Add Support for

Querying Quotas with Usage

Problem Description

The neutron HTTP API supports issuing a GET call on /v2.0/quotas/{project\_id}/details.json in order to obtain quotas with usage information for a given tenant. However, this capability is not currently exposed in the python-neutronclient code. The example for the usage information returned by API /v2.0/quotas/{project\_id}/details.json:

{u'quota':

{u'subnet': {u'limit': 100, u'used': 4, u'reserved': 0},

 u'network': {u'limit': 100, u'used': 3, u'reserved': 0},

 u'floatingip': {u'limit': 50, u'used': 0, u'reserved': 0},

 u'subnetpool': {u'limit': -1, u'used': 0, u'reserved': 0},

 u'security\_group\_rule': {u'limit': 100, u'used': 4, u'reserved': 0},

 u'security\_group': {u'limit': 10, u'used': 1, u'reserved': 0},

 u'router': {u'limit': 10, u'used': 1, u'reserved': 0},

 u'rbac\_policy': {u'limit': 10, u'used': 0, u'reserved': 0},

 u'port': {u'limit': 500, u'used': 5, u'reserved': 0}}}

With the rise of Edge Computing and Fog Computing, the OpenStack community is interested in distributed-cloud**[1]**. And the quota information can be used by distributed-cloud to query the resource usage for a given project/user. For example, the resource usage can be obtained by aggregating all the quota information for each sub-cloud. Therefore exposing the API /v2.0/quotas/{project\_id}/details.json in the python-neutronclient can provide an efficient mechanism to retrieve the quota details of all resources. What’s more, StarlingX provides a distributed-cloud solution which is stx-distcloud**[2]**. And this API can be used by stx-distcloud.

Proposed Change

Add following path to class Client (in python-neutronclient/v2\_0/client.py):

       quota\_details\_path = "/quotas/%s/details.json"

Add function show\_quota\_details to class Client (in python-neutronclient/v2\_0/client.py).

All changes can be viewed through the link below:

https://review.openstack.org/#/c/621507

Data Model Impact

None

REST API Impact

None

Command Line Client Impact

Add new function.

Other Impact

None

Other Deployer Impact

None

Performance Impact

None

Implementation

Assignee(s)

Work Items

* Add path: quota\_details\_path = "/quotas/%s/details.json"
* Add function show\_quota\_details

Dependencies

None

Testing

Unit tests are necessary.

Documentation Impact

None.

References

**[1]** <https://wiki.openstack.org/wiki/Fog_Edge_Massively_Distributed_Clouds>

**[2]** <https://git.starlingx.io/cgit/stx-distcloud/>