

## Redmine - Patch #20369

### Use String#casecmp for case insensitive comparison

2015-07-19 06:41 - Go MAEDA

<b>Status:</b>	Closed	<b>Start date:</b>	
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assignee:</b>		<b>% Done:</b>	0%
<b>Category:</b>	Code cleanup/refactoring	<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>	3.2.0		

#### Description

String#casecmp is faster than String#downcase. We can save some CPU cycles by replacing String#downcase with String#casecmp.

The following is a script to benchmark.

```
#!/usr/bin/env ruby

def measure(p)
  t1 = Time.now
  1000000.times {p.call}
  t2 = Time.now
  t2 - t1
end

str1 = (1..100).map {'A'..'z'}.to_a.sample.join
str2 = str1.downcase

puts "String#casecmp : #{measure(->{ str1.casecmp(str2) == 0})} sec"
puts "String#downcase : #{measure(->{ str1.downcase == str2 })} sec"
```

Here is a result. casecmp is remarkably faster than downcase.

```
laphroaig:patches maeda$ ruby casecmp-vs-downcase.rb
String#casecmp : 0.358929 sec
String#downcase : 0.557218 sec
```

#### Related issues:

Related to Redmine - Defect # 20278: Wrong syntax for resizing inline images ...

**Closed**

Related to Redmine - Defect # 27780: Attachment sort doesn't work with Unicode

**New**

#### Associated revisions

##### Revision 14484 - 2015-08-12 14:54 - Toshi MARUYAMA

use String#casecmp for case insensitive comparison (#20369)

Contributed by Go MAEDA.

##### Revision 14498 - 2015-08-15 08:44 - Jean-Philippe Lang

#downcase no longer needed after r14484 (#20369).

**Revision 14502 - 2015-08-15 09:07 - Jean-Philippe Lang**

#downcase no longer needed after r14484 (#20369).

**Revision 14676 - 2015-10-15 20:31 - Jean-Philippe Lang**

Fixed unsafe call to #casecmp (#20369, #21000).

**History**

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**#1 - 2015-07-19 06:45 - Toshi MARUYAMA**

- *Target version set to 3.2.0*

**#2 - 2015-07-19 09:45 - Go MAEDA**

- *Related to Defect #20278: Wrong syntax for resizing inline images will throw a 500 error added*

**#3 - 2015-08-12 15:39 - Toshi MARUYAMA**

- *Status changed from New to Closed*

Committed in trunk r14484, thanks.

**#4 - 2017-12-12 04:07 - Go MAEDA**

- *Related to Defect #27780: Attachment sort doesn't work with Unicode added*

**Files**

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replace-downcase-with-casecmp.diff	4.57 KB	2015-07-19	Go MAEDA
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