Open Infrastructure - Task #6875

Task # 6869 (Rejected): Challenge OpenStack and OpenNebula with ucloud

Create ucloud-scheduler

06/24/2019 02:18 PM - Nico Schottelius

Status:	Closed		**Start date:**	06/24/2019
Priority:	Normal		**Due date:**	
Assignee:	Ahmed Bilal		**% Done:**	50%
Category:			**Estimated time:**	0.00 hour
Target version:				
PM Check date:				

Description

Reads / watches keys below /v1/vm (later probably as well /v1/networks?)

The JSON of the VM should contain a "status" field. On submit, the status should be "REQUESTED_NEW" (-> need to update ucloud-api).

Creating VM

The scheduler watches for changes on the key prefix. If the status is REQUEST_NEW, find a suitable host for deploying the VM to. Update the status field to "SCHEDULED_DEPLOY". Also add a new field "host" that contains the hostname of the host the VM should be running on.

Deleting VM

The scheduler watches for changes on the key prefix. If the status is REQUEST_DELETE, do nothing -> ucloud-vm needs to react and will update the field.

APIs

ucloud scheduler only reacts on etcd changes and does not have a direct accessible API.

History

#1 - 06/24/2019 02:22 PM - Ahmed Bilal

- Status changed from New to Seen

#2 - 06/24/2019 02:27 PM - Nico Schottelius

To be solved / undefined at the moment:

- Which component writes information about hosts? Do we have a key prefix /v1/host/<id>?
  - If yes, do we need ucloud-host?
- Or do we use (existing) consul?
  - consul is indeed an alternative to etcd for us as well

For the start:

- Create /v1/host and fill it up manually -- Balazs might also have some ideas on this

#3 - 06/24/2019 05:33 PM - Ahmed Bilal

- Status changed from Seen to In Progress

#4 - 06/24/2019 05:57 PM - Ahmed Bilal

Now, using etcd3 instead of using coreos/etcd python binding because the latter does not have support to watch a prefix e.g /v1/vm

This has implication that we can't access etcd v2 data from v3 API and vice versa. So, instead of usual `etcdctl` we need to use `ETCDCTL_API=3 etcdctl`.

#5 - 06/25/2019 01:55 PM - Ahmed Bilal

v1 is ready. It can be found [here](#)
@william and @llnu is notified to verify its working.

#6 - 06/26/2019 08:05 AM - Ahmed Bilal

- % Done changed from 0 to 50

#7 - 06/27/2019 01:22 PM - Ahmed Bilal

- Status changed from In Progress to Waiting

#8 - 06/30/2019 05:07 PM - Ahmed Bilal

- Status changed from Waiting to Feedback

#9 - 07/15/2019 04:27 PM - Ahmed Bilal

- Status changed from Feedback to In Progress

#10 - 11/28/2019 08:25 PM - Ahmed Bilal

- Status changed from In Progress to Closed