## Enhancements to OpenStruct

**02/21/2012 11:16 PM - trans (Thomas Sawyer)**

<table>
<thead>
<tr>
<th>Status:</th>
<th>Closed</th>
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<tbody>
<tr>
<td>Priority:</td>
<td>Normal</td>
</tr>
<tr>
<td>Assignee:</td>
<td>marcandre (Marc-Andre Lafortune)</td>
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<td>Target version:</td>
<td>2.0.0</td>
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### Description

This patch fixes one issue, protecting #new_ostruct_member method, and possibly another by dup'ing marshal_dump, but I need more feedback on the later b/c I've also been told it is not needed.

The rest of this patch provides enhancements to OpenStruct that I feel are sorely needed, these include access via [] and []=, ability to mass update via merge!, minimal polymorphism with Hash and the addition of equality methods, eql? and ==.

https://github.com/ruby/ruby/pull/95

I'd also like opinions on further enhancements:

- adding #each and #each_pair
- making OpenStruct a subclass of BasicObject

### Related issues:

- Related to Ruby master - Feature #1400: Please add a method to enumerate fiel... Closed 04/23/2009
- Related to Ruby master - Bug #6029: Should OpenStruct implement #eql? and #hash? Closed 02/15/2012

### Associated revisions

<table>
<thead>
<tr>
<th>Revision</th>
<th>Date/Time</th>
<th>Commiter</th>
<th>Notes</th>
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<tbody>
<tr>
<td>e44e356b</td>
<td>10/28/2012 09:20 PM - marcandre (Marc-Andre Lafortune)</td>
<td>lib/ostruct.rb: Add [] and [], base on a patch by Thomas Sawyer [ruby-core:42779] [Feature #6056] git-svn-id: svn+ssh://ci.ruby-lang.org/ruby/trunk@37376 b2dd03c8-39d4-4d8f-98ff-823fe69b080e</td>
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<td>37376</td>
<td>10/28/2012 09:20 PM - marcandre (Marc-Andre Lafortune)</td>
<td>lib/ostruct.rb: Add [] and [], base on a patch by Thomas Sawyer [ruby-core:42779] [Feature #6056] git-svn-id: svn+ssh://ci.ruby-lang.org/ruby/trunk@37376 b2dd03c8-39d4-4d8f-98ff-823fe69b080e</td>
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Hi.

In the future, please break requests in independent parts.

new_ostruct_member will be protected

equal? is already defined. I don't think any coercion can be accepted in this case. You can't compare a Set and an Array directly, for instance. Open a new request if you disagree and show use case and how that would be consistent with other built-in and library classes.

equal? has already an issue opened: https://bugs.ruby-lang.org/issues/6029. Please comment there if need be.

each_pair and to_h is the subject of https://bugs.ruby-lang.org/issues/1400. Please comment there if need be.

marshal_dump is not meant for public use, no dup needed. I will remove the explicit documentation once issue 1400 is closed, as one should probably not rely on its implementation.

"making OpenStruct a subclass of BasicObject". I don't see why and can see different problems with it. Please make a separate request for it with justification (e.g. why should it be more helpful if it did not implement respond_to?, send, object_id, etc...) if you want this.

This leaves "Access via [] and []=", which we can discuss in this thread. I was wondering about this myself, about why it wasn't implemented like this to start with. I'm inclined to think it would be a good idea.

#2 - 02/22/2012 03:45 AM - trans (Thomas Sawyer)
Each change should be separate pull request or just a separate commit?

I knew about issue #6029. I was just trying to take care of that a couple of other features while I was involved with the code.

I see what you are saying about ==. I am actually surprised that:

class Q
def to_ary; [1,2,3]; end
end
Q.new == [1,2,3] #=> false

But that being the case, then okay I will remove.

I will also remove .dup from marshal_dump.

I will submit new issue about BasicObject, but briefly, the reason is for of use with #method_missing, to get as many methods out of the way as
possible for its use.

#3 - 02/22/2012 03:51 AM - marcandre (Marc-Andre Lafortune)
Hi,

Thomas Sawyer wrote:

    Each change should be separate pull request or just a separate commit?

Ideally, both. It makes it easier to accept only some of the parts. As I said, "in the future"; no need to split your existing commits. In this case, the difficulty lies in deciding what should be done, not in implementing it.

#4 - 02/22/2012 03:55 AM - trans (Thomas Sawyer)
I've updated the pull request.

#5 - 03/18/2012 06:46 PM - shyouhei (Shyouhei Urabe)
    - Status changed from Open to Assigned

#6 - 10/27/2012 06:39 AM - ko1 (Koichi Sasada)
ping.
    status?

#7 - 10/29/2012 06:20 AM - marcandre (Marc-Andre Lafortune)
    - Status changed from Assigned to Closed
    - % Done changed from 0 to 100

This issue was solved with changeset r37376.
Thomas, thank you for reporting this issue.
Your contribution to Ruby is greatly appreciated.
May Ruby be with you.

- lib/ostruct.rb: Add [] and [[]]=, base on a patch by Thomas Sawyer [ruby-core:42779] [Feature #6056]