

## Smart Proxy - Bug #12359

### 100% cpu usage foreman-proxy after upgrade to 1.9

10/31/2015 05:59 AM - Veaceslav Mindru

<b>Status:</b>	Resolved	
<b>Priority:</b>	Normal	
<b>Assignee:</b>		
<b>Category:</b>	DHCP	
<b>Target version:</b>		
<b>Difficulty:</b>		<b>Fixed in Releases:</b>
<b>Triaged:</b>		<b>Found in Releases:</b> 1.9.2
<b>Bugzilla link:</b>		<b>Red Hat JIRA:</b>
<b>Pull request:</b>		
<b>Description</b>		
after upgrade from 1.8 to 1.9 at some point the ruby process of foreman-proxy starts consuming high amounts of mem and is on 100% cpu usage. upgrade of foreman-proxy to 1.10 did not solve the issue.		
<b>Related issues:</b>		
Related to Smart Proxy - Feature #12370: Provide TTIN trap for stacktrace log...	<b>Closed</b>	<b>11/02/2015</b>
Related to Smart Proxy - Bug #12392: 100% cpu usage on foreman-proxy DHCP calls	<b>Resolved</b>	<b>11/04/2015</b>

#### History

##### #1 - 11/02/2015 11:17 AM - Lukas Zapletal

- Priority changed from High to Normal

Are you able to acquire stacktrace? Proxy does not provide signal trap, but if you modify launcher.rb with this code:

```
trap('TTIN') do
  puts "Starting thread dump for current Ruby process"
  puts "======"
  puts ""
  Thread.list.each do |thread|
    puts "Thread TID-#{thread.object_id}"
    puts thread.backtrace
    puts ""
  end
end
```

You can then send this signal and find the stracktraces in logs. Do this while CPU load is high tho.

##### #2 - 11/02/2015 11:21 AM - Lukas Zapletal

- Related to Feature #12370: Provide TTIN trap for stacktrace log output added

##### #3 - 11/04/2015 06:41 AM - Dominic Cleal

- Related to Bug #12392: 100% cpu usage on foreman-proxy DHCP calls added

##### #4 - 11/04/2015 09:32 AM - Dominic Cleal

<https://github.com/theforeman/smart-proxy/compare/theforeman:1.9-stable...domcleal:1.9-stable-ttin.patch> - equivalent patch for 1.9.

##### #5 - 11/07/2015 09:59 PM - Alexandr Romanov

This is the log form different foreman-proxy  
Ubuntu 14.04  
foreman-proxy 1.9.2-1

```
Starting thread dump for current Ruby process
[54/424]
=====
Thread TID-5466100
```

```
/usr/share/foreman-proxy/lib/smart_proxy.rb:151:in `block (2 levels) in launch'  
/usr/share/foreman-proxy/lib/smart_proxy.rb:149:in `each'  
/usr/share/foreman-proxy/lib/smart_proxy.rb:149:in `block in launch'  
/usr/share/foreman-proxy/lib/smart_proxy.rb:156:in `call'  
/usr/share/foreman-proxy/lib/smart_proxy.rb:156:in `join'  
/usr/share/foreman-proxy/lib/smart_proxy.rb:156:in `launch'  
/usr/share/foreman-proxy/bin/smart-proxy:6:in `'
```

Thread TID-20463920

```
/usr/lib/ruby/1.9.1/webrick/server.rb:98:in `block in start'  
/usr/lib/ruby/1.9.1/webrick/server.rb:22:in `start'  
/usr/lib/ruby/1.9.1/webrick/server.rb:89:in `start'  
/usr/lib/ruby/vendor_ruby/rack/handler/webrick.rb:14:in `run'  
/usr/lib/ruby/vendor_ruby/rack/server.rb:264:in `start'  
/usr/share/foreman-proxy/lib/smart_proxy.rb:137:in `block in launch'
```

Thread TID-10371020

```
/usr/lib/ruby/1.9.1/webrick/utils.rb:184:in `block in initialize'
```

Thread TID-20459720

[31/424]

```
/usr/lib/ruby/1.9.1/ipaddr.rb:405:in `mask!'  
/usr/lib/ruby/1.9.1/ipaddr.rb:488:in `initialize'  
/usr/share/foreman-proxy/modules/dhcp/subnet.rb:32:in `new'  
/usr/share/foreman-proxy/modules/dhcp/subnet.rb:32:in `include?'  
/usr/share/foreman-proxy/modules/dhcp/providers/server/isc.rb:113:in `block in loadSubnetData'  
/usr/share/foreman-proxy/modules/dhcp/providers/server/isc.rb:98:in `scan'  
/usr/share/foreman-proxy/modules/dhcp/providers/server/isc.rb:98:in `loadSubnetData'  
/usr/share/foreman-proxy/modules/dhcp/subnet.rb:65:in `load'  
/usr/share/foreman-proxy/modules/dhcp/subnet.rb:75:in `records'  
/usr/share/foreman-proxy/modules/dhcp/server.rb:79:in `block in find_record'  
/usr/share/foreman-proxy/modules/dhcp/server.rb:78:in `each'  
/usr/share/foreman-proxy/modules/dhcp/server.rb:78:in `find_record'  
/usr/share/foreman-proxy/modules/dhcp/dhcp_api.rb:84:in `block in <class:DhcpApi>'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:1541:in `call'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:1541:in `block in compile!'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:950:in `[]'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:950:in `block (3 levels) in route!'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:966:in `route_eval'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:950:in `block (2 levels) in route!'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:987:in `block in process_route'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:985:in `catch'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:985:in `process_route'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:948:in `block in route!'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:947:in `each'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:947:in `route!'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:1059:in `block in dispatch!'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:1041:in `block in invoke'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:1041:in `catch'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:1041:in `invoke'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:1056:in `dispatch!'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:882:in `block in call!'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:1041:in `block in invoke'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:1041:in `catch'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:1041:in `invoke'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:882:in `call!'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:870:in `call'  
/usr/lib/ruby/vendor_ruby/rack/methodoverride.rb:21:in `call'  
/usr/lib/ruby/vendor_ruby/rack/commonlogger.rb:33:in `call'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:212:in `call'  
/usr/share/foreman-proxy/lib/proxy/log.rb:35:in `call'  
/usr/lib/ruby/vendor_ruby/rack/protection/xss_header.rb:18:in `call'  
/usr/lib/ruby/vendor_ruby/rack/protection/path_traversal.rb:16:in `call'  
/usr/lib/ruby/vendor_ruby/rack/protection/json_csrf.rb:18:in `call'  
/usr/lib/ruby/vendor_ruby/rack/protection/base.rb:50:in `call'  
/usr/lib/ruby/vendor_ruby/rack/protection/base.rb:50:in `call'  
/usr/lib/ruby/vendor_ruby/rack/protection/frame_options.rb:31:in `call'  
/usr/lib/ruby/vendor_ruby/rack/nulllogger.rb:9:in `call'  
/usr/lib/ruby/vendor_ruby/rack/head.rb:11:in `call'  
/usr/lib/ruby/vendor_ruby/sinatra/showexceptions.rb:21:in `call'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:175:in `call'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:1949:in `call'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:1449:in `block in call'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:1726:in `synchronize'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:1449:in `call'
```

```
/usr/lib/ruby/vendor_ruby/rack/builder.rb:138:in `call'  
/usr/lib/ruby/vendor_ruby/rack/urlmap.rb:65:in `block in call'  
/usr/lib/ruby/vendor_ruby/rack/urlmap.rb:50:in `each'  
/usr/lib/ruby/vendor_ruby/rack/urlmap.rb:50:in `call'  
/usr/lib/ruby/vendor_ruby/rack/builder.rb:138:in `call'  
/usr/lib/ruby/vendor_ruby/rack/handler/webrick.rb:60:in `service'  
/usr/lib/ruby/1.9.1/webrick/httpserver.rb:138:in `service'  
/usr/lib/ruby/1.9.1/webrick/httpserver.rb:94:in `run'  
/usr/lib/ruby/1.9.1/webrick/server.rb:191:in `block in start_thread'
```

#### #6 - 11/07/2015 10:07 PM - Alexandr Romanov

And this is the log from the original installation (from which ticket was created).

Ubuntu 14.04

foreman-proxy 1.10.0~rc2-1

Starting thread dump for current Ruby process

[108/564]

Thread TID-14067700

```
/usr/share/foreman-proxy/lib/launcher.rb:129:in `block (2 levels) in launch'  
/usr/share/foreman-proxy/lib/launcher.rb:127:in `each'  
/usr/share/foreman-proxy/lib/launcher.rb:127:in `block in launch'  
/usr/share/foreman-proxy/lib/launcher.rb:138:in `call'  
/usr/share/foreman-proxy/lib/launcher.rb:138:in `join'  
/usr/share/foreman-proxy/lib/launcher.rb:138:in `launch'  
/usr/share/foreman-proxy/bin/smart-proxy:6:in `'
```

Thread TID-27919840

```
/usr/lib/ruby/1.9.1/webrick/server.rb:98:in `block in start'  
/usr/lib/ruby/1.9.1/webrick/server.rb:22:in `start'  
/usr/lib/ruby/1.9.1/webrick/server.rb:89:in `start'  
/usr/lib/ruby/vendor_ruby/rack/handler/webrick.rb:14:in `run'  
/usr/lib/ruby/vendor_ruby/rack/server.rb:264:in `start'  
/usr/share/foreman-proxy/lib/launcher.rb:113:in `block in launch'
```

Thread TID-24946400

```
/usr/lib/ruby/1.9.1/webrick/utils.rb:184:in `block in initialize'
```

Thread TID-23493380

[85/564]

```
/usr/share/foreman-proxy/modules/dhcp/providers/server/isc.rb:96:in `block (2 levels) in parse_config_and_leases_for_records'  
/usr/share/foreman-proxy/modules/dhcp/providers/server/isc.rb:95:in `each'  
/usr/share/foreman-proxy/modules/dhcp/providers/server/isc.rb:95:in `block in parse_config_and_leases_for_records'  
/usr/share/foreman-proxy/modules/dhcp/providers/server/isc.rb:90:in `scan'  
/usr/share/foreman-proxy/modules/dhcp/providers/server/isc.rb:90:in `parse_config_and_leases_for_records'  
/usr/share/foreman-proxy/modules/dhcp/dhcp_api.rb:42:in `load_subnet_data'  
/usr/share/foreman-proxy/modules/dhcp/dhcp_api.rb:95:in `block in <class:DhcpApi>'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:1541:in `call'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:1541:in `block in compile!'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:950:in `[]'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:950:in `block (3 levels) in route!'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:966:in `route_eval'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:950:in `block (2 levels) in route!'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:987:in `block in process_route'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:985:in `catch'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:985:in `process_route'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:948:in `block in route!'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:947:in `each'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:947:in `route!'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:1059:in `block in dispatch!'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:1041:in `block in invoke'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:1041:in `catch'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:1041:in `invoke'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:1056:in `dispatch!'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:882:in `block in call!'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:1041:in `block in invoke'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:1041:in `catch'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:1041:in `invoke'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:882:in `call!'
```

```
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:870:in `call'  
/usr/lib/ruby/vendor_ruby/rack/methodoverride.rb:21:in `call'  
/usr/lib/ruby/vendor_ruby/rack/commonlogger.rb:33:in `call'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:212:in `call'  
/usr/share/foreman-proxy/lib/proxy/log.rb:58:in `call'  
/usr/lib/ruby/vendor_ruby/rack/protection/xss_header.rb:18:in `call'  
/usr/lib/ruby/vendor_ruby/rack/protection/path_traversal.rb:16:in `call'  
/usr/lib/ruby/vendor_ruby/rack/protection/json_csrf.rb:18:in `call'  
/usr/lib/ruby/vendor_ruby/rack/protection/base.rb:50:in `call'  
/usr/lib/ruby/vendor_ruby/rack/protection/base.rb:50:in `call'  
/usr/lib/ruby/vendor_ruby/rack/protection/frame_options.rb:31:in `call'  
/usr/lib/ruby/vendor_ruby/rack/nulllogger.rb:9:in `call'  
/usr/lib/ruby/vendor_ruby/rack/head.rb:11:in `call'  
/usr/lib/ruby/vendor_ruby/sinatra/showexceptions.rb:21:in `call'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:175:in `call'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:1949:in `call'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:1449:in `block in call'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:1726:in `synchronize'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:1449:in `call'  
/usr/lib/ruby/vendor_ruby/rack/builder.rb:138:in `call'  
/usr/lib/ruby/vendor_ruby/rack/urlmap.rb:65:in `block in call'  
/usr/lib/ruby/vendor_ruby/rack/urlmap.rb:50:in `each'  
/usr/lib/ruby/vendor_ruby/rack/urlmap.rb:50:in `call'  
/usr/lib/ruby/vendor_ruby/rack/builder.rb:138:in `call'  
/usr/lib/ruby/vendor_ruby/rack/handler/webrick.rb:60:in `service'  
/usr/lib/ruby/1.9.1/webrick/httpserver.rb:138:in `service'  
/usr/lib/ruby/1.9.1/webrick/httpserver.rb:94:in `run'  
/usr/lib/ruby/1.9.1/webrick/server.rb:191:in `block in start_thread'
```

Thread TID-70174802568480

[25/564]

```
/usr/share/foreman-proxy/modules/dhcp/providers/server/isc.rb:208:in `parse_record_options'  
/usr/share/foreman-proxy/modules/dhcp/providers/server/isc.rb:96:in `block (2 levels) in parse_config_and_leases_for_records'  
/usr/share/foreman-proxy/modules/dhcp/providers/server/isc.rb:95:in `each'  
/usr/share/foreman-proxy/modules/dhcp/providers/server/isc.rb:95:in `block in parse_config_and_leases_for_records'  
/usr/share/foreman-proxy/modules/dhcp/providers/server/isc.rb:90:in `scan'  
/usr/share/foreman-proxy/modules/dhcp/providers/server/isc.rb:90:in `parse_config_and_leases_for_records'  
/usr/share/foreman-proxy/modules/dhcp/providers/server/isc.rb:147:in `loadSubnetData'  
/usr/share/foreman-proxy/modules/dhcp/dhcp_api.rb:42:in `load_subnet_data'  
/usr/share/foreman-proxy/modules/dhcp/dhcp_api.rb:95:in `block in <class:DhcpApi>'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:1541:in `call'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:1541:in `block in compile!'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:950:in `[]'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:950:in `block (3 levels) in route!'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:966:in `route_eval'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:950:in `block (2 levels) in route!'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:987:in `block in process_route'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:985:in `catch'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:985:in `process_route'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:948:in `block in route!'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:947:in `each'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:947:in `route!'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:1059:in `block in dispatch!'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:1041:in `block in invoke'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:1041:in `catch'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:1041:in `invoke'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:1056:in `dispatch!'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:882:in `block in call!'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:1041:in `block in invoke'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:1041:in `catch'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:1041:in `invoke'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:882:in `call!'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:870:in `call'  
/usr/lib/ruby/vendor_ruby/rack/methodoverride.rb:21:in `call'  
/usr/lib/ruby/vendor_ruby/rack/commonlogger.rb:33:in `call'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:212:in `call'  
/usr/share/foreman-proxy/lib/proxy/log.rb:58:in `call'  
/usr/lib/ruby/vendor_ruby/rack/protection/xss_header.rb:18:in `call'  
/usr/lib/ruby/vendor_ruby/rack/protection/path_traversal.rb:16:in `call'  
/usr/lib/ruby/vendor_ruby/rack/protection/json_csrf.rb:18:in `call'  
/usr/lib/ruby/vendor_ruby/rack/protection/base.rb:50:in `call'  
/usr/lib/ruby/vendor_ruby/rack/protection/base.rb:50:in `call'  
/usr/lib/ruby/vendor_ruby/rack/protection/frame_options.rb:31:in `call'
```

```
/usr/lib/ruby/vendor_ruby/rack/nulllogger.rb:9:in `call'  
/usr/lib/ruby/vendor_ruby/rack/head.rb:11:in `call'  
/usr/lib/ruby/vendor_ruby/sinatra/showexceptions.rb:21:in `call'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:175:in `call'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:1949:in `call'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:1449:in `block in call'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:1726:in `synchronize'  
/usr/lib/ruby/vendor_ruby/sinatra/base.rb:1449:in `call'  
/usr/lib/ruby/vendor_ruby/rack/builder.rb:138:in `call'  
/usr/lib/ruby/vendor_ruby/rack/urlmap.rb:65:in `block in call'  
/usr/lib/ruby/vendor_ruby/rack/urlmap.rb:50:in `each'  
/usr/lib/ruby/vendor_ruby/rack/urlmap.rb:50:in `call'  
/usr/lib/ruby/vendor_ruby/rack/builder.rb:138:in `call'  
/usr/lib/ruby/vendor_ruby/rack/handler/webrick.rb:60:in `service'  
/usr/lib/ruby/1.9.1/webrick/httpserver.rb:138:in `service'  
/usr/lib/ruby/1.9.1/webrick/httpserver.rb:94:in `run'  
/usr/lib/ruby/1.9.1/webrick/server.rb:191:in `block in start_thread'
```

#### **#7 - 04/22/2016 07:43 AM - Anonymous**

I opened a pull request (<https://github.com/theforeman/smart-proxy/pull/409>) that eliminates parsing of the dhcpd leases file on every request. The changes have been tested against a fairly low-load dhcpd server, and I would appreciate if you could run a test against a busy dhcpd server and report your findings in the main ticket: <http://projects.theforeman.org/issues/2687>.

#### **#8 - 07/29/2016 06:41 AM - Dominic Cleal**

- Category set to DHCP

- Status changed from New to Feedback

The inotify-related changes from ticket [#2687](#) have now been made in develop (nightly) for 1.13, which should drastically reduce the amount of re-parsing of config/lease files during smart proxy requests. I'm moving this ticket state to feedback as hopefully the next release will resolve this issue.

[#12425](#) in 1.12 should also have reduced the number of calls being made to the DHCP smart proxy, thus reducing the load.

#### **#9 - 05/17/2017 11:34 AM - Anonymous**

- Status changed from Feedback to Resolved