

Ruby master - Bug #6753

Comparing Date::Infinity with Date/DateTime

07/19/2012 06:25 PM - herwinw (Herwin Quarantainenet)

Status:	Rejected	
Priority:	Normal	
Assignee:	tadf (tadayoshi funaba)	
Target version:	1.9.3	
ruby -v:	ruby 1.9.3p0 (2011-10-30 revision 33570) [i686-linux]	Backport:

Description

Depending on the order you use for comparing, this works or throws an error. A snippet from IRB

```
irb(main):001:0> require 'date'
=> true
irb(main):002:0> DateTime.now < Date::Infinity.new
=> true
irb(main):003:0> Date::Infinity.new > DateTime.now
ArgumentError: comparison of Date::Infinity with DateTime failed
```

The same thing happens when using Date instead of DateTime.

The problem arises in `Date::Infinity#<=>(other)`. This method checks if the other is a `Date::Infinity` (it is not) or a `Numeric` (it is not). It then falls back to the generic code, which calls `other.coerce`. Since both instances of `DateTime` and `Date` don't have a `coerce` method this fails.

I've fixed the problem here by adding this line to `Date::Infinity#<=>(other)`

```
when DateTime, Date; return d
```

This is not optimal, because when you'll try to compare an instance created with `Date::Infinity.new(0)`, it will always return 0 when comparing with a `Date(Time)`, which means any `Date(Time)` will be equal to `Date::Infinity.new(0)`. Then again, I don't see the use case where you would initialize the `Date::Infinity` with a value of 0, and the same problem happens when you're comparing it with a `Numeric`.

```
irb(main):006:0> Date::Infinity.new(0) == 4
=> true
```

I'm not really familiar with the background of the `coerce` method, but relying on the `coerce` of a given parameter seems a little bit weird to me. There is no check on the type of the parameter (except it is not `Date::Infinity` and not `numeric`) which means the `coerce` method can be anything (if it exists).

History

#1 - 07/20/2012 07:09 AM - tadf (tadayoshi funaba)

- Status changed from Open to Assigned
- Assignee set to tadf (tadayoshi funaba)
- Priority changed from Normal to 3

#2 - 07/20/2012 07:21 AM - tadf (tadayoshi funaba)

- Status changed from Assigned to Rejected

`Date::Infinity` was designed as a numeric class.

same as:
`Float::INFINITY < Date.new`

this undocumented class was provided only for internal use.
and now it is just for backward compatibility.