

Ruby master - Feature #11484

add output offset for readpartial/read_nonblock/etc

08/24/2015 07:29 PM - normalperson (Eric Wong)

Status:	Feedback
Priority:	Normal
Assignee:	matz (Yukihiro Matsumoto)
Target version:	

Description

Specifying a destination offset will allow allocating less garbage strings to improve performance when reading partial data off a pipe or socket.

For example:

```
tmp = "".b
buf = "".b
case rv = io.read_nonblock(8192, tmp, exception: false)
when String
  buf << tmp
  break if parsing_done?(buf)
else
  return rv
end while true
```

Can be written as:

```
buf = "".b
case rv = io.read_nonblock(8192, buf, exception: false, off_out: buf.size)
when String
  break if parsing_done?(buf)
else
  return rv
end while true
```

For reference, here is the relevant part from "perldoc -f sysread"

```
sysread FILEHANDLE, SCALAR, LENGTH, OFFSET
sysread FILEHANDLE, SCALAR, LENGTH
-snip-
```

An OFFSET may be specified to place the read data at some place in the string other than the beginning. A negative OFFSET specifies placement at that many characters counting backwards from the end of the string. A positive OFFSET greater than the length of SCALAR results in the string being padded to the required size with "\0" bytes before the result of the read is appended.

-snip-

Maybe we can shortcut by allowing "off_out: :end" to avoid redundant words and potentially using the wrong variable:

```
io.read_nonblock(8192, buf, exception: false, off_out: :end)
```

I'm not sure when I'll have time to work on this feature.

Lately I've been working in Perl again and rediscovered this API subtlety.

History

#1 - 06/09/2017 08:21 AM - ioquatix (Samuel Williams)

This is a great idea, but I propose the argument is called simply offset:

#2 - 09/25/2017 06:56 AM - matz (Yukihiro Matsumoto)

- Status changed from Open to Feedback

I like the idea but do not like the name off_out. Any other candidate?

Matz.

#3 - 09/25/2017 07:28 AM - akr (Akira Tanaka)

How about bufoffset?