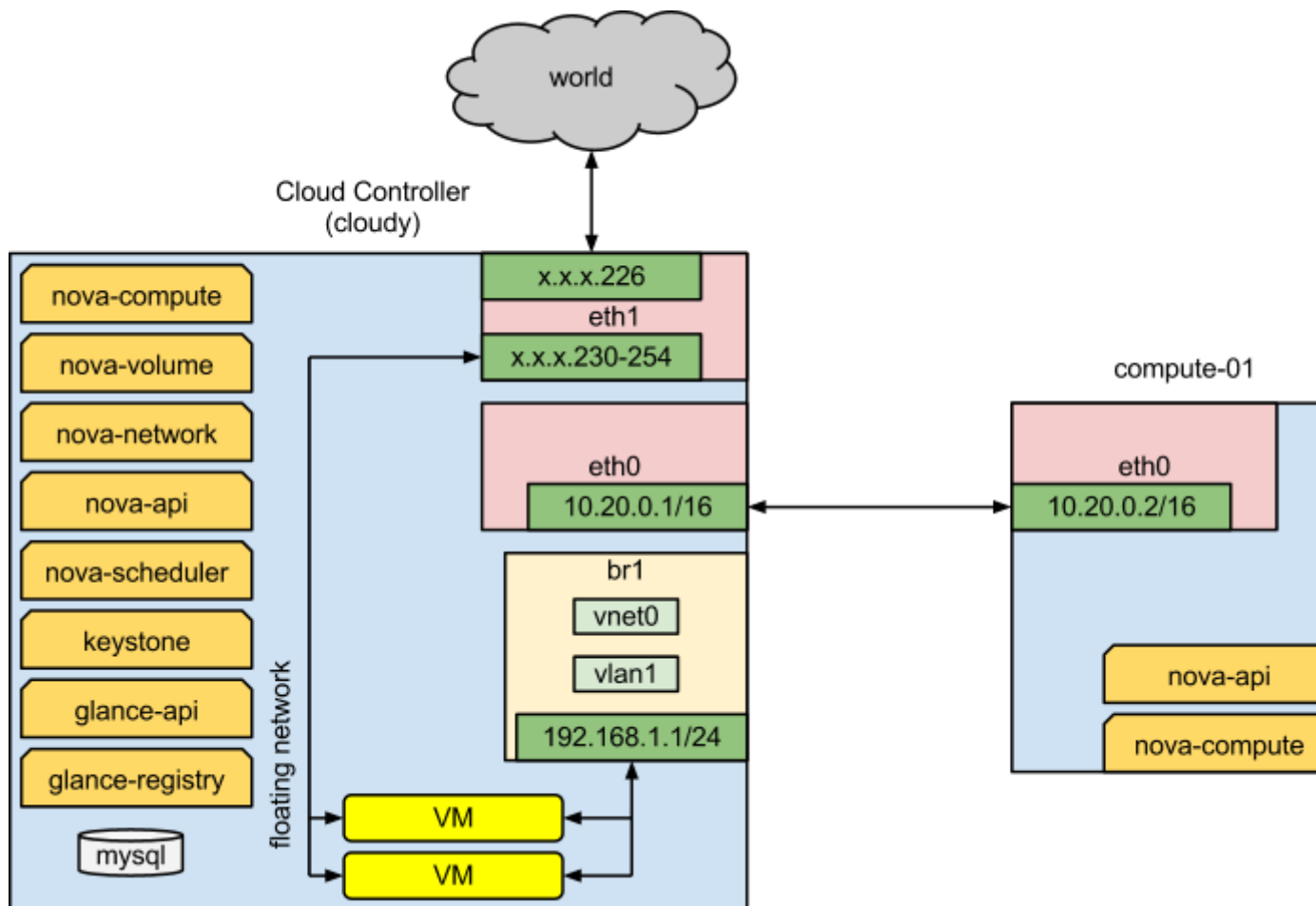




127.0.0.1	localhost
127.0.1.1	cloudy.domain.edu
x.x.x.226	cloudy-pub
10.20.0.1	cloudy-priv cloudy

10.20.0.2	compute-01
-----------	------------

/etc/hosts (cloudy)

127.0.0.1	localhost
127.0.1.1	compute-01
10.20.0.1	cloudy-priv

/etc/hosts (compute-01)

```
[DEFAULT]
debug=true
verbose=true

##### RabbitMQ #####
rabbit_host=cloudy-priv

##### MySQL #####
sql_connection=mysql://novadbadmin:NOT-THE-REAL-PASSWORD@cloudy-priv/nova

##### nova-api #####
auth_strategy=keystone
cc_host=cloudy-priv

##### nova-network #####
network_manager=nova.network.manager.VlanManager
public_interface=eth1
vlan_interface=eth0
network_host=cloudy-priv
fixed_range=192.168.0.0/24
network_size=1024
dhcpbridge_flagfile=/etc/nova/nova.conf
dhcpbridge=/usr/bin/nova-dhcpbridge
force_dhcp_release=True
fixed_ip_disassociate_timeout=30
my_ip=10.20.0.1
routing_source_ip=x.x.x.226
```

```
##### nova-compute #####
connection_type=libvirt
libvirt_type=kvm
libvirt_use_virtio_for_bridges=True
use_cow_images=True
snapshot_image_format=qcow2
resume_guests_state_on_host_boot=true
start_guests_on_host_boot=true

##### nova-volume #####
num_targets=100
iscsi_helper=tgtadm
iscsi_ip_address=10.20.0.1

##### glance #####
image_service=nova.image.glance.GlanceImageService
glance_api_servers=cloudy-priv:9292

##### Misc #####
logdir=/var/log/nova
state_path=/var/lib/nova
lock_path=/var/lock/nova
root_helper=sudo nova-rootwrap

##### EC2 #####
ec2_host=cloudy-pub
ec2_dmz_host=cloudy-priv
ec2_path=/services/Cloud
ec2_port=8773
ec2_scheme=http
keystone_ec2_url=http://cloudy-priv:5000/v2.0/ec2tokens
ec2_listen=0.0.0.0
ec2_list_port=8773
```

/etc/nova/nova.conf (cloudy)

```
[DEFAULT]
debug=true
verbose=true

##### RabbitMQ #####
rabbit_host=cloudy-priv

##### MySQL #####
sql_connection=mysql://novadbadmin:NOT-THE-REAL-PASSWORD@cloudy-priv/nova

##### nova-api #####
auth_strategy=keystone
cc_host=cloudy-priv

##### nova-network #####
network_manager=nova.network.manager.VlanManager
public_interface=eth0
vlan_interface=eth0
network_host=cloudy-priv
fixed_range=192.168.0.0/24
network_size=1024
dhcpbridge_flagfile=/etc/nova/nova.conf
dhcpbridge=/usr/bin/nova-dhcpbridge
force_dhcp_release=True
fixed_ip_disassociate_timeout=30
my_ip=10.20.0.2
#???? Not sure what to put below. 10.20.0.1? x.x.x.226?
routing_source_ip=10.20.0.2

##### nova-compute #####
connection_type=libvirt
libvirt_type=kvm
libvirt_use_virtio_for_bridges=True
use_cow_images=True
snapshot_image_format=qcow2
resume_guests_state_on_host_boot=true
start_guests_on_host_boot=true

##### nova-volume #####
num_targets=100
iscsi_helper=tgtadm
iscsi_ip_address=10.20.0.1

##### glance #####
```

```
image_service=nova.image.glance.GlanceImageService
glance_api_servers=cloudy-priv:9292

##### Misc #####
logdir=/var/log/nova
state_path=/var/lib/nova
lock_path=/var/lock/nova
root_helper=sudo nova-rootwrap

##### EC2 #####
ec2_host=cloudy-pub
ec2_dmz_host=cloudy-priv
ec2_path=/services/Cloud
ec2_port=8773
ec2_scheme=http
keystone_ec2_url=http://cloudy-priv:5000/v2.0/ec2tokens
ec2_listen=0.0.0.0
ec2_list_port=8773
```

/etc/nova/nova.conf (compute-01)

```
root@compute-01:/etc/nova# nmap -p1-65535 -n cloudy-priv

Starting Nmap 5.21 ( http://nmap.org ) at 2012-08-24 12:43 EDT
Nmap scan report for cloudy-priv (10.20.0.1)
Host is up (0.000079s latency).
Not shown: 65517 closed ports
PORT      STATE SERVICE
22/tcp    open  ssh
25/tcp    open  smtp
111/tcp   open  rpcbind
3260/tcp  open  iscsi
3306/tcp  open  mysql
4369/tcp  open  unknown
5000/tcp  open  upnp
5672/tcp  open  amqp
8773/tcp  open  unknown
8774/tcp  open  unknown
8775/tcp  open  unknown
8776/tcp  open  unknown
9191/tcp  open  unknown
9292/tcp  open  unknown
```

```

35357/tcp open  unknown
40958/tcp open  unknown
48933/tcp open  unknown
59118/tcp open  unknown
MAC Address: XX:XX:XX:XX:XX:XX (Super Micro Computer)

Nmap done: 1 IP address (1 host up) scanned in 1.28 seconds
root@compute-01:/etc/nova#

```

NMAP portscan of cloudy from compute-01

```

root@compute-01:/etc/nova# iptables -L -n -v
Chain INPUT (policy ACCEPT 76352 packets, 17M bytes)
  pkts bytes target     prot opt in     out     source               destination
    0    0 ACCEPT     udp  --  virbr0 *      0.0.0.0/0           0.0.0.0/0           udp dpt:53
    0    0 ACCEPT     tcp  --  virbr0 *      0.0.0.0/0           0.0.0.0/0           tcp dpt:53
    0    0 ACCEPT     udp  --  virbr0 *      0.0.0.0/0           0.0.0.0/0           udp dpt:67
    0    0 ACCEPT     tcp  --  virbr0 *      0.0.0.0/0           0.0.0.0/0           tcp dpt:67

Chain FORWARD (policy ACCEPT 2 packets, 594 bytes)
  pkts bytes target     prot opt in     out     source               destination
    0    0 ACCEPT     all  --  *        virbr0  0.0.0.0/0           192.168.122.0/24    state RELATED,ESTABLISHED
    0    0 ACCEPT     all  --  virbr0 *      192.168.122.0/24    0.0.0.0/0
    0    0 ACCEPT     all  --  virbr0 virbr0  0.0.0.0/0           0.0.0.0/0
    0    0 REJECT     all  --  *        virbr0  0.0.0.0/0           0.0.0.0/0           reject-with icmp-port-unreachable
    0    0 REJECT     all  --  virbr0 *      0.0.0.0/0           0.0.0.0/0           reject-with icmp-port-unreachable

Chain OUTPUT (policy ACCEPT 77985 packets, 11M bytes)
  pkts bytes target     prot opt in     out     source               destination
root@compute-01:/etc/nova# iptables -L -n -v -t nat
Chain PREROUTING (policy ACCEPT 4 packets, 473 bytes)
  pkts bytes target     prot opt in     out     source               destination

Chain INPUT (policy ACCEPT 3 packets, 176 bytes)
  pkts bytes target     prot opt in     out     source               destination

Chain OUTPUT (policy ACCEPT 68342 packets, 3022K bytes)
  pkts bytes target     prot opt in     out     source               destination

Chain POSTROUTING (policy ACCEPT 68343 packets, 3022K bytes)
  pkts bytes target     prot opt in     out     source               destination
    0    0 MASQUERADE tcp  --  *        *        192.168.122.0/24    !192.168.122.0/24    masq ports: 1024-65535

```

0	0	MASQUERADE	udp	--	*	*	192.168.122.0/24	!192.168.122.0/24	masq ports: 1024-65535
0	0	MASQUERADE	all	--	*	*	192.168.122.0/24	!192.168.122.0/24	

iptables mangle/nat tables for compute-01

```

root@cloudy:~# iptables -L -n -v
Chain INPUT (policy ACCEPT 161K packets, 64M bytes)
pkts bytes target      prot opt in     out     source        destination
161K  64M nova-network-INPUT all  --  *      *       0.0.0.0/0     0.0.0.0/0
161K  64M nova-api-INPUT  all  --  *      *       0.0.0.0/0     0.0.0.0/0
161K  64M nova-compute-INPUT all --  *      *       0.0.0.0/0     0.0.0.0/0
0      0 ACCEPT      udp  --  virbr0 *      0.0.0.0/0     0.0.0.0/0     udp dpt:53
0      0 ACCEPT      tcp  --  virbr0 *      0.0.0.0/0     0.0.0.0/0     tcp dpt:53
0      0 ACCEPT      udp  --  virbr0 *      0.0.0.0/0     0.0.0.0/0     udp dpt:67
0      0 ACCEPT      tcp  --  virbr0 *      0.0.0.0/0     0.0.0.0/0     tcp dpt:67

Chain FORWARD (policy ACCEPT 2 packets, 168 bytes)
pkts bytes target      prot opt in     out     source        destination
3444  480K nova-filter-top  all  --  *      *       0.0.0.0/0     0.0.0.0/0
1940  331K nova-network-FORWARD all --  *      *       0.0.0.0/0     0.0.0.0/0
2      168 nova-api-FORWARD  all  --  *      *       0.0.0.0/0     0.0.0.0/0
2      168 nova-compute-FORWARD all --  *      *       0.0.0.0/0     0.0.0.0/0
0      0 ACCEPT      all  --  *      virbr0 0.0.0.0/0     192.168.122.0/24 state RELATED,ESTABLISHED
0      0 ACCEPT      all  --  virbr0 *      192.168.122.0/24 0.0.0.0/0
0      0 ACCEPT      all  --  virbr0 virbr0 0.0.0.0/0     0.0.0.0/0
0      0 REJECT      all  --  *      virbr0 0.0.0.0/0     0.0.0.0/0     reject-with icmp-port-unreachable
0      0 REJECT      all  --  virbr0 *      0.0.0.0/0     0.0.0.0/0     reject-with icmp-port-unreachable

Chain OUTPUT (policy ACCEPT 155K packets, 64M bytes)
pkts bytes target      prot opt in     out     source        destination
157K  64M nova-filter-top  all  --  *      *       0.0.0.0/0     0.0.0.0/0
155K  64M nova-network-OUTPUT all --  *      *       0.0.0.0/0     0.0.0.0/0
155K  64M nova-api-OUTPUT  all  --  *      *       0.0.0.0/0     0.0.0.0/0
155K  64M nova-compute-OUTPUT all --  *      *       0.0.0.0/0     0.0.0.0/0

Chain nova-api-FORWARD (1 references)
pkts bytes target      prot opt in     out     source        destination

Chain nova-api-INPUT (1 references)
pkts bytes target      prot opt in     out     source        destination
2      84 ACCEPT      tcp  --  *      *       0.0.0.0/0     10.20.0.1     tcp dpt:8775

```

```

Chain nova-api-OUTPUT (1 references)
pkts bytes target      prot opt in      out      source      destination

Chain nova-api-local (1 references)
pkts bytes target      prot opt in      out      source      destination

Chain nova-compute-FORWARD (1 references)
pkts bytes target      prot opt in      out      source      destination
0      0 ACCEPT      all  --  br1     *        0.0.0.0/0    0.0.0.0/0
0      0 ACCEPT      all  --  *       br1      0.0.0.0/0    0.0.0.0/0

Chain nova-compute-INPUT (1 references)
pkts bytes target      prot opt in      out      source      destination

Chain nova-compute-OUTPUT (1 references)
pkts bytes target      prot opt in      out      source      destination

Chain nova-compute-inst-1 (1 references)
pkts bytes target      prot opt in      out      source      destination
0      0 DROP        all  --  *       *        0.0.0.0/0    0.0.0.0/0      state INVALID
1022 149K ACCEPT      all  --  *       *        0.0.0.0/0    0.0.0.0/0      state RELATED,ESTABLISHED
55   3262 nova-compute-provider all  --  *       *        0.0.0.0/0    0.0.0.0/0
0      0 ACCEPT      udp  --  *       *        192.168.1.1  0.0.0.0/0      udp spt:67 dpt:68
0      0 ACCEPT      all  --  *       *        192.168.1.0/24 0.0.0.0/0
2    122 ACCEPT      icmp --  *       *        0.0.0.0/0    0.0.0.0/0
0      0 ACCEPT      tcp  --  *       *        0.0.0.0/0    0.0.0.0/0      tcp dpt:80
51   3048 ACCEPT      tcp  --  *       *        0.0.0.0/0    0.0.0.0/0      tcp dpt:22
0      0 ACCEPT      tcp  --  *       *        0.0.0.0/0    0.0.0.0/0      tcp dpt:443
2     92 nova-compute-sg-fallback all  --  *       *        0.0.0.0/0    0.0.0.0/0

Chain nova-compute-inst-2 (1 references)
pkts bytes target      prot opt in      out      source      destination
0      0 DROP        all  --  *       *        0.0.0.0/0    0.0.0.0/0      state INVALID
808 122K ACCEPT      all  --  *       *        0.0.0.0/0    0.0.0.0/0      state RELATED,ESTABLISHED
62   3722 nova-compute-provider all  --  *       *        0.0.0.0/0    0.0.0.0/0
0      0 ACCEPT      udp  --  *       *        192.168.1.1  0.0.0.0/0      udp spt:67 dpt:68
0      0 ACCEPT      all  --  *       *        192.168.1.0/24 0.0.0.0/0
2    122 ACCEPT      icmp --  *       *        0.0.0.0/0    0.0.0.0/0
51   3048 ACCEPT      tcp  --  *       *        0.0.0.0/0    0.0.0.0/0      tcp dpt:22
8     512 ACCEPT      tcp  --  *       *        0.0.0.0/0    0.0.0.0/0      tcp dpt:80
0      0 ACCEPT      tcp  --  *       *        0.0.0.0/0    0.0.0.0/0      tcp dpt:443
1     40 nova-compute-sg-fallback all  --  *       *        0.0.0.0/0    0.0.0.0/0

Chain nova-compute-inst-3 (1 references)

```

pkts	bytes	target	prot	opt	in	out	source	destination	
0	0	DROP	all	--	*	*	0.0.0.0/0	0.0.0.0/0	state INVALID
642	110K	ACCEPT	all	--	*	*	0.0.0.0/0	0.0.0.0/0	state RELATED,ESTABLISHED
23	1317	nova-compute-provider	all	--	*	*	0.0.0.0/0	0.0.0.0/0	
0	0	ACCEPT	udp	--	*	*	192.168.1.1	0.0.0.0/0	udp spt:67 dpt:68
0	0	ACCEPT	all	--	*	*	192.168.1.0/24	0.0.0.0/0	
2	89	ACCEPT	icmp	--	*	*	0.0.0.0/0	0.0.0.0/0	
20	1188	ACCEPT	tcp	--	*	*	0.0.0.0/0	0.0.0.0/0	tcp dpt:22
1	40	nova-compute-sg-fallback	all	--	*	*	0.0.0.0/0	0.0.0.0/0	

Chain nova-compute-local (1 references)

pkts	bytes	target	prot	opt	in	out	source	destination
1077	152K	nova-compute-inst-1	all	--	*	*	0.0.0.0/0	192.168.1.3
870	126K	nova-compute-inst-2	all	--	*	*	0.0.0.0/0	192.168.1.4
665	111K	nova-compute-inst-3	all	--	*	*	0.0.0.0/0	192.168.1.5

Chain nova-compute-provider (3 references)

pkts	bytes	target	prot	opt	in	out	source	destination
------	-------	--------	------	-----	----	-----	--------	-------------

Chain nova-compute-sg-fallback (3 references)

pkts	bytes	target	prot	opt	in	out	source	destination
4	172	DROP	all	--	*	*	0.0.0.0/0	0.0.0.0/0

Chain nova-filter-top (2 references)

pkts	bytes	target	prot	opt	in	out	source	destination
160K	64M	nova-network-local	all	--	*	*	0.0.0.0/0	0.0.0.0/0
160K	64M	nova-api-local	all	--	*	*	0.0.0.0/0	0.0.0.0/0
160K	64M	nova-compute-local	all	--	*	*	0.0.0.0/0	0.0.0.0/0

Chain nova-network-FORWARD (1 references)

pkts	bytes	target	prot	opt	in	out	source	destination
1938	331K	ACCEPT	all	--	br1	*	0.0.0.0/0	0.0.0.0/0
0	0	ACCEPT	all	--	*	br1	0.0.0.0/0	0.0.0.0/0
0	0	ACCEPT	udp	--	*	*	0.0.0.0/0	192.168.1.2 udp dpt:1194

Chain nova-network-INPUT (1 references)

pkts	bytes	target	prot	opt	in	out	source	destination
------	-------	--------	------	-----	----	-----	--------	-------------

Chain nova-network-OUTPUT (1 references)

pkts	bytes	target	prot	opt	in	out	source	destination
------	-------	--------	------	-----	----	-----	--------	-------------

Chain nova-network-local (1 references)

pkts	bytes	target	prot	opt	in	out	source	destination
------	-------	--------	------	-----	----	-----	--------	-------------

root@cloudy:~# iptables -L -n -v -tnat

Chain PREROUTING (policy ACCEPT 68686 packets, 3148K bytes)

```

pkts bytes target      prot opt in      out      source      destination
68827 3156K nova-network-PREROUTING all -- *      *      0.0.0.0/0    0.0.0.0/0
68686 3148K nova-api-PREROUTING all -- *      *      0.0.0.0/0    0.0.0.0/0
68686 3148K nova-compute-PREROUTING all -- *      *      0.0.0.0/0    0.0.0.0/0

Chain INPUT (policy ACCEPT 68520 packets, 3138K bytes)
pkts bytes target      prot opt in      out      source      destination

Chain OUTPUT (policy ACCEPT 460 packets, 29460 bytes)
pkts bytes target      prot opt in      out      source      destination
460 29460 nova-network-OUTPUT all -- *      *      0.0.0.0/0    0.0.0.0/0
460 29460 nova-api-OUTPUT all -- *      *      0.0.0.0/0    0.0.0.0/0
460 29460 nova-compute-OUTPUT all -- *      *      0.0.0.0/0    0.0.0.0/0

Chain POSTROUTING (policy ACCEPT 597 packets, 37673 bytes)
pkts bytes target      prot opt in      out      source      destination
684 44252 nova-network-POSTROUTING all -- *      *      0.0.0.0/0    0.0.0.0/0
684 44252 nova-api-POSTROUTING all -- *      *      0.0.0.0/0    0.0.0.0/0
684 44252 nova-compute-POSTROUTING all -- *      *      0.0.0.0/0    0.0.0.0/0
0 0 MASQUERADE tcp -- *      *      192.168.122.0/24 !192.168.122.0/24 masq ports: 1024-65535
0 0 MASQUERADE udp -- *      *      192.168.122.0/24 !192.168.122.0/24 masq ports: 1024-65535
0 0 MASQUERADE all -- *      *      192.168.122.0/24 !192.168.122.0/24
684 44252 nova-postrouting-bottom all -- *      *      0.0.0.0/0    0.0.0.0/0

Chain nova-api-OUTPUT (1 references)
pkts bytes target      prot opt in      out      source      destination

Chain nova-api-POSTROUTING (1 references)
pkts bytes target      prot opt in      out      source      destination

Chain nova-api-PREROUTING (1 references)
pkts bytes target      prot opt in      out      source      destination

Chain nova-api-float-snat (1 references)
pkts bytes target      prot opt in      out      source      destination

Chain nova-api-snat (1 references)
pkts bytes target      prot opt in      out      source      destination
597 37673 nova-api-float-snat all -- *      *      0.0.0.0/0    0.0.0.0/0

Chain nova-compute-OUTPUT (1 references)
pkts bytes target      prot opt in      out      source      destination

Chain nova-compute-POSTROUTING (1 references)
pkts bytes target      prot opt in      out      source      destination

```

Chain nova-compute-PREROUTING (1 references)

pkts	bytes	target	prot	opt	in	out	source	destination
------	-------	--------	------	-----	----	-----	--------	-------------

Chain nova-compute-float-snat (1 references)

pkts	bytes	target	prot	opt	in	out	source	destination
------	-------	--------	------	-----	----	-----	--------	-------------

Chain nova-compute-snat (1 references)

pkts	bytes	target	prot	opt	in	out	source	destination
597	37673	nova-compute-float-snat	all	--	*	*	0.0.0.0/0	0.0.0.0/0

Chain nova-network-OUTPUT (1 references)

pkts	bytes	target	prot	opt	in	out	source	destination
0	0	DNAT	udp	--	*	*	0.0.0.0/0	10.20.0.1 udp dpt:1000 to:192.168.1.2:1194
0	0	DNAT	all	--	*	*	0.0.0.0/0	x.x.x.230 to:192.168.1.3
0	0	DNAT	all	--	*	*	0.0.0.0/0	x.x.x.231 to:192.168.1.4
0	0	DNAT	all	--	*	*	0.0.0.0/0	x.x.x.232 to:192.168.1.5

Chain nova-network-POSTROUTING (1 references)

pkts	bytes	target	prot	opt	in	out	source	destination
0	0	ACCEPT	all	--	*	*	192.168.0.0/24	10.20.0.1
0	0	ACCEPT	all	--	*	*	192.168.0.0/24	10.128.0.0/24
0	0	ACCEPT	all	--	*	*	192.168.0.0/24	192.168.0.0/24 ! ctstate DNAT

Chain nova-network-PREROUTING (1 references)

pkts	bytes	target	prot	opt	in	out	source	destination
0	0	DNAT	tcp	--	*	*	0.0.0.0/0	169.254.169.254 tcp dpt:80 to:10.20.0.1:8775
0	0	DNAT	udp	--	*	*	0.0.0.0/0	10.20.0.1 udp dpt:1000 to:192.168.1.2:1194
55	3262	DNAT	all	--	*	*	0.0.0.0/0	x.x.x.230 to:192.168.1.3
63	3782	DNAT	all	--	*	*	0.0.0.0/0	x.x.x.231 to:192.168.1.4
23	1317	DNAT	all	--	*	*	0.0.0.0/0	x.x.x.232 to:192.168.1.5

Chain nova-network-float-snat (1 references)

pkts	bytes	target	prot	opt	in	out	source	destination
0	0	SNAT	all	--	*	*	192.168.1.3	0.0.0.0/0 to:x.x.x.230
38	2888	SNAT	all	--	*	*	192.168.1.4	0.0.0.0/0 to:x.x.x.231
49	3691	SNAT	all	--	*	*	192.168.1.5	0.0.0.0/0 to:x.x.x.232

Chain nova-network-snat (1 references)

pkts	bytes	target	prot	opt	in	out	source	destination
684	44252	nova-network-float-snat	all	--	*	*	0.0.0.0/0	0.0.0.0/0
0	0	SNAT	all	--	*	*	192.168.0.0/24	0.0.0.0/0 to:x.x.x.226

Chain nova-postrouting-bottom (1 references)

pkts	bytes	target	prot	opt	in	out	source	destination
------	-------	--------	------	-----	----	-----	--------	-------------

684	44252	nova-network-snat	all	--	*	*	0.0.0.0/0	0.0.0.0/0
597	37673	nova-api-snat	all	--	*	*	0.0.0.0/0	0.0.0.0/0
597	37673	nova-compute-snat	all	--	*	*	0.0.0.0/0	0.0.0.0/0

iptables mangle/nat tables for cloudy

```

root@compute-01:/etc/nova# ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 16436 qdisc noqueue state UNKNOWN
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
    inet6 ::1/128 scope host
        valid_lft forever preferred_lft forever
2: eth0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc mq state UP qlen 1000
    link/ether XX:XX:XX:XX:XX:XX brd ff:ff:ff:ff:ff:ff
    inet 10.20.0.2/16 brd 10.20.255.255 scope global eth0
    inet 10.54.50.30/16 brd 10.54.255.255 scope global eth0
    inet6 XXXX::XXX:XXX:XXX:XXX/64 scope link
        valid_lft forever preferred_lft forever
3: eth1: <BROADCAST,MULTICAST> mtu 1500 qdisc noop state DOWN qlen 1000
    link/ether XX:XX:XX:XX:XX:XX brd ff:ff:ff:ff:ff:ff
4: virbr0: <NO-CARRIER,BROADCAST,MULTICAST,UP> mtu 1500 qdisc noqueue state DOWN
    link/ether 56:33:4d:71:14:db brd ff:ff:ff:ff:ff:ff
    inet 192.168.122.1/24 brd 192.168.122.255 scope global virbr0

```

Network interfaces on compute-01

```

root@cloudy:~# ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 16436 qdisc noqueue state UNKNOWN
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
    inet 169.254.169.254/32 scope link lo
    inet6 ::1/128 scope host
        valid_lft forever preferred_lft forever
2: eth0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc mq state UP qlen 1000
    link/ether XX:XX:XX:XX:XX:XX brd ff:ff:ff:ff:ff:ff
    inet 10.20.0.1/16 brd 10.20.255.255 scope global eth0
    inet6 fe80::225:90ff:fe56:d7a6/64 scope link
        valid_lft forever preferred_lft forever
3: eth1: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc mq state UP qlen 1000
    link/ether XX:XX:XX:XX:XX:XX brd ff:ff:ff:ff:ff:ff

```

```

inet x.x.x.226/24 brd 130.111.46.255 scope global eth1
inet x.x.x.230/32 scope global eth1
inet x.x.x.231/32 scope global eth1
inet x.x.x.232/32 scope global eth1
inet6 XXXX::XXX:XXX:XXX:XXX/64 scope link
    valid_lft forever preferred_lft forever
4: eth2: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc mq state UP qlen 1000
    link/ether XX:XX:XX:XX:XX:XX brd ff:ff:ff:ff:ff:ff
    inet 10.57.60.0/16 brd 10.57.255.255 scope global eth2
    inet6 XXXX::XXX:XXX:XXX:XXX/64 scope link
        valid_lft forever preferred_lft forever
5: eth3: <BROADCAST,MULTICAST> mtu 1500 qdisc noop state DOWN qlen 1000
    link/ether XX:XX:XX:XX:XX:XX brd ff:ff:ff:ff:ff:ff
6: virbr0: <NO-CARRIER,BROADCAST,MULTICAST,UP> mtu 1500 qdisc noqueue state DOWN
    link/ether XX:XX:XX:XX:XX:XX brd ff:ff:ff:ff:ff:ff
    inet 192.168.122.1/24 brd 192.168.122.255 scope global virbr0
8: vlan1@eth0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc noqueue master br1 state UP
    link/ether XX:XX:XX:XX:XX:XX brd ff:ff:ff:ff:ff:ff
    inet6 XXXX::XXX:XXX:XXX:XXX/64 scope link
        valid_lft forever preferred_lft forever
9: br1: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc noqueue state UP
    link/ether XX:XX:XX:XX:XX:XX brd ff:ff:ff:ff:ff:ff
    inet 192.168.1.1/24 brd 192.168.1.255 scope global br1
    inet6 XXXX::XXX:XXX:XXX:XXX/64 scope link
        valid_lft forever preferred_lft forever
13: vnet0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast master br1 state UNKNOWN qlen 500
    link/ether XX:XX:XX:XX:XX:XX brd ff:ff:ff:ff:ff:ff
    inet6 XXXX::XXX:XXX:XXX:XXX/64 scope link
        valid_lft forever preferred_lft forever
15: vnet1: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast master br1 state UNKNOWN qlen 500
    link/ether XX:XX:XX:XX:XX:XX brd ff:ff:ff:ff:ff:ff
    inet6 XXXX::XXX:XXX:XXX:XXX/64 scope link
        valid_lft forever preferred_lft forever
16: vnet2: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast master br1 state UNKNOWN qlen 500
    link/ether XX:XX:XX:XX:XX:XX brd ff:ff:ff:ff:ff:ff
    inet6 XXXX::XXX:XXX:XXX:XXX/64 scope link
        valid_lft forever preferred_lft forever

```

Network interfaces for cloudy

```
root@cloudy:~# brctl show
bridge name    bridge id        STP enabled    interfaces
br1            8000.fa163e2b45f7 no              vlan1
               8000.000000000000 yes             vnet0
               8000.000000000000 yes             vnet1
               8000.000000000000 yes             vnet2
virbr0         8000.000000000000
```

Bridges on cloudy

```
root@compute-01:/etc/nova# brctl show
bridge name    bridge id        STP enabled    interfaces
virbr0         8000.000000000000
```

Bridges on compute-01