DevStack

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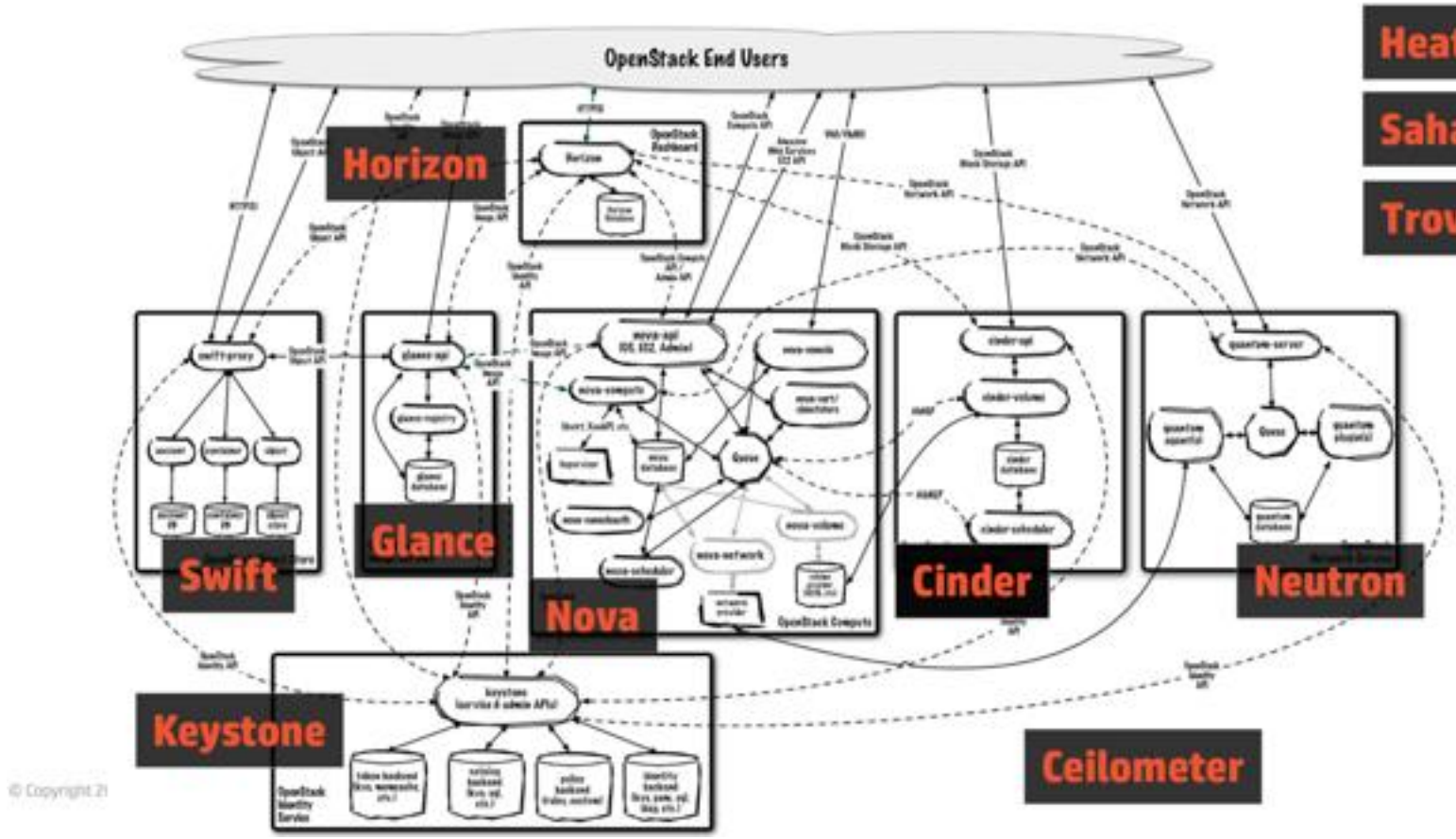
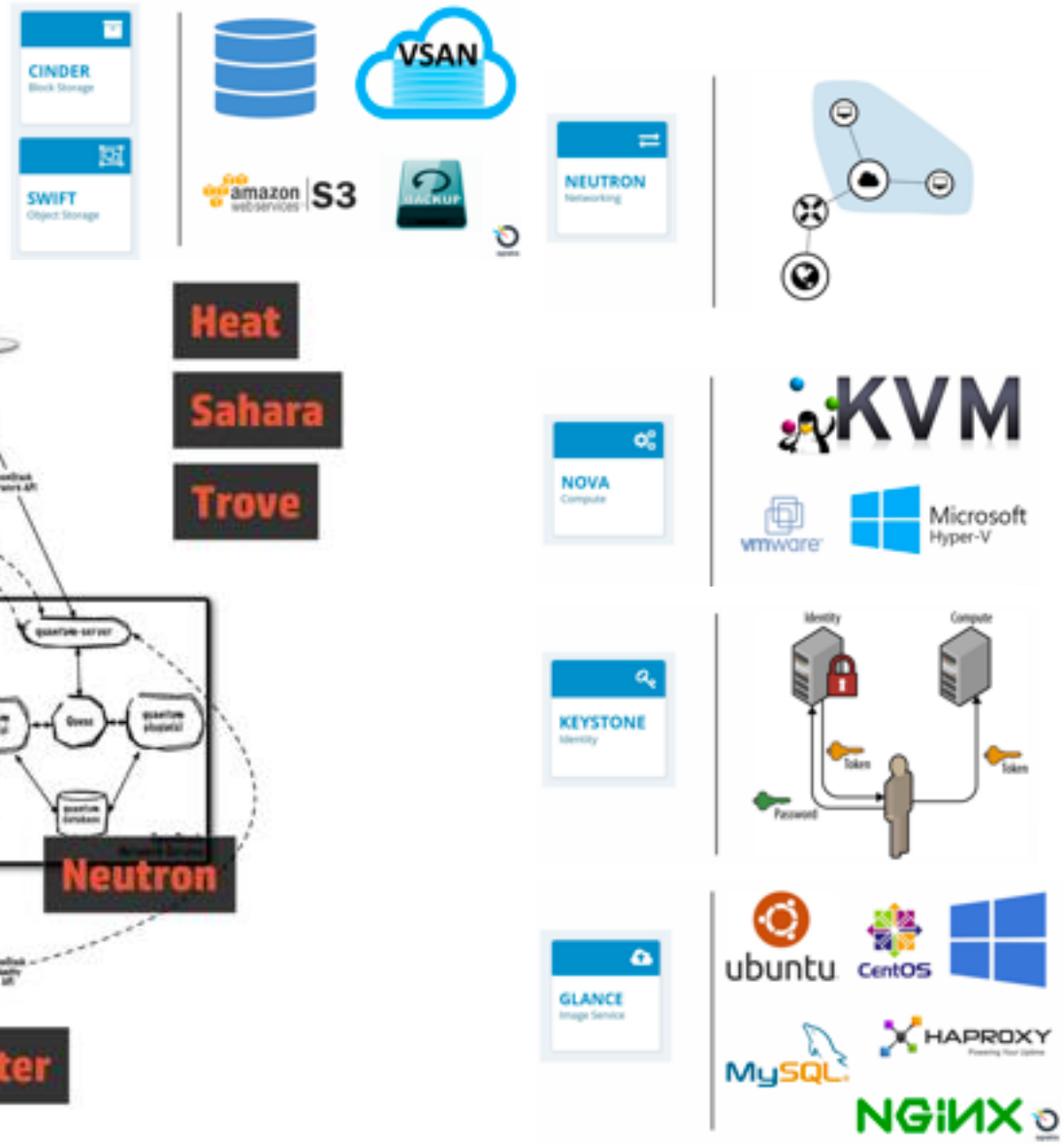
OpenStack

OpenStack

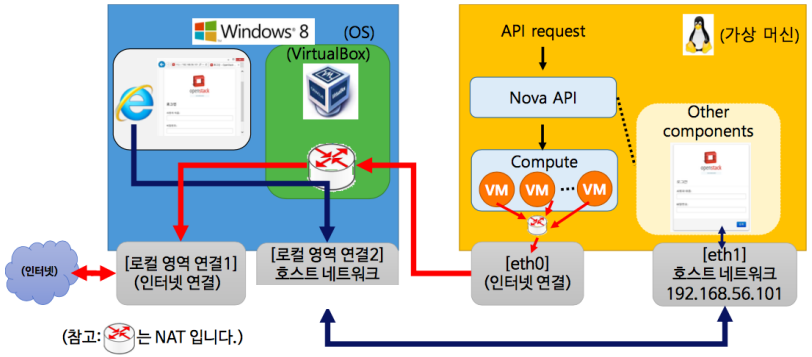
- OpenStack core services & etc



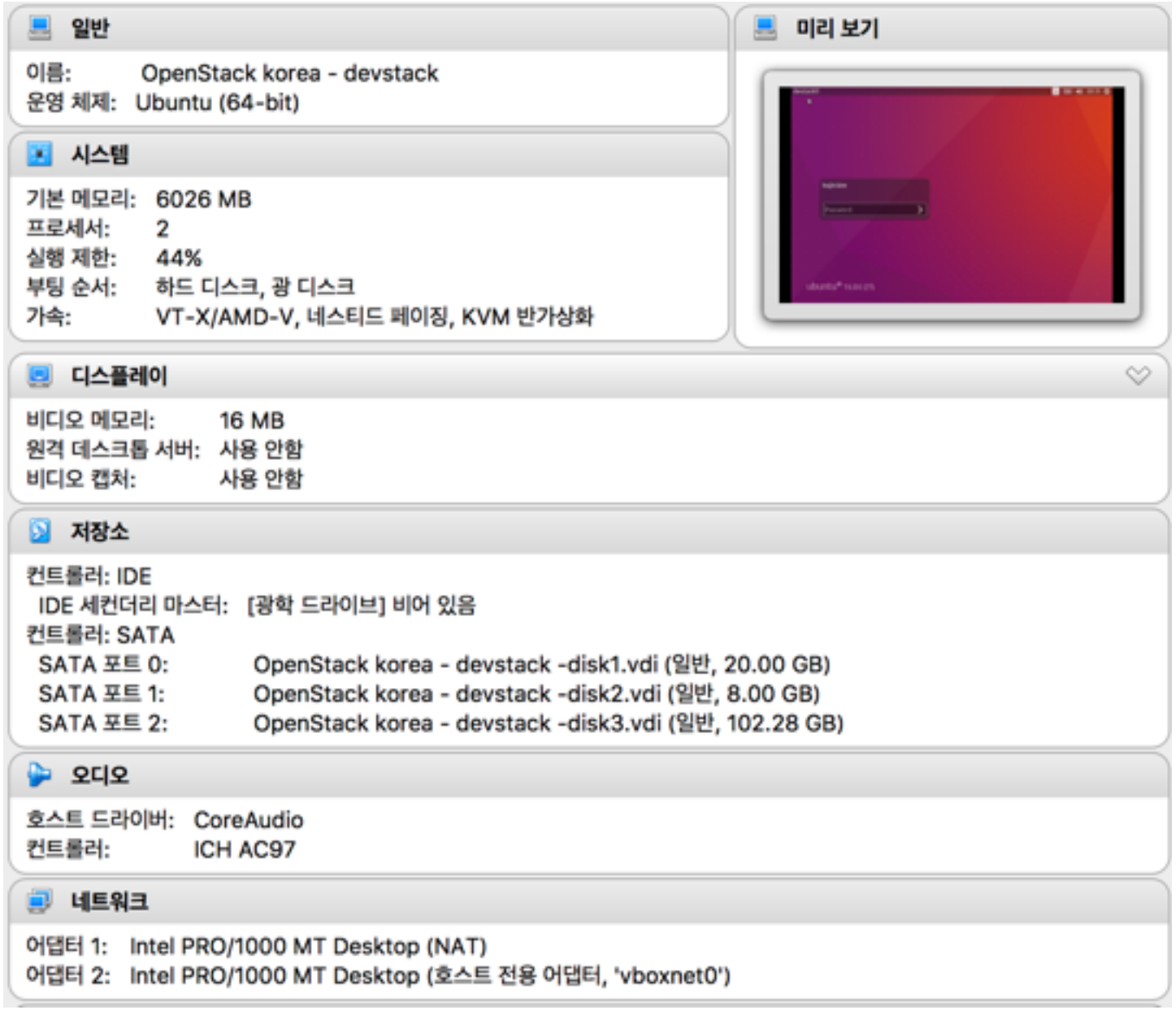


DevStack

- install Linux – ubuntu 16.04
- Add Stack User
- Download DevStack
- Create a local.conf
- Start the install
- working DevStack!



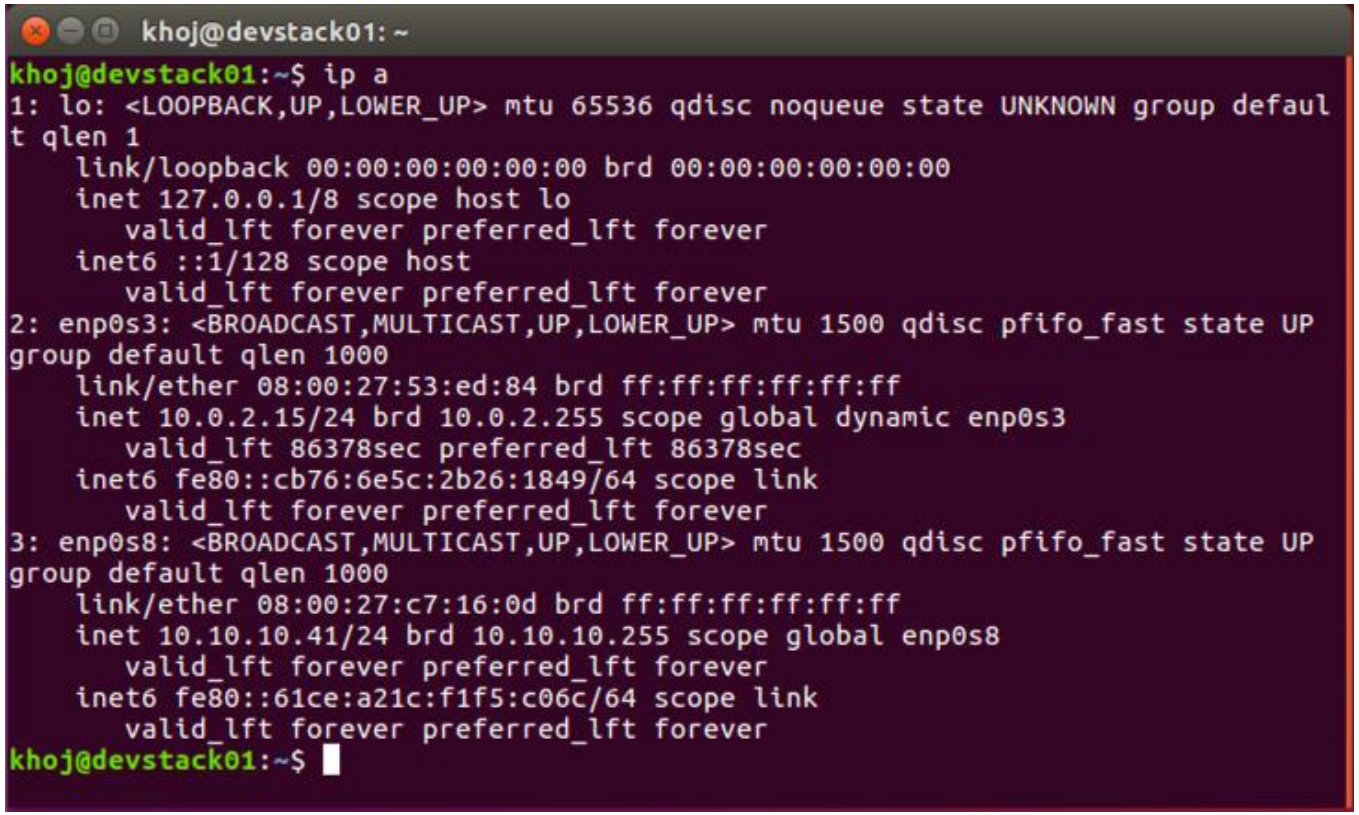
출처: OpenStack korea community by 최영락



DevStack

- install Linux
- Add Stack User
- Download DevStack
- Create a local.conf¶
- Start the install
- working DevStack!

```
$ sudo useradd -s /bin/bash -d /opt/stack -m stack
$ echo "stack ALL=(ALL) NOPASSWD: ALL" | sudo tee /etc/sudoers.d/stack
$ sudo su - stack
```



DevStack

- install Linux
- Add Stack User
- Download DevStack
- Create a local.conf¶
- Start the install
- working DevStack!

```
$ git clone https://git.openstack.org/openstack-dev/devstack -b stable/ocata

$ cd devstack
```

DevStack

- install Linux
- Add Stack User
- Download DevStack
- Create a local.conf¶
- Start the install
- working DevStack!

- Local.conf
  - Stack.sh 의 default 값을 customizing하거나 정의하기위한 파일

```
$ cat local.conf
[[local|localrc]]
ADMIN_PASSWORD=secret
DATABASE_PASSWORD=$ADMIN_PASSWORD
RABBIT_PASSWORD=$ADMIN_PASSWORD
SERVICE_PASSWORD=$ADMIN_PASSWORD
HOST_IP=10.10.10.41
SERVICE_HOST=$HOST_IP
no_proxy=127.0.0.1,10.10.10.41
```

설치 후 코드 변경 및 테스트 용도를 위해서 설치후세팅

```
OFFLINE=True # don't download if rpms exist
RECLONE=no # doesn't a clean install every time
LOGFILE=$DEST/logs/stack.sh.log # install log
```

- Local.conf - ceph

```
$ cat local.conf
…+
enable_plugin devstack-plugin-ceph
git://git.openstack.org/openstack/devstack-plugin-ceph
ENABLE_CEPH_CINDER=True # ceph backend for cinder
ENABLE_CEPH_GLANCE=True # store images in ceph
ENABLE_CEPH_C_BAK=True # backup volumes to ceph
ENABLE_CEPH_NOVA=True # allow nova to use ceph resources
```

- Local.conf - neutron

```
$ cat local.conf
…+
disable_service n-net
enable_service q-svc
enable_service q-agt
enable_service q-dhcp
enable_service q-l3
enable_service q-meta
```

DevStack

- install Linux
- Add Stack User
- Download DevStack
- Create a local.conf¶
- Start the install
- working DevStack!

./stack.sh

we met the error #1

OSError: [Errno 13] Permission denied: '/opt/stack/.cache/pip/wheels/2c/f7/79/13f3a12cd723892437c0cfbde1230ab4d82947ff7b3839a4fc'

➔ chown -R stack /opt/stack/.cache

we met the error #2

Failed to discover available identity versions when contacting http://10.10.10.41/identity. Attempting to parse version from URL.Could not determine a suitable URL for the plugin

Add local.conf as below

no_proxy=127.0.0.1,10.10.10.41

DevStack

- install Linux
- Add Stack User
- Download DevStack
- Create a local.conf¶
- Start the install
- working DevStack!

./stack.sh

we met the error #3

Failed to discover available identity versions when contacting http://10.10.10.41/identity. Attempting to parse version from URL.Could not determine a suitable URL for the plugin

➔ ./unstack.sh, ./clean.sh , rm –rf /opt/stack/*
git clone https://git.openstack.org/openstack-dev/devstack
./stack.sh with the same local.conf and the deployment completed.

DevStack

- install Linux
- Add Stack User
- Download DevStack
- Create a local.conf¶
- Start the install
- working DevStack!

```
./stack.sh
```

we met the error #4

2017-07-13 23:58:08.437 | Discovering versions from the identity service failed when creating the password plugin. Attempting to determine version from URL.2017-07-13 23:58:08.437 | Could not determine a suitable URL for the plugin

DevStack

- install Linux
- Add Stack User
- Download DevStack
- Create a local.conf¶
- Start the install
- working DevStack!

screen –x stack
(if you meet error, please type script /dev/null)

Other command

- unstack.sh
  - DB/mq stop

screen –x stack
(if you meet error, please type script /dev/null)

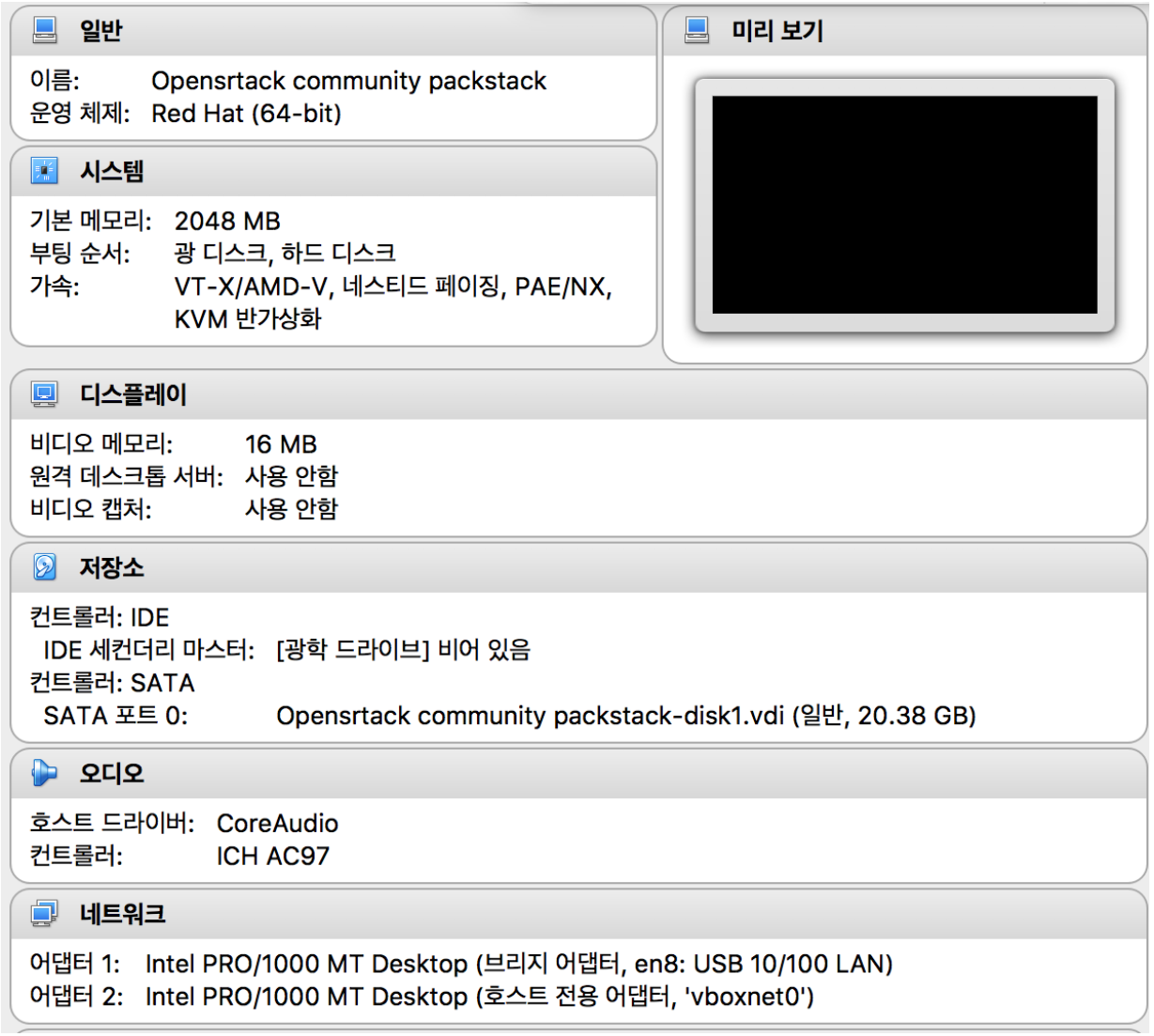
Developing Code

- change code
- Restart service
  - CTRL +C
  - up arrow
  - Enter
- List name of all screen
  - Ctrl + a, Then Press Shift + '
- Detach/Exit from a screen
  - Ctrl + a, Then Press d

```
screen –x stack
( if you meet error, please type script /dev/null)

screen – ls / screen   -r <session-id> / rejoin-stack.sh
```

Packstack

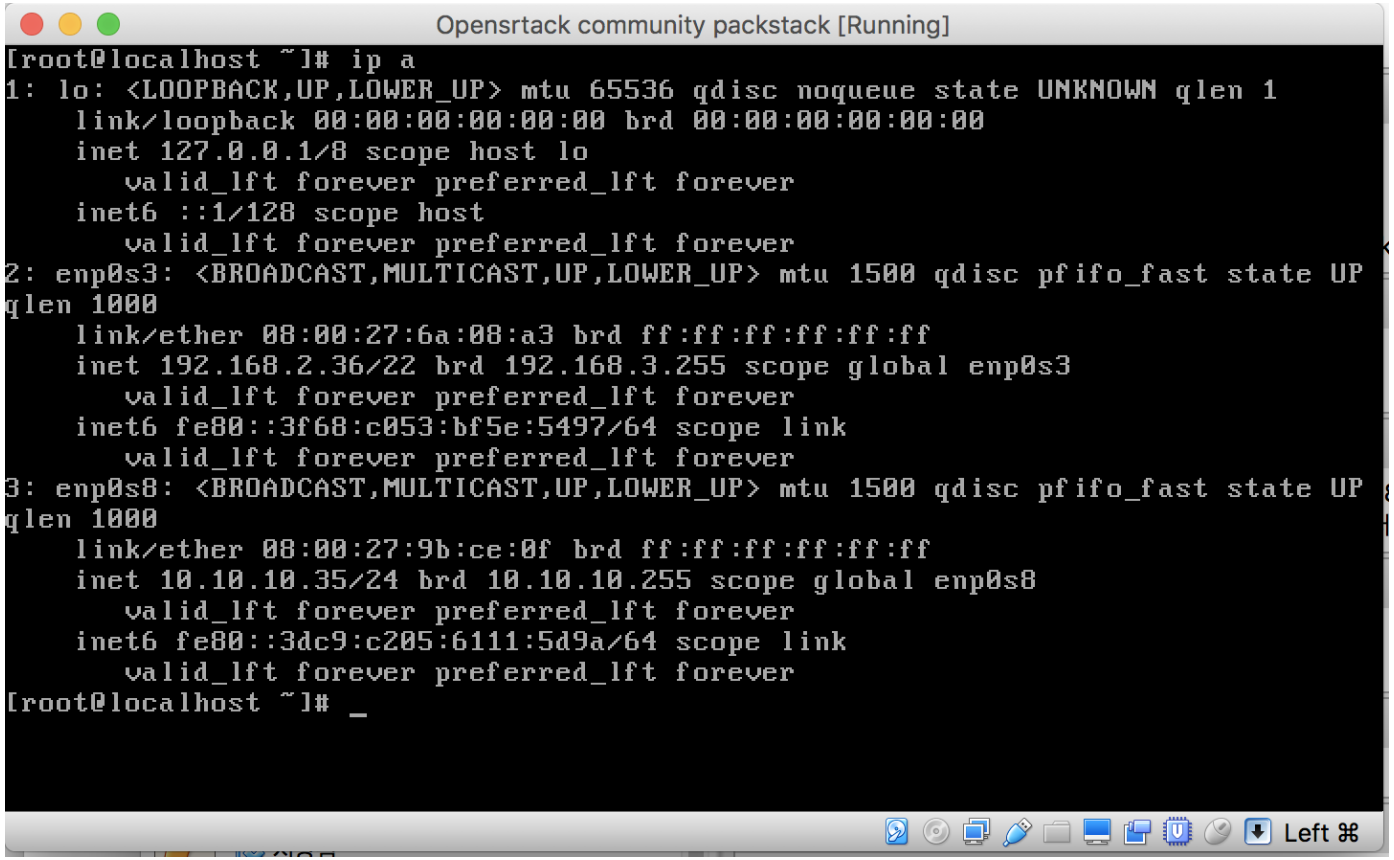
- install Linux – centos 7.3
- Download PackStack
- Configure answer.txt
- Start the install
- working DevStack!



PackStack

- install Linux
- Download PackStack
- Configure answer.txt
- Start the install
- working DevStack!

```
hostnamectl set-hostname packstack04
yum install -y centos-release-openstack-ocata;
yum update -y ; reboot
yum install -y openstack-packstack;
yum install -y openstack-utils
```



PackStack

- install Linux
- Download PackStack
- Configure answer.txt
- Start the install
- working DevStack!

```
packstack --gen-answer-file=/root/answer.txt

yum install crudini;

crudini --set /root/answer.txt general CONFIG_SWIFT_INSTALL n;
crudini --set /root/answer.txt general CONFIG_HEAT_INSTALL n;
crudini --set /root/answer.txt general CONFIG_CEILOMETER_INSTALL n;
crudini --set /root/answer.txt general CONFIG_AODH_INSTALL n;
crudini --set /root/answer.txt general CONFIG_GNOCCHI_INSTALL n;
crudini --set /root/answer.txt general CONFIG_NAGIOS_INSTALL n;
crudini --set /root/answer.txt general CONFIG_KEYSTONE_ADMIN_PW
jan01jan;
crudini --set /root/answer.txt general CONFIG_PROVISION_DEMO n;

crudini --set /root/answer.txt general CONFIG_COMPUTE_HOSTS
192.168.122.12;
crudini --set /root/answer.txt general CONFIG_CONTROLLER_HOST
192.168.122.21;
```

PackStack

- install Linux
- Download PackStack
- Configure answer.txt
- Start the install
- working PackStack!

```
packstack --answer-file=/root/answer.txt
============================

change the bridge setting

ifcfg-enp0s3
============
NAME=enp0s3
DEVICE=enp0s3
ONBOOT=yes
TYPE=OVSPort
DEVICETYPE=ovs
OVS_BRIDGE=br-ex

ifcfg-br-ex
============
DEVICE=br-ex
DEVICETYPE=ovs
TYPE=OVSBridge
BOOTPROTO=static
IPADDR=192.168.2.36
NETMASK=255.255.252.0
GATEWAY=192.168.0.1
```

PackStack

- install Linux
- Download PackStack
- Configure answer.txt
- Start the install
- working PackStack!

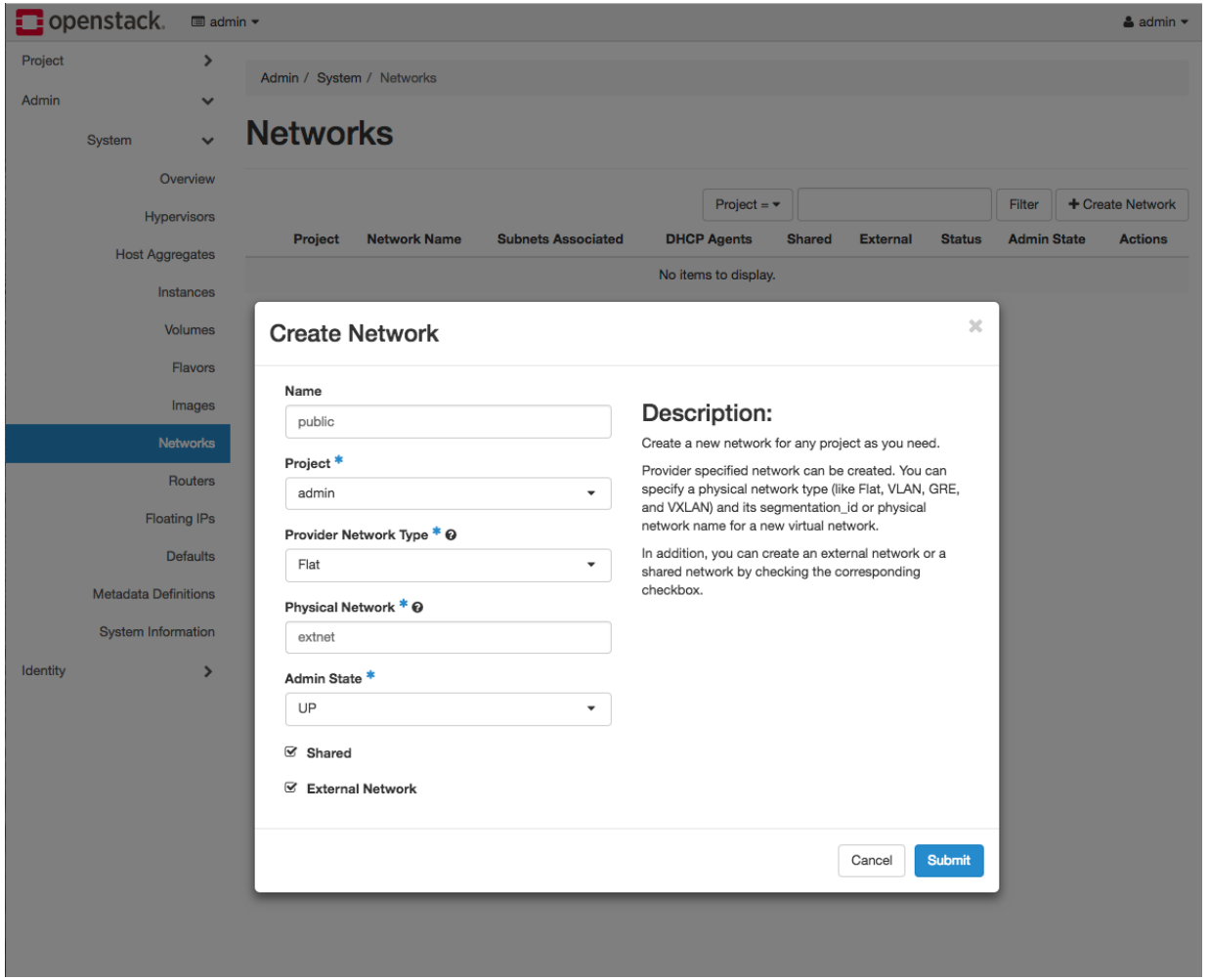
systemctl restart network

```
[root@packstack04 network-scripts]# getenforce
Enforcing
[root@packstack04 network-scripts]# systemctl status firewalld
● firewalld.service - firewalld - dynamic firewall daemon
   Loaded: loaded (/usr/lib/systemd/system/firewalld.service; disabled; vendor preset: enabled)
   Active: inactive (dead)
     Docs: man:firewalld(1)

Jul 17 23:23:26 packstack04 systemd[1]: Starting firewalld - dynamic firewall daemon...
Jul 17 23:23:26 packstack04 systemd[1]: Started firewalld - dynamic firewall daemon.
Jul 17 23:29:26 packstack04 systemd[1]: Stopping firewalld - dynamic firewall daemon...
Jul 17 23:29:27 packstack04 systemd[1]: Stopped firewalld - dynamic firewall daemon.
[root@packstack04 network-scripts]# systemctl status iptables
● iptables.service - IPv4 firewall with iptables
   Loaded: loaded (/usr/lib/systemd/system/iptables.service; enabled; vendor preset: disabled)
   Active: active (exited) since Mon 2017-07-17 23:29:29 EDT; 1h 23min ago
 Main PID: 3781 (code=exited, status=0/SUCCESS)
   CGroup: /system.slice/iptables.service

Jul 17 23:29:28 packstack04 systemd[1]: Starting IPv4 firewall with iptables...
Jul 17 23:29:29 packstack04 iptables.init[3781]: iptables: Applying firewall rules: [  OK  ]
Jul 17 23:29:29 packstack04 systemd[1]: Started IPv4 firewall with iptables.
```

openstack default check

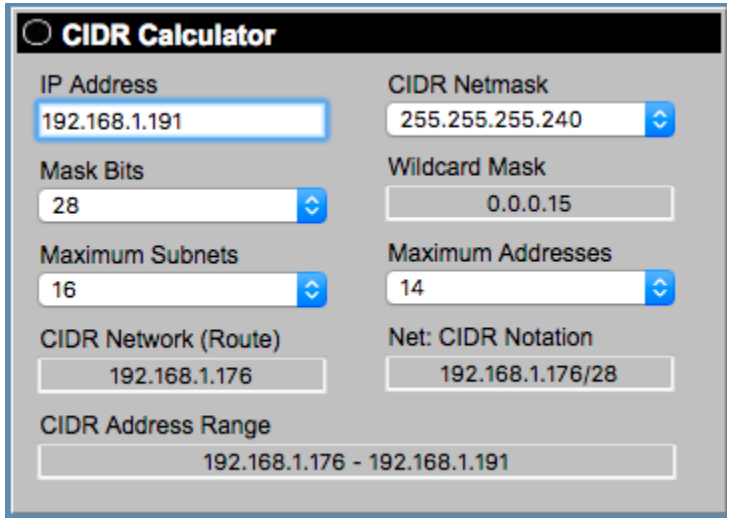
- public network setting

```
[root@packstack04 ~]# grep extnet answer.txt
CONFIG_NEUTRON_OVS_BRIDGE_MAPPINGS=extnet:br-ex
# compute=br-vlan --os-neutron-ovs-bridge-mappings="extnet:br-
# bridge-mappings="extnet:br-ex,physnet1:br-vlan" --os-neutron-ovs-
# external-physnet="extnet"
CONFIG_NEUTRON_OVS_EXTERNAL_PHYSNET=extnet
[root@packstack04 ~]# _
```

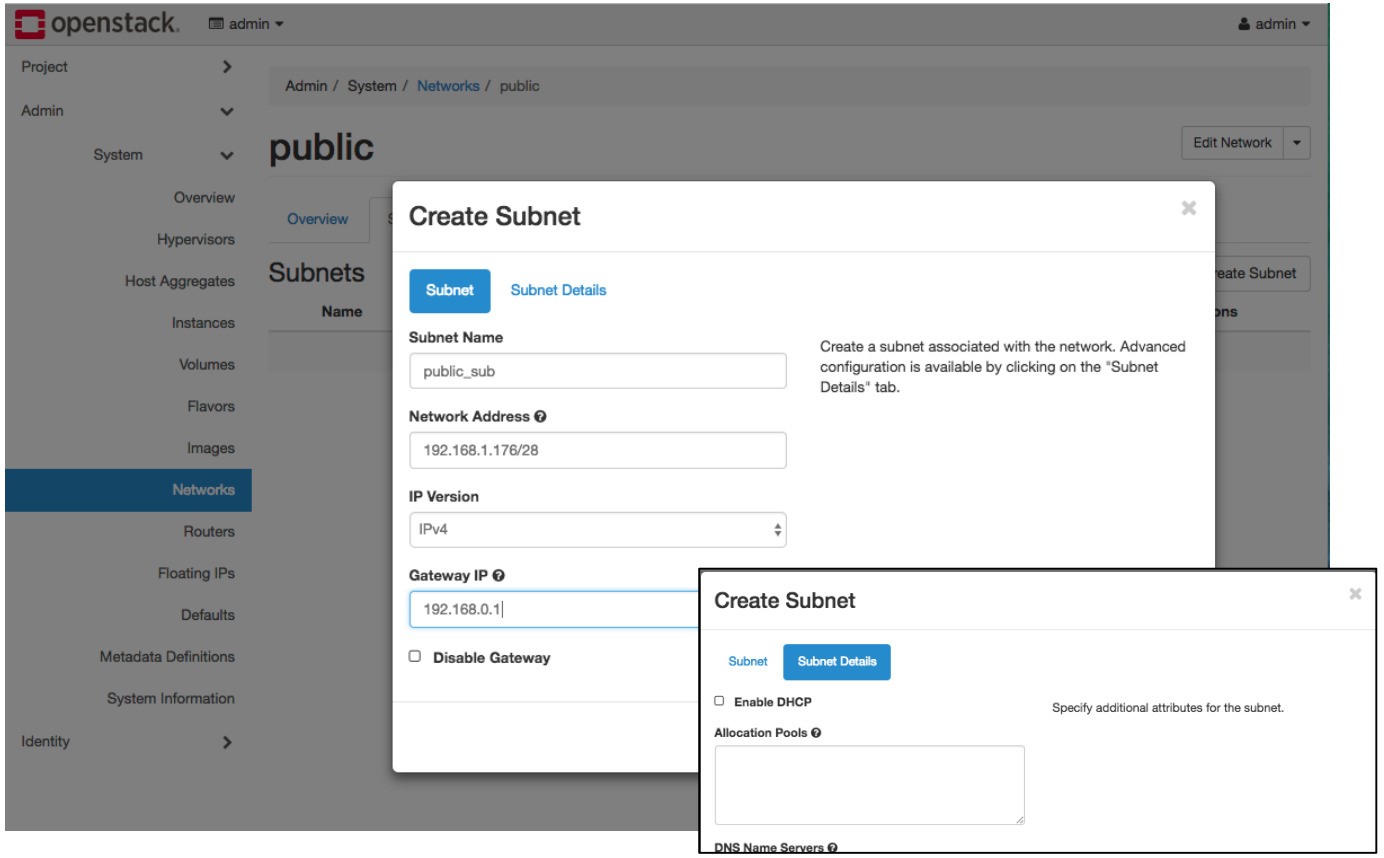


openstack default check

- public network setting
- public subnet setting
-

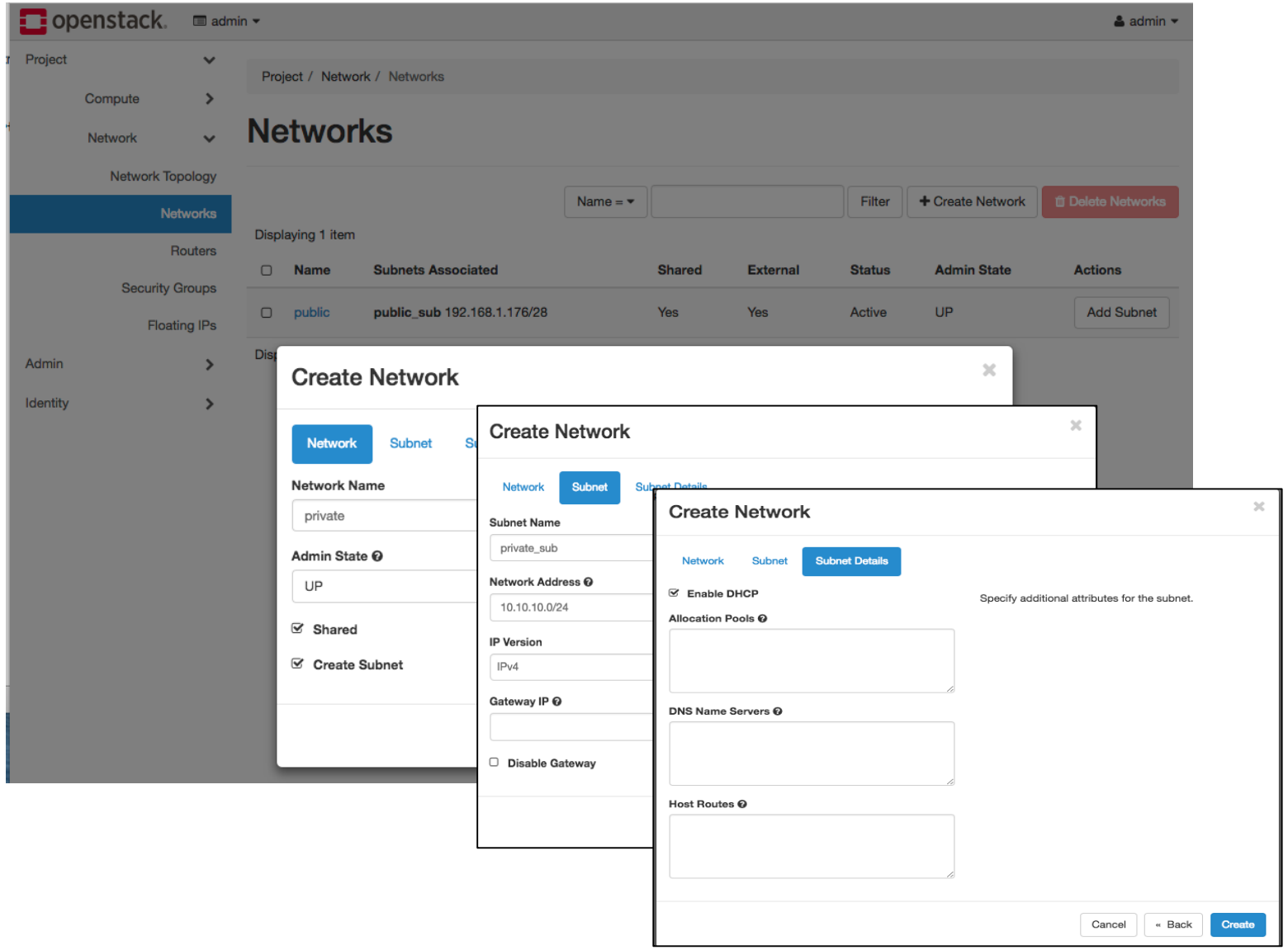


http://www.subnet-calculator.com/cidr.php



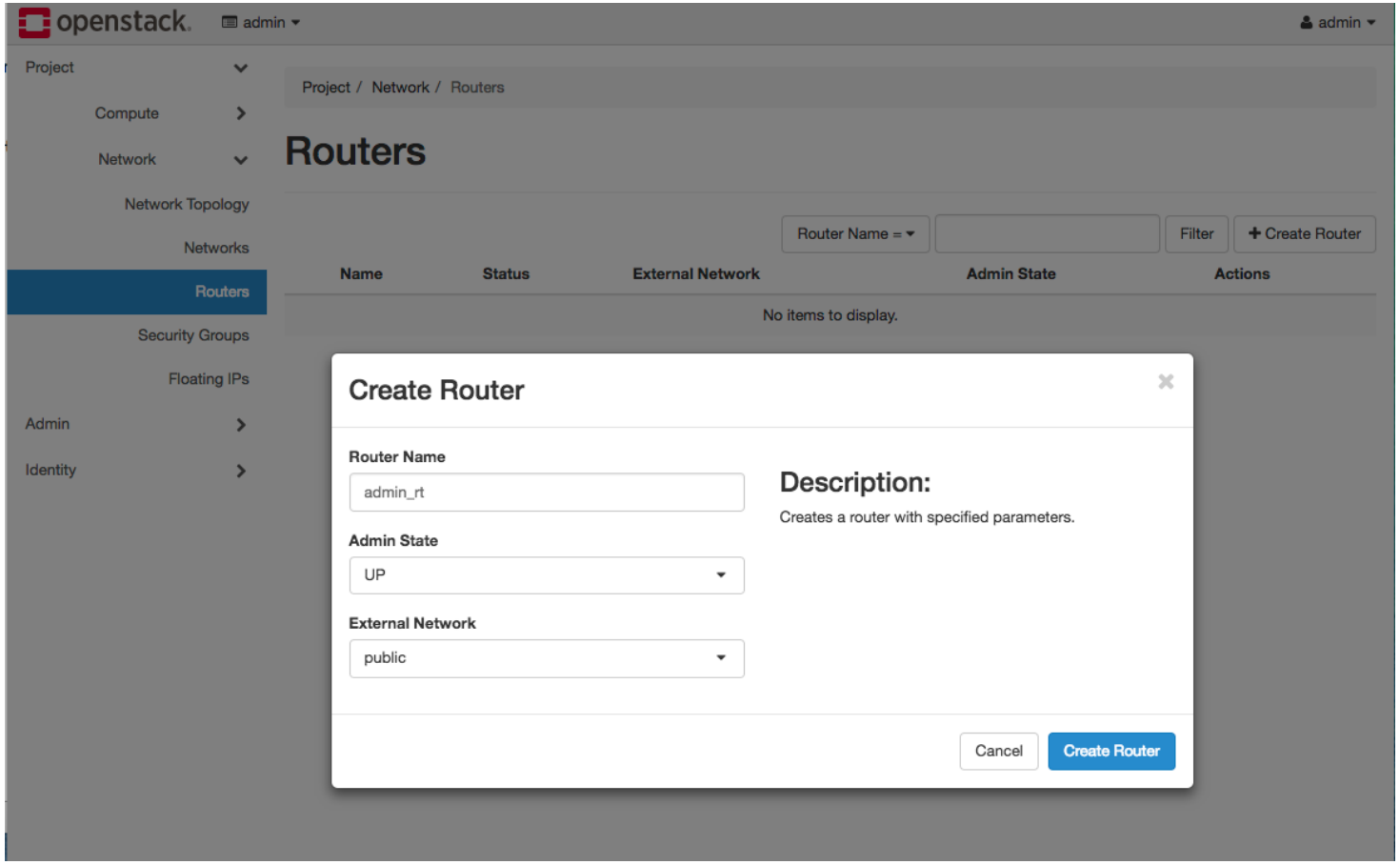
openstack default check

- public network setting
- public subnet setting
- private network setting



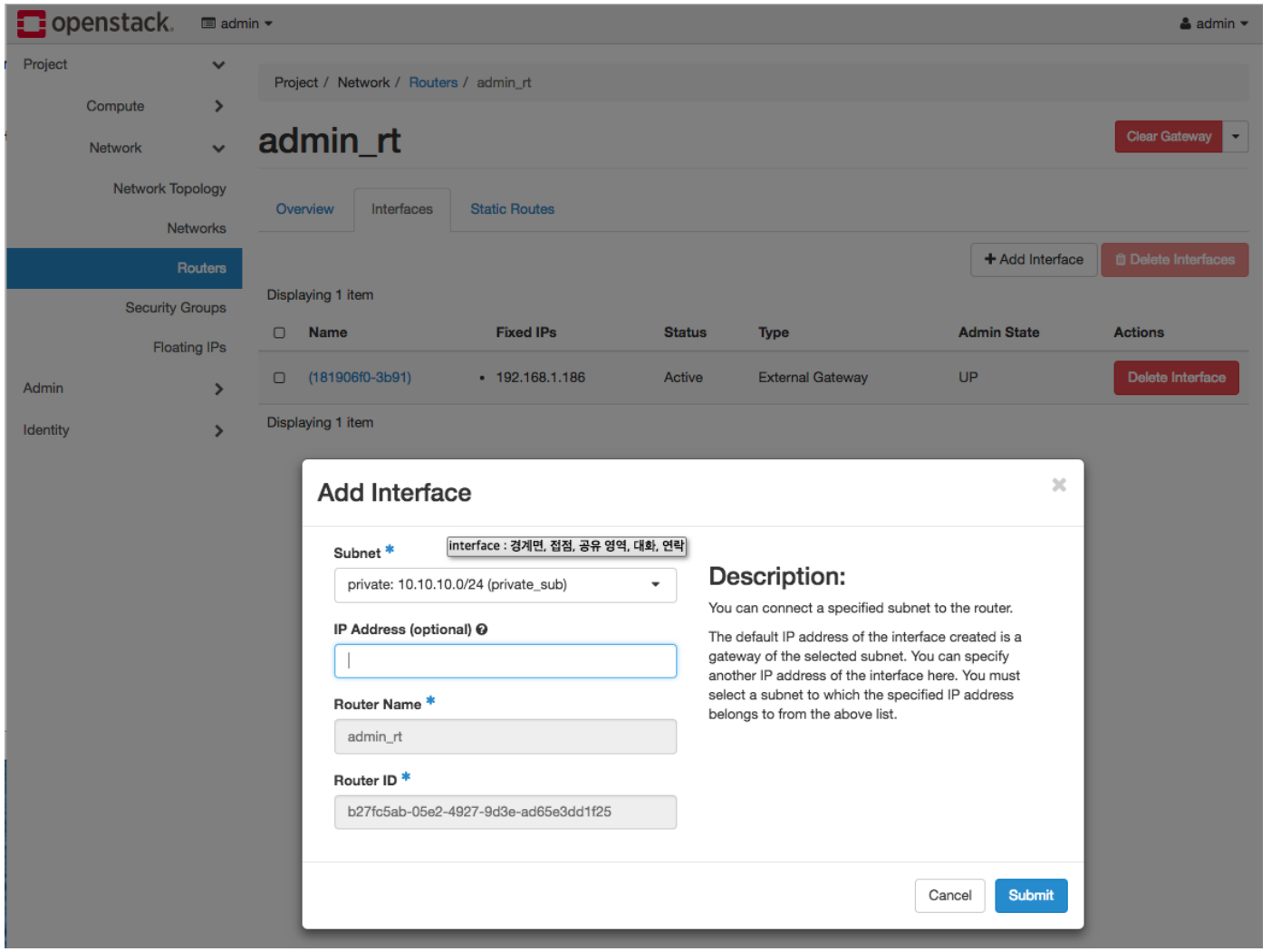
openstack default check

- public network setting
- public subnet setting
- private network setting
- router setting



openstack default check

- public network setting
- public subnet setting
- private network setting
- router setting



openstack default check

- public network setting
- public subnet setting
- private network setting
- router setting
- security group setting

Manage Security Group Rules: default (74e40dd8-614b-42ae-af03-5074c102648a)

+ Add Rule | Delete Rules

Displaying 7 items

Direction	Ether Type	IP Protocol	Port Range	Remote IP Prefix	Remote Security Group	Actions
Ingress	IPv6	Any	Any	-	default	Delete Rule
Egress	IPv6	Any	Any	::/0	-	Delete Rule
Ingress	IPv4	Any	Any	-	default	Delete Rule
Egress	IPv4	Any	Any	0.0.0.0/0	-	Delete Rule
Ingress	IPv4	ICMP	Any	0.0.0.0/0	-	Delete Rule
Ingress	IPv4	TCP	1 - 65535	0.0.0.0/0	-	Delete Rule
Ingress	IPv4	UDP	1 - 65535	0.0.0.0/0	-	Delete Rule

Displaying 7 items

openstack default check

- public network setting
- public subnet setting
- private network setting
- router setting
- security group setting
- add compute node

```
[root@packstack04 ~]# egrep
"EXCLUDE_SERVERS|COMPUTE"   /root/answer.txt

EXCLUDE_SERVERS=192.168.2.60 # allinone node
CONFIG_COMPUTE_HOSTS=192.168.2.60,192.168.2.61

[root@packstack04 packstack –answer-file=/root/answer.txt
```

change the bridge setting

ifcfg-enp0s3

```
==========
NAME=enp0s3
DEVICE=enp0s3
ONBOOT=yes
TYPE=OVSPort
DEVICETYPE=ovs
OVS_BRIDGE=br-ex
```

ifcfg-br-ex

```
==========
DEVICE=br-ex
DEVICETYPE=ovs
TYPE=OVSBridge
BOOTPROTO=static
IPADDR=192.168.2.61
NETMASK=255.255.252.0
GATEWAY=192.168.0.1
```

Thank you.