Ruby - Bug #14695

[2.5.1] `===` is 1.77x slower than `match?`

04/18/2018 07:30 AM - baweaver (Brandon Weaver)

Status:	Clos	ed		
Priority:	Norn			
Assignee:				
Target version:				
ruby -v:		2.5.1p57 (2018-03-29 revision 29) [x86_64-darwin17]	Backport:	2.3: UNKNOWN, 2.4: UNKNOWN, 2.5: UNKNOWN
Description				
Was evaluating some of the === implementations while testing and came across this one:				
# ruby 2.5.1p57 (2018-03-29 revision 63029) [x86_64-darwin17]				
require 'benchmark/ips'				
<pre>def run_benchmark(title, **benchmarks) puts '', title, '=' * title.size, ''</pre>				
<pre># Validation benchmarks.each do benchmark_name, benchmark_fn puts "#{benchmark_name} result: #{benchmark_fn.call()}" end</pre>				
puts				
<pre>Benchmark.ips do bm benchmarks.each do benchmark_name, benchmark_fn bm.report(benchmark_name, &benchmark_fn) end</pre>				
bm.compare! end end				
<pre>regex = /foo/ # => /foo/ string = 'foobarbaz' # => "foobarbaz"</pre>				
<pre>run_benchmark('=== vs match? - 2.5.1', '===': -> { regex === string }, 'match?': -> { regex.match? string })</pre>				
=== vs match? - 2.5.1				
=== result: true match? result: true				
Warming up		172 425k j/100mg		
Calculating -	match?	173.435k i/100ms 233.124k i/100ms		
	===	3.174M (± 1.6%) i/s - 5.626M (± 2.5%) i/s -	15.956M in 28.208M in	5.029027s 5.016991s
Comparison:		5626170.1 i/s		
===: 3173659.6 i/s - 1.77x slower				

It appears that === is running a bit slower than match?, though there may be some concerns around old code potentially relying on regex set globals after === too in case statements, so not sure there.

Related issues:

Related to Ruby - Feature #8110: Regex methods not changing global variables

Closed

History

#1 - 04/18/2018 07:57 AM - shyouhei (Shyouhei Urabe)

baweaver (Brandon Weaver) wrote:

It appears that === is running a bit slower than match?

Accurate observation. Regexp#match? was introduced as a "faster alternative" to ordinary matches; see also https://bugs.ruby-lang.org/issues/8110

#2 - 04/18/2018 07:57 AM - shyouhei (Shyouhei Urabe)

- Related to Feature #8110: Regex methods not changing global variables added

#3 - 07/29/2019 10:20 PM - jeremyevans0 (Jeremy Evans)

- Status changed from Open to Closed