text[index-1] == "\\\"'"
end

while line = Readline.readline("> ") do
  p line
  p completion_text
  completion_text = nil
end
```

This is my first contribution to Ruby, so I'm sure there'll be some changes I need to make before it's accepted. I hope to be able to follow up with a few more Readline features as I build more gitsh features.

Thanks to my colleague Adam Sharp for pairing with me on the multibyte string support.

Associated revisions

Revision 402f0426 - 10/03/2016 08:20 AM - nobu (Nobuyoshi Nakada)

`rl_char_is_quoted_p`

- `ext/readline/readline.c` (`readline_s_set_quoting_detection_proc`): support `rl_char_is_quoted_p`. [Feature #12659]
- `ext/readline/readline.c` (`readline_s_get_quoting_detection_proc`): ditto.

git-svn-id: svn+ssh://ci.ruby-lang.org/ruby/trunk@56326 b2dd03c8-39d4-4d8f-98ff-823fe69b080e

Revision 56326 - 10/03/2016 08:20 AM - nobu (Nobuyoshi Nakada)

`rl_char_is_quoted_p`

- ext/readline/readline.c (readline_s_set_quoting_detection_proc): support rl_char_is_quoted_p. [Feature #12659]
- ext/readline/readline.c (readline_s_get_quoting_detection_proc): ditto.

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Revision 011e45c6 - 10/03/2016 12:39 PM - nobu (Nobuyoshi Nakada)

use rb_locale_str_new

- ext/readline/readline.c (readline_char_is_quoted): use rb_locale_str_new with the length. [Feature #12659]

git-svn-id: svn+ssh://ci.ruby-lang.org/ruby/trunk@56330 b2dd03c8-39d4-4d8f-98ff-823fe69b080e

Revision 56330 - 10/03/2016 12:39 PM - nobu (Nobuyoshi Nakada)

use rb_locale_str_new

- ext/readline/readline.c (readline_char_is_quoted): use rb_locale_str_new with the length. [Feature #12659]

Revision 56330 - 10/03/2016 12:39 PM - nobu (Nobuyoshi Nakada)

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- ext/readline/readline.c (readline_char_is_quoted): use rb_locale_str_new with the length. [Feature #12659]

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Revision 56330 - 10/03/2016 12:39 PM - nobu (Nobuyoshi Nakada)

use rb_locale_str_new

- ext/readline/readline.c (readline_char_is_quoted): use rb_locale_str_new with the length. [Feature #12659]

History

#1 - 08/15/2016 09:11 PM - shevegen (Robert A. Heiler)

If I understand it correctly then you provide a wrapper that is currently not part of ruby readline module yes?

If so then I am in full support of this.

#2 - 10/02/2016 03:09 PM - georgebrock (George Brocklehurst)

Robert A. Heiler wrote:

If I understand it correctly then you provide a wrapper that is currently not part of ruby readline module yes?

If so then I am in full support of this.

Yes, that's exactly what this patch does.

Anything I can do to move this forward?

#3 - 10/03/2016 06:46 AM - nobu (Nobuyoshi Nakada)

Could you add a few tests?

And these functions should be static, and don't seem need forward declarations if the latter function is defined before the former.

```
int readline_char_is_quoted(char *text, int index);
long byte_index_to_char_index(VALUE str, long byte_index);
```

#4 - 10/03/2016 07:03 AM - nobu (Nobuyoshi Nakada)

Could you add a few tests?

Sorry, I missed the patch.

You may be able to use `rb_str_sublen()` instead of `byte_index_to_char_index()`.

```
static int
readline_char_is_quoted(char *text, int byte_index)
{
    VALUE proc, result, str;
    long char_index;
    size_t len;

    proc = rb_attr_get(mReadline, quoting_detection_proc);
    if (NIL_P(proc)) {
        return 0;
    }

    len = strlen(text);
    if (byte_index < 0 || len < (size_t)byte_index) {
        rb_raise(rb_eIndexError, "invalid byte index (%d in %"PRIuSIZE)",
                byte_index, len);
    }

    str = rb_locale_str_new_cstr(text);
    char_index = rb_str_sublen(str, byte_index);
    result = rb_funcall(proc, rb_intern("call"), 2, str, LONG2FIX(char_index));
    return RTEST(result);
}
```

#5 - 10/03/2016 08:20 AM - nobu (Nobuyoshi Nakada)

- Status changed from Open to Closed

Applied in changeset r56326.

rl_char_is_quoted_p

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- ext/readline/readline.c (readline_s_get_quoting_detection_proc): ditto.

#6 - 10/10/2016 11:03 PM - georgebrock (George Brocklehurst)

Nobuyoshi Nakada wrote:

Applied in changeset r56326.

Thank you!

Files

readline_quoting_detection_proc.patch	9.29 KB	08/06/2016	georgebrock (George Brocklehurst)
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