Foreman - Bug #28957

Foreman 1.24.2 - very slow hostgroup view and edit for non admin user

02/07/2020 10:38 AM - Christian Fuchs

Status:	Closed		
Priority:	Normal		
Assignee:	Shira Maximov		
Category:	Organizations and Locations		
Target version:			
Difficulty:		**Fixed in Releases:**	2.1.0
Triaged:	No	**Found in Releases:**	
Bugzilla link:		**Red Hat JIRA:**	
Pull request:	https://github.com/theforeman/foreman/pull/7451		

Description

Hello everybody,
in foreman 1.24.2 opening the page for the hostgroup overview or editing hostgroups for non admin user is very slow. Unfortunately I can't say if the problem came with the update to version 1.24 or if it already existed before.

My test setup contains about 60 servers, 114 host groups, 5 Environment, 136 puppet classes with total of 2594 smart class parameters (but not all are enabled for overwriting). We're using Foreman as ENC for the puppetserver.

Test as Admin
In the first test i opend the page for the hostgroup overview as admin user. With debug log activated this results in ~ 115 SQL queries. The performance is quiet well (debug out in the attachment: foreman_hostgroup_view_admin.log). Opening the page for editing a hostgroup took some more time. It results in approximately 1200 sql queries. Much more than expected, but the performance was still ok (but noticeably slower) (debug out in the attachment: foreman_hostgroup_edit_admin.log).

Test as Non Admin
For the second test, i created a local testuser with the default role "Viewer". Furthermore i assigned a role to the testuser, which gave him the possibility to edit all hostgroups. After that i signed into foreman with this user and open the page for the hostgroup overview. This request now took much longer and results in ~ 5000 SQL queries :face_with_monocle: …to show 50 hostgroups, thats quite a lot (debug out in the attachment: foreman_hostgroup_view_testuser.log).
Opening the page for editing a hostgroup took much longer to open. It results in ~ 11000 SQL queries :astonished: (debug out in the attachment: foreman_hostgroup_edit_testuser.log).

best regards

Associated revisions

Revision 5b1244d8 - 03/05/2020 02:54 PM - Shira Maximov

Fixes #28957 - reduce the amount of taxonomies queries

History

#1 - 02/07/2020 10:49 AM - Christian Fuchs

This Ticket relates to https://community.theforeman.org/t/foreman-1-24-2-very-slow-hostgroup-view-and-edit-for-non-admin-user/17222

#2 - 02/07/2020 02:09 PM - Christian Fuchs

tbrisker (source https://community.theforeman.org/t/foreman-1-24-2-very-slow-hostgroup-view-and-edit-for-non-admin-user/17222/2)

```
Thank you for bringing this up!
The reason there are many more sql queries for non-admin user is that we need to do check for authorization fo
r all resources for the user - on the index page, for calculating the host counts, and on the edit page, for a
ll of the different attributes on the form.
Looking at the logs, the SQL queries may be very many, but nearly all of them conclude in <1ms, meaning that t
he issue is not in inefficient queries but rather in the shear number of them - 11k queries would mean around
10 seconds for the page to load - is this consistent with what you are seeing?
We did have some improvements in the authorization speed that will land in 2.0 but i can't tell for sure if it
 will fix this issue for you.
```

You can also try adding config.active_record.verbose_query_logs = Foreman::Logging.logger('sql') to /usr/share/foreman/config/production.rb which should also add source lines for each sql query so we can see where it is triggered from.

To make sure this thread doesn't get lost in the history, can you please also open a bug report on our bug tracker?

#3 - 02/07/2020 02:21 PM - Christian Fuchs

I added "config.active_record.verbose_query_logs = Foreman::Logging.logger('sql') to /usr/share/foreman/config/production.rb" and tried again. The results can be found in the attachment.

#4 - 02/07/2020 02:22 PM - Christian Fuchs

- File foreman_hostgroup_edit_debug_testuser.log.gz added

- File foreman_hostgroup_view_debug_testuser.log.gz added

...adding the missing attachments

#5 - 02/09/2020 09:18 AM - Tomer Brisker

- Category set to Organizations and Locations

Thanks for the detailed logs and bug report!
Looks like the main hotspot is around https://github.com/theforeman/foreman/blob/1.24.2/app/models/user.rb#L485-L490.

Stats for edit (not sure why, but the line numbers for user.rb seem to be off by a bit):

```
app/models/user.rb:498 => 939
app/models/user.rb:496 => 632
app/models/concerns/taxonomix.rb:86 => 308
app/models/taxonomy.rb:84 => 308
app/models/concerns/taxonomix.rb:101 => 154
app/helpers/hostgroups_helper.rb:7 => 50
app/models/hostgroup.rb:238 => 50
app/models/concerns/taxonomix.rb:61 => 30
app/models/host/base.rb:53 => 8
app/models/role.rb:123 => 5
app/services/authorizer.rb:48 => 4
app/models/host/base.rb:54 => 3
app/models/user.rb:407 => 3
app/models/user.rb:185 => 3
app/models/user.rb:181 => 3
app/controllers/concerns/foreman/controller/authentication.rb:10 => 3
app/services/authorizer_cache.rb:12 => 2
app/controllers/concerns/application_shared.rb:56 => 2
app/helpers/layout_helper.rb:18 => 1
app/helpers/layout_helper.rb:24 => 1
app/helpers/layout_helper.rb:50 => 1
app/services/authorizer.rb:18 => 1
app/helpers/pagination_helper.rb:3 => 1
app/services/host_counter.rb:39 => 1
app/views/hostgroups/index.html.erb:15 => 1
app/controllers/application_controller.rb:31 => 1
```

stats for edit:

```
app/models/user.rb:498 => 4005
app/models/user.rb:496 => 2680
app/models/taxonomy.rb:84 => 1316
app/models/concerns/taxonomix.rb:86 => 1308
app/models/concerns/taxonomix.rb:101 => 658
app/models/hostgroup.rb:152 => 232
app/models/hostgroup.rb:151 => 232
app/models/concerns/nested_ancestry_common.rb:65 => 136
app/models/concerns/nested_ancestry_common.rb:77 => 136
app/models/host/base.rb:53 => 96
app/models/concerns/taxonomix.rb:61 => 92
app/services/authorizer.rb:48 => 62
app/helpers/lookup_keys_helper.rb:47 => 48
app/helpers/application_helper.rb:350 => 48
app/models/host/base.rb:54 => 36
app/models/concerns/host_common.rb:180 => 28
app/models/hostgroup.rb:138 => 22
```

```
app/models/hostgroup.rb:137 => 22
app/models/hostgroup.rb:135 => 22
app/models/concerns/host_common.rb:184 => 20
app/models/hostgroup.rb:284 => 12
app/models/concerns/host_common.rb:193 => 12
app/helpers/form_helper.rb:108 => 10
app/models/concerns/host_common.rb:197 => 10
app/helpers/application_helper.rb:461 => 10
app/models/role.rb:123 => 9
app/models/hostgroup.rb:146 => 8
app/models/hostgroup.rb:145 => 8
app/models/concerns/taxonomix.rb:114 => 8
app/views/config_groups/_config_groups_selection.html.erb:28 => 6
app/models/user.rb:407 => 5
app/models/user.rb:185 => 5
app/models/user.rb:181 => 5
app/controllers/concerns/foreman/controller/authentication.rb:10 => 5
app/helpers/form_helper.rb:88 => 4
app/services/association_authorizer.rb:19 => 4
app/models/concerns/taxonomix.rb:232 => 4
app/models/hostgroup.rb:165 => 4
app/models/concerns/host_common.rb:238 => 4
app/models/concerns/nested_ancestry_common.rb:25 => 4
app/helpers/shared_smart_proxies_helper.rb:37 => 4
app/models/concerns/taxonomix.rb:87 => 4
app/controllers/concerns/application_shared.rb:56 => 4
app/helpers/layout_helper.rb:18 => 2
app/helpers/layout_helper.rb:24 => 2
app/helpers/layout_helper.rb:50 => 2
app/models/concerns/taxonomix.rb:179 => 2
app/models/concerns/taxonomix.rb:175 => 2
app/helpers/common_parameters_helper.rb:80 => 2
app/helpers/common_parameters_helper.rb:79 => 2
app/services/authorizer.rb:88 => 2
app/services/authorizer.rb:86 => 2
app/models/hostgroup.rb:168 => 2
app/views/hostgroups/_form.html.erb:85 => 2
app/models/lookup_keys/lookup_key.rb:128 => 2
app/views/puppetclasses/_classes_parameters.html.erb:12 => 2
app/helpers/puppet_related_helper.rb:67 => 2
app/helpers/puppet_related_helper.rb:66 => 2
app/helpers/puppet_related_helper.rb:65 => 2
app/views/common/os_selection/_operatingsystem.html.erb:10 => 2
app/views/common/os_selection/_operatingsystem.html.erb:6 => 2
app/views/common/os_selection/_architecture.html.erb:9 => 2
app/views/hostgroups/_form.html.erb:62 => 2
app/views/hostgroups/_form.html.erb:61 => 2
app/helpers/hosts_helper.rb:332 => 2
app/views/hostgroups/_form.html.erb:55 => 2
app/views/hostgroups/_form.html.erb:54 => 2
app/views/puppetclasses/_class_selection.html.erb:65 => 2
app/views/puppetclasses/_class_selection.html.erb:43 => 2
app/views/puppetclasses/_class_selection.html.erb:42 => 2
app/views/puppetclasses/_class_selection.html.erb:29 => 2
app/views/puppetclasses/_class_selection.html.erb:23 => 2
app/views/config_groups/_config_group.html.erb:24 => 2
app/views/config_groups/_config_group.html.erb:6 => 2
app/views/config_groups/_config_groups_selection.html.erb:9 => 2
app/views/puppetclasses/_class_selection.html.erb:6 => 2
app/helpers/hosts_and_hostgroups_helper.rb:21 => 2
app/helpers/hostgroups_helper.rb:19 => 2
app/helpers/hostgroups_helper.rb:15 => 2
app/helpers/application_helper.rb:356 => 2
app/models/concerns/parameterizable.rb:15 => 2
app/controllers/concerns/find_common.rb:12 => 2
```

Some statistics about your environment could be useful - how many organizations and locations do you have assigned to the user? are there any nested ones?

We'll continue investigating.

#6 - 02/10/2020 08:32 AM - Christian Fuchs

Currently we have configured one location and one (main-)organization with 20 nested organizations. All users are assigened to our (main-)organization.

We only use these nested organizations to give write/edit acces for some group of users to the hostgroup. Perhaps there is another way to realize write/edit acces to hostgroups?

#7 - 02/16/2020 11:43 AM - Tomer Brisker

There can be different ways of defining permissions per hostgroup - you can add a filter to the various permissions, e.g. "hostgroup = development" for hosts or "name = development" for hostgroup permissions.

#8 - 02/18/2020 11:02 AM - Christian Fuchs

Okay, thanks for the information. Unfortunately this permission concept does not help us.
I also tested on our foreman developement environment with only one organization, the behavior was similar. The reason is probably the high number (600+) of nested hostgroups (in total).
Is there any news about the slow hostgroup yet?

#9 - 02/20/2020 04:41 PM - The Foreman Bot

- Status changed from New to Ready For Testing

- Assignee set to Shira Maximov

- Pull request https://github.com/theforeman/foreman/pull/7451 added

#10 - 03/05/2020 02:54 PM - The Foreman Bot

- Fixed in Releases 2.1.0 added

#11 - 03/05/2020 03:01 PM - Shira Maximov

- Status changed from Ready For Testing to Closed

Applied in changeset [5b1244d8f11adb4efeb2039a5a6cce756560d445](#).

Files

foreman_hostgroup_edit_admin.log.gz	21.8 KB	02/07/2020	Christian Fuchs
foreman_hostgroup_edit_testuser.log.gz	144 KB	02/07/2020	Christian Fuchs
foreman_hostgroup_view_admin.log.gz	3.28 KB	02/07/2020	Christian Fuchs
foreman_hostgroup_view_testuser.log.gz	51.7 KB	02/07/2020	Christian Fuchs
foreman_hostgroup_view_debug_testuser.log.gz	53.4 KB	02/07/2020	Christian Fuchs
foreman_hostgroup_edit_debug_testuser.log.gz	252 KB	02/07/2020	Christian Fuchs