This reduces memory overhead of ivars for common types such as T_DATA the same way T_OBJECT does it.

For 9992 accepted clients on an OpenSSL server, this reduces RSS memory from 77160K to 69248K on x86-64 with the attached ossl.rb script. Connecting client process was reduced from 246312K to 230724K RSS.

OpenSSL 1.0.1e-2+deb7u16 on Debian 7
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Revision 50678 - 05/29/2015 11:42 PM - normal

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Revision 6cd5825 - 05/30/2015 12:20 AM - normal

variable.c: avoid compatibility table with generic ivars

This recovers and improves performance of Marshal.dump/load on Time objects compared to when we implemented generic ivars entirely using st_table.
This also recovers some performance on other generic ivar objects, but does not bring Marshal.dump/load performance up to previous speeds.

benchmark results:
minimum results in each 10 measurements.
Execution time (sec)

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- time.c (time_mload): use rb_attr_delete
- variable.c (generic_ivar_delete): implement (rb_iivar_delete): ditto (rb_attr_delete): ditto
git-svn-id: svn+ssh://ci.ruby-lang.org/ruby/trunk@50680 b2dd03c8-39d4-4d8f-98ff-823fe69b080e

Revision 50680 - 05/30/2015 12:20 AM - normalperson (Eric Wong)

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## History

**#1 - 05/23/2015 01:35 AM - normalperson (Eric Wong)**

- File ossl_11170.rb added

Attached standalone test script, increase "ulimit -n" as necessary.

**#2 - 05/23/2015 02:19 AM - ko1 (Koichi Sasada)**

+1.

T_CLASS/T_MODULE can use same technique, but it seems not so many use-cases.

**#3 - 05/29/2015 12:58 AM - normalperson (Eric Wong)**

After the original patch, rb_generic_ivar_table() is much more expensive but kept for compatibility reasons. I propose deprecating it, I'm not sure if any 3rd party C-exts use it.

[PATCH 3/2] avoid compatibility table with generic ivars

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#4 - 05/29/2015 11:43 PM - Anonymous

- Status changed from Open to Closed

Applied in changeset r50678.

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Files

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<th>Author</th>
</tr>
</thead>
<tbody>
<tr>
<td>ivar-reduce-combined.patch</td>
<td>17.2 KB</td>
<td>05/23/2015</td>
<td>normalperson (Eric Wong)</td>
</tr>
<tr>
<td>ossl_11170.rb</td>
<td>1.74 KB</td>
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