

## Foreman - Bug #19990

### Failed to update a compute vmware (VMware) instance node.test.domain: undefined method `[]' for nil:NilClass

06/13/2017 05:07 AM - Christian Meißner

|  |                                  |
|--|----------------------------------|
| <b>Status:</b> Closed  |                                  |
| <b>Priority:</b> Normal  |                                  |
| <b>Assignee:</b> Ondřej Pražák   |                                  |
| <b>Category:</b> Compute resources - VMware  |                                  |
| <b>Target version:</b> 1.18.0  |                                  |
| <b>Difficulty:</b>   | <b>Fixed in Releases:</b>        |
| <b>Triaged:</b>  | <b>Found in Releases:</b> 1.16.1 |
| <b>Bugzilla link:</b> 1551014  | <b>Red Hat JIRA:</b>             |
| <b>Pull request:</b> <a href="https://github.com/theforeman/foreman/pull/5577">https://github.com/theforeman/foreman/pull/5577</a> ,<br><a href="https://github.com/theforeman/foreman/pull/5626">https://github.com/theforeman/foreman/pull/5626</a> ,<br><a href="https://github.com/theforeman/foreman/pull/5627">https://github.com/theforeman/foreman/pull/5627</a> |                                  |
| <b>Description</b>   |                                  |
| If I try to update the environment of a machine in a vmware compute instance i get the above error.  |                                  |
| I attached the sanitized debug output of the following command.  |                                  |
| hammer -u user -p pass -d host update --id 127 --environment production  |                                  |
| If I use --environment-id instead of --environment it leads to the same error.   |                                  |
| Other actions for example start and stop of a virtual machine works fine.  |                                  |
| <b>Related issues:</b>   |                                  |
| Copied to Foreman - Bug #23752: VMWare allow save vm w/o size_gb attr (1.16.2)   | <b>Closed</b> <b>05/31/2018</b>  |

#### Associated revisions

##### Revision 1dbb2c5b - 05/31/2018 07:24 AM - Steve Miller

Fixes #19990 - VMWare allow save vm w/o size\_gb attr

#### History

##### #1 - 06/13/2017 10:55 AM - Tomáš Strachota

Hello Christian,  
thank you for reporting the issue. Attached hammer logs show that the error occurs on the server side. May I ask you to attach relevant part of foreman logs too?  
If you try to perform the same action in the UI, does it fail with the same error?

##### #2 - 06/14/2017 01:11 AM - Christian Meißner

- File production.log added

Tomáš Strachota wrote:

Hello Christian,  
thank you for reporting the issue. Attached hammer logs show that the error occurs on the server side. May I ask you to attach relevant part of foreman logs too?

Hi Tomas attached you can find the cut off of our production.log.

If you try to perform the same action in the UI, does it fail with the same error?

No, in the UI it works pretty good.

**#3 - 06/14/2017 05:18 AM - Tomáš Strachota**

- *Project changed from Hammer CLI to Foreman*
- *Category changed from Hosts to Compute resources - VMware*

I'm switching the component to VMWare as this is a server side API issue. The compute node orchestration fails on update via API because it misses some compute attribute data. UI works fine because it loads the compute attributes into the form when the page is rendered and then when user hits update the request is sent with required parameters. In API the only workaround is to send the fill set of current compute attributes with the update request.

**#4 - 06/14/2017 06:00 AM - Tomáš Strachota**

- *Target version set to 115*

**#5 - 06/14/2017 06:28 AM - Tomáš Strachota**

Most likely introduced with <https://github.com/theforeman/foreman/pull/4146/> oVirt is probably affected too.

**#6 - 06/15/2017 04:56 AM - Marek Hulán**

- *translation missing: en.field\_release set to 266*

I suppose this is a candidate for 1.15.2 then. Please reset the Release if you disagree.

**#7 - 06/15/2017 03:03 PM - Steven Miller**

- *File production.log added*
- *File guiheader.txt added*

I am seeing the same bug on this provider, even when provisioning a new system from the GUI. I've attached my production logs, along with the final form data that is submitted when attempting to create a host. On the VMware side the actual VM is created, but then when it hits the "undefined method" error it rolls back the VMware machine (but not the record within foreman)

**#8 - 07/06/2017 08:34 AM - Daniel Lobato Garcia**

- *translation missing: en.field\_release changed from 266 to 276*

**#9 - 08/08/2017 05:12 AM - Daniel Lobato Garcia**

- *translation missing: en.field\_release changed from 276 to 287*

**#10 - 09/11/2017 01:28 PM - Marek Hulán**

Tomas, why do you think it was introduced by the linked PR? According to the trace, it seems that compute\_attrs for a given VM are nil. Based on incoming parameters, they are part of API request. I don't see how attributes can become nil so far

```
Parameters: {"host"=>{"environment_id"=>20, "compute_attributes"=>{"volumes_attributes"=>{}}, "host_parameters_attributes"=>{}}, "interfaces_attributes"=>{}}, "apiv"=>"v2", "id"=>"119"}
```

**#11 - 09/13/2017 08:35 AM - Tomáš Strachota**

Marek, the issue has actually been there even before the commit I mentioned, but this change eventually exposed the buggy code to users: <https://github.com/theforeman/foreman/pull/4146/files#diff-4443c0de1e4e867a30d3c878b9cb64e9R24>

Before that it wasn't possible to update attribute of existing VMs on vmWare. From the traceback, the process fails on: [https://github.com/theforeman/foreman/blob/c952c782adac290fd5a1145090380424665f5fe1/app/models/compute\\_resources/foreman/model/vmware.rb#L434](https://github.com/theforeman/foreman/blob/c952c782adac290fd5a1145090380424665f5fe1/app/models/compute_resources/foreman/model/vmware.rb#L434)

(please note that the bug was reported against the foreman 1.15 and line numbers have been shifted since then)

So the issue isn't caused by compute\_attributes being nil, but by volume attributes that can't be found. The code isn't prepared for partial updates and always requires the full set of compute attributes (including volumes and nics). The reason it works in the UI is that the host edit form pre-loads current compute attributes and therefore the attributes are complete.

**#12 - 09/13/2017 09:08 AM - Marek Hulán**

- *translation missing: en.field\_release deleted (287)*

Now that makes more sense, thanks for clarification. I suppose this is API RFE then, removing from 1.15.4

### #13 - 10/18/2017 05:30 PM - Bhanu Prasad Ganguru

Hi, we recently updated foreman to 1.15.6  
And still seeing the same issue  
is there a solution for this issue?

Bhanu

### #15 - 11/21/2017 07:29 AM - Adam Winberg

Im not using hammer, but the workaround I use when using the API is to first do a GET to get the nodes 'vm\_compute\_attributes' and then attach that result to my PUT operation on the node.

In perl (just to get the idea):

```
my $client = REST::Client->new();

$client->setHost($foreman_host);

# Get compute attributes, bug workaround:
# http://projects.theforeman.org/issues/19990
$client->GET("/api/hosts/$fqdn/vm_compute_attributes", $headers);

my $compute_attrs = decode_json($client->responseContent());
# Set the attributes for a new host
my %json_data = (
  host => {
    comment => "Updating the comment attribute",
    compute_attributes => $compute_attrs,
  }
);

# Translate the perl hash in json notation
my $data = encode_json(\%json_data);

# Update parameter
$client->PUT("/api/hosts/$fqdn", ($data, $headers));
```

I'm not using hammer though...

### #16 - 01/05/2018 03:16 PM - Steven Miller

I recently upgraded my environment to 1.16.0 and still found the issue. I was able to eliminate the issue by commenting out the following line in line 457 of the app/models/compute\_resources/foreman/model/vmware.rb (the line in the 1.16.0 codebase). I may submit a pull request at some point, but want to do a little more research to make sure this doesn't break anything unexpected. For us this fixes compute creating through the UI and API.

```
450     def save_vm(uuid, attr)
451       vm = find_vm_by_uuid(uuid)
452       vm.attributes.merge!(attr.deep_symbolize_keys)
453       #volumes are not part of vm.attributes so we have to set them seperately if needed
454       if attr.has_key?(:volumes_attributes)
455         vm.volumes.each do |vm_volume|
456           volume_attrs = attr[:volumes_attributes].values.detect {|vol| vol[:id] == vm_volume.id}
457           #vm_volume.size_gb = volume_attrs[:size_gb]
458         end
459       end
460       vm.save
461     end
```

### #17 - 01/05/2018 03:18 PM - Steven Miller

Forgot to mention that it appears the UI is passing the parameter "sizeGb" to specify volume size. It appear the older, non-React UI code still uses that parameter, but the newer view code does not...maybe...

### #18 - 01/19/2018 11:17 AM - Marek Hulán

- Status changed from New to Need more information

- Priority changed from High to Normal

The patch would disable the volume size adjusting. What I did not fully understand was the last comment, do you say that you are now able to reproduce this bug even using UI? The new react implementation work the same way.

**#19 - 01/19/2018 02:28 PM - Steven Miller**

- File `foremanpost-smiller-20180119.txt` added

The patch I submitted is the only way we could foreman to work. The hard drive size is still set correctly, even with this line completely commented out. I have a more sophisticated patch that will check if `size_gb` is set, and if it is not, then just skip the assignment (line 457 in the example).

In our 1.16 install, the "size\_gb" parameter is never passed through the web interface, and seems to break at this line. I've attached "foremanpost-smiller-20180119.txt", which contains all the POSTed variables from a web browser doing a VMware deployment (on a 1.16 install). I see that both "size" and "SizeGB" are set within the `host[compute_attributes][scsi_controllers]` attribute. I don't see a `size_gb` set on the UI end at least.

**#20 - 04/05/2018 05:00 PM - Dmitry Okun**

Steven Miller wrote:

The patch I submitted is the only way we could foreman to work. The hard drive size is still set correctly, even with this line completely commented out. I have a more sophisticated patch that will check if `size_gb` is set, and if it is not, then just skip the assignment (line 457 in the example).

In our 1.16 install, the "size\_gb" parameter is never passed through the web interface, and seems to break at this line. I've attached "foremanpost-smiller-20180119.txt", which contains all the POSTed variables from a web browser doing a VMware deployment (on a 1.16 install). I see that both "size" and "SizeGB" are set within the `host[compute_attributes][scsi_controllers]` attribute. I don't see a `size_gb` set on the UI end at least.

I was also hitting the same error when attempting to provision a VMware VM. Moreover, my VMs were created and right away deleted via foreman. By commenting these lines out, I was able to create VMs via Foreman

**#21 - 05/17/2018 12:59 PM - Steven Miller**

- Pull request <https://github.com/foreman/foreman/pull/5577> added

Created a pull request for a slightly more sophisticated version of my fix. If `volume_attrs` is present as a has it will attempt to set `size_gb`, otherwise it will skip the assignment. Internal testing seems to work for us (both UI and API usage)

**#22 - 05/21/2018 05:42 PM - The Foreman Bot**

- Status changed from *Need more information* to *Ready For Testing*

**#23 - 05/30/2018 02:35 PM - Tomer Brisker**

- Bugzilla link set to 1551014

**#24 - 05/31/2018 07:35 AM - The Foreman Bot**

- Assignee set to Ondřej Pražák

- Pull request <https://github.com/foreman/foreman/pull/5626> added

**#25 - 05/31/2018 07:40 AM - The Foreman Bot**

- Pull request <https://github.com/foreman/foreman/pull/5627> added

**#26 - 05/31/2018 07:44 AM - Daniel Lobato Garcia**

- translation missing: `en.field_release` set to 330

**#27 - 05/31/2018 07:47 AM - Daniel Lobato Garcia**

- Copied to Bug #23752: *VMWare allow save vm w/o size\_gb attr (1.16.2)* added

**#28 - 05/31/2018 08:01 AM - Anonymous**

- Status changed from *Ready For Testing* to *Closed*

- % Done changed from 0 to 100

Applied in changeset [1d5b2c5b319dbab023f3aaa98019d7b9cd0ee8f6](#).

**Files**

|                      |         |            |                   |
|----------------------|---------|------------|-------------------|
| hammer_cli_debug.log | 6.62 KB | 06/13/2017 | Christian Meißner |
| production.log       | 23.3 KB | 06/14/2017 | Christian Meißner |

|                                  |         |            |               |
|----------------------------------|---------|------------|---------------|
| production.log                   | 472 KB  | 06/15/2017 | Steven Miller |
| guiheader.txt                    | 3.78 KB | 06/15/2017 | Steven Miller |
| foremanpost-smiller-20180119.txt | 2.83 KB | 01/19/2018 | Steven Miller |