

Ruby - Feature #4257

switch_hitter - an acceleration of date library

01/10/2011 09:52 PM - tadf (tadayoshi funaba)

Status:	Closed	
Priority:	Normal	
Assignee:	tadf (tadayoshi funaba)	
Target version:		
Description		
<pre>=begin switch_hitter'ed already passed nearly all of tests (except some tests of class name and some confirmations of format of inspect). • The constructors may return Date::Light instead of Date. • as fast as home_run when it represents simple date of proleptic gregorian of the age of the human race. • keeps compatibility. ◦ can load ruby 1.9.2 dumped marshal. • accepts flonum explicitly with limitations. ◦ If the given offset is flonum, DateTime assumes its precision is at most second. ◦ If the given +/- argument is flonum, DateTime assumes its precision is at most nanosecond. I'd like to apply this to trunk in the near future. I also have a plan of improvement about some format methods. see also http://redmine.ruby-lang.org/issues/show/4068 =end</pre>		
Related issues:		
Related to Ruby - Feature #4068: Replace current standard Date/DateTime libra...		Rejected 11/18/2010

Associated revisions

Revision fdf36118 - 02/26/2011 08:10 AM - Tadayoshi Funaba

- lib/date.rb: [Feature #4257]

```
* ext/date/extconf.rb: new
```

```
* ext/date/date_core.c: new
```

git-svn-id: svn+ssh://ci.ruby-lang.org/ruby/trunk@30961 b2dd03c8-39d4-4d8f-98ff-823fe69b080e

History

#1 - 01/12/2011 06:20 AM - jeremyevans0 (Jeremy Evans)

=begin
I ran switch_hitter against home_run's test suites. Most of the failures are due to differences between home_run and the standard library. There are a few failures that I think should be addressed in switch_hitter:

1. Operator methods such as >>, <<, +, and - and methods such as next_day and prev_day should return instances that are the same class of the receiver. This could be complicated as subclasses are generally going to subclass Date and DateTime instead of Date::Light and DateTime::Light. I think it's fair to return a Date::Light for a Date or DateTime::Light for a DateTime, but if the receiver is an instance of a subclass of Date or DateTime, the operator method should return an instance the same subclass.
2. Class methods such as civil, new, commercial, ordinal, and jd should return instances of the class. Similar to 1), Date.new can return Date or Date::Light, but a subclass of Date should return an instance of that subclass.
3. Strings returned by Date or DateTime methods should use US-ASCII encoding by default, or the default internal encoding if set.
4. Date parsing methods such as parse, strptime, httpdate, iso8601, etc. are broken (but the DateTime versions are not).

```

ruby-head :001 > Date.parse '1/1/2011'
ArgumentError: cannot create
from /home/jeremy/.rvm/rubies/ruby-head/lib/ruby/1.9.1/date.rb:803:in new_!' from /home/jeremy/.rvm/rubies/ruby-head/lib/ruby/1.9.1/date.rb:803:in
new!'
from /home/jeremy/.rvm/rubies/ruby-head/lib/ruby/1.9.1/date.rb:1081:in new_by_frgs' from
/home/jeremy/.rvm/rubies/ruby-head/lib/ruby/1.9.1/date.rb:1123:in parse'
from (irb):1
from /home/jeremy/.rvm/rubies/ruby-head/bin/irb:16:in ``

```

Related to 1) is that with switch_hitter's design, subclasses of Date and DateTime are not going to have optimized performance. A user would have to subclass Date::Light or DateTime::Light if they wanted their subclass to have optimized performance. I don't really see a way around this without having some Date objects use internal type T_DATA and other Date objects use internal type T_OBJECT, and having a ruby class whose objects can differ in internal type is probably not a good idea.

```

=end

```

#2 - 01/16/2011 09:25 PM - tadf (tadayoshi funaba)

- File switch_hitter.patch3 added

```

=begin
i've integrated both.
=end

```

#3 - 01/21/2011 11:41 AM - jeremyevans0 (Jeremy Evans)

```

=begin
Looks good. The only thing I noticed is that DateTime#amjd is broken:

```

```

$ ruby -v -r date -e 'DateTime.new.amjd'
ruby 1.9.3dev (2011-01-21 trunk 30620) [x86_64-openbsd4.8]
-e:1:in amjd': undefined method amjd_' for #<DateTime[R]: -4712-01-01T00:00:00+00:00 (-1/2,0,2299161)> (NoMethodError)
from -e:1:in ``

=end

```

#4 - 02/13/2011 01:22 AM - tadf (tadayoshi funaba)

- File switch_hitter.patch4 added

```

=begin
i'm planning to apply this change within a couple of weeks.
=end

```

#5 - 02/17/2011 06:43 AM - headius (Charles Nutter)

```

=begin
Added http://jira.codehaus.org/browse/JRUBY-5518 to track this. We'll want to implement a Java version of switch_hitter, most likely.
=end

```

#6 - 02/17/2011 12:44 PM - jeremyevans0 (Jeremy Evans)

```

=begin
Looks good, no unexpected failures in home_run's test suite.
=end

```

#7 - 03/02/2011 09:01 PM - tadf (tadayoshi funaba)

- Status changed from Open to Closed

```

=begin

=end

```

Files

switch_hitter.patch2	83.8 KB	01/10/2011	tadf (tadayoshi funaba)
switch_hitter.patch3	97.4 KB	01/16/2011	tadf (tadayoshi funaba)
switch_hitter.patch4	97.4 KB	02/13/2011	tadf (tadayoshi funaba)