

Ruby - Feature #15231

Remove `Object#=~`

10/17/2018 08:46 AM - mame (Yusuke Endoh)

Status:	Closed	
Priority:	Normal	
Assignee:		
Target version:		
Description		
Object#=~ receives (and just discards) an argument, and always returns nil. What purpose is this method for?		
The following behavior that Object#=~ caused was confusing to me.		
<pre>["foo"] =~ /foo/ #=> nil</pre>		
More precisely: the actual example that I encountered was to parse coverage data from output of coverage measurement tool by using Open3.capture2:		
<pre>out = Open3.capture2("gcov", ...) # BUG: `out, =` was intended if out =~ /lines\.*: *(\d+\.\d+)\%/ ... end</pre>		
Obviously, I forgot a comma to receive the return value of Open3.capture2. The method returns a two-element array, and out =~ calls Object#=~ , which hid the bug. (Worse, I took several tens of minutes to debug it because I first thought that this is a bug of regexp, and spent tweaking the regexp.)		
I guess Object#=~ was intended for general pattern matching, but presently the role was taken over by Object#===.		
So. How about removing Object#=~?		
Concerns:		
<ul style="list-style-type: none">• @usa (Usaku NAKAMURA) said NilClass#=~ should be newly introduced because of: if gets =~ /re/• Object#!~ is difficult to remove: some classes define only #=~ , and expect Object#!~ to delegate to #=~.		

Associated revisions

Revision 7a635a7d12fc127da76bc4eca78414602db6350c - 11/26/2018 05:29 AM - mame (Yusuke Endoh)

lib/webrick: explicitly convert header values to a string

The values of @header are expected to be all strings;
WEBrick::HTTPResponse::[]=(key, val) explicitly converts the second argument to a string and assigns it to @header hash.
However, there were some points in WEBrick internal code that assigns non-String to @header. This change fixes the issues.

The values are checked by header_value =~ /\r\n/ in check_header.
The type confusion caused conflict with removal of Object#=~
[Feature #15231].

git-svn-id: svn+ssh://ci.ruby-lang.org/ruby/trunk@65984 b2dd03c8-39d4-4d8f-98ff-823fe69b080e

Revision 7a635a7d12fc127da76bc4eca78414602db6350c - 11/26/2018 05:29 AM - mame (Yusuke Endoh)

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Revision 7a635a7d - 11/26/2018 05:29 AM - mame (Yusuke Endoh)

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`WEBrick::HTTPResponse::[]= (key, val)` explicitly converts the second argument to a string and assigns it to `@header` hash.
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Revision 03cde6c805bea904111311de87a1714aa902c5d3 - 11/26/2018 05:32 AM - mame (Yusuke Endoh)

lib/rdoc/markup/: Remove wrong call to `=~` against Array

`@res` is an Array, so `@res =~ /\n/z/` calls `Object#=~` which always returns nil.
I guess it should be `@res.last =~ /\n/z/`, but the change causes test failures.

This bug was found during work for removal of `Object#=~`.
[Feature #15231]

git-svn-id: svn+ssh://ci.ruby-lang.org/ruby/trunk@65985 b2dd03c8-39d4-4d8f-98ff-823fe69b080e

Revision 03cde6c805bea904111311de87a1714aa902c5d3 - 11/26/2018 05:32 AM - mame (Yusuke Endoh)

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Revision 03cde6c8 - 11/26/2018 05:32 AM - mame (Yusuke Endoh)

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Revision e0dd7b4d3a41203d01f3b97e7b2001fb996f8175 - 11/26/2018 05:46 AM - mame (Yusuke Endoh)

test/rdoc/test_rdoc_rdoc.rb: add dummy finish

`RDoc::Options#@exclude` is initialized as an empty array.
Then, `#finish` converts it to a regexp or nil and reassign it to `@exclude`.
Some methods of `RDoc` assumes that `#finish` has been already called.
So, this change forces to assign nil to `@exclude`.

This type confusion was found during work for removal of `Object#=~`.
[Feature #15231]

git-svn-id: svn+ssh://ci.ruby-lang.org/ruby/trunk@65986 b2dd03c8-39d4-4d8f-98ff-823fe69b080e

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Revision e0dd7b4d - 11/26/2018 05:46 AM - mame (Yusuke Endoh)

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Revision f7e94df0d66aff47745d189ab5a7858a92233d57 - 11/26/2018 07:13 AM - mame (Yusuke Endoh)

lib/rubygems: explicitly clarify the type for =~ matching

RubyGems is very indifferent for type.
This change is needed for removal of Object#=~. [Feature #15231]

git-svn-id: svn+ssh://ci.ruby-lang.org/ruby/trunk@65988 b2dd03c8-39d4-4d8f-98ff-823fe69b080e

Revision f7e94df0d66aff47745d189ab5a7858a92233d57 - 11/26/2018 07:13 AM - mame (Yusuke Endoh)

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Revision ebff9dc10e6e72239c23e50acc7d3cbfdc659e7a - 11/26/2018 07:55 AM - mame (Yusuke Endoh)

object.c: Deprecate Object#=~ and add NilClass#=~`

Object#=~ always returns nil. This behavior is not only useless but
also troublesome because it may hide a type error.

This change deprecates Object#=~. For compatibility, NilClass#=~ is
newly introduced. [Feature #15231]

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Revision ebff9dc1 - 11/26/2018 07:55 AM - mame (Yusuke Endoh)

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Revision 973f84ef558b6869ecc1e017cbe48b197726c7bf - 12/06/2018 11:03 PM - nobu (Nobuyoshi Nakada)

Show the class of the receiver [Feature #15231]

git-svn-id: svn+ssh://ci.ruby-lang.org/ruby/trunk@66261 b2dd03c8-39d4-4d8f-98ff-823fe69b080e

Revision 973f84ef558b6869ecc1e017cbe48b197726c7bf - 12/06/2018 11:03 PM - nobu (Nobuyoshi Nakada)

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Revision 973f84ef - 12/06/2018 11:03 PM - nobu (Nobuyoshi Nakada)

Show the class of the receiver [Feature #15231]

git-svn-id: svn+ssh://ci.ruby-lang.org/ruby/trunk@66261 b2dd03c8-39d4-4d8f-98ff-823fe69b080e

Revision 1272a331b40575826ecef085232e06d8b4977e2 - 01/05/2022 09:18 AM - nobu (Nobuyoshi Nakada)

NEWS: Removal of Kernel#=~ [Feature #15231]

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Revision 1272a331 - 01/05/2022 09:18 AM - nobu (Nobuyoshi Nakada)

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History

#1 - 10/17/2018 08:51 AM - naruse (Yui NARUSE)

rubocop should alert obj =~ re to fix as re =~ obj.

#2 - 10/17/2018 09:54 AM - znz (Kazuhiro NISHIYAMA)

- Description updated

#3 - 10/17/2018 10:06 AM - nobu (Nobuyoshi Nakada)

- Description updated

#4 - 10/18/2018 06:12 AM - sawa (Tsuyoshi Sawada)

I agree. At the same time, the String=~ behaviour:

str =~ obj → integer or nil click to toggle source

Match—If obj is a Regexp, use it as a pattern to match against str, and returns the position the match starts, or nil if there is no match. Otherwise, invokes obj.=~, passing str as an argument. The default =~ in Object returns nil.

(from <https://ruby-doc.org/core-2.4.0/String.html#method-i-3D>~)

should be changed to raise a TypeError when obj is not a Regexp, on a par with Regexp#=~ given a non-String argument. Afterall, the following unnatural asymmetry in the current behaviour should be resolved:

```
// =~ Object.new # >> TypeError: no implicit conversion of Object into String
"" =~ Object.new # => nil
```

#5 - 10/20/2018 12:50 AM - znz (Kazuhiro NISHIYAMA)

```
"" =~ "" #=> TypeError (type mismatch: String given)
```

#6 - 11/22/2018 10:29 PM - matz (Yukihiro Matsumoto)

I vote for the proposed change. Let's give deprecation warning first. I don't think we need to remove !~ from Kernel.

Matz.

#7 - 11/26/2018 05:29 AM - mame (Yusuke Endoh)

- *Status changed from Open to Closed*

Applied in changeset trunk|r65984.

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