

## Installer - Bug #4244

### Core dump during foreman-installer

02/04/2014 12:46 PM - Klaas D

<b>Status:</b>	Rejected	
<b>Priority:</b>	Normal	
<b>Assignee:</b>		
<b>Category:</b>	foreman-installer script	
<b>Target version:</b>		
<b>Difficulty:</b>		<b>Fixed in Releases:</b>
<b>Triaged:</b>		<b>Found in Releases:</b>
<b>Bugzilla link:</b>		<b>Red Hat JIRA:</b>
<b>Pull request:</b>		

#### Description

Hi,  
I'm experiencing a reproduce able core dump during foreman-installer, though I'm not sure if a bug of foreman or puppet :)  
In any case I have attached the log file and the abrt report that rhel has automatically created.

#### System Information:

clean redhat 6.5 installation all updates installed

```
[root@bootstrapstest01 ~]# yum repolist
Loaded plugins: product-id, rhnplugin, security, subscription-manager
This system is not registered to Red Hat Subscription Management. You can use subscription-manager
to register.
This system is receiving updates from RHN Classic or RHN Satellite.
repo id                               repo name
-----
epel                                   Extra Packages for Enterprise Linux 6 - x86_64
10.433
foreman                               Foreman 1.4
127
foreman-plugins                       Foreman plugins 1.4
44
puppetlabs-deps                       Puppet Labs Dependencies El 6 - x86_64
54
puppetlabs-products                  Puppet Labs Products El 6 - x86_64
329
rhel-x86_64-server-6                  Red Hat Enterprise Linux Server (v. 6 for 64-bit x86_64)
12.195
rhel-x86_64-server-6-rhsc1-1          Red Hat Software Collections 1 (RHEL 6 Server x86_64)
498
rhel-x86_64-server-optional-6         RHEL Server Optional (v. 6 64-bit x86_64)
6.941
```

#### Related issues:

Related to Katello - Bug #7064: Katello installer segfaults on Ruby 1.8.7	<b>Closed</b>	<b>08/13/2014</b>
Has duplicate Kafo - Support #4267: foreman-installer fails with coredump	<b>Closed</b>	<b>02/05/2014</b>
Has duplicate Foreman - Bug #5250: Foreman-installer errors out during instal...	<b>Duplicate</b>	<b>04/21/2014</b>

#### History

#1 - 02/04/2014 12:49 PM - Klaas D

- File *abrt-report.tgz* added

I can't seem to attach the full abrt report because of its size, I deleted the core file and attached the rest, if the core file is needed I can upload it to a dropbox like service :)

## #2 - 02/04/2014 03:35 PM - Klaas D

I tried to trace the issue a little further, the only explanation I came up with is that the hostname of my testserver (bootstraptest01) is producing the problems... other machines with names like foreman01 install fine

## #3 - 02/05/2014 08:49 AM - Marek Hulán

From trace it looks like a problem in puppet, could you please send the output of puppet --version? How did you install puppet? Also could you run facter hostname and facter fqdn to see whether it works?

EDIT: sorry, from repolist I suppose you have latest puppet from puppetlabs repo, right?

## #4 - 02/05/2014 08:51 AM - Dominic Cleal

We did see this briefly on our automated tests a few weeks ago, but it's since disappeared. Another user in IRC last week reported it too, but he thought the problem went away after a general yum update.

The only other info I have is that it only appeared with Puppet 3.4.2, not 2.7.2x from EPEL.

If you have a core dump, I'd suggest opening a support case with Red Hat, as the crash is from /usr/bin/ruby.

## #5 - 02/05/2014 08:51 AM - Dominic Cleal

- translation missing: en.field\_release deleted (2)

## #6 - 02/05/2014 09:13 AM - Klaas D

I created a support case with Red Hat, I'll keep this ticket updated :)

I use the latest puppet, all packages are the newest versions from their respective repositories.

If I have some spare time later I may try to look into the core dump with their respective debug packages but my skills are limited there :)

Thanks

## #7 - 02/05/2014 06:27 PM - Dominic Cleal

- Has duplicate Support #4267: foreman-installer fails with core dump added

## #8 - 02/06/2014 07:50 AM - Klaas D

Red Hat came back to me and claimed that it crashes because of a corrupted bins, they are working on solving the issue.

In case anyone is interested, the backtrace with debugging symbols :)

```
bt
#0 0x0000003652c32925 in raise () from /lib64/libc.so.6
#1 0x0000003652c34105 in abort () from /lib64/libc.so.6
#2 0x00007f5b7167bb23 in rb_bug (fmt=0x7f5b7171422c "Segmentation fault") at error.c:213
#3 0x00007f5b716e3fec in sigsegv (sig=11) at signal.c:634
#4 <signal handler called>
#5 0x00007f5b716e7404 in st_foreach (table=0x7f5b6c3b2058, func=0x7f5b7169f2c0 <mark_entry>, arg=2) at st.c:4
87
#6 0x00007f5b7169f162 in gc_mark_children (ptr=<value optimized out>, lev=1) at gc.c:1063
#7 0x00007f5b7169ed0f in mark_locations_array (x=<value optimized out>, n=33889) at gc.c:690
#8 0x00007f5b7169f5b7 in garbage_collect () at gc.c:1493
#9 0x00007f5b716a022f in ruby_xmalloc (size=<value optimized out>) at gc.c:153
#10 0x00007f5b716a062d in ruby_xcalloc (n=<value optimized out>, size=<value optimized out>) at gc.c:174
#11 0x00007f5b716e7ba6 in st_init_table_with_size (type=0x7f5b71934860, size=11) at st.c:164
#12 0x00007f5b7166c269 in flatten (ary=140030631337440, level=-1, modified=0x7fff4148951c) at array.c:3139
#13 0x00007f5b7166c58f in rb_ary_flatten (argc=<value optimized out>, argv=<value optimized out>, ary=14003063
1337440) at array.c:3252
#14 0x00007f5b7168a6a5 in rb_call0 (klass=140030721096760, recv=140030631337440, id=7105, oid=<value optimized
out>, argc=0, argv=0x0, body=0x7f5b71636540, flags=0) at eval.c:5968
#15 0x00007f5b7168aac7 in rb_call (klass=140030721096760, recv=140030631337440, mid=7105, argc=0, argv=0x0, sc
ope=0, self=<value optimized out>) at eval.c:6251
#16 0x00007f5b71687602 in rb_eval (self=140030665413080, n=0x7f5b6e5923f8) at eval.c:3530
#17 0x00007f5b7168a5c3 in rb_call0 (klass=140030670071360, recv=140030665413080, id=68705, oid=<value optimize
d out>, argc=<value optimized out>, argv=<value optimized out>,
body=0x7f5b6e592ce0, flags=2) at eval.c:6147
#18 0x00007f5b7168aac7 in rb_call (klass=140030670071360, recv=140030665413080, mid=68705, argc=2, argv=0x7fff
4148aaa0, scope=1, self=<value optimized out>) at eval.c:6251
#19 0x00007f5b716874fb in rb_eval (self=140030665413080, n=0x7f5b6e593488) at eval.c:3545
#20 0x00007f5b7168a5c3 in rb_call0 (klass=140030670071360, recv=140030665413080, id=68737, oid=<value optimize
d out>, argc=<value optimized out>, argv=<value optimized out>,
body=0x7f5b6e5935c8, flags=2) at eval.c:6147
(gdb) f 5
#5 0x00007f5b716e7404 in st_foreach (table=0x7f5b6c3b2058, func=0x7f5b7169f2c0 <mark_entry>, arg=2) at st.c:4
```

```

87
487     for(ptr = table->bins[i]; ptr != 0;) {
(gdb) p *table
$7 = {type = 0x2147, num_bins = 1902389232, num_entries = 32603, bins = 0x4c}
(gdb) p *0x4c
Cannot access memory at address 0x4c

```

#### #9 - 02/14/2014 05:43 PM - Brian Pitts

I hit this as well with 64-bit RHEL 6.5 and puppet 3.4.2 from Puppet Labs repository. I think my first run of foreman-installer completed (but with errors) and all subsequent runs were aborted by this core dump.

I rolled back to an lvm snapshot from before I ran foreman-installer, removed puppet 3.4.2, and installed 2.7.23 from EPEL instead. That solved the problem.

#### #10 - 02/14/2014 05:47 PM - Dominic Cleal

Just for reference, this was raised to the (private) BZ: [https://bugzilla.redhat.com/show\\_bug.cgi?id=1064340](https://bugzilla.redhat.com/show_bug.cgi?id=1064340). Currently waiting on more detailed analysis. Thanks to Klaas for raising the case.

#### #11 - 04/10/2014 07:59 AM - Klaas D

just a heads up, RedHat is taking their time to fix this. I got an email today that basically states that nothing has changed since their initial analysis ... :)

#### #12 - 04/22/2014 07:55 AM - Marek Hulán

- Has duplicate Bug #5250: Foreman-installer errors out during install process due to Segmentation fault on Ruby 1.8.7 added

#### #13 - 04/28/2014 10:05 AM - Lukas Zapletal

Adding lsof output, not many native extensions there:

```

lsof -np 4540
COMMAND  PID USER  FD   TYPE DEVICE SIZE/OFF  NODE NAME
puppet  4540 root   cwd   DIR    8,1    4096     49 /root
puppet  4540 root   rtd   DIR    8,1    4096     2 /
puppet  4540 root   txt   REG    8,1    5184   15266 /usr/bin/ruby
puppet  4540 root   mem   REG    8,1   35696   15701 /usr/lib64/ruby/site_ruby/1.8/x86_64-linux/json/ext/generator.so
puppet  4540 root   mem   REG    8,1   20792   15702 /usr/lib64/ruby/site_ruby/1.8/x86_64-linux/json/ext/parser.so
puppet  4540 root   mem   REG    8,1    9864   17296 /usr/lib64/ruby/site_ruby/1.8/x86_64-linux/shadow.so
puppet  4540 root   mem   REG    8,1   208040  14506 /usr/lib64/ruby/site_ruby/1.8/x86_64-linux/selinux.so
puppet  4540 root   mem   REG    8,1  1380832   5208 /usr/lib64/libxml2.so.2.7.6
puppet  4540 root   mem   REG    8,1   89224   14510 /usr/lib64/libfa.so.1.4.0
puppet  4540 root   mem   REG    8,1   312888   14508 /usr/lib64/libaugeas.so.0.16.0
puppet  4540 root   mem   REG    8,1   13464   17291 /usr/lib64/ruby/site_ruby/1.8/x86_64-linux/_augeas.so
puppet  4540 root   mem   REG    8,1   12408   15233 /usr/lib64/ruby/1.8/x86_64-linux/digest/sha2.so
puppet  4540 root   mem   REG    8,1   38280   15255 /usr/lib64/ruby/1.8/x86_64-linux/zlib.so
puppet  4540 root   mem   REG    8,1    5368   15230 /usr/lib64/ruby/1.8/x86_64-linux/digest/md5.so
puppet  4540 root   mem   REG    8,1   15128   15245 /usr/lib64/ruby/1.8/x86_64-linux/racc/cparse.so
puppet  4540 root   mem   REG    8,1   48536   15249 /usr/lib64/ruby/1.8/x86_64-linux/socket.so
puppet  4540 root   mem   REG    8,1    5368   15232 /usr/lib64/ruby/1.8/x86_64-linux/digest/sha1.so
puppet  4540 root   mem   REG    8,1   12720   15253 /usr/lib64/ruby/1.8/x86_64-linux/syslog.so
puppet  4540 root   mem   REG    8,1   65928   4448 /lib64/libnss_files-2.12.so
puppet  4540 root   mem   REG    8,1   19296   15251 /usr/lib64/ruby/1.8/x86_64-linux/strscan.so
puppet  4540 root   mem   REG    8,1   16664   15238 /usr/lib64/ruby/1.8/x86_64-linux/iconv.so
puppet  4540 root   mem   REG    8,1  267248   15241 /usr/lib64/ruby/1.8/x86_64-linux/nkf.so
puppet  4540 root   mem   REG    8,1    5192   15236 /usr/lib64/ruby/1.8/x86_64-linux/fcntl.so
puppet  4540 root   mem   REG    8,1   12384   15228 /usr/lib64/ruby/1.8/x86_64-linux/digest.so
puppet  4540 root   mem   REG    8,1   122040   4957 /lib64/libselinux.so.1
puppet  4540 root   mem   REG    8,1   110960   4458 /lib64/libresolv-2.12.so
puppet  4540 root   mem   REG    8,1   10192   6623 /lib64/libkeyutils.so.1.3
puppet  4540 root   mem   REG    8,1   43728   6635 /lib64/libkrb5support.so.0.1
puppet  4540 root   mem   REG    8,1   88600   4858 /lib64/libz.so.1.2.3
puppet  4540 root   mem   REG    8,1   174840   6631 /lib64/libk5crypto.so.3.1
puppet  4540 root   mem   REG    8,1   14664   4876 /lib64/libcom_err.so.2.1
puppet  4540 root   mem   REG    8,1   941920   6633 /lib64/libkrb5.so.3.3
puppet  4540 root   mem   REG    8,1   277704   6627 /lib64/libgssapi_krb5.so.2.2
puppet  4540 root   mem   REG    8,1  1946880   8603 /usr/lib64/libcrypto.so.1.0.1e
puppet  4540 root   mem   REG    8,1   436984   8605 /usr/lib64/libssl.so.1.0.1e
puppet  4540 root   mem   REG    8,1   265096   15242 /usr/lib64/ruby/1.8/x86_64-linux/openssl.so
puppet  4540 root   mem   REG    8,1   119912   15252 /usr/lib64/ruby/1.8/x86_64-linux/syck.so
puppet  4540 root   mem   REG    8,1   20752   15250 /usr/lib64/ruby/1.8/x86_64-linux/stringio.so
puppet  4540 root   mem   REG    8,1   10968   15235 /usr/lib64/ruby/1.8/x86_64-linux/etc.so

```

```

puppet 4540 root mem REG 8,1 16472 15254 /usr/lib64/ruby/1.8/x86_64-linux/thread.so
puppet 4540 root mem REG 8,1 469528 3860 /lib64/libfreebl3.so
puppet 4540 root mem REG 8,1 90880 34 /lib64/libgcc_s-4.4.7-20120601.so.1
puppet 4540 root mem REG 8,1 1921216 4432 /lib64/libc-2.12.so
puppet 4540 root mem REG 8,1 596264 4440 /lib64/libm-2.12.so
puppet 4540 root mem REG 8,1 40400 4436 /lib64/libcrypt-2.12.so
puppet 4540 root mem REG 8,1 19536 4438 /lib64/libdl-2.12.so
puppet 4540 root mem REG 8,1 43832 4460 /lib64/librt-2.12.so
puppet 4540 root mem REG 8,1 142640 4456 /lib64/libpthread-2.12.so
puppet 4540 root mem REG 8,1 948192 15223 /usr/lib64/libruby.so.1.8.7
puppet 4540 root mem REG 8,1 154520 4424 /lib64/ld-2.12.so
puppet 4540 root 0r FIFO 0,8 0t0 49923 pipe
puppet 4540 root 1u CHR 136,2 0t0 5 /dev/pts/2
puppet 4540 root 2u CHR 136,2 0t0 5 /dev/pts/2
puppet 4540 root 3u REG 8,1 484659 141552 /var/log/foreman-installer/foreman-installer.log

```

#### #14 - 04/28/2014 10:47 AM - Lukas Zapletal

Namely: json, shadow, selinux, augeas.

I am trying SystemTap now to see latest pure ruby method calls before the coredump. Looks good so far, but slow. Waiting for another run to finish.

#### #15 - 04/28/2014 12:44 PM - Lukas Zapletal

The bug does not seem to be stable.

```
/usr/lib/ruby/site_ruby/1.8/puppet/parser/type_loader.rb:91: [BUG] rb_gc_mark(): unknown data type 0x30(0x7f003d895ed8) non object
```

```
/usr/lib/ruby/site_ruby/1.8/puppet/parser/type_loader.rb:91: [BUG] Segmentation fault
```

```
/usr/lib/ruby/site_ruby/1.8/puppet/parser/type_loader.rb:91: [BUG] rb_gc_mark() called for broken object
```

At least I have top method calls when segfault was raised:

```

414956x Hash.[]
347066x String.==
292584x StringScanner.match?
225574x Object.==
157227x Object.method
153018x String.[]
132849x Object.respond_to?
120069x Hash.[]=
118181x Class.exist?
112672x Class.basename
112369x Regexp.to_s
111858x Pathname.chop_basename
110421x Object.hash
98185x Hash.default
96394x Array.unshift
95196x Array.each
91555x String.rindex
89526x Class.new
85597x String =~
78612x Method.==
76487x Object.dup
75959x Class.join
75205x Object.send
72871x String.initialize_copy
72667x Array.[]
70509x String.+
70234x Object.is_a?
68105x Array.empty?
67787x Symbol.to_s

```

Tracking down individual method calls before the sigsegv is a challenge, I can see all of them, but it's a log 2 gigs long. Too much detailed. Let's see if I can find a way to filter this out.

#### #16 - 04/28/2014 02:53 PM - Lukas Zapletal

With -OO I can see the ruby object that is causing the segfault on my system:

```

(gdb) f 3
#3 0x00007f3794494dd6 in gc_mark_children (ptr=139876675993304, lev=2) at gc.c:1080
1080 rb_bug("rb_gc_mark(): unknown data type 0x%x(0x%x) %s",
(gdb) p *obj

```

```

$6 = {as = {free = {flags = 128097008, next = 0x7a29120}, basic = {flags = 128097008, klass = 128094496}, obje
ct = {basic = {
  flags = 128097008, klass = 128094496}, iv_tbl = 0x7f379395bed8}, klass = {basic = {flags = 128097008,
  klass = 128094496}, iv_tbl = 0x7f379395bed8, m_tbl = 0x7f379395bed8, super = 139876675993320}, flonum
= {basic = {
  flags = 128097008, klass = 128094496}, value = 6.9108260262758527e-310}, string = {basic = {flags = 12
8097008,
  klass = 128094496}, len = 139876675993304, ptr = 0x7f379395bed8 "\360\232\242\a", aux = {capa = 139876
675993320,
  shared = 139876675993320}}, array = {basic = {flags = 128097008, klass = 128094496}, len = 13987667599
3304, aux = {
  capa = 139876675993304, shared = 139876675993304}, ptr = 0x7f379395bee8}, regexp = {basic = {flags = 1
28097008,
  klass = 128094496}, ptr = 0x7f379395bed8, len = 139876675993304, str = 0x7f379395bee8 "\225\223\067\1
77"}, hash = {
  basic = {flags = 128097008, klass = 128094496}, tbl = 0x7f379395bed8, iter_lev = -1818902824,
  ifnone = 139876675993320}, data = {basic = {flags = 128097008, klass = 128094496},
  dmark = 0x7f379395bed8 <main_arena+88>, dfree = 0x7f379395bed8 <main_arena+88>, data = 0x7f379395bee8},
rstruct = {
  basic = {flags = 128097008, klass = 128094496}, len = 139876675993304, ptr = 0x7f379395bed8}, bignum = {
basic = {
  flags = 128097008, klass = 128094496}, sign = -40 '\330', len = 139876675993304, digits = 0x7f379395be
e8}, file = {
  basic = {flags = 128097008, klass = 128094496}, fptr = 0x7f379395bed8}, node = {flags = 128097008,
  nd_file = 0x7a29120 "h\037]\214\067\177", u1 = {node = 0x7f379395bed8, id = 139876675993304, value = 139
876675993304,
  cfunc = 0x7f379395bed8 <main_arena+88>, tbl = 0x7f379395bed8}, u2 = {node = 0x7f379395bed8, id = 13987
6675993304,
  argc = 139876675993304, value = 139876675993304}, u3 = {node = 0x7f379395bee8, id = 139876675993320,
  state = 139876675993320, entry = 0x7f379395bee8, cnt = 139876675993320, value = 139876675993320}}, mat
ch = {basic = {
  flags = 128097008, klass = 128094496}, str = 139876675993304, regs = 0x7f379395bed8}, varmap = {super
= {
  flags = 128097008, klass = 128094496}, id = 139876675993304, val = 139876675993304, next = 0x7f379395b
ee8}, scope = {
  super = {flags = 128097008, klass = 128094496}, local_tbl = 0x7f379395bed8, local_vars = 0x7f379395bed8,
  flags = -1818902808}}}}

```

I thought memory map will point on a native extension, but it is in the main heap :-)

#### #17 - 04/28/2014 04:58 PM - Lukas Zapletal

I need to go for today, but I am suspicious that some libraries which are carried by puppetlabs RHEL repo are built incorrectly with ABI breakage. The biggest candidate is ruby-shadow where we can see major upgrade on February 2014: [https://yum.puppetlabs.com/el/6/dependencies/x86\\_64/](https://yum.puppetlabs.com/el/6/dependencies/x86_64/)

Will investigate this tomorrow.

#### #18 - 04/29/2014 09:50 AM - Lukas Zapletal

Ok that was false suspicion. I wonder if the upgrade to SCL 193 ruby is the only way of fixing this.

#### #19 - 04/30/2014 02:16 AM - Jason Berry

I ran into the same issue; Fully updated RHEL 6.5, with Ruby 1.8.7, same segfault with the ruby installer. After installing Ruby 1.9.3 (ruby193) from RHSCCL repo, the foreman-install completed successfully now. An uninstall of 1.8.7 was not required.

#### #20 - 05/05/2014 07:49 AM - Lukas Zapletal

**Ugly workaround:** (Only if you have more than 4 GB of memory):

Edit /usr/bin/puppet and add this line to the top:

```
GC.disable = true
```

Then run the installer and remove this one.

#### #21 - 05/23/2014 11:44 AM - Marek Hulán

```
GC.disable = true
```

or GC.disable

**#22 - 09/10/2014 05:26 PM - Spencer Owen**

I am also running into this problem. I can reproduce it consistantly. Things I've tried

puppet 3.7  
puppet 3.6  
yum upgrade  
rvm + ruby 1.9.3  
rvm + ruby 2.1.2

All still have the same crash. I've not been able to work around this.

**#23 - 09/11/2014 11:52 AM - Spencer Owen**

**Update**

foreman 1.6.0 does not appear to have this problem. It installed sucessfully.

**#24 - 01/19/2015 09:10 AM - Stephen Benjamin**

- *Related to Bug #7064: Katello installer segfaults on Ruby 1.8.7 added*

**#25 - 02/08/2017 03:27 AM - Dominic Cleal**

- *Status changed from New to Rejected*

foreman-installer no longer supports Ruby 1.8.7.

**Files**

---

foreman-installer.log	168 KB	02/04/2014	Klaas D
abrt-report.tgz	901 KB	02/04/2014	Klaas D