

Backport191 - Backport #2560

IO.read not always closes the file

01/06/2010 02:31 AM - vvs (Vladimir Sizikov)

Status:	Assigned
Priority:	Normal
Assignee:	yugui (Yuki Sonoda)
Description	
<pre>=begin Consider the following: File.open('test_file', 'wb') { f f.write 'abc' } IO.read('test_file', 0, -1) rescue nil File.unlink('test_file') On Windows the unlink call fails with: `unlink': Permission denied - test_file (Errno::EACCES) This is due to fact that IO.read, invoked with invalid offset parameter does not close the opened file. But the documentation clearly states that: "read ensures the file is closed before returning." This causes two RubySpec failures for IO.read: mspec -t r core\io\read_spec.rb ruby 1.9.2dev (2009-11-12 trunk 25723) [i386-mingw32]E..E.....E. 1) An exception occurred during: after :each IO.read raises an Errno::EINVAL when not passed a valid offset ERROR Errno::EACCES: Permission denied - D:/work/jruby-dev/rubyspec.git/rubyspec_temp/io_read.txt D:/work/jruby-dev/rubyspec.git/core/io/read_spec.rb:13:in block (2 levels) in <top (required)>' D:/work/jruby-dev/rubyspec.git/core/io/read_spec.rb:5:in ' D:/work/jruby-dev/mspec.git/bin/mspec-run:8:in ` 2) An exception occurred during: after :each IO#read can be read from consecutively ERROR Errno::EACCES: Permission denied - D:/work/jruby-dev/rubyspec.git/rubyspec_temp/io_read.txt D:/work/jruby-dev/rubyspec.git/core/io/read_spec.rb:100:in block (2 levels) in <top (required)>' D:/work/jruby-dev/rubyspec.git/core/io/read_spec.rb:88:in ' D:/work/jruby-dev/mspec.git/bin/mspec-run:8:in ` =end</pre>	

History

#1 - 01/08/2010 02:30 PM - usa (Usaku NAKAMURA)

```
=begin
Hello,
```

In message "[ruby-core:27429] [Bug #2560] IO.read not always closes the file"
on Jan.06,2010 02:31:39, redmine@ruby-lang.org wrote:

This is due to fact that IO.read, invoked with invalid offset parameter does not close the opened file. But the documentation clearly states that:
"read ensures the file is closed before returning."

1.8 has same problem, too.

This patch is for trunk.

Index: io.c

```
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--- io.c (revision 26249)
```

```

+++ io.c (working copy)
@@ -7816,6 +7816,19 @@ io_s_read(struct foreach_arg *arg)
return io_read(arg->argc, arg->argv, arg->io);
}

+struct seek_arg {
  • VALUE io;
  • VALUE offset;
  • int mode; +}; + +static VALUE +seek_before_read(struct seek_arg *arg) +{
  • rb_io_binmode(arg->io);
  • return rb_io_seek(arg->io, arg->offset, arg->mode); +} +/*
    ◦ call-seq:
      ◦ IO.read(name, [length [, offset]]) => string @@ -7858,8 +7871,16 @@ rb_io_s_read(int argc, VALUE *argv, VALU open_key_args(argc,
        argv, &arg); if (NIL_P(arg.io)) return Qnil; if (!NIL_P(offset)) {
  • rb_io_binmode(arg.io);
  • rb_io_seek(arg.io, offset, SEEK_SET);
  • struct seek_arg sarg;
  • int state = 0;
  • sarg.io = arg.io;
  • sarg.offset = offset;
  • sarg.mode = SEEK_SET;
  • rb_protect((VALUE (*)(VALUE))seek_before_read, (VALUE)&sarg, &state);
  • if (state) {
  • rb_io_close(arg.io);
  • rb_jump_tag(state);
  • } if (arg argc == 2) arg argc = 1; } return rb_ensure(io_s_read, (VALUE)&arg, rb_io_close, arg.io); Regards, -- U.Nakamura
usa@garbagecollect.jp

```

=end

#2 - 01/08/2010 02:46 PM - matz (Yukihiko Matsumoto)

=begin
Hi,

In message "Re: [ruby-core:27483] Re: [Bug #2560] IO.read not always closes the file"
on Fri, 8 Jan 2010 14:29:53 +0900, "U.Nakamura" usa@garbagecollect.jp writes:

|In message "[ruby-core:27429] [Bug #2560] IO.read not always closes the file"
| on Jan.06,2010 02:31:39, redmine@ruby-lang.org wrote:
|> This is due to fact that IO.read, invoked with invalid offset parameter does not close the opened file. But the documentation clearly states that:
|> "read ensures the file is closed before returning."
|
|1.8 has same problem, too.
|
|This patch is for trunk.

Could you check in?

matz.

=end

#3 - 01/08/2010 04:57 PM - usa (Usaku NAKAMURA)

- Status changed from Open to Closed
- % Done changed from 0 to 100

=begin
This issue was solved with changeset r26250.
Vladimir, thank you for reporting this issue.
Your contribution to Ruby is greatly appreciated.
May Ruby be with you.

=end

#4 - 01/08/2010 05:17 PM - usa (Usaku NAKAMURA)

- Status changed from Closed to Assigned
- Assignee set to yugui (Yuki Sonoda)

=begin

=end