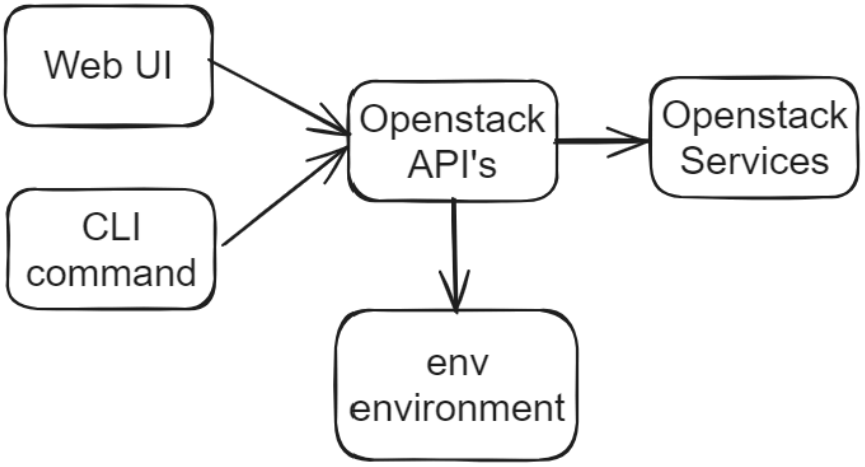
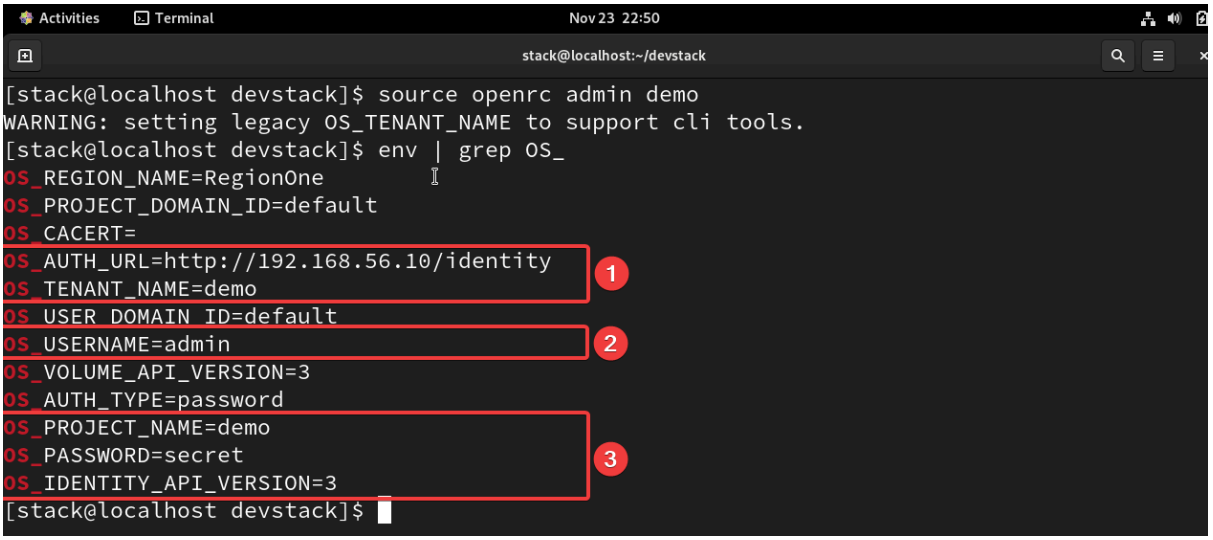
Understand how to OpenStack API and Command Line interface

All of the functionality that provided by the dashboard is also accessible through the OpenStack APIs.



Credentials

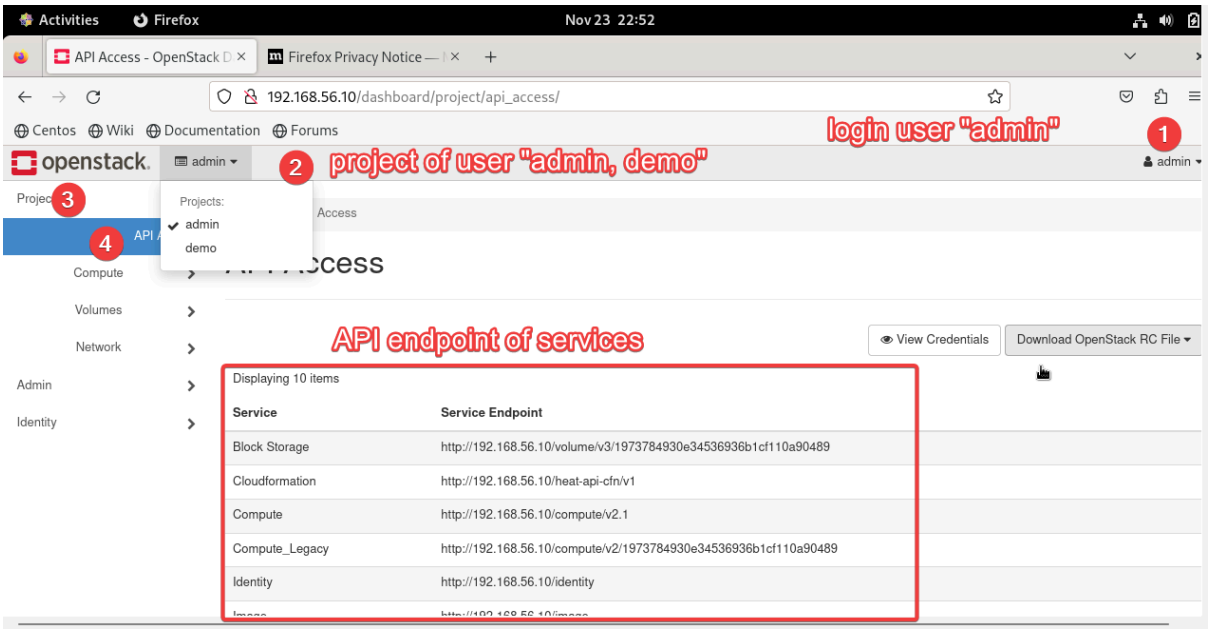
To use the APIs you need to have the correct OpenStack credentials loaded into your environment.



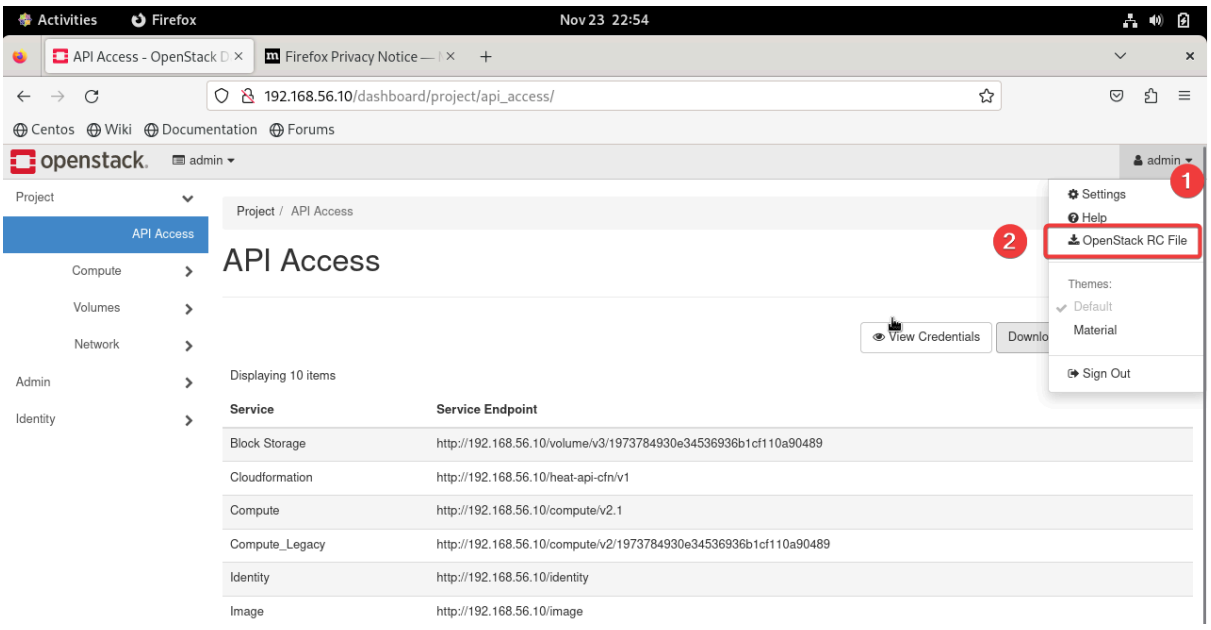
https://docs.openstack.org/keystone/latest/admin/cli-manage-projects-users-and-roles.html

Get your credentials

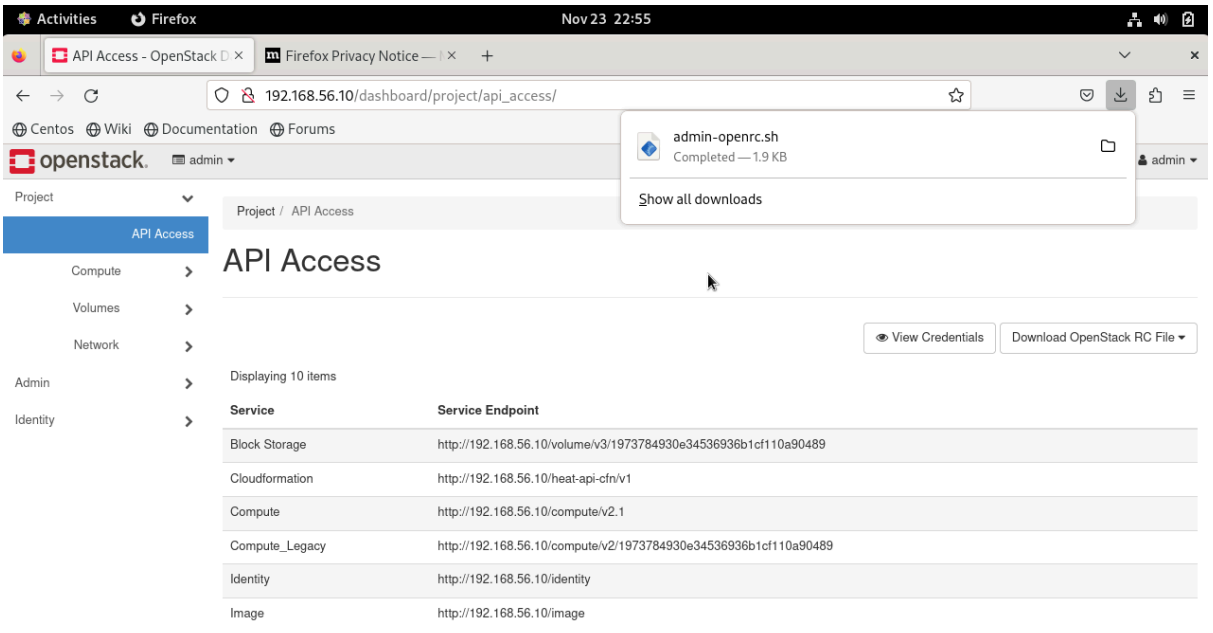
Each of Openstack have own endpoint Project > API Access

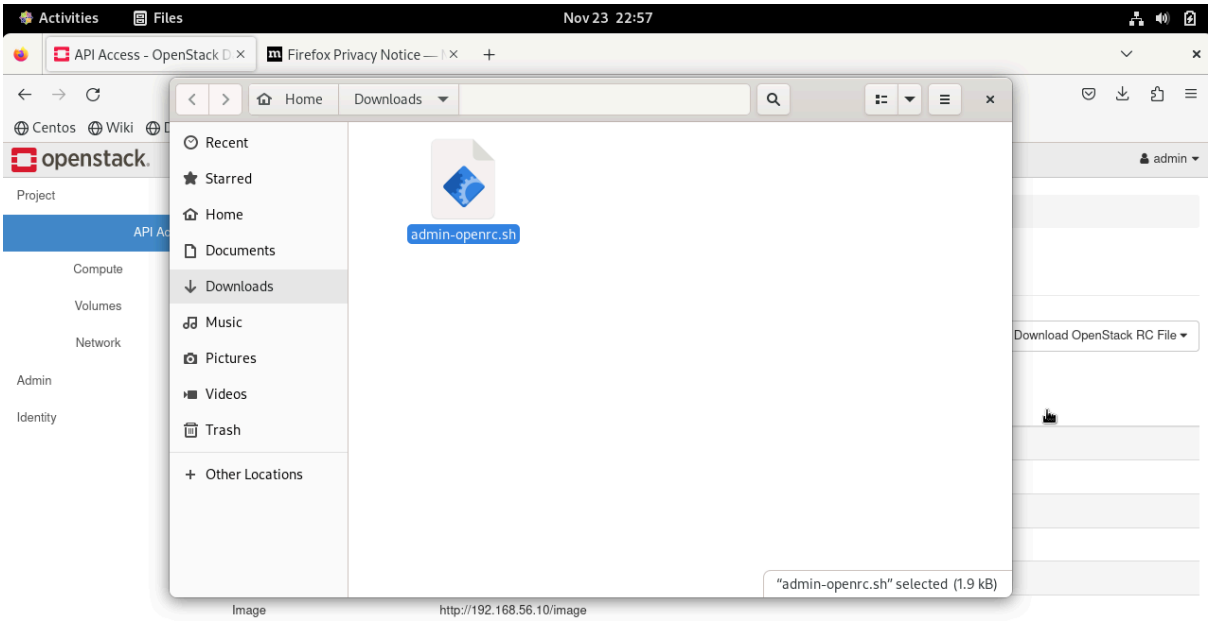


Get Openstack RC file by click menu from account menu and Download to your host machine

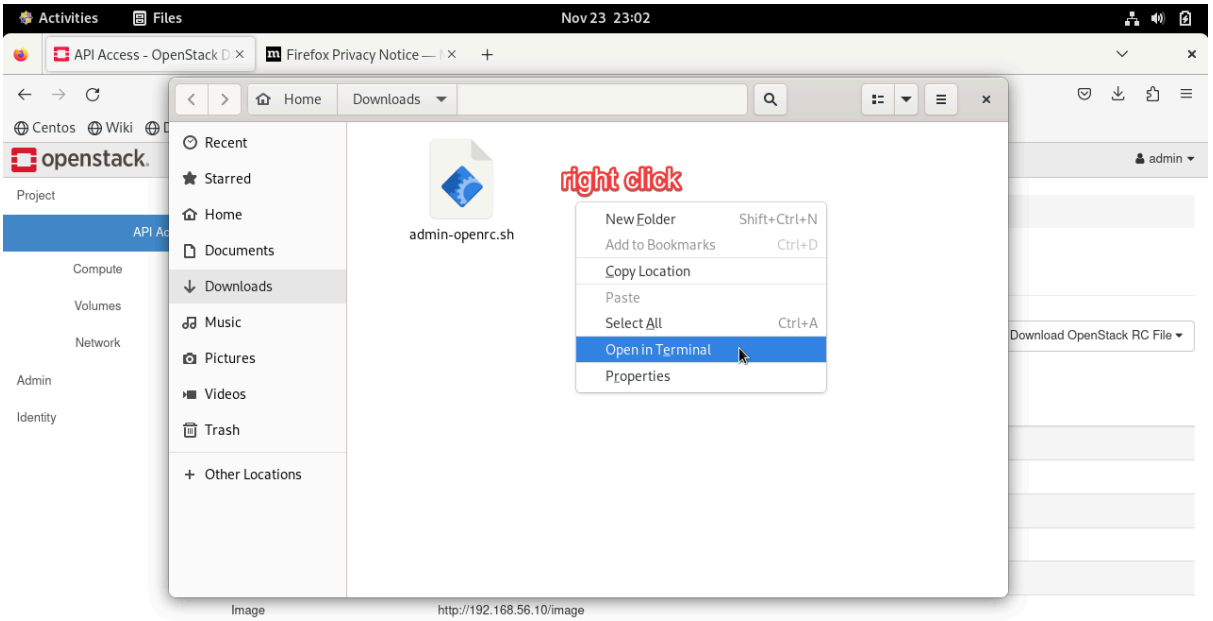


download openstack rc file “admin-openrc.sh” to download folder

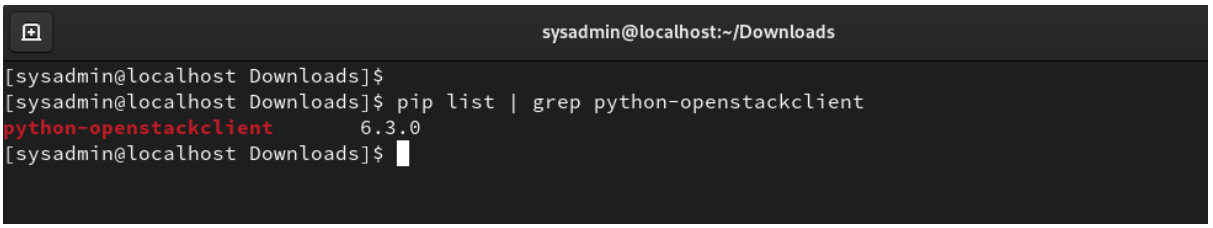




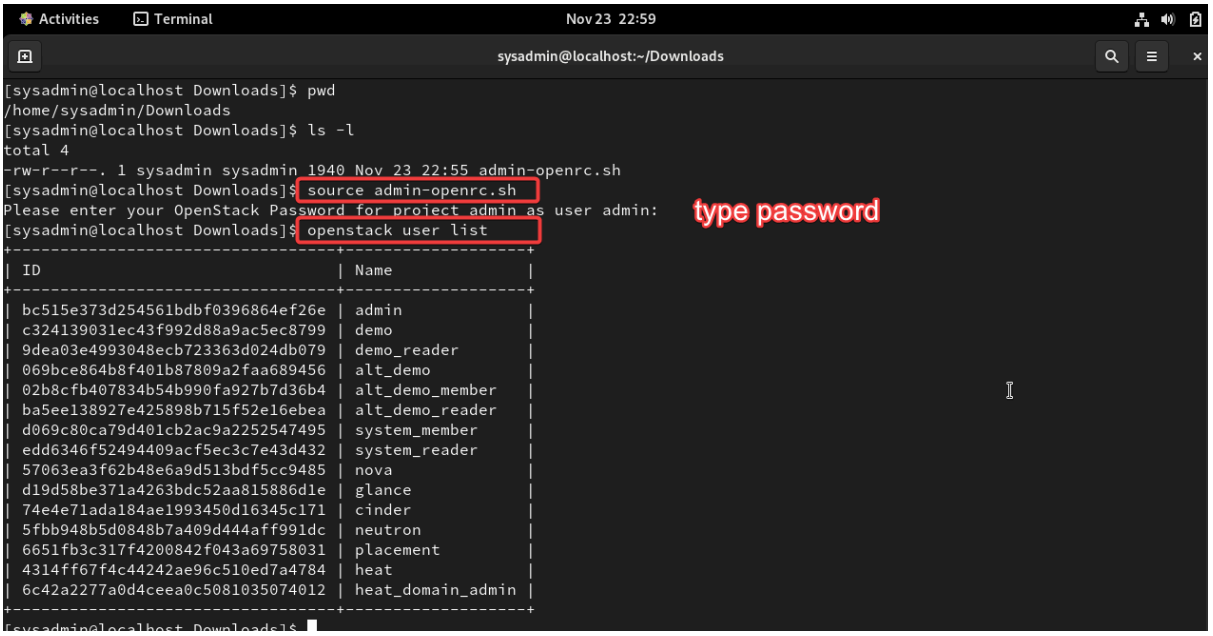
Open in terminal right click on file browser



Check version of python-openstackclient

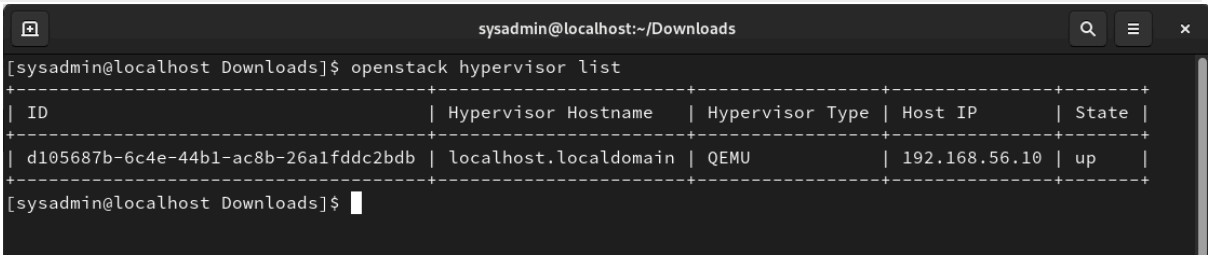



```
$ source admin-openrc.sh
$ openstack user list
```

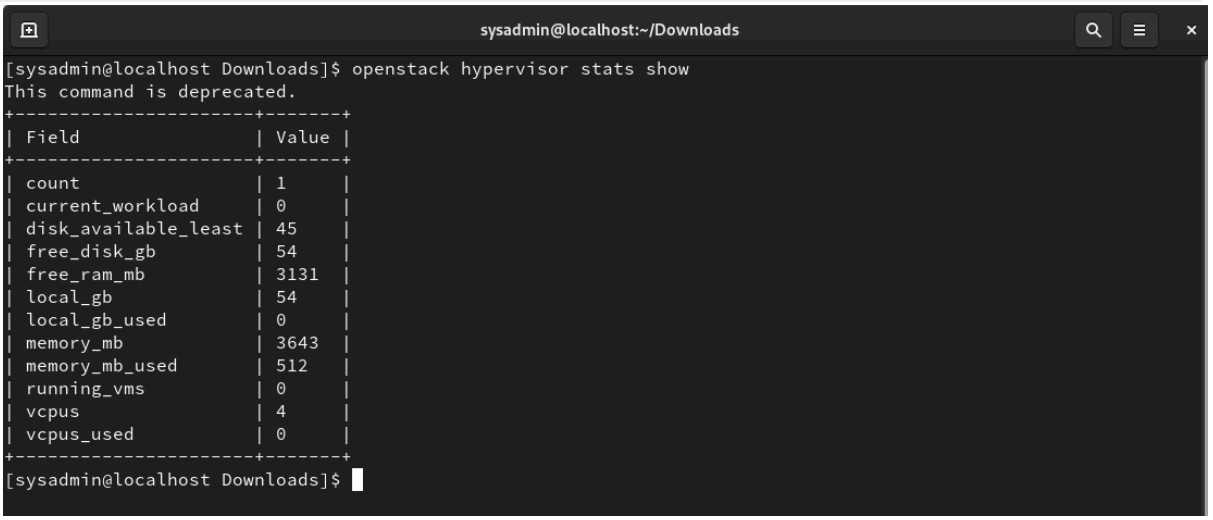


Run openstack command and get result

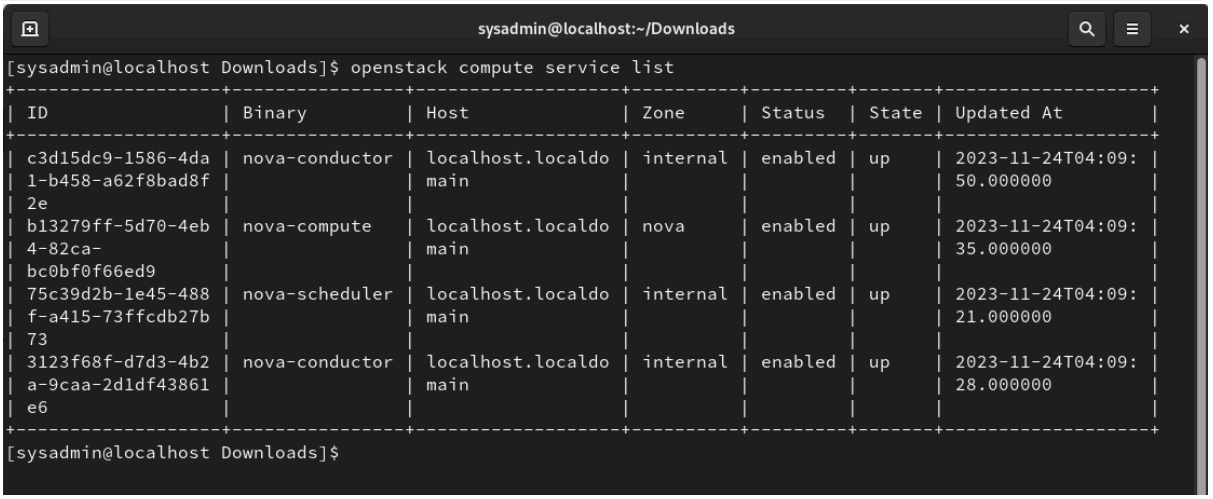
```
$ openstack hypervisor list
```




```
$ openstack hypervisor stats show
```




```
$ openstack compute service list
```




```
$ openstack volume service list
```

```
sysadmin@localhost:~/Downloads
[sysadmin@localhost Downloads]$ openstack volume service list
+------------------+-----------------------------------+------+---------+-------+----------------------------+
| Binary           | Host                              | Zone | Status  | State | Updated At                 |
+------------------+-----------------------------------+------+---------+-------+----------------------------+
| cinder-scheduler | localhost.localdomain             | nova | enabled | up    | 2023-11-24T04:09:49.000000 |
| cinder-volume    | localhost.localdomain@lvmdriver-1 | nova | enabled | up    | 2023-11-24T04:09:49.000000 |
+------------------+-----------------------------------+------+---------+-------+----------------------------+
[sysadmin@localhost Downloads]$
```

```
$ openstack network agent list
```

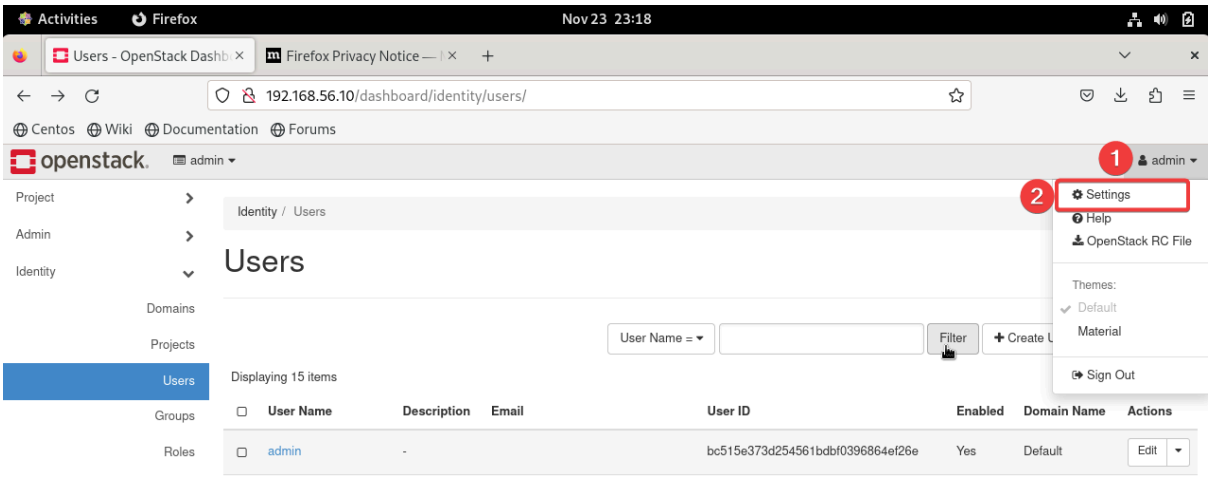
```
sysadmin@localhost:~/Downloads
[sysadmin@localhost Downloads]$ openstack network agent list
+------------------+-----------------+-----------------+-------------------+-------+-------+-------------------
-+
| ID               | Agent Type      | Host            | Availability Zone | Alive | State | Binary
 |
+------------------+-----------------+-----------------+-------------------+-------+-------+-------------------
-+
| 2e17d2ce-b458-5 | OVN Metadata    | localhost.local |                   | :-)   | UP    | neutron-ovn-
 |
| b51-8f71-26d81e | agent           | domain          |                   |       |       | metadata-agent
 |
| d88f7a          |                 |                 |                   |       |       |
 |
| cf5a96f9-fb85-4 | OVN Controller  | localhost.local |                   | :-)   | UP    | ovn-controller
 |
| e71-9a76-aa9305 | Gateway agent   | domain          |                   |       |       |
 |
| a95a26          |                 |                 |                   |       |       |
 |
+------------------+-----------------+-----------------+-------------------+-------+-------+-------------------
-+
[sysadmin@localhost Downloads]$
```

```
$ openstack image list
```

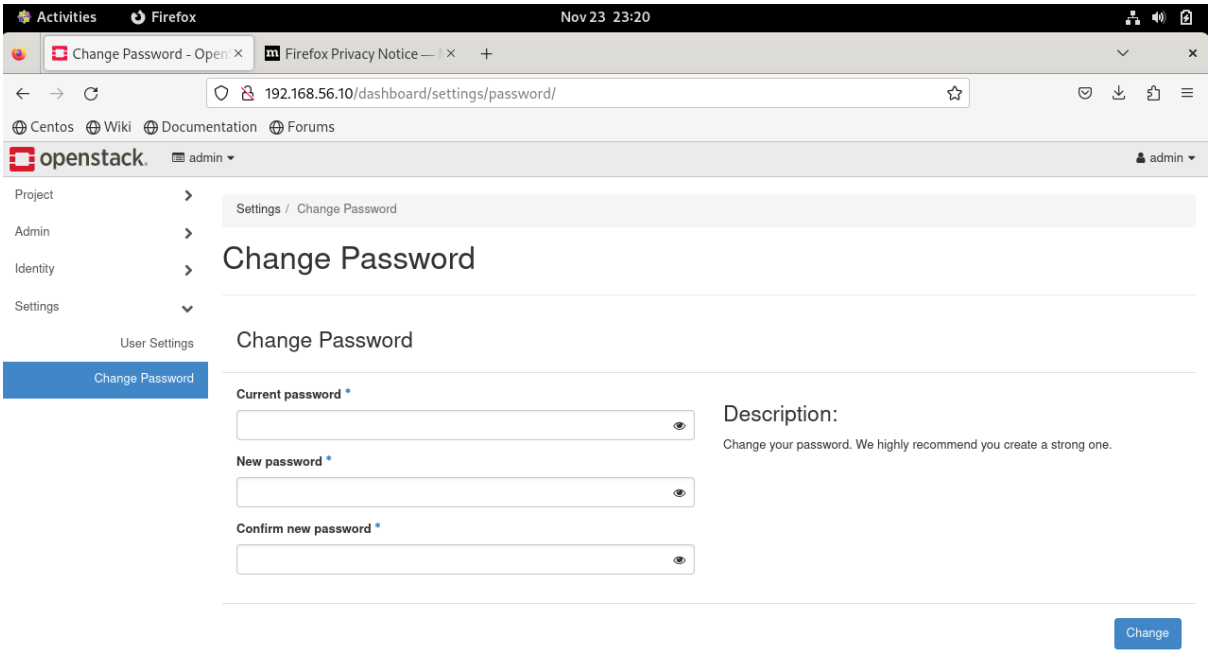
```
sysadmin@localhost:~/Downloads
[sysadmin@localhost Downloads]$ openstack image list
+--------------------------------------+---------------------------------+--------+
| ID                                   | Name                            | Status |
+--------------------------------------+---------------------------------+--------+
| 6eca3511-2741-4e56-9bb1-8fe65e0eacdc | Fedora-Cloud-Base-37-1.7.x86_64 | active |
| baa0fd8f-cf2b-4025-bc67-368206f938be | cirros-0.6.2-x86_64-disk        | active |
+--------------------------------------+---------------------------------+--------+
[sysadmin@localhost Downloads]$
```

Reset Password

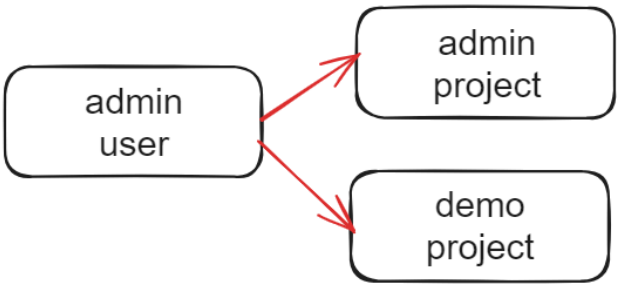
Goto Admin > Settings



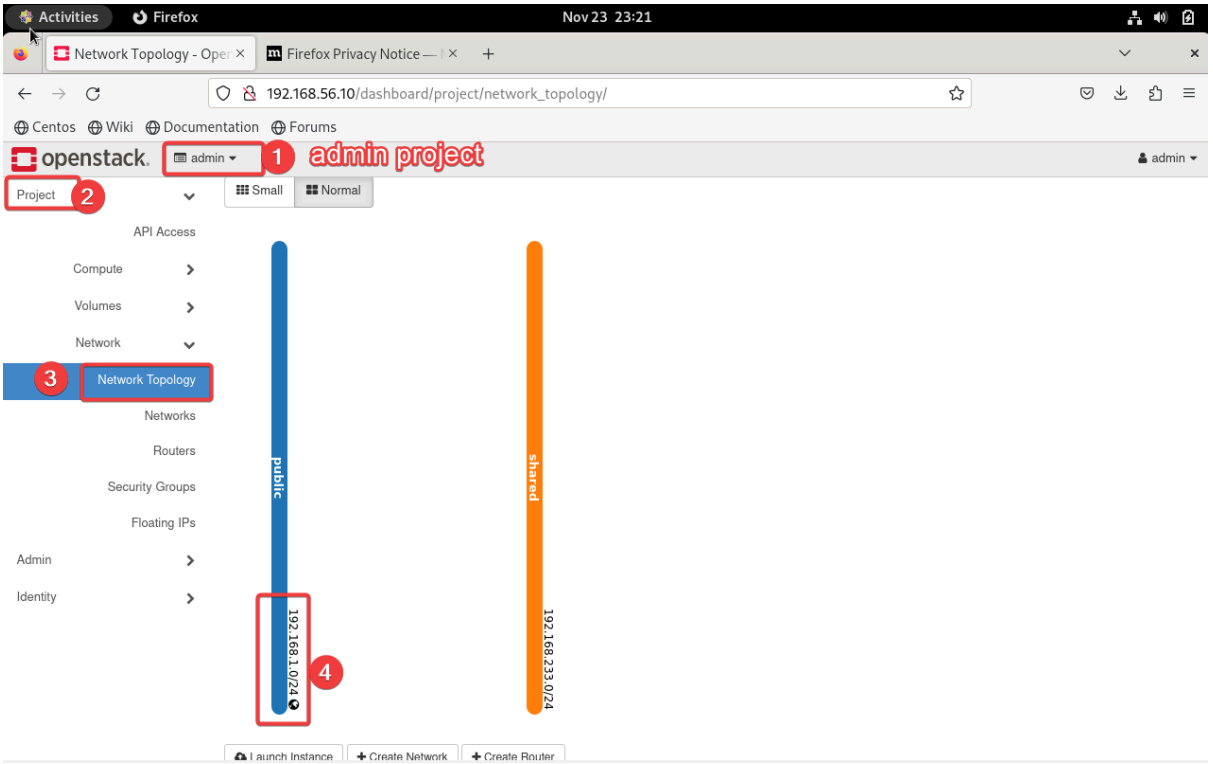
Setting > Change Password



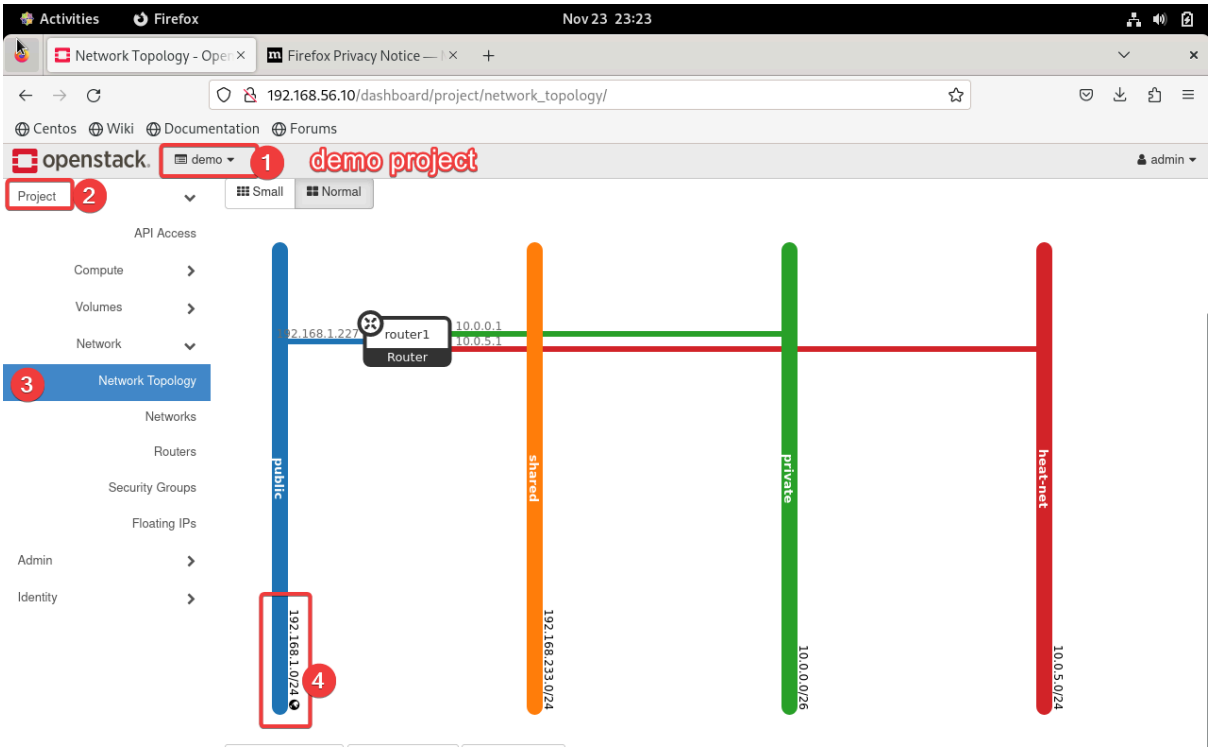
User admin and project



Network of Admin project



Network of Demo project


Activities
Firefox
Nov 23 23:23
Network Topology - Ope
Firefox Privacy Notice —
192.168.56.10/dashboard/project/network_topology/
Centos
Wiki
Documentation
Forums
openstack.
demo
1
demo project
admin
Project
2
Small
Normal
API Access
Compute
Volumes
Network
3
Network Topology
Networks
Routers
Security Groups
Floating IPs
Admin
Identity
192.168.1.227
router1
Router
10.0.0.1
10.0.5.1
public
shared
private
heat-net
192.168.1.0/24
4
192.168.233.0/24
10.0.0.0/26
10.0.5.0/24