

Ruby trunk - Feature #8506

Object#iter_for / Object#to_iter

06/09/2013 10:31 PM - alindeman (Andy Lindeman)

Status:	Open
Priority:	Normal
Assignee:	
Target version:	
Description	
<pre>=begin</pre> <p>Ruby's (<code>Enumerator</code>) and (<code>#enum_for</code>) methods are very powerful and I use them very often. However, (<code>Object#enum_for</code>) requires a method that yields, usually in some sort of loop.</p> <p>Many objects in Ruby have methods that iterate to a "next value," but do not yield. For example, (<code>Fixnum#next</code>). There is no way to use (<code>Fixnum#next</code>) with (<code>#enum_for</code>) directly that I am aware of.</p> <p>I propose the introduction of (<code>Object#iter_for</code>) which--given a method--generates a lazy sequence by continually invoking the method on successive values. I call it (<code>iter</code>) or (<code>iterate</code>) because it is very similar to clojure's <code>iterate</code>: http://clojure.github.io/clojure/clojure.core-api.html#clojure.core/iterate</p> <p>Proposed API:</p> <pre>0.iter_for(:next).take(5) # => [0, 1, 2, 3, 4]</pre> <pre>require 'date'</pre> <pre>Date.new(2013, 1, 1).iter_for(:next_month).take(3) # => [Tue, 01 Jan 2013, Fri, 01 Feb 2013, Fri, 01 Mar 2013]</pre> <p>I am especially excited about (<code>0.iter_for(:next)</code>) as I find myself using infinite lazy numeric sequences more often lately to solve specific kinds of problems. Right now you are required to write something like: (<code>Enumerator.new { y i = 0; loop { y << i; i += 1 } }</code>) or (<code>0..Float::INFINITY.each</code>). Neither is especially elegant or happy to the developers' eyes in my opinion.</p> <p>Thank you all :) Ruby is an amazing tool.</p> <pre>=end</pre>	

History

#1 - 06/09/2013 10:34 PM - charliesome (Charlie Somerville)

+1

#2 - 06/10/2013 12:38 AM - Anonymous

Btw., regarding `Object#to_enum`, what is your opinion? Do you use it often? Or is there something about it that makes it less useful?

#3 - 06/10/2013 02:44 PM - nobu (Nobuyoshi Nakada)

- *Description updated*

You may want to show the implementation in ruby (and tests)?

#4 - 06/10/2013 05:20 PM - Eregon (Benoit Daloze)

Here is the related blogpost: <http://alindeman.github.io/2013/06/10/porting-iterate-to-ruby.html>

#5 - 06/10/2013 05:21 PM - phluid61 (Matthew Kerwin)

nobu (Nobuyoshi Nakada) wrote:

You may want to show the implementation in ruby (and tests)?

Here is an implementation: <https://gist.github.com/phluid61/5747216>