Foreman - Bug #9820

API: Hostgroup Clone does not clone parameters

03/18/2015 08:46 PM - Tommy McNeely

Status: Closed
Priority: Normal
Assignee: Tommy McNeely
Category: Host groups
Target version: 1.10.0
Difficulty: medium

Description

While working on Issue #9815, I found that the way that the API does a "Hostgroup clone" operation, does not actually clone the parameters. Rather, it "moves" them over to the new Hostgroup. (changes the reference_id)

This leads to two hostgroups using the same backend parameter in the database, and the possibility of serious confusion and chaos. When I changed the one line of code to actually duplicate the parameters for #9815, it caused the API test to fail, because of the reference_id in the "new" parameters.

The test is currently succeeding, but should be failing because the parameters were not properly cloned.

As the fix for #9815 breaks this, this becomes a blocker.

This will require model changes.

Here is some debug output demonstrating the information above:

```
[vagrant@devforeman db]$ git checkout develop
error: You have local changes to 'app/models/hostgroup.rb'; cannot switch branches.
[vagrant@devforeman db]$ git checkout -- ..
[vagrant@devforeman db]$ cd ..
[vagrant@devforeman foreman]$ git checkout develop
Switched to branch 'develop'
[vagrant@devforeman foreman]$ rails console
The Apipie cache is turned off. Enable it and run apipie:cache rake task to speed up API calls.
Workaround for RbVmomi may not work as ComputeResource is already loaded: ComputeResource /home/vagrant/foreman/config/initializers/rbvmomi.rb:20: warning: toplevel constant ComputeResource referenced by RbVmomi::VIM::ComputeResource
For some operations a user must be set, try User.current = User.first
Loading development environment (Rails 3.2.21)
irb(main):001:0> User.current = User.first
2015-03-18 18:28:57 [D] User Load (0.2ms) SELECT "users".* FROM "users" ORDER BY firstname LIMIT 1

** Hirb Warning: Too many fields for the current width. Configure your width and/or fields to avoid this error. Defaulting to a vertical table. **
************************************************************************************ 1. row *****************************************************
id: 2
    login: foreman_api_admin
    firstname: API
    lastname: Admin
    mail: 
    admin: true
    last_login_on: 
    auth_source_id: 2
    created_at: 2014-11-25 10:00:08 UTC
    updated_at: 2014-11-25 10:00:08 UTC
    password_hash: 
    password_salt: 
```
locale:    
avatar_hash: 
default_organization_id: 
default_location_id: 
   lower_login: foreman_api_admin 
mail_enabled: true 
timezone: 
1 row in set

irb(main):002> hg=Hostgroup.find(1)
2015-03-18 18:29:14 [D]   Hostgroup Load (0.3ms)  SELECT "hostgroups".* FROM "hostgroups" WHERE "hostgroups"."id" = ? ORDER BY hostgroups.title LIMIT 1  [["id", 1]]
2015-03-18 18:29:14 [D]   Operatingsystem Load (0.1ms)  SELECT "operatingsystems".* FROM "operatingsystems" WHERE "operatingsystems"."id" = 1 ORDER BY title LIMIT 1

** Hirb Warning: Too many fields for the current width. Configure your width and/or fields to avoid this error. Defaulting to a vertical table. **
***************************
1. row  ****************************
iid:  1
name:  Testing
created_at:  2014-11-25 10:05:23 UTC
updated_at:  2014-11-25 10:05:23 UTC
environment_id:  1
operatingsystem_id:  1
architecture_id:  1
medium_id:  1
ptable_id:  7
root_pass:  $6$tfESPO6K$Ku5wTFTUiYwmAPwQxh1IJOr9oFukQIOUAN.DxP6husJ.seki6/lUf3kLIN3jMbJRFr6AKvuT2991tWlGp0N3.
puppet_ca_proxy_id:  
use_image:  
image_file:  
ancestry:  
vm_defaults:  
subnet_id:  
domain_id:  1
puppet_proxy_id:  
title:  Testing
realm_id:  
compute_profile_id:  1
grub_pass:  $6$tfESPO6K$Ku5wTFTUiYwmAPwQxh1IJOr9oFukQIOUAN.DxP6husJ.seki6/lUf3kLIN3jMbJRFr6AKvuT2991tWlGp0N3.

1 row in set

irb(main):003> hg.group_parameters
2015-03-18 18:29:26 [D]   GroupParameter Load (0.2ms)  SELECT "parameters".* FROM "parameters" WHERE "parameters"."type" IN ('GroupParameter') AND "parameters"."reference_id" = 1 ORDER BY "parameters"."id"
2015-03-18 18:29:26 [D]   Taxonomy Load (0.1ms)  SELECT "taxonomies".* FROM "taxonomies" INNER JOIN "taxable_taxonomies" ON "taxonomies"."id" = "taxable_taxonomies"."taxonomy_id" WHERE "taxonomies"."id" = 1

<table>
<thead>
<tr>
<th>id</th>
<th>name</th>
<th>value</th>
<th>ref...</th>
<th>create...</th>
<th>updated_at</th>
<th>type</th>
<th>priority</th>
<th>hidden...</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>TestPa...</td>
<td>MyValue</td>
<td>1</td>
<td>2015-0...</td>
<td>2015-03...</td>
<td>GroupP...</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
1 row in set

1. This is the method that the API Clone controller calls, this indicates its not an API specific problem, but a model problem.

irb(main):004> clone_hg=hg.clone("MyNewClonedGroup")
2015-03-18 18:29:56 [D]   Puppetclass Load (0.1ms)  SELECT "puppetclasses".* FROM "puppetclasses" INNER JOIN "hostgroup_classes" ON "puppetclasses"."id" = "hostgroup_classes"."puppetclass_id" WHERE "hostgroup_classes"."hostgroup_id" = 1 ORDER BY puppetclasses.name
2015-03-18 18:29:56 [D]   Taxonomy Load (0.1ms)  SELECT "taxonomies".* FROM "taxonomies" INNER JOIN "taxable_taxonomies" ON "taxonomies"."id" = "taxable_taxonomies"."taxonomy_id" WHERE "taxonomies"."id" = 1

03/25/2022
**Warning**: Too many fields for the current width. Configure your width and/or fields to avoid this error. Defaulting to a vertical table. **

```
1. row

name: MyNewClonedGroup
```

```
1 row in set
```

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03/25/2022
```
WHERE "taxable_taxonomies"."taxonomy_id" = 1 AND "taxable_taxonomies"."taxable_id" = 4 AND "taxable_taxonomies"."taxable_type" = 'hostgroup' LIMIT 1

2015-03-18 18:30:07 [D] SQL (0.3ms) INSERT INTO "taxable_taxonomies" ("created_at", "taxable_id", "taxable_type", "updated_at") VALUES (?, ?, ?, ?, ?) (["created_at", Thu, 19 Mar 2015 00:30:06 UTC +00:00], ["taxable_id", 4], ["taxable_type", "Hostgroup"], ["taxonomy_id", 1]) (["updated_at", Thu, 19 Mar 2015 00:30:06 UTC +00:00])

2015-03-18 18:30:06 [D] TaxableTaxonomy Exists (0.1ms) SELECT 1 AS one FROM "taxable_taxonomies" WHERE ("taxable_taxonomies"."taxonomy_id" = 2 AND "taxable_taxonomies"."taxable_id" = 4 AND "taxable_taxonomies"."taxable_type" = 'hostgroup') LIMIT 1

2015-03-18 18:30:06 [D] SQL (0.1ms) SELECT "audit_type" FROM "audited_changes" 2015-03-18 18:30:06 [D] Architecture Load (0.3ms) SELECT "architectures".* FROM "architectures" WHERE "architectures"."id" = 1 LIMIT 1

2015-03-18 18:30:06 [D] SQL (0.3ms) UPDATE "architectures" SET "hostgroups_count" = COALESCE("hostgroups_count", 0) + 1 WHERE "architectures"."id" = 1

2015-03-18 18:30:06 [D] Environment Load (0.1ms) SELECT "environments".* FROM "environments" WHERE "environments"."id" = 1 ORDER BY environments.name LIMIT 1

2015-03-18 18:30:06 [D] SQL (0.2ms) UPDATE "environments" SET "hostgroups_count" = COALESCE("hostgroups_count", 0) + 1 WHERE "environments"."id" IN (SELECT "environments"."id" FROM "environments" WHERE "environments"."id" = 1 ORDER BY environments.name)

2015-03-18 18:30:06 [D] SQL (0.1ms) UPDATE "operatingsystems" SET "hostgroups_count" = COALESCE("hostgroups_count", 0) + 1 WHERE "operatingsystems"."id" IN (SELECT "operatingsystems"."id" FROM "operatingsystems" WHERE "operatingsystems"."type" IN ('Redhat') AND "operatingsystems"."id" = 1 ORDER BY title)

2015-03-18 18:30:07 [D] Hostgroup Load (0.2ms) SELECT "hostgroups".* FROM "hostgroups" WHERE "hostgroups"."id" = 4 ORDER BY hostgroups.title LIMIT 1

2015-03-18 18:30:07 [D] (19.1ms) SELECT MAX("audits"."version") AS max_from FROM "audits" WHERE "audits"."auditable_id" = 4 AND "audits"."auditable_type" = 'Hostgroup'

2015-03-18 18:30:07 [D] SQL (8.8ms) INSERT INTO "audits" ("action", "associated_id", "associated_name", "auditable_type", "auditable_id", "auditable_name", "audited_changes", "comment", "created_at",
(ancestry IS NOT NULL) ORDER BY hostgroups.title
2015-03-18 18:30:08 [D] SQL (0.2ms) UPDATE "lookup_values" SET "match" = 'hostgroup=MyNewClonedGroup' WHERE "lookup_values"."match" = 'hostgroup=
2015-03-18 18:30:08 [D] (74.6ms) commit transaction

=> true

irb(main):006:0> clone_hg.group_parameters
+----+-----------+---------+-----------+-----------+------------+-----------+----------+----------+
| id | name      | value   | refere... | create... | updated_at | type      | priority | hidden...
|----+-----------+---------+-----------+-----------+------------+-----------+----------+----------+
| 1  | TestPa... | MyValue | 2015-0... | 2015-03... | GroupP...  | 3         |          |          |
|    | *****     |         |           |           |            |           |          |          |
+----+-----------+---------+-----------+-----------+------------+-----------+----------+----------+

1 row in set

1. NOTICE (above) how the reference_id has changed to "4" but its still parameter_id "1" ... but hg (hostgroup_id=1) is still pointing to parameter_id 1"this is bad" :)

irb(main):009:0> hg.group_parameters
+----+-----------+---------+-----------+-----------+------------+-----------+----------+----------+
| id | name      | value   | refere... | create... | updated_at | type      | priority | hidden...
|----+-----------+---------+-----------+-----------+------------+-----------+----------+----------+
| 1  | TestPa... | MyValue | 2015-0... | 2015-03... | GroupP...  | 3         |          |          |
|    | *****     |         |           |           |            |           |          |          |
+----+-----------+---------+-----------+-----------+------------+-----------+----------+----------+

1 row in set

irb(main):010:0>

This was found originally in 1.7.3 and reproduced in the "develop" branch as of today.

Related issues:
Related to Foreman - Bug #9815: HostGroup Clone doesn't work if the hostgroup... Closed 03/18/2015

History
#1 - 03/18/2015 08:47 PM - Tommy McNeely
- Blocks Bug #9815: HostGroup Clone doesn't work if the hostgroup has parameters added

#2 - 09/18/2015 05:06 AM - Dominic Cleal
- Blocks deleted (Bug #9815: HostGroup Clone doesn't work if the hostgroup has parameters)

#3 - 09/18/2015 05:10 AM - Dominic Cleal
- Status changed from New to Closed
- % Done changed from 0 to 100
- Legacy Backlogs Release (now unused) set to 63

The change in #9815 has fixed this, as it now uses deep_clonable to properly duplicate them.

#4 - 09/18/2015 05:11 AM - Dominic Cleal
- Related to Bug #9815: HostGroup Clone doesn't work if the hostgroup has parameters added

03/25/2022