

## Ruby trunk - Bug #10931

### [PERF]bm\_app\_mandelbrot.rb 20% slower.

03/03/2015 03:18 PM - tgxworld (Guo Xiang Tan)

<b>Status:</b> Open	
<b>Priority:</b> Normal	
<b>Assignee:</b> nobu (Nobuyoshi Nakada)	
<b>Target version:</b>	
<b>ruby -v:</b> ruby 2.3.0dev	<b>Backport:</b> 2.0.0: UNKNOWN, 2.1: UNKNOWN, 2.2: UNKNOWN

#### Description

[http://rubybench.org/ruby/ruby/commits?result\\_type=app\\_mandelbrot](http://rubybench.org/ruby/ruby/commits?result_type=app_mandelbrot)

Relevant Commits:

<https://github.com/ruby/ruby/commit/909c4c0>

<https://github.com/ruby/ruby/commit/41b2f1a>

Before: 0.786s  
After Commit 909c4c0: 0.856s  
After Commit 41b2f1a: 0.923s

Just want to raise awareness on this. Feel free to close this issue if the performance trade-offs were intended. Let me know if more information is required. Thank you!

#### History

##### #1 - 03/04/2015 08:37 AM - nobu (Nobuyoshi Nakada)

My results.

benchmark results:

Execution time (sec)

name	<a href="#">r49722</a>	<a href="#">r49723</a>	<a href="#">r49724</a>	<a href="#">r49732</a>	<a href="#">r49743</a>	<a href="#">r49754</a>	<a href="#">r49757</a>
app_mandelbrot	0.969	0.980	0.957	0.971	0.996	0.976	1.004
so_mandelbrot	1.787	1.743	1.740	1.741	1.744	1.752	1.755

Speedup ratio: compare with the result of `r49722` (greater is better)

name	<a href="#">r49723</a>	<a href="#">r49724</a>	<a href="#">r49732</a>	<a href="#">r49743</a>	<a href="#">r49754</a>	<a href="#">r49757</a>
app_mandelbrot	0.989	1.013	0.998	0.973	0.993	0.966
so_mandelbrot	1.026	1.027	1.027	1.025	1.020	1.018

Log file: bmllog-20150304-170709.40624

##### #2 - 03/04/2015 09:05 AM - tgxworld (Guo Xiang Tan)

Hi Nobu,

I ran the benchmarks on my local machine and I'm seeing the same results as those on RubyBench's dedicated server. How are you running your benchmarks? I'll like to try running them too.

total: 2 trial(s) (2 trial(s) for 1 benchmark(s))

..

benchmark results:

Execution time (sec)

name ruby 2.3.0dev (2015-02-25 trunk 49753) [x86\_64-linux]

app\_mandelbrot 0.957

total: 2 trial(s) (2 trial(s) for 1 benchmark(s))

..

benchmark results:

Execution time (sec)

name ruby 2.3.0dev (2015-02-25 trunk 49754) [x86\_64-linux]

app\_mandelbrot 1.037

total: 2 trial(s) (2 trial(s) for 1 benchmark(s))

..

benchmark results:

Execution time (sec)

name ruby 2.3.0dev (2015-02-26 trunk 49757) [x86\_64-linux]

app\_mandelbrot 1.159

### #3 - 03/05/2015 03:02 AM - nobu (Nobuyoshi Nakada)

On MacBook Pro late 2013, OSX 10.10.2, 2.6GHz 16GiB.

At a git-svn working directory, (\$build is the build directory):

```
$ execs=; for c in `git log --since=2015/2/1 --format=%H --reverse -- complex.c`; do v=`git log -1 $c | sed '/git-svn-id:\/!d;s\/.*@\/;\/s\/.*\/'`; git co $c -- complex.c numeric.c && echo $'#define RUBY_REVISION '$v$'\n#def
ine RUBY_BRANCH_NAME "bm_complex"' > revision.h && rm -f $build/{complex,numeric,version}.o && make -C $build
EXEXT=-$v mini && execs="$${execs};r$v::$build/miniruby-$v"; done && ruby benchmark/driver.rb -fm -e "${execs}
" -p mandel
```

benchmark results:

Execution time (sec)

name	<a href="#">r49723</a>	<a href="#">r49724</a>	<a href="#">r49732</a>	<a href="#">r49743</a>	<a href="#">r49754</a>	<a href="#">r49757</a>
app_mandelbrot	0.982	0.959	1.004	0.988	1.092	1.150
so_mandelbrot	1.750	1.750	1.739	1.823	1.729	1.725

Speedup ratio: compare with the result of `r49723` (greater is better)

name	<a href="#">r49724</a>	<a href="#">r49732</a>	<a href="#">r49743</a>	<a href="#">r49754</a>	<a href="#">r49757</a>
app_mandelbrot	1.024	0.978	0.994	0.899	0.854
so_mandelbrot	1.000	1.006	0.960	1.012	1.015

Log file: bmlog-20150305-115133.69279.md

### #4 - 03/05/2015 04:59 AM - tgxworld (Guo Xiang Tan)

Nobu from your benchmarks, can we say that it is a regression or is it a trade off made?