# Tacker Installation Guide

**Openstack Version: Liberty**

## Installation Steps

**Network Diagram**

**Controller Node**

**eth1**

**eth0**

**Local Switch**

**Internet**

1. Pull devstack repo for stable liberty branch
2. git clone -b stable/liberty https://github.com/openstack-dev/devstack
3. Update/Create local.conf

* Update the HOST\_IP to the IP address of VM or host where you are running tacker.
* Update t FLOATING\_RANGE and Q\_FLOATING\_ALLOCATION\_POOL as per the requirement.
* Devstack installation will create the network provision network and tenant network as per the local.conf value provided.
* It creates one flat network and two vlan network.
* Net0, Net1 and Net\_mgmt networks.

File : local.conf



[[local|localrc]]

############################################################

# Customize the following HOST\_IP based on your installation

############################################################

HOST\_IP=10.12.161.164

ADMIN\_PASSWORD=devstack

MYSQL\_PASSWORD=devstack

RABBIT\_PASSWORD=devstack

SERVICE\_PASSWORD=$ADMIN\_PASSWORD

SERVICE\_TOKEN=devstack

############################################################

# Customize the following section based on your installation

############################################################

# Pip

PIP\_USE\_MIRRORS=False

USE\_GET\_PIP=1

OFFLINE=False

# Logging

LOGFILE=$DEST/logs/stack.sh.log

SCREEN\_LOGDIR=$DEST/logs/screen

VERBOSE=True

ENABLE\_DEBUG\_LOG\_LEVEL=True

ENABLE\_VERBOSE\_LOG\_LEVEL=True

# Neutron ML2 with OpenVSwitch

Q\_PLUGIN=ml2

Q\_AGENT=openvswitch

#PUBLIC NETWORK CONFIGURATION

Q\_USE\_PROVIDERNET\_FOR\_PUBLIC=False

FLOATING\_RANGE=10.12.161.0/24

Q\_FLOATING\_ALLOCATION\_POOL="start=10.12.161.150,end=10.12.161.201"

PUBLIC\_NETWORK\_NAME=external

PUBLIC\_NETWORK\_GATEWAY=10.12.161.1

PUBLIC\_PHYSICAL\_NETWORK=public

PUBLIC\_INTERFACE=eth1

# Required for l3-agent to connect to external-network-bridge

PUBLIC\_BRIDGE=br-ex

#PRIVATE NETWORK CONFIGURATION

NETWORK\_GATEWAY=${NETWORK\_GATEWAY:-15.0.0.1}

FIXED\_RANGE=${FIXED\_RANGE:-15.0.0.0/24}

enable\_plugin tacker https://git.openstack.org/openstack/tacker stable/liberty

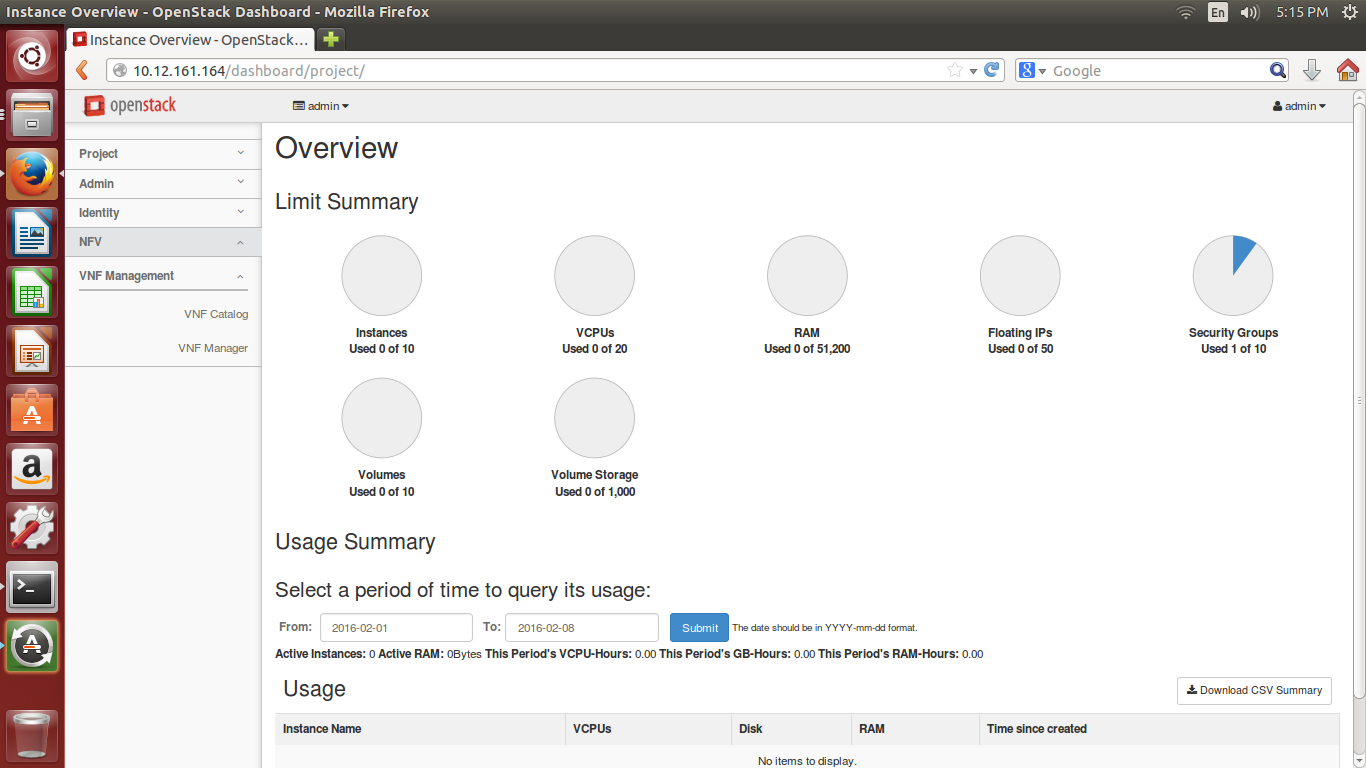
enable\_service n-novnc

enable\_service n-cauth

disable\_service tempest

1. Make sure the local.conf "enable\_plugin tacker" is pointing to stable/liberty,
2. enable\_plugin tacker https://github.com/openstack/tacker stable/liberty
3. Run stack.sh
4. After installation check the horizon dashboard with link as

http:// 10.12.161.168/dashboard/



**HOST\_IP = 10.12.161.168**

**ENVIRONMENT File to verify the openstack service running. Create the env.sh with following and source as “source env.sh”**

export OS\_TENANT\_NAME=admin

export OS\_USERNAME=admin

export OS\_PASSWORD=devstack

export OS\_AUTH\_URL=http://10.12.161.164:5000/v3

export OS\_IDENTITY\_API\_VERSION=3

export OS\_IMAGE\_API\_VERSION=2

**Observation:**

1. Check the networks are created net0, net1 and net\_mgmt
2. Sample image files are loaded in Glance (cirros image files)
3. Observe in Horizon NFV tab with VNF catalog and VNF Manager.

## Subnet Creation for flat network:

Flat network is created with eth0 IP address. Hence it needs to modify as per the requirement.

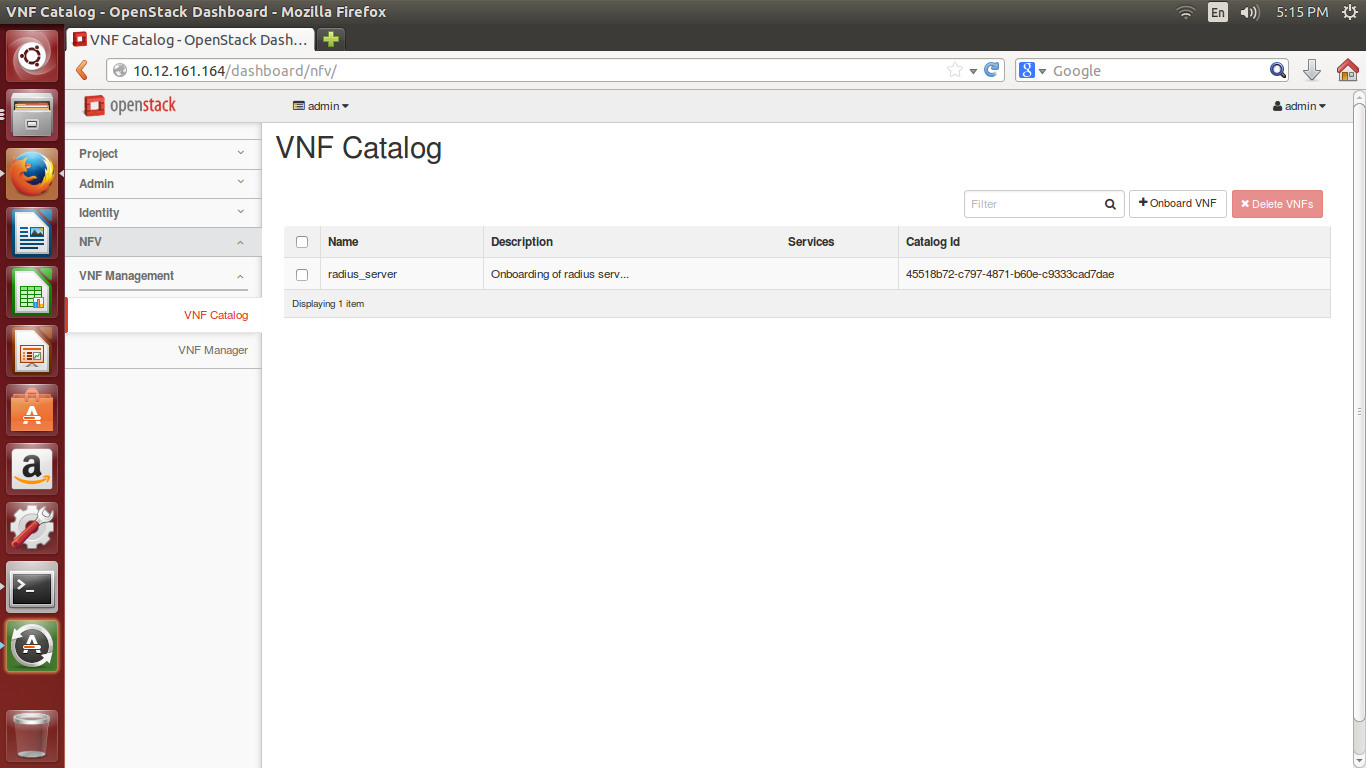
1. Delete the subnet for the flat network **net\_mgmt**  from GUI and create the new subnet for the **net\_mgmt** network.

## Tacker configuration and template

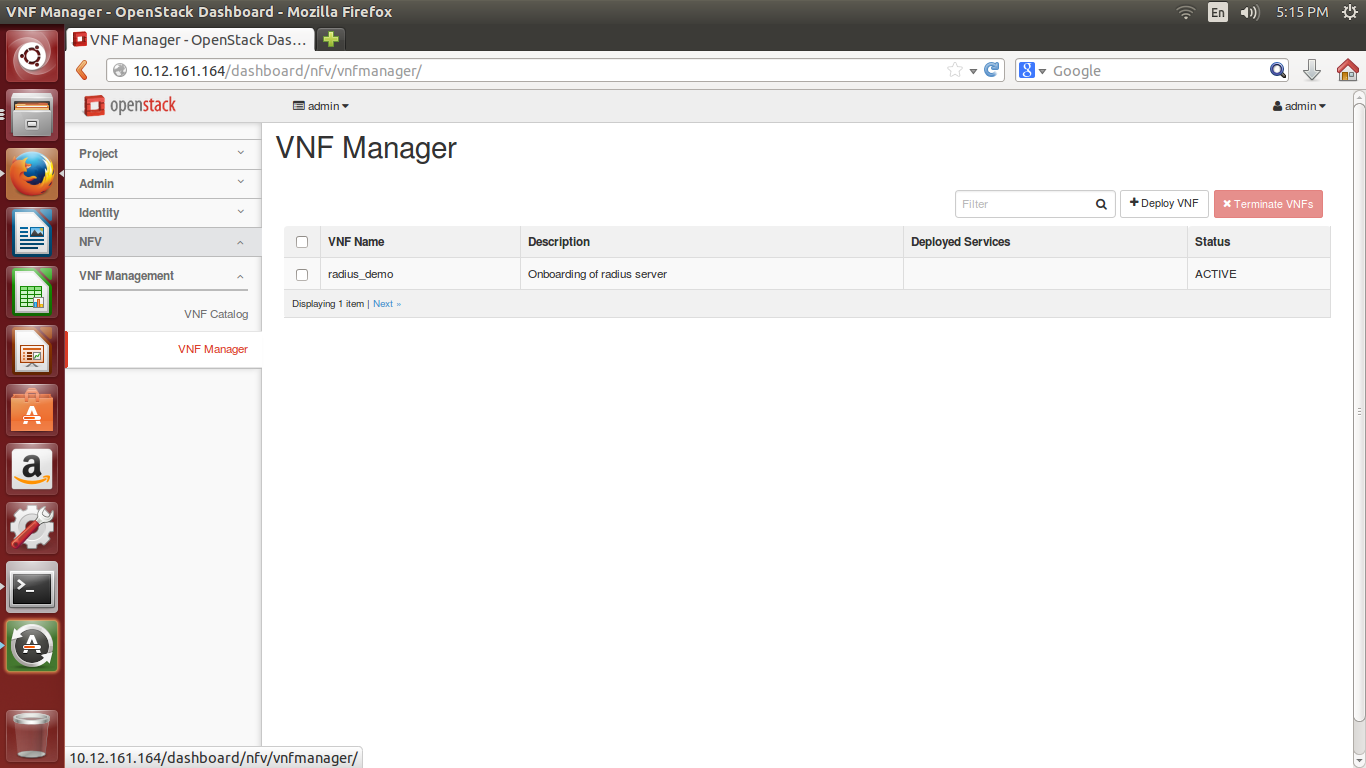
1. Create the catalog template file and params file as attached

1. Onboard VNFD catalog using the radius\_server.yaml file.it creates template with name as radius\_server as shown in below snapshot .



1. Deploy the VNF using the template “radius\_server” and parmeter file “param.yaml” as input.



1. Check the status of the VNF is ACTIVE after creating the VNF instance.

## Monitoring

Follow the steps in **section 3** with the below VNFD template file for monitoring service.



1. Verify the instance is created and wait for some time.
2. After configured interval the instance will be deleted and new instance will be created with tag as “XXXXX\_RESPWAN”.

**Command for Image conversion from snapshot to RAW format**

glance image-download --file <filename> <image-id>

techm@techm:~/devstack$ glance image-list

+--------------------------------------+---------------------------------+

| ID | Name |

+--------------------------------------+---------------------------------+

| 01d353cc-e412-4418-93c9-856b70cff6af | cirros-0.3.4-x86\_64-uec |

| e907fb97-54b2-49c5-b6f6-d050608765d6 | cirros-0.3.4-x86\_64-uec-kernel |

| 2aaccf68-6b1d-4a5e-b0a3-9def701f6751 | cirros-0.3.4-x86\_64-uec-ramdisk |

| e06e01e6-71c3-4b76-99f0-8c78375cab17 | RADIUS\_SERVICE |

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techm@techm:~/devstack$ glance image-download --file RAD\_SERVICE.raw e06e01e6-71c3-4b76-99f0-8c78375cab17

## References

<https://wiki.openstack.org/wiki/Tacker/Installation>