# Ruby - Bug #13062

# 2.4.0-rc1 BigDecimal regression - to\_d inconsistent with other numeric classes

12/22/2016 01:34 AM - jhawthorn (John Hawthorn)

Status: Closed Priority: Normal

**Assignee:** mrkn (Kenta Murata)

Target version:

 ruby -v:
 2.4.0-rc1
 Backport:
 2.1: UNKNOWN, 2.2: UNKNOWN, 2.3:

UNKNOWN

# Description

To solve #10286, BigDecimal() was changed to raise exceptions on invalid input, which is more consistent with the other numeric types.

Unfortunately, String#to\_d now also raises errors, which is inconsistent with the other to\_\* methods (to\_i, to\_f), which return 0 on error.

# Under ruby 2.4.0-rc1:

```
> require 'bigdecimal'
> require 'bigdecimal/util'
> "invalid".to_d
ArgumentError: invalid value for BigDecimal(): "invalid"
> "invalid".to_i
=> 0
> "invalid".to_f
=> 0.0
```

# Under ruby 2.3.3 or 2.4.0preview3:

```
> "invalid".to_d
=> #<BigDecimal:55871ca1f808,'0.0',9(9)>
> "invalid".to_i
=> 0
> "invalid".to_f
=> 0.0
```

There's also a further problem that BigDecimal() still doesn't behave the same as Integer() when given a string with the number at the start:

# Under ruby 2.4.0-rc1:

```
> BigDecimal("2 turtle doves")
=> 0.2e1
> Integer("2 turtle doves")
ArgumentError: invalid value for Integer(): "2 turtle doves"
> Float("2 turtle doves")
ArgumentError: invalid value for Float(): "2 turtle doves"
```

So BigDecimal is still inconsistent.

#### History

# #1 - 12/25/2016 12:17 AM - Esse (Piotr Szmielew)

```
- File fix_13062_string_to_d.patch added
```

In attachment you will find patch for this issue.

This patch fixes issue with String#to\_d method which was inconsistent with other to\_d methods (String one returned error, while other simply returns 0).

Also, there tests added for this case.

11/14/2025 1/2

# #2 - 01/16/2017 03:14 AM - mrkn (Kenta Murata)

- Status changed from Open to Assigned
- Assignee set to mrkn (Kenta Murata)

We continue this issue at <a href="https://github.com/ruby/bigdecimal/issues/51">https://github.com/ruby/bigdecimal/issues/51</a>.

# #3 - 02/22/2017 01:27 AM - mrkn (Kenta Murata)

- Status changed from Assigned to Closed

Fixed in bigdecimal 1.3.1 and ruby trunk.

### #4 - 02/24/2017 04:24 PM - rafaelfranca (Rafael França)

Is this going to be backported to 2.4?

### #5 - 03/23/2017 07:44 AM - abezzub (Andrew Bezzub)

I can reproduce this in 2.4.1. Is this going to be fixed in 2.4.2? This is a significant issue that makes it hard to upgrade to Ruby 2.4.

# #6 - 03/24/2017 12:27 AM - hsbt (Hiroshi SHIBATA)

You can install and use bigdecimal-1.3.1 via standalone gem with Ruby 2.4

# #7 - 03/24/2017 12:37 AM - abezzub (Andrew Bezzub)

1.3.1 still had the problem, but 1.3.2 worked, thanks! It would still be nice if this was ported over to 2.4.x

### **Files**

fix\_13062\_string\_to\_d.patch 1.57 KB 12/25/2016 Esse (Piotr Szmielew)

11/14/2025 2/2