

Ruby trunk - Bug #7522

Non-core "Type()" Kernel methods return new objects

12/06/2012 06:17 AM - jballanc (Joshua Ballanco)

Status:	Assigned	
Priority:	Normal	
Assignee:	matz (Yukihiro Matsumoto)	
Target version:		
ruby -v:	2.0.0-preview1	Backport: 2.3: UNKNOWN, 2.4: UNKNOWN, 2.5: UNKNOWN

Description

The methods Array(), String(), Float(), Integer(), Hash(), and Rational() all return their argument when the argument is already an instance of the type in question. For example:

```
a = []  
a.equal? Array(a) #=> true
```

However, the similar methods Pathname(), BigDecimal(), and Complex() do not do this:

```
p = Pathname.new('/tmp')  
p.equal? Pathname(p) #=> false
```

I had the impression that the "Type()" methods were intended as "safe" coercion methods. That is, if no type conversion is required, then the system is left unchanged (and no new objects are created). The attached patch fixes the three methods mentioned above to adhere to this same invariant.

History

#1 - 12/09/2012 12:15 PM - charliesome (Charlie Somerville)

=begin
Your change to ext/bigdecimal/bigdecimal.c will cause a compiler warning:

```
compiling bigdecimal.c  
bigdecimal.c: In function 'BigDecimal_global_new':  
bigdecimal.c:2414: warning: ISO C90 forbids mixed declarations and code
```

You should move the declaration of ((pv)) above the your if statement, but leave the assignment where it is.
=end

#2 - 12/10/2012 04:24 AM - jballanc (Joshua Ballanco)

- File kernel_methods.diff added

Ah, thanks for that catch!

Updated patch is attached.

#3 - 01/25/2013 12:51 PM - ko1 (Koichi Sasada)

- Category set to core
- Assignee set to mame (Yusuke Endoh)
- Target version set to 2.0.0

I'm not sure who should take this issue.

#4 - 02/02/2013 12:04 PM - mame (Yusuke Endoh)

- Status changed from Open to Assigned
- Assignee changed from mame (Yusuke Endoh) to matz (Yukihiro Matsumoto)
- Target version changed from 2.0.0 to 2.6

Sorry but let me postpone this to the next minor.

I'm afraid if the existing code depends on the traditional behavior.
It should have been included in rc1, which is my fault. Sorry, blame me.

--

Yusuke Endoh mame@tsg.ne.jp

#5 - 02/03/2013 07:05 PM - jballanc (Joshua Ballanco)

No apology necessary. Thanks for the help!

#6 - 12/25/2017 06:15 PM - naruse (Yui NARUSE)

- *Target version deleted (2.6)*

Files

kernel_methods.diff	2.97 KB	12/06/2012	jballanc (Joshua Ballanco)
kernel_methods.diff	3.05 KB	12/10/2012	jballanc (Joshua Ballanco)