**PATCH** Specifying MACRO for increase performance in ppc64

07/22/2014 06:40 PM - gustavo.pedrosa (Gustavo Frederico Temple Pedrosa)

**Status:** Closed  
**Priority:** Normal  
**Assignee:**  
**Target version:** 2.2.0

**Description**
To increase performance on ppc64 machines, the MACRO "powerpc64" were specified for the architecture, just like for x86_64 machines.

I've executed some benchmarks, see below:

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>Before (milliseconds)</th>
<th>After (milliseconds)</th>
<th>Percentage difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>bm_vim2_regexp.rb</td>
<td>4955</td>
<td>4752</td>
<td>-4.10%</td>
</tr>
<tr>
<td>bm_so_meteor_contest.rb</td>
<td>6065</td>
<td>5817</td>
<td>-4.09%</td>
</tr>
<tr>
<td>bm_app_pentomino.rb</td>
<td>35122</td>
<td>34886</td>
<td>-0.67%</td>
</tr>
<tr>
<td>bm_hash Flatten.rb</td>
<td>3055</td>
<td>3011</td>
<td>-1.44%</td>
</tr>
<tr>
<td>bm_so_sieve.rb</td>
<td>1227</td>
<td>1210</td>
<td>-1.39%</td>
</tr>
</tbody>
</table>

**Associated revisions**

Revision 63360be4 - 07/23/2014 02:50 PM - nobu (Nobuyoshi Nakada)

UNALIGNED_WORD_ACCESS on ppc64

- include/ruby/defines.h, siphash.c, st.c (UNALIGNED_WORD_ACCESS): add PowerPC64 too, which is capable to access unaligned words. patched by Gustavo Frederico Temple Pedrosa in [ruby-core:63937]. [Feature #10081]
- regint.h (PLATFORM_UNALIGNED_WORD_ACCESS): ditto.

git-svn-id: svn+ssh://ci.ruby-lang.org/ruby/trunk@46915 b2dd03c8-39d4-4d8f-98ff-823fe69b080e

Revision 46915 - 07/23/2014 02:50 PM - nobu (Nobuyoshi Nakada)

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History

#1 - 07/23/2014 01:36 AM - nobu (Nobuyoshi Nakada)
PowerPC64 can unaligned access?

#2 - 07/23/2014 11:28 AM - gustavo.pedrosa (Gustavo Frederico Temple Pedrosa)
Nobuyoshi Nakada wrote:

    PowerPC64 can unaligned access?

Yes, I have tested in my IBM POWER 7+ (rev 2.1)

#3 - 07/23/2014 12:52 PM - nobu (Nobuyoshi Nakada)
Thank you.
Possibly, can PACKED_STRUCT_UNALIGNED also work on PowerPC64?

#4 - 07/23/2014 02:50 PM - nobu (Nobuyoshi Nakada)
- Status changed from Open to Closed
- % Done changed from 0 to 100

Applied in changeset r46915.

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Files

macro_powerpc64.patch  1.16 KB  07/22/2014  gustavo.pedrosa (Gustavo Frederico Temple Pedrosa)