Foreman - Bug #3145

Performance issue editing host with many parameters

09/24/2013 06:13 PM - Espen Fjellvær Olsen

Status:	Closed		
Priority:	Normal		
Assignee:	Tom Caspy		
Category:	Performance		
Target version:	1.10.0		
Difficulty:		**Fixed in Releases:**	
Triaged:		**Found in Releases:**	
Bugzilla link:		**Red Hat JIRA:**	
Pull request:	https://github.com/theforeman/foreman/pull/2664		

Description

Hi,
I am having an issue where Foreman is acting very slow.
Clicking edit on a host will for example take around 27.5 seconds, but other actions are slow as well, Updating/reading from the API for instance.

I am only using Foreman with puppet, so no compute resources or host management.
The issue is both in 1.1 and 1.2.

I am running Foreman via passenger (webrick isnt any faster, upgraded to passenger to see if that helped, which it didnt), with a mysql backend.
The mysql server have around 0.04 in load with no IO.
I have also tried running with the various memcached settings, but it will only cache around 6000 bytes at max, and no performance improvements.

I am not sure where to start to debug this.

Related issues:

Related to Foreman - Tracker #11657: Performance refactoring for HostsController	**New**	**09/02/2015**

Associated revisions

Revision 55ee550c - 09/07/2015 11:13 AM - Tom Caspy

fixes #3145 - host with a lot of parameters quicker

History

#1 - 09/25/2013 06:18 AM - Ohad Levy

could you turn on debugging and paste log entries from the slow requests? see [Troubleshooting](#) for turning on debug

#2 - 09/25/2013 06:37 AM - Espen Fjellvær Olsen

- File debug.log added

Oh.. This was interesting..
It seems that there is a tonne of "CACHE (0.0ms) SELECT `hostgroups`.* FROM `hostgroups` WHERE `hostgroups`.`id` IN (1) AND (1=1) ORDER BY (case when hostgroups.ancestry is null then 0 else 1 end), hostgroups.ancestry" taking all the time.

I have prepended some timings to the debug logging to really show where it is using time.

#3 - 09/25/2013 07:04 AM - Ohad Levy

Indeed that does not seem right.. do you have an extremely large number of puppet classes, or hostgroups or something like that?

is it connected to a Compute Resource? any chance its the connectivity which is slow ?

does it happens it all hosts? (also if you click on new host vs edit)

#4 - 09/25/2013 07:13 AM - Espen Fjellvær Olsen

From the database I see that I have 430 puppetclasses, 484 host groups, 774 hosts, 68038 facts, 1060866 reports etc.
No connection to any compute resource (it should be totally disabled as far as I can see).

All hosts are placed in a hostgroup (One or more hosts per hostgroup) which inherits from one global host group.

Clicking the new button to create a new hosts also takes around 10-15 seconds, and hitting edit on that again after its created also takes 20+ seconds, regardless of it having a hostgroup or not.

As you can see from the debug log the 8125

```
 "CACHE (0.0ms) SELECT `hostgroups`.* FROM `hostgroups` WHERE `hostgroups`.`id` IN (1) AND (1=1) ORDER BY (cas
e when hostgroups.ancestry is null then 0 else 1 end), hostgroups.ancestry"  lines take all the time, and ther
e are sometimes a second++ gap between them:
"2013-09-25 06-32-38-903   CACHE (0.0ms)  SELECT `hostgroups`.* FROM `hostgroups` WHERE `hostgroups`.`id` IN (
1) AND (1=1) ORDER BY (case when hostgroups.ancestry is null then 0 else 1 end), hostgroups.ancestry
2013-09-25 06-32-41-037   CACHE (0.0ms)  SELECT `hostgroups`.* FROM `hostgroups` WHERE `hostgroups`.`id` IN (1
) AND (1=1) ORDER BY (case when hostgroups.ancestry is null then 0 else 1 end), hostgroups.ancestry"
```

#5 - 08/11/2015 06:03 PM - Dan Hawke

Hi, did you ever manage to find a solution to this? We have 294 puppetclasses, but currently only 1 hostgroup and 25 hosts and are seeing similar slowness on editing Hosts compared to an otherwise responsive interface. We do have a connection to a VMware compute resource.

We are running on Foreman 1.8.1 on RHEL6.6, 8GB RAM, 2vCPU.

Did you require any more debug info?

2015-08-12 09:54:46 [I]

Started GET "/hosts/[clientname]/edit" for 192.168.109.78 at 2015-08-12 09:54:46 +1200
2015-08-12 09:54:46 [I] Processing by HostsController#edit as HTML
2015-08-12 09:54:46 [I]   Parameters: {"id"=>"[clientname]"}
2015-08-12 09:54:46 [I]   Rendered hosts/_progress.html.erb (0.1ms)
2015-08-12 09:54:46 [I]   Rendered puppetclasses/_selectedClasses.html.erb (1.4ms)
2015-08-12 09:54:46 [I]   Rendered puppetclasses/_classes_in_groups.html.erb (0.0ms)
2015-08-12 09:54:46 [I]   Rendered puppetclasses/_classes.html.erb (383.8ms)
2015-08-12 09:54:46 [I]   Rendered puppetclasses/_class_selection.html.erb (446.1ms)
2015-08-12 09:54:46 [I] Successfully decrypted field for Foreman::Model::Vmware [vCentername]
2015-08-12 09:54:47 [I] Connecting to database specified by database.yml
2015-08-12 09:54:48 [I]

Started GET "/node/[clientname]?format=yml" for 10.102.1.61 at 2015-08-12 09:54:48 +1200
2015-08-12 09:54:48 [I] Processing by HostsController#externalNodes as YML
2015-08-12 09:54:48 [I]   Parameters: {"name"=>"[clientname]"}
2015-08-12 09:54:49 [I]   Rendered text template (0.0ms)
2015-08-12 09:54:49 [I] Completed 200 OK in 293ms (Views: 0.7ms | ActiveRecord: 10.0ms)
2015-08-12 09:54:52 [I]   Rendered compute_resources_vms/form/vmware/_base.html.erb (4911.8ms)
2015-08-12 09:54:53 [I]   Rendered compute_resources_vms/form/vmware/_volume.html.erb (1387.4ms)
2015-08-12 09:54:53 [W] Creating scope :completer_scope. Overwriting existing method Organization.completer_scope.
2015-08-12 09:54:53 [W] Creating scope :completer_scope. Overwriting existing method Location.completer_scope.
2015-08-12 09:54:55 [I]   Rendered compute_resources_vms/form/vmware/_volume.html.erb (1315.5ms)
2015-08-12 09:54:56 [I]   Rendered compute_resources_vms/form/vmware/_volume.html.erb (1327.2ms)
2015-08-12 09:54:56 [I]   Rendered compute_resources_vms/form/_volumes.html.erb (4358.3ms)
2015-08-12 09:54:56 [I]   Rendered hosts/_compute_detail.html.erb (9271.1ms)
2015-08-12 09:54:56 [I]   Rendered hosts/_compute.html.erb (9451.8ms)
2015-08-12 09:54:56 [I]   Rendered nic/_base_form.html.erb (13.1ms)
2015-08-12 09:54:56 [I]   Rendered nic/_virtual_form.html.erb (1.3ms)
2015-08-12 09:54:57 [I]   Rendered compute_resources_vms/form/vmware/_network.html.erb (1459.2ms)
2015-08-12 09:54:57 [I]   Rendered nic/_provider_specific_form.html.erb (1461.0ms)
2015-08-12 09:54:57 [I]   Rendered nic/manageds/_managed.html.erb (1477.7ms)
2015-08-12 09:54:57 [I]   Rendered nic/_base_form.html.erb (140.3ms)
2015-08-12 09:54:58 [I]   Rendered nic/_virtual_form.html.erb (1.4ms)
2015-08-12 09:54:59 [I]   Rendered compute_resources_vms/form/vmware/_network.html.erb (1548.2ms)
2015-08-12 09:54:59 [I]   Rendered nic/_provider_specific_form.html.erb (1549.3ms)
2015-08-12 09:54:59 [I]   Rendered nic/manageds/_managed.html.erb (1693.6ms)
2015-08-12 09:54:59 [I]   Rendered hosts/_interfaces.html.erb (3174.4ms)
2015-08-12 09:54:59 [I]   Rendered common/os_selection/_architecture.html.erb (3.7ms)
2015-08-12 09:54:59 [I]   Rendered common/os_selection/_operatingsystem.html.erb (9.3ms)
2015-08-12 09:54:59 [I]   Rendered hosts/_operating_system.html.erb (19.0ms)
2015-08-12 09:54:59 [I]   Rendered hosts/_unattended.html.erb (12648.7ms)
2015-08-12 09:54:59 [I]   Rendered puppetclasses/_class_parameters.html.erb (0.0ms)
2015-08-12 09:54:59 [I]   Rendered puppetclasses/_classes_parameters.html.erb (9.4ms)

2015-08-12 09:54:59 [I]   Rendered common_parameters/_inherited_parameters.html.erb (0.6ms)
2015-08-12 09:54:59 [I]   Rendered common_parameters/_puppetclass_parameter.html.erb (3.0ms)
2015-08-12 09:54:59 [I]   Rendered common_parameters/_puppetclasses_parameters.html.erb (7.5ms)
2015-08-12 09:54:59 [I]   Rendered common_parameters/_parameter.html.erb (1.7ms)
2015-08-12 09:54:59 [I]   Rendered common_parameters/_parameters.html.erb (5.4ms)
2015-08-12 09:54:59 [I]   Rendered hosts/_form.html.erb (13174.4ms)
2015-08-12 09:54:59 [I]   Rendered hosts/edit.html.erb within layouts/application (13176.7ms)
2015-08-12 09:54:59 [I]   Rendered home/_user_dropdown.html.erb (4.5ms)
2015-08-12 09:54:59 [I] Read fragment views/tabs_and_title_records-3 (0.1ms)
2015-08-12 09:54:59 [I]   Rendered home/_org_switcher.html.erb (0.0ms)
2015-08-12 09:54:59 [I]   Rendered home/_submenu.html.erb (2.8ms)
2015-08-12 09:54:59 [I]   Rendered home/_submenu.html.erb (8.4ms)
2015-08-12 09:54:59 [I]   Rendered home/_submenu.html.erb (2.3ms)
2015-08-12 09:54:59 [I]   Rendered home/_submenu.html.erb (4.5ms)
2015-08-12 09:54:59 [I]   Rendered home/_submenu.html.erb (203.2ms)
2015-08-12 09:54:59 [I] Write fragment views/tabs_and_title_records-3 (1.5ms)
2015-08-12 09:54:59 [I]   Rendered home/_topbar.html.erb (236.3ms)
2015-08-12 09:54:59 [I]   Rendered layouts/base.html.erb (238.0ms)
2015-08-12 09:54:59 [I] Completed 200 OK in 13433ms (Views: 13397.9ms | ActiveRecord: 21.5ms)
2015-08-12 09:54:59 [I]

Started GET "/hosts/[clientname]/edit" for 192.168.109.78 at 2015-08-12 09:54:59 +1200
2015-08-12 09:54:59 [I] Processing by HostsController#edit as HTML
2015-08-12 09:54:59 [I]   Parameters: {"id"=>"[clientname]"}
2015-08-12 09:54:59 [I]   Rendered hosts/_progress.html.erb (0.2ms)
2015-08-12 09:55:00 [I]   Rendered puppetclasses/_selectedClasses.html.erb (1.5ms)
2015-08-12 09:55:00 [I]   Rendered puppetclasses/_classes_in_groups.html.erb (0.0ms)
2015-08-12 09:55:00 [I]   Rendered puppetclasses/_classes.html.erb (589.1ms)
2015-08-12 09:55:00 [I]   Rendered puppetclasses/_class_selection.html.erb (666.2ms)
2015-08-12 09:55:00 [I]

Started POST "/api/hosts/facts" for 10.102.1.61 at 2015-08-12 09:55:00 +1200
2015-08-12 09:55:00 [I] Successfully decrypted field for Foreman::Model::Vmware [vCentername]
2015-08-12 09:55:00 [I] Processing by Api::V2::HostsController#facts as JSON
2015-08-12 09:55:00 [I]   Parameters: {"name"=>"[clientname]", "facts"=>"[FILTERED]", "certname"=>"[clientname]", "apiv"=>"v2",
:host=>{"name"=>"[clientname]", "certname"=>"[clientname]"}}
2015-08-12 09:55:00 [I] Import facts for '[clientname]' completed. Added: 0, Updated: 5, Deleted 0 facts
2015-08-12 09:55:01 [I] Completed 201 Created in 365ms (Views: 2.2ms | ActiveRecord: 0.0ms)
2015-08-12 09:55:01 [I]

Started GET "/node/[clientname]?format=yml" for 10.102.1.61 at 2015-08-12 09:55:01 +1200
2015-08-12 09:55:01 [I] Processing by HostsController#externalNodes as YML
2015-08-12 09:55:01 [I]   Parameters: {"name"=>"[clientname]"}
2015-08-12 09:55:01 [I]   Rendered text template (0.0ms)
2015-08-12 09:55:01 [I] Completed 200 OK in 388ms (Views: 0.8ms | ActiveRecord: 10.4ms)
2015-08-12 09:55:02 [I]

#6 - 09/01/2015 07:20 AM - Jeff Sault

This may or may not be related to the original issue but it looks like performance has dropped significantly somewhere between foreman 1.6 and 1.8.1. We are seeing page render times of over 3 MINUTES when trying to edit hosts with a large number of class parameters (~400), even only with a handful of hostgroups

```
2015-09-01 11:13:57 [I]    Rendered puppetclasses/_class_parameters.html.erb (181876.2ms)
2015-09-01 11:13:57 [I]    Rendered puppetclasses/_classes_parameters.html.erb (182157.2ms)
2015-09-01 11:13:57 [I]    Rendered common_parameters/_inherited_parameters.html.erb (1.9ms)
2015-09-01 11:14:00 [I]    Rendered common_parameters/_puppetclass_parameter.html.erb (2908.9ms)
2015-09-01 11:14:00 [I]    Rendered common_parameters/_puppetclasses_parameters.html.erb (2921.3ms)
2015-09-01 11:14:00 [I]    Rendered common_parameters/_parameter.html.erb (16.7ms)
2015-09-01 11:14:00 [I]    Rendered common_parameters/_parameters.html.erb (151.3ms)
2015-09-01 11:14:00 [I]    Rendered hosts/_form.html.erb (185953.7ms)
2015-09-01 11:14:00 [I]    Rendered hosts/edit.html.erb within layouts/application (186180.6ms)
2015-09-01 11:14:00 [I]    Rendered home/_user_dropdown.html.erb (12.2ms)
2015-09-01 11:14:00 [I] Read fragment views/tabs_and_title_records-3 (0.1ms)
2015-09-01 11:14:00 [I]    Rendered home/_org_switcher.html.erb (0.9ms)
2015-09-01 11:14:00 [I]    Rendered home/_submenu.html.erb (9.2ms)
2015-09-01 11:14:00 [I]    Rendered home/_submenu.html.erb (9.6ms)
2015-09-01 11:14:00 [I]    Rendered home/_submenu.html.erb (6.7ms)
2015-09-01 11:14:00 [I]    Rendered home/_submenu.html.erb (8.0ms)
2015-09-01 11:14:00 [I]    Rendered home/_submenu.html.erb (7.4ms)
2015-09-01 11:14:00 [I] Write fragment views/tabs_and_title_records-3 (2.7ms)
2015-09-01 11:14:00 [I]    Rendered home/_topbar.html.erb (73.6ms)
2015-09-01 11:14:00 [I]    Rendered layouts/base.html.erb (79.6ms)
2015-09-01 11:14:00 [I] Completed 200 OK in 186603ms (Views: 180047.8ms | ActiveRecord: 6490.8ms)
```

Enabling debug shows an **insane** number of SQL queries. In my test the debug log for a single page render was ~65,000 lines long. Most of the lines were similar to this..

```
2015-09-01 11:05:58 [D]   CACHE (0.0ms)  SELECT "lookup_values"."id" AS t0_r0, "lookup_values"."match" AS t0_r
1, "lookup_values"."value" AS t0_r2, "lookup_values"."lookup_key_id" AS t0_r3, "lookup_values"."created_at" AS
 t0_r4, "lookup_values"."updated_at" AS t0_r5, "lookup_values"."use_puppet_default" AS t0_r6, "lookup_keys"."i
d" AS t1_r0, "lookup_keys"."key" AS t1_r1, "lookup_keys"."created_at" AS t1_r2, "lookup_keys"."updated_at" AS
t1_r3, "lookup_keys"."puppetclass_id" AS t1_r4, "lookup_keys"."default_value" AS t1_r5, "lookup_keys"."path" A
S t1_r6, "lookup_keys"."description" AS t1_r7, "lookup_keys"."validator_type" AS t1_r8, "lookup_keys"."validat
or_rule" AS t1_r9, "lookup_keys"."is_param" AS t1_r10, "lookup_keys"."key_type" AS t1_r11, "lookup_keys"."over
ride" AS t1_r12, "lookup_keys"."required" AS t1_r13, "lookup_keys"."lookup_values_count" AS t1_r14, "lookup_ke
ys"."merge_overrides" AS t1_r15, "lookup_keys"."avoid_duplicates" AS t1_r16, "lookup_keys"."use_puppet_default
" AS t1_r17 FROM "lookup_values" LEFT OUTER JOIN "lookup_keys" ON "lookup_keys"."id" = "lookup_values"."lookup
_key_id" WHERE "lookup_values"."match" IN ('fqdn=mspi-02-srv02.mspu.hq.k.grp', 'hostgroup=SDP', 'environment=M
L28', 'all_environments=true', 'default_parameters_environment=ML28') AND "lookup_values"."lookup_key_id" IN (
SELECT "lookup_keys"."id" FROM "lookup_keys" INNER JOIN "environment_classes" ON "environment_classes"."lookup
_key_id" = "lookup_keys"."id" WHERE "lookup_keys"."override" = 't' AND "environment_classes"."puppetclass_id"
IN (34, 106, 107, 84, 118, 119, 126, 117, 104, 95, 40, 102, 98, 161, 108, 157, 93, 100, 105, 109, 92, 97, 103,
 115, 127, 101, 110, 124, 113, 87, 114) AND "environment_classes"."environment_id" = 3 ORDER BY lookup_keys.ke
y) AND "lookup_values"."lookup_key_id" = 677 AND "lookup_values"."use_puppet_default" = 'f'
```

This is making foreman pretty much unusable for us.

#7 - 09/02/2015 05:52 AM - Tom Caspy

- Assignee set to Tom Caspy

#8 - 09/02/2015 05:57 AM - Dominic Cleal

- Tracker changed from Support to Bug

- Subject changed from Performance issue to Performance issue editing host with many parameters

- Category set to Performance

- Status changed from New to Ready For Testing

- Pull request https://github.com/theforeman/foreman/pull/2664 added

#9 - 09/02/2015 07:10 AM - Tom Caspy

- Related to Tracker #11657: Performance refactoring for HostsController added

#10 - 09/07/2015 12:01 PM - Tom Caspy

- Status changed from Ready For Testing to Closed

- % Done changed from 0 to 100

Applied in changeset [55ee550c02b59e2677600761142de483d2adbf9a](#).

#11 - 09/08/2015 02:55 AM - Dominic Cleal

- translation missing: en.field_release set to 63

Files

debug.log	1.8 MB	09/25/2013	Espen Fjellvær Olsen