Identify and Verify Neutron Networking Service

Andrew Mallett
LINUX AUTHOR AND TRAINER

@theurbanpenguin www.theurbanpenguin.com

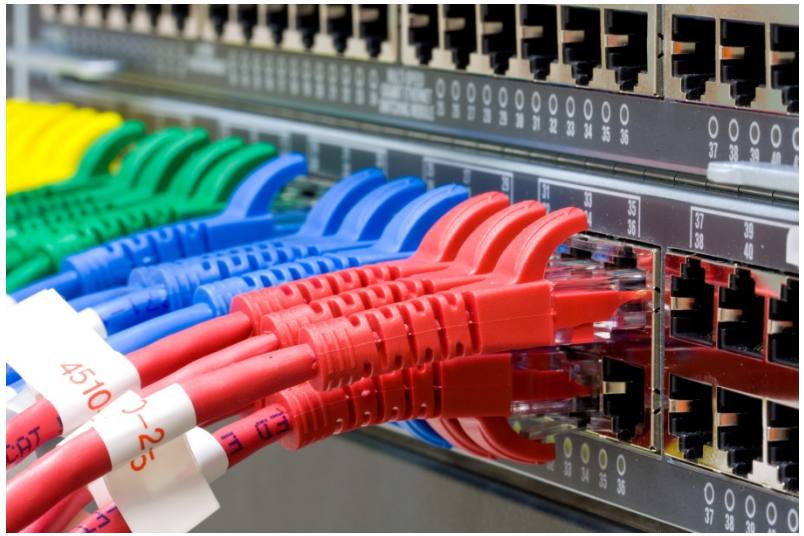
Let’s take a 100 mile per hour sprint through Networking. Giving us a working OpenStack Cloud with more details in later courses

Objectives

Neutron Networking Components

Revisit the PackStack Answer File

Quick Network Reconfigure



Neutron is the OpenStack Networking service and is another major part of OpenStack. Neutron evolved out of Nova and provides the Networking elements to the Cloud internals.

This includes:

Networks and Subnet Ranges

DHCP Agent

Routers

Firewalling

Network Address Translation

PackStack Answer File

During the install we did set-up some of the networking:

CONFIG_NEUTRON_OVS_BRIDGE_MAPPINGS=physnet1:br-ex
/etc/neutron/plugins/ml2/openvswitch_agent.ini

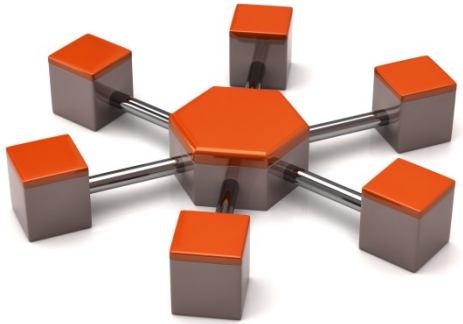
CONFIG_NEUTRON_OVS_BRIDGE_IFACES=br-ex:eth0
/etc/neutron/l3_agent.ini

Check Neutron Configuration

What We Have

Private Network Private_Subnet 10.0.0.0/24

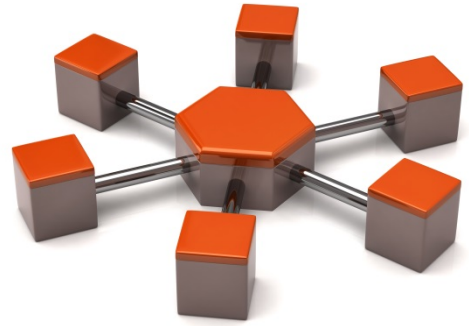
Public Network Public_Subnet 172.24.4.224/28



Physical Network
192.168.56.0/24

What We Want

Demo_Private_Network Demo_Subnet 10.1.0.0/16



External Network External_Subnet 192.168.56.0/24

Physical Network
192.168.56.0/24

```
# source adminrc
# openstack network list
# neutron net-list
# neutron subnet-list
# neutron agent-list
```

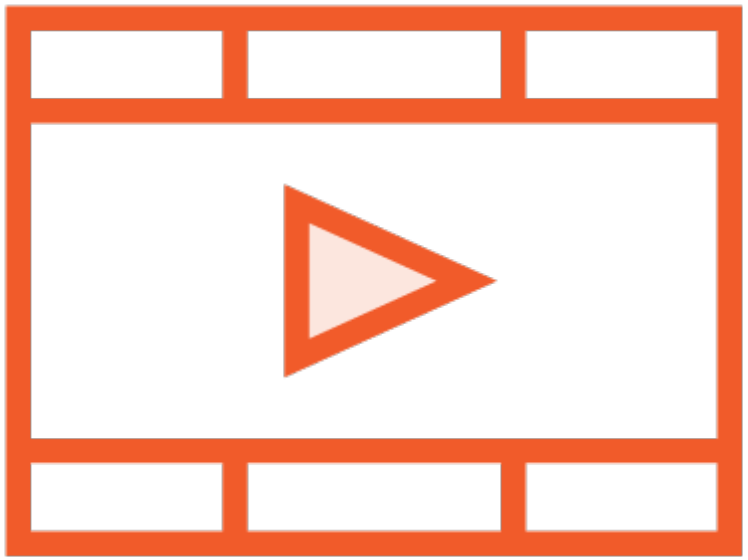
Working with Neutron

Whilst the openstack client is OK, however, we have more options with the neutron client.

Identify the Problem

Fixing the Problem

Instance with Networking



Identified Neutron: The networking service for OpenStack.

Verified Neutron: Using tools provided we could list the status of the OpenStack Network

Provisioned Networking: We created a networking structure that was usable in our Cloud

Next up: OpenStack Managing Identities and Objects