Ruby - Bug #7442

StringScanner#charpos vs StringScanner#pos

11/27/2012 11:04 AM - zenspider (Ryan Davis)

Status: Closed
Priority: Normal
Assignee:
Target version: 3.0
ruby -v: 1.9.x
Backport:

Description

=beain

I talked to Matz at rubyconf and he agreed this was a bug I should file. Sorry I took so long to do so.

As mentioned in #3482, StringScanner#pos is byte-oriented even when scanning multibyte strings. The reasoning was that IO#pos is byte-oriented so this is to spec and functioning correctly. The problem is that StringScanner isn't *just* an IO as it also represents a String and the progress scanning through it. Strings in 1.9+ must respect their encodings and with a few exceptions don't even support the idea of naked bytes. I think StringScanner must be able to respect that.

Given that ss is a StringScanner instance on a string with a valid encoding, getting the substring of the current progress via ss.string[0..ss.pos] can result in a String with *invalid* encoding. I propose that we add #charpos to make it possible to pull out a valid substring. This would also be useful towards being able to report proper offset or column information in the case of an error when you're using StringScanner as your lexer.

This is the code that I needed to get proper char-offsets (and substrings--I needed both for my purposes):

```
def string_to_pos
   string.byteslice(0, pos)
end

def charpos
   string_to_pos.length
end
```

=end

Related issues:

History

#1 - 11/27/2012 12:25 PM - mame (Yusuke Endoh)

- Status changed from Open to Feedback
- Target version set to 3.0

Sorry, it is too late to fix such a spec-level bug. Setting the target to Next Major.

If you create and commit a patch by preview2 (1 Dec.), and if it does not lead to any problem (and any discussion) at all, we might include it in 2.0.0.

Yusuke Endoh mame@tsq.ne.jp

#2 - 11/28/2012 09:31 AM - zenspider (Ryan Davis)

Committed revision 37916.

Please beat up on it.

#3 - 11/29/2012 09:23 AM - zenspider (Ryan Davis)

No objections (yet)... can this be merged to 2.0 branch for next preview release?

#4 - 11/29/2012 12:25 PM - mame (Yusuke Endoh)

- Status changed from Feedback to Closed

06/13/2025

I think so. We can keep it unless any serious problem is reported after preview2. Thanks for your quick action!

I'm slightly worried about its very inefficient implementation, but I don't know whether it matters because I understand the use case. Anyway, we can refine it after 2.0.0.

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Yusuke Endoh mame@tsg.ne.jp

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