

Ruby master - Feature #10328

[PATCH] make OPT_SUPPORT_JOKE a proper VM option

10/05/2014 09:14 PM - normalperson (Eric Wong)

Status:	Open				
Priority:	Normal				
Assignee:	normalperson (Eric Wong)				
Target version:					
Description					
This is not a joke :)					
I worry about executable size with things like [Feature #10326], and I noticed unused instructions are emitted even with jokes disabled					
This reduces executable size slightly on x86-64-linux:					
text	data	bss	dec	hex	filename
2782156	22400	71880	2876436	2be414	ruby.before
2781420	22400	71880	2875700	2be134	ruby.after
Pretty trivial so I'll commit in a day or two.					
<pre>compile.c 4 ++-- eval.c 2 +- iseq.h 2 +- tool/instruction.rb 9 ++++++--- vm_opts.h 2 +- 5 files changed, 11 insertions(+), 8 deletions(-)</pre>					

History

#1 - 10/06/2014 02:11 AM - ko1 (Koichi Sasada)

or remove them?

#2 - 10/06/2014 02:22 AM - normalperson (Eric Wong)

ko1@atdot.net wrote:

or remove them?

Sure, even better.

Anybody have objections to removing joke VM options?
Ruby 2.2 can officially become a SERIOUS VM :)

#3 - 10/07/2014 03:25 AM - ko1 (Koichi Sasada)

BTW, we provide "bitblt" and "answer" instructions as a official (joke) instructions without enabling SUPPORT_JOKE flag. People can use them by assembling YARV codes (with some tricks) manually.

With your measurement, we paid 736 bytes for this kind of humor. Personally, I hope that Ruby can understand humor. 736 byte is not expensive *for me*.

However, I also agree Ruby is now a serious language.

#4 - 10/07/2014 03:49 AM - nobu (Nobuyoshi Nakada)

- Description updated

#5 - 11/14/2017 07:11 PM - normalperson (Eric Wong)

ko1@atdot.net wrote:

BTW, we provide "bitblt" and "answer" instructions as a official (joke) instructions without enabling SUPPORT_JOKE flag. People can use them by assembling YARV codes (with some tricks) manually.

OK, since we remove "trace" instruction which breaks ISeq compatibility anyways; I think we can remove "bitblt" and "answer" to make the VM smaller.

With your measurement, we paid 736 bytes for this kind of humor. Personally, I hope that Ruby can understand humor. 736 byte is not expensive *for me*.

However, I also agree Ruby is now a serious language.

Every byte counts to me; that's 12 cache lines on most CPUs.

#6 - 11/15/2017 07:31 AM - normalperson (Eric Wong)

patch to do full joke removal:

<https://80x24.org/spew/20171115070108.3264-1-e@80x24.org/raw>

#7 - 11/28/2017 05:25 AM - name (Yusuke Endoh)

A patch to remove joke instructions when SUPPORT_JOKE is false:

```
diff --git a/tool/instruction.rb b/tool/instruction.rb
index 3354933da9..e917826ffe 100755
--- a/tool/instruction.rb
+++ b/tool/instruction.rb
@@ -885,6 +885,7 @@ def make_footer_undefs insn

  def make_header insn
    label = insn.trace ? ' ' : "start_of_#{insn.name};"
+   commit "#ifdef SUPPORT_JOKE" if insn.comm[:c] == "joke"
    commit "INSN_ENTRY(#{insn.name})#{label}"
    make_header_prepare_stack insn
    commit "{"
@@ -911,6 +912,7 @@ def make_footer insn
  make_footer_undefs insn
  end
  commit "  END_INSN(#{insn.name});}"
+   commit "#endif /* SUPPORT_JOKE */" if insn.comm[:c] == "joke"
  end

  def make_insn_def insn
```

I'm neutral to the SUPPORT_JOKE feature. I don't care 736 bytes if the feature is funny enough. But I'm unsure if the feature is funny enough.

#8 - 11/28/2017 05:51 AM - normalperson (Eric Wong)

I prefer we remove the code from the VM to make it easier-to-read (I have a short attention span)

My most recent patch

<https://80x24.org/spew/20171115070108.3264-1-e@80x24.org/raw>

removes 120 lines. Many of those lines are inside #if blocks, and I find having #if/#ifdefs inside function bodies to be confusing.

#9 - 01/05/2018 09:01 PM - naruse (Yui NARUSE)

- Target version deleted (2.2.0)

Files

0001-make-OPT_SUPPORT_JOKE-a-proper-VM-option.patch	3.18 KB	10/05/2014	normalperson (Eric Wong)
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