

Redmine - Defect #38145

Unreachable branch in ApplicationHelper#format\_object due to the use of the deprecated Fixnum class

2023-01-03 07:15 - Go MAEDA

Status:	Closed	Start date:	
Priority:	Normal	Due date:	
Assignee:	Go MAEDA	% Done:	0%
Category:	Code cleanup/refactoring	Estimated time:	0.00 hour
Target version:	5.1.0	Affected version:	
Resolution:	Fixed		

**Description**

There is an unreachable branch in ApplicationHelper#format\_object. This is because a deprecated class name `Fixnum` is given to the `when` keyword.

Reference:  
Unify Fixnum and Bignum into Integer  
<https://bugs.ruby-lang.org/issues/12005>

While the branch is unreachable, fortunately, the result of the code below `when 'Fixnum` is the same as the result of the code for the unknown class below `else`, so no problem is occurring for now.

The following patch fixes the issue.

```
Index: app/helpers/application_helper.rb
=====
--- app/helpers/application_helper.rb      (revision 22022)
+++ app/helpers/application_helper.rb      (working copy)
@@ -263,7 +263,7 @@
     format_time(object)
     when 'Date'
       format_date(object)
-    when 'Fixnum'
+    when 'Integer'
       object.to_s
     when 'Float'
       sprintf "%.2f", object
</diff>
```

Associated revisions

Revision 22041 - 2023-01-12 05:04 - Go MAEDA

Unreachable branch in ApplicationHelper#format\_object due to the use of the deprecated Fixnum class (#38145).

Patch by Go MAEDA.

History

#1 - 2023-01-05 11:13 - Thomas Löber

I think the problem (or "code smell") is that the case argument is object.class.name and not object. If the code was like this, using Fixnum would be fine because Fixnum equals Integer:

```
case object
when Array
  formatted_objects = object.map {|o| format_object(o, html)}
  html ? safe_join(formatted_objects, ', ') : formatted_objects.join(', ')
when Time
  format_time(object)
when Date
  format_date(object)
when Fixnum
  object.to_s
when Float
```

```
sprintf "%.2f", object
```

## #2 - 2023-01-08 09:38 - Go MAEDA

- File 38145.patch added

Thomas Löber wrote:

I think the problem (or "code smell") is that the case argument is `object.class.name` and not `object`. If the code was like this, using `Fixnum` would be fine because `Fixnum` equals `Integer`:

Thank you for suggesting the improved code. But we should not use `Fixnum` because the constant was removed in Ruby 3.2.

[https://github.com/ruby/ruby/blob/ruby\\_3\\_2/NEWS.md#removed-constants](https://github.com/ruby/ruby/blob/ruby_3_2/NEWS.md#removed-constants)

Attaching an updated patch.

## #3 - 2023-01-10 11:21 - Thomas Löber

I agree with the use of `Integer` instead of `Fixnum`.

However, I don't think the patch works, because the case expression is `object.class`, but it should be `object`.

The case statement calls `===` on the expression(s) that come after `when`, with the case expression as a parameter.

```
>> object = 1
=> 1
>> Integer === object      # Integer.===(object)
=> true
>> Integer === object.class # Integer.===(object.class)
=> false
```

## #4 - 2023-01-11 15:43 - Go MAEDA

- File 38145-v2.patch added

Thomas Löber wrote:

However, I don't think the patch works, because the case expression is `object.class`, but it should be `object`.

Thank you for pointing it out, I attached the wrong patch.

I have updated the patch.

## #5 - 2023-01-11 15:44 - Go MAEDA

- Target version changed from *Candidate for next major release* to *5.1.0*

Setting the target version to 5.1.0.

## #6 - 2023-01-12 05:04 - Go MAEDA

- Status changed from *New* to *Closed*

- Assignee set to *Go MAEDA*

- Resolution set to *Fixed*

Committed the fix.

## Files

38145.patch	1.62 KB	2023-01-08	Go MAEDA
38145-v2.patch	1.61 KB	2023-01-11	Go MAEDA