

## Foreman - Bug #14179

### Interface/NIC compute attributes in API host creation overwritten with compute profile attributes

03/14/2016 06:48 AM - Dominic Cleal

<b>Status:</b>	Closed	
<b>Priority:</b>	Normal	
<b>Assignee:</b>	Dominic Cleal	
<b>Category:</b>	Host creation	
<b>Target version:</b>	1.11.0	
<b>Difficulty:</b>		<b>Fixed in Releases:</b>
<b>Triaged:</b>		<b>Found in Releases:</b>
<b>Bugzilla link:</b>		<b>Red Hat JIRA:</b>
<b>Pull request:</b>	<a href="https://github.com/theforeman/foreman/pull/3316">https://github.com/theforeman/foreman/pull/3316</a>	

#### Description

Since [#6342](#), compute attributes specified *inside* a NIC/interface via the host create API are overwritten with compute attributes from associated compute profiles. This has the same symptoms as ticket [#11124](#), which fixed it before [#6342](#) reintroduced it.

POST to `/api/v2/hosts` with the following parameters:

```
{
  "host": {
    "name": "niccrattrs",
    "hostgroup_name": "libvirt",
    "compute_resource_name": "localhost",
    "compute_attributes": {
      "cpus": 3
    },
    "interfaces_attributes": {
      "0": {
        "primary": "true",
        "compute_attributes": {
          "model": "e1000"
        }
      }
    }
  }
}
```

... results in a VM with the NIC model set in the compute profile assigned to the host group, rather than e1000 as per the NIC compute attributes.

In `HostsController#create`, the host compute attrs after `ComputeAttributeMerge` contains the `nic_attributes` from the profile:

```
[1] pry(#<Api::V2::HostsController>)> @host.compute_attributes
=> {"cpus"=>3,
  "memory"=>"1073741824",
  "nics_attributes"=>{"0"=>{"type"=>"network", "network"=>"default", "model"=>"virtio"}},
  "volumes_attributes"=>{"0"=>{"pool_name"=>"default", "capacity"=>"10G", "allocation"=>"0G", "format_type"=>"qcow2"}}}
```

Prior to [#6342](#), these compute attributes wouldn't have been filled in - it changed the API behaviour to merge compute profile attributes into `host.compute_attributes`.

But the NIC's `compute_attributes` does contain the merged compute attributes from the compute profile plus the user's parameters, due to `InterfaceMerge` and [#11124](#):

```
[2] pry(#<Api::V2::HostsController>)> @host.interfaces
=> [#<Nic::Managed id: nil, mac: nil, ip: nil, type: "Nic::Managed", name: "test13982a", host_id: nil, subnet_id: nil, domain_id: nil, attrs: {}, created_at: nil, updated_at: nil, provider: nil, u
```

```
sername: nil, password: nil, virtual: false, link: true, identifier: nil, tag: "", attached_to: ""
, managed: true, mode: "balance-rr", attached_devices: "", bond_options: "", primary: true, provis
ion: true, compute_attributes: {"type"=>"network", "network"=>"default", "model"=>"e1000", "from_p
rofile"=>"libvirt"}>]
```

Later in `Orchestration::Compute#add_interfaces_to_compute_attrs`, the per-NIC compute attributes should be merged back into the host compute attributes, but the step is skipped (the return unless in this method) as the host compute attributes already contains `nics_attributes`:

```
[1] pry(<#Host::Managed>)> compute_attributes[attrs_name]
=> {"0"=>{"type"=>"network", "network"=>"default", "model"=>"virtio"}}
[2] pry(<#Host::Managed>)> compute_attributes
=> {"cpus"=>3,
    "memory"=>"1073741824",
    "nics_attributes"=>{"0"=>{"type"=>"network", "network"=>"default", "model"=>"virtio"}},
    "volumes_attributes"=>{"0"=>{"pool_name"=>"default", "capacity"=>"10G", "allocation"=>"0G", "form
at_type"=>"qcow2"}}}
```

#### Related issues:

Related to Foreman - Bug #6342: Compute profile should be used when empty vol...	Closed	06/23/2014
Related to Foreman - Bug #11124: Interface compute attributes not merged from...	Closed	07/15/2015

#### Associated revisions

##### Revision 860cbb0a - 03/14/2016 02:53 PM - Dominic Cleal

fixes #14179 - don't merge NIC compute attrs in `ComputeProfileMerge`

When creating a host over the API and specifying interface compute attributes, the interface attributes were overwritten from the compute profile. Example request:

```
{"host":{"interfaces_attributes":{"0":{"primary":"true","compute_attributes":{"model":"e1000"}}}, ...}}
```

`ComputeProfileMerge` stores `:interfaces_attributes` (name varies based on the CR type) from the profile in `host.compute_attributes`, while `InterfaceMerge` stores attributes in each interface. When `Orchestration::Compute#add_interfaces_to_compute_attrs` runs to merge per-interface attributes into `host.compute_attributes`, the step was skipped as `host.compute_attributes[:interfaces_attributes]` already existed from `ComputeProfileMerge`.

This change excludes interface attributes from being merged by `ComputeProfileMerge`, so `InterfaceMerge` is responsible for copying them into the interface.

##### Revision ff222ae6 - 03/22/2016 01:15 PM - Dominic Cleal

fixes #14179 - don't merge NIC compute attrs in `ComputeProfileMerge`

When creating a host over the API and specifying interface compute attributes, the interface attributes were overwritten from the compute profile. Example request:

```
{"host":{"interfaces_attributes":{"0":{"primary":"true","compute_attributes":{"model":"e1000"}}}, ...}}
```

`ComputeProfileMerge` stores `:interfaces_attributes` (name varies based on the CR type) from the profile in `host.compute_attributes`, while `InterfaceMerge` stores attributes in each interface. When `Orchestration::Compute#add_interfaces_to_compute_attrs` runs to merge per-interface attributes into `host.compute_attributes`, the step was skipped as `host.compute_attributes[:interfaces_attributes]` already existed from `ComputeProfileMerge`.

This change excludes interface attributes from being merged by `ComputeProfileMerge`, so `InterfaceMerge` is responsible for copying them into the interface.

(cherry picked from commit 860cbb0a7c86f7669aad75c7011dbb2030aaede0)

#### History

##### #1 - 03/14/2016 06:48 AM - Dominic Cleal

- Related to Bug #6342: Compute profile should be used when empty volumes and interfaces passed in compute\_attributes added

**#2 - 03/14/2016 06:48 AM - Dominic Cleal**

- Related to Bug #11124: Interface compute attributes not merged from API request over compute profile added

**#3 - 03/14/2016 07:00 AM - Dominic Cleal**

- Status changed from New to Assigned

- Assignee set to Dominic Cleal

**#4 - 03/14/2016 08:08 AM - The Foreman Bot**

- Status changed from Assigned to Ready For Testing

- Pull request <https://github.com/theforeman/foreman/pull/3316> added

**#5 - 03/14/2016 03:02 PM - Dominic Cleal**

- Status changed from Ready For Testing to Closed

- % Done changed from 0 to 100

Applied in changeset [860cbb0a7c86f7669aad75c7011dbb2030aaede0](#).