Ruby master - Bug #14695

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

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

<table>
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<td>Priority:</td>
<td>Normal</td>
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<td>Assignee:</td>
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<td>ruby -v:</td>
<td>2.3: UNKNOWN, 2.4: UNKNOWN, 2.5: UNKNOWN</td>
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```
require 'benchmark/ips'

def run_benchmark(title, **benchmarks)
  puts '', title, '=' * title.size, ''
  # Validation
  benchmarks.each do |benchmark_name, benchmark_fn|
    puts "#{benchmark_name} result: #{benchmark_fn.call()}"
  end
  puts
  Benchmark.ips do |bm|
    benchmarks.each do |benchmark_name, benchmark_fn|
      bm.report(benchmark_name, &benchmark_fn)
    end
    bm.compare!
  end
end

regex = /foo/  # => /foo/
# => /foo/
string = 'foobarbaz'  # => "foobarbaz"

run_benchmark('=== vs match? - 2.5.1',
  '=': -> { regex === string },
  'match?:' -> { regex.match? string })

=== vs match? - 2.5.1
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=== result: true
match? result: true

Warming up -----------------------------

    ===  173.435k i/100ms
match?  233.124k i/100ms

Calculating -----------------------------

    ===  3.174M (± 1.6%) i/s - 15.956M in 5.029027s
match?  5.626M (± 2.5%) i/s - 28.208M in 5.016991s

Comparison:

match?:  5626170.1 i/s
    ===  3173659.6 i/s - 1.77x slower
```

09/01/2022
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 master - Feature #8110: Regex methods not changing global var... 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](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