

Gestión de redes con neutron

En la última demostración vamos a crear una nueva red, un nuevo router y una instancia conectada a esta nueva red. Será necesario tener instalado el cliente *python-neutronclient* como se explica en la sección de conceptos previos. Veamos los pasos que tenemos que seguir:

1. Vemos las redes, subredes y routers que tenemos en nuestro proyecto:

```
neutron net-list
+-----+-----+-----+
| id                | name          | subnets      |
+-----+-----+-----+
| d15e0eb6-c892-4717-8be1-b3e85795e8c9 | ext-net       | c80b173f-c203-4e63-956a-ed7351a5a07
| d5d686b5-32fb-4e45-8809-98df3ee5ef3e | 00000061-net | 4751dc7e-6b54-4284-ba02-6c1a44deb07
+-----+-----+-----+

neutron subnet-list
+-----+-----+-----+-----+
| id                | name          | cidr          | allocation_pool |
+-----+-----+-----+-----+
| 4751dc7e-6b54-4284-ba02-6c1a44deb076 | 00000061-subnet | 10.0.15.64/26 | {"start": "10.0
| c80b173f-c203-4e63-956a-ed7351a5a073 | ext-net        | 185.45.72.0/23 | {"start": "185.
+-----+-----+-----+-----+

neutron router-list
+-----+-----+-----+
| id                | name          | external_gateway_info |
+-----+-----+-----+
| d377a1cf-e78b-472f-8235-197c107b9e5d | 00000061-ext-router | {"network_id": "d15e0eb6-c89
+-----+-----+-----+

```

[gistfile1.bash](#) hosted with ❤ by [GitHub](#) [view raw](#)

2. Creamos una red de nombre *mi_red* con una subred asociada con el direccionamiento 192.168.0.0/24:

```
neutron net-create mi_red
Created a new network:
+-----+-----+-----+
| Field            | Value        |
+-----+-----+-----+
| admin_state_up  | True        |
| id              | 44925468-3181-490e-8d81-6c1012aba2e8 |
+-----+-----+-----+

```

```

| name          | mi_red          |
| shared        | False          |
| status        | ACTIVE         |
| subnets      |                |
| tenant_id     | 44f5cb63ad34481aab5cc9c2809e4a76 |
+-----+-----+

```

```

neutron subnet-create mi_red 192.168.0.0/24 --name mi_subred
Created a new subnet:

```

```

+-----+-----+
| Field          | Value          |
+-----+-----+
| allocation_pools | {"start": "192.168.0.2", "end": "192.168.0.254"} |
| cidr           | 192.168.0.0/24 |
| dns_nameservers |                |
| enable_dhcp     | True           |
| gateway_ip      | 192.168.0.1    |
| host_routes     |                |
| id             | e0e4b108-ac13-4827-86fd-a8ea325057cc |
| ip_version      | 4              |
| name           |                |
| network_id      | 44925468-3181-490e-8d81-6c1012aba2e8 |
| tenant_id      | 44f5cb63ad34481aab5cc9c2809e4a76 |
+-----+-----+

```

3. Creamos un nuevo router (*mi_router*), que vamos a conectar con la red externa y con la subred anteriormente creada:

```

neutron router-create mi_router
Created a new router:

```

```

+-----+-----+
| Field          | Value          |
+-----+-----+
| admin_state_up | True           |
| external_gateway_info |                |
| id             | 4e179266-06b1-46d4-a0f7-f3e2f06bc7d3 |
| name           | mi_router      |
| status         | ACTIVE         |
| tenant_id      | 44f5cb63ad34481aab5cc9c2809e4a76 |
+-----+-----+

```

Conectamos el router a la red externa:

```

neutron router-gateway-set mi_router ext-net

```

Conectamos el router a la red:

```

neutron router-interface-add mi_router mi_subred

```

Para listar los puertos:

```

neutron port-list

```

4. Creamos una nueva instancia conectada a la nueva red y le asignamos una ip pública.

```

nova boot --flavor ssd.XXXS \

```

```
--image 44288012-b805-455f-a21f-74ab36c46362 \  
--security-groups gr_seguridad \  
--key-name clave_acceso \  
--nic net-id=44925468-3181-490e-8d81-6c1012aba2e8 \  
otra_instancia
```

Property	Value
OS-DCF:diskConfig	MANUAL
OS-EXT-AZ:availability_zone	nova
OS-EXT-STS:power_state	0
OS-EXT-STS:task_state	scheduling
OS-EXT-STS:vm_state	building
OS-SRV-USG:launched_at	-
OS-SRV-USG:terminated_at	-
accessIPv4	
accessIPv6	
adminPass	iwwBVxtYcv4R
config_drive	
created	2014-10-23T08:15:15Z
flavor	ssd.XXXS (20)
hostId	
id	ae5a8cea-2c6c-4666-a02b-1d246d97caa5
image	Ubuntu 14.04 LTS - Trusty Tahr - 64 bits (44288012)
key_name	clave_acceso
metadata	{}
name	otra_instancia
os-extended-volumes:volumes_attached	[]
progress	0
security_groups	gr_seguridad
status	BUILD
tenant_id	44f5cb63ad34481aab5cc9c2809e4a76
updated	2014-10-23T08:15:16Z
user_id	7a15970a225d41babb750da8a6f5e8d2

```
nova show otra_instancia
```

Property	Value
OS-DCF:diskConfig	MANUAL
OS-EXT-AZ:availability_zone	nova
OS-EXT-STS:power_state	1
OS-EXT-STS:task_state	-
OS-EXT-STS:vm_state	active
OS-SRV-USG:launched_at	2014-10-23T08:15:25.000000
OS-SRV-USG:terminated_at	-

```
| accessIPv4 |
| accessIPv6 |
| config_drive |
| created | 2014-10-23T08:15:15Z
| flavor | ssd.XXS (20)
| hostId | 962db8c7b201499f39eeee5cb2c88d73cae9931aa8703e1d3e
| id | ae5a8cea-2c6c-4666-a02b-1d246d97caa5
| image | Ubuntu 14.04 LTS - Trusty Tahr - 64 bits (44288012)
| key_name | clave_acceso
| metadata | {}
| mi_red network | 192.168.0.2
| name | otra_instancia
| os-extended-volumes:volumes_attached | []
| progress | 0
| security_groups | gr_seguridad
| status | ACTIVE
| tenant_id | 44f5cb63ad34481aab5cc9c2809e4a76
| updated | 2014-10-23T08:15:25Z
| user_id | 7a15970a225d41babb750da8a6f5e8d2
```

```
+-----+
nova floating-ip-create ext-net
```

```
+-----+-----+-----+-----+
| Ip | Server Id | Fixed Ip | Pool |
+-----+-----+-----+-----+
| 185.45.73.4 | - | - | ext-net |
+-----+-----+-----+-----+
```

```
nova floating-ip-associate otra_instancia 185.45.73.4
```