

Ruby master - Bug #13447

Improve performance of rb_eql()

04/18/2017 07:50 AM - watson1978 (Shizuo Fujita)

Status: Closed	
Priority: Normal	
Assignee:	
Target version:	
ruby -v:	Backport: 2.2: UNKNOWN, 2.3: UNKNOWN, 2.4: UNKNOWN
Description This is similar with https://github.com/ruby/ruby/pull/1552 At least, Array#eq? will be faster around 30% with following test code.	
Before	
<pre>user system total real 1.740000 0.000000 1.740000 (1.738344)</pre>	
After	
<pre>user system total real 1.300000 0.000000 1.300000 (1.303624)</pre>	
Test code	
<pre>require 'benchmark' Benchmark.bmbm do x ary1 = Array.new(1000) { rand(1000) } ary2 = Array.new(1000) { rand(1000) } x.report do 5000000.times do ary1.eq?(ary2) end end end</pre>	
Patch	
https://github.com/ruby/ruby/pull/1589	

Associated revisions

Revision b827fdff - 05/25/2017 04:25 AM - watson1978 (Shizuo Fujita)

Improve performance of rb_eql()

This improvement is similar with <https://github.com/ruby/ruby/pull/1552>

internal.h: add declaration of rb_eql_opt() API.

vm_insnhelper.c (rb_eql_opt): add rb_eql_opt() API which provides optimized path for #eq? method such as rb_equal_opt().

object.c (rb_eq): optimize using rb_eql_opt() such as rb_equal().
Array#eq? and some methods have used rb_eql() and Array#eq? will be faster around 20%.

[ruby-core:80761] [Bug #13447] [Fix GH-#1589]

Before

```
user      system    total     real
1.570000  0.000000  1.570000 ( 1.569754)
```

After

```
user      system    total     real
1.300000  0.000000  1.300000 ( 1.303624)
```

Test code

```
require 'benchmark'
```

```
Benchmark.bmbm do |x|
  ary1 = Array.new(1000) { rand(1000) }
  ary2 = Array.new(1000) { rand(1000) }
```

```
  x.report do
    5000000.times do
      ary1.eql?(ary2)
    end
  end
```

```
end
```

git-svn-id: svn+ssh://ci.ruby-lang.org/ruby/trunk@58881 b2dd03c8-39d4-4d8f-98ff-823fe69b080e

Revision 58881 - 05/25/2017 04:25 AM - watson1978 (Shizuo Fujita)

Improve performance of rb_eql()

This improvement is similar with <https://github.com/ruby/ruby/pull/1552>

internal.h: add declaration of rb_eql_opt() API.

vm_insnhelper.c (rb_eql_opt): add rb_eql_opt() API which provides optimized path for #eql? method such as rb_equal_opt().

object.c (rb_eql): optimize using rb_eql_opt() such as rb_equal().
Array#eql? and some methods have used rb_eql() and Array#eql? will be faster around 20%.

[ruby-core:80761] [Bug #13447] [Fix GH-#1589]

Before

```
user      system    total     real
1.570000  0.000000  1.570000 ( 1.569754)
```

After

```
user      system    total     real
1.300000  0.000000  1.300000 ( 1.303624)
```

Test code

```
require 'benchmark'
```

```
Benchmark.bmbm do |x|
  ary1 = Array.new(1000) { rand(1000) }
  ary2 = Array.new(1000) { rand(1000) }
```

```
  x.report do
    5000000.times do
      ary1.eql?(ary2)
    end
  end
```

```
end
```

Revision 58881 - 05/25/2017 04:25 AM - watson1978 (Shizuo Fujita)

Improve performance of rb_eql()

This improvement is similar with <https://github.com/ruby/ruby/pull/1552>

internal.h: add declaration of rb_eql_opt() API.

vm_insnhelper.c (rb_eql_opt): add rb_eql_opt() API which provides optimized path for #eq!? method such as rb_equal_opt().

object.c (rb_eql): optimize using rb_eql_opt() such as rb_equal(). Array#eq!? and some methods have used rb_eql() and Array#eq!? will be faster around 20%.

[ruby-core:80761] [Bug #13447] [Fix GH-#1589]

Before

user	system	total	real
1.570000	0.000000	1.570000	(1.569754)

After

user	system	total	real
1.300000	0.000000	1.300000	(1.303624)

Test code

```
require 'benchmark'
```

```
Benchmark.bmbm do |x|  
  ary1 = Array.new(1000) { rand(1000) }  
  ary2 = Array.new(1000) { rand(1000) }
```

```
  x.report do  
    5000000.times do  
      ary1.eql?(ary2)  
    end  
  end
```

```
end
```

Revision 58881 - 05/25/2017 04:25 AM - watson1978 (Shizuo Fujita)

Improve performance of rb_eql()

This improvement is similar with <https://github.com/ruby/ruby/pull/1552>

internal.h: add declaration of rb_eql_opt() API.

vm_insnhelper.c (rb_eql_opt): add rb_eql_opt() API which provides optimized path for #eq!? method such as rb_equal_opt().

object.c (rb_eql): optimize using rb_eql_opt() such as rb_equal(). Array#eq!? and some methods have used rb_eql() and Array#eq!? will be faster around 20%.

[ruby-core:80761] [Bug #13447] [Fix GH-#1589]

Before

user	system	total	real
1.570000	0.000000	1.570000	(1.569754)

After

user	system	total	real
1.300000	0.000000	1.300000	(1.303624)

Test code

```
require 'benchmark'
```

```
Benchmark.bmbm do |x|  
  ary1 = Array.new(1000) { rand(1000) }  
  ary2 = Array.new(1000) { rand(1000) }
```

```
  x.report do  
    5000000.times do  
      ary1.eql?(ary2)  
    end  
  end
```

```
end
```

History

#1 - 04/18/2017 07:16 PM - nobu (Nobuyoshi Nakada)

Would you commit it by yourself?

#2 - 04/20/2017 05:56 AM - watson1978 (Shizuo Fujita)

Unfortunately, I'm just one of Ruby users.
Could you please commit it if you agreed the changing ?

#3 - 05/25/2017 04:25 AM - watson1978 (Shizuo Fujita)

- Status changed from Open to Closed

Applied in changeset [trunk|r58881](#).

Improve performance of rb_eql()

This improvement is similar with <https://github.com/ruby/ruby/pull/1552>

internal.h: add declaration of rb_eql_opt() API.

vm_insnhelper.c (rb_eql_opt): add rb_eql_opt() API which provides optimized path for #eql? method such as rb_equal_opt().

object.c (rb_eql): optimize using rb_eql_opt() such as rb_equal().
Array#eql? and some methods have used rb_eql() and Array#eql? will be faster around 20%.

[ruby-core:80761] [Bug #13447] [Fix GH-#1589]

Before

user	system	total	real
------	--------	-------	------

1.570000 0.000000 1.570000 (1.569754)

After

user	system	total	real
------	--------	-------	------

1.300000 0.000000 1.300000 (1.303624)

Test code

```
require 'benchmark'
```

```
Benchmark.bmbm do |x|  
  ary1 = Array.new(1000) { rand(1000) }  
  ary2 = Array.new(1000) { rand(1000) }
```

```
  x.report do  
    5000000.times do  
      ary1.eql?(ary2)  
    end  
  end
```

end