Lecture: Week 14 - 1



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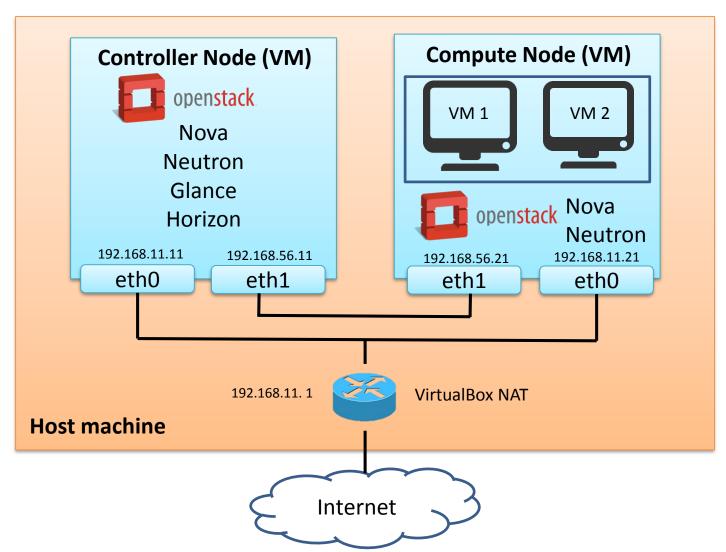
### **Outline**



- OpenStack Additional Setup # 1
- OpenStack Additional Setup # 2
- OpenStack CLI



#### Environment Overview



"provider" network (192.168.11.0/24)

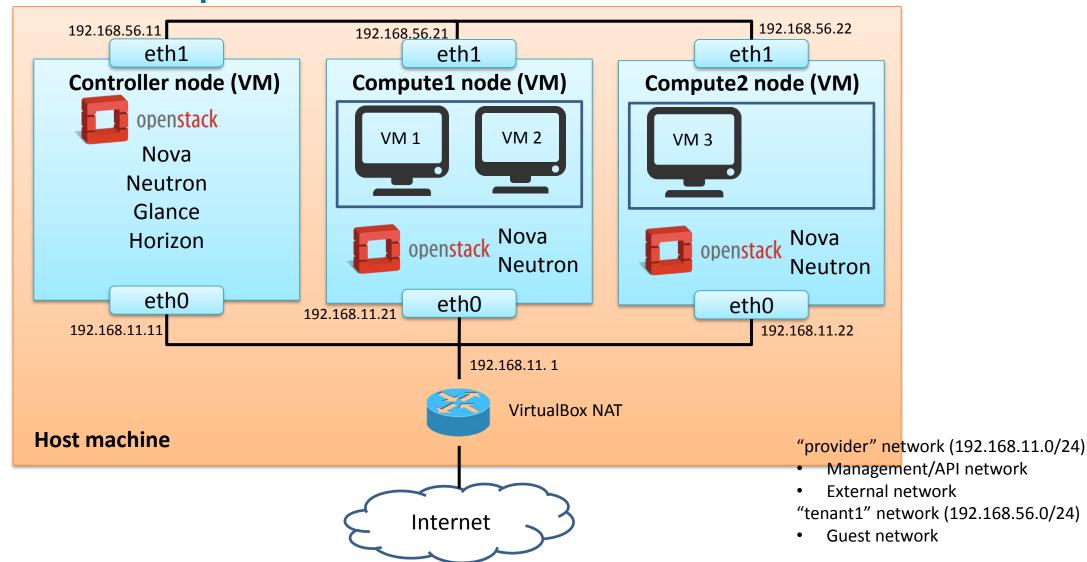
- Management/API network
- External network

"tenant1" network (192.168.56.0/24)

Guest network



#### Add a New Compute Node

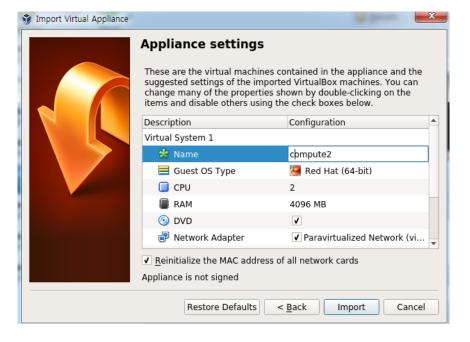




#### Add a New Compute Node

- File → Import Applicance → select "compute1.ova"
- Rename compute1 → compute2
- Check "Reinitialize the MAC address of all network cards"







#### Add a New Compute Node

- Start the VM (now called "compute2 VM") and login (USER: root, PW: stack)
- Modify the ethernet interface configuration as follows and type "service network restart" in a terminal

eth0: 192.168.11.22eth1: 192.168.56.22

eth2: 10.10.1.22

TYPE="Ethernet"
BOOTPROTO="none"
DEFROUTE="yes"
IPV4\_FAILURE\_FATAL="no"
IPV6INIT="no"
DEVICE="eth1"
ONBOOT="yes"
IPADDR="192.168.56.22<u>"</u>
PREFIX="24"

```
TYPE="Ethernet"
BOOTPROTO="none"
DEFROUTE="yes"
IPV4_FAILURE_FATAL="no"
IPV6INIT="no"
DEVICE="eth2"
ONBOOT="yes"
_PADDR="10.10.1.22"
PREFIX="24"
```

TYPE="Ethernet"
BOOTPROTO="none"
DEFROUTE="yes"
IPV6INIT="no"
NAME="eth0"
UUID="2310a910-0344-4ca1-aefe-f7903a4626cb"
DEVICE="eth0"
ONBOOT="yes"
IPADDR="192.168.11.22"
PREFIX="24"
GATEWAY="192.168.11.1"
DNS1="8.8.8.8"

 Ping to the controller and compute1 node with management network IP

```
[root@compute1 ~]# ping 192.168.11.11
PING 192.168.11.11 (192.168.11.11) 56(84) bytes of data
64 bytes from 192.168.11.11: icmp_seq=1 ttl=64 time=2.27 ms
64 bytes from 192.168.11.11: icmp_seq=2 ttl=64 time=1.45 ms
64 bytes from 192.168.11.11: icmp_seq=3 ttl=64 time=1.73 ms
--- 192.168.11.11 ping statistics ---
3 packets transmitted, 3 received, 0% packet loss, time 2003ms
rtt min/avg/max/mdev = 1.458/1.823/2.277/0.340 ms
[root@compute1 ~]# ping 192.168.11.21
PING 192.168.11.21 (192.168.11.21) 56(84) bytes of data.
64 bytes from 192.168.11.21: icmp_seq=1 ttl=64 time=0.044 ms
64 bytes from 192.168.11.21: icmp_seq=2 ttl=64 time=0.061 ms
64 bytes from 192.168.11.21: icmp_seq=3 ttl=64 time=0.044 ms
--- 192.168.11.21 ping statistics ---
3 packets transmitted, 3 received, 0% packet loss, time 2000ms
rtt min/avg/max/mdev = 0.044/0.049/0.061/0.011 ms
```



#### Add a New Compute Node

Default setup on "compute2" VM

```
## compute1:~$ service NetworkManager stop
root@compute1:~$ service firewalld stop
root@compute1:~$ setenforce 0
root@compute1:~$ hostnamectl set-hostname compute2.openstack && su -
root@compute2:~$
```

- Modify the Packstack answer file in the controller node as follows
  - Run packstack again with the changes

```
## controller node

root@controller:~$ cp packstack-sample-answer.txt packstack-adding-compute.txt
root@controller:~$ vim multi-nodes-2computes.txt
...

# list compute nodes

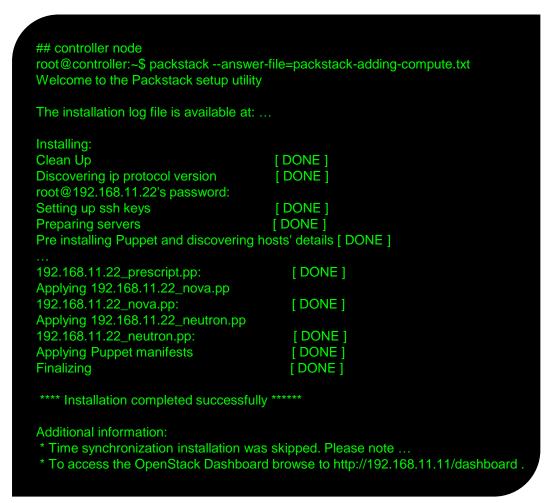
CONFIG_COMPUTE_HOSTS=192.168.11.21,192.168.11.22

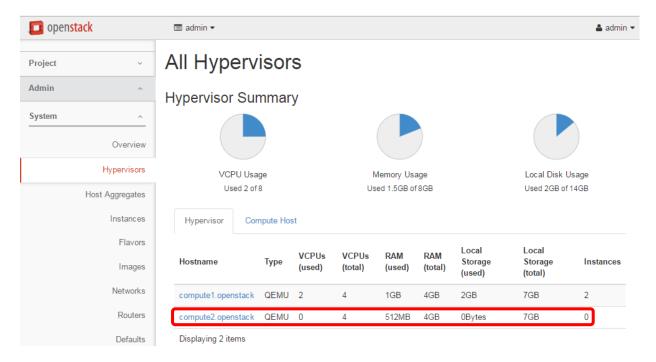
# prevent Packstack from overwriting the pre-defined configuration in existing nodes

EXCLUDE_SERVERS=192.168.11.11,192.168.11.21
...
root@controller:~$ packstack --answer-file=packstack-adding-compute.txt
```



#### Add a New Compute Node



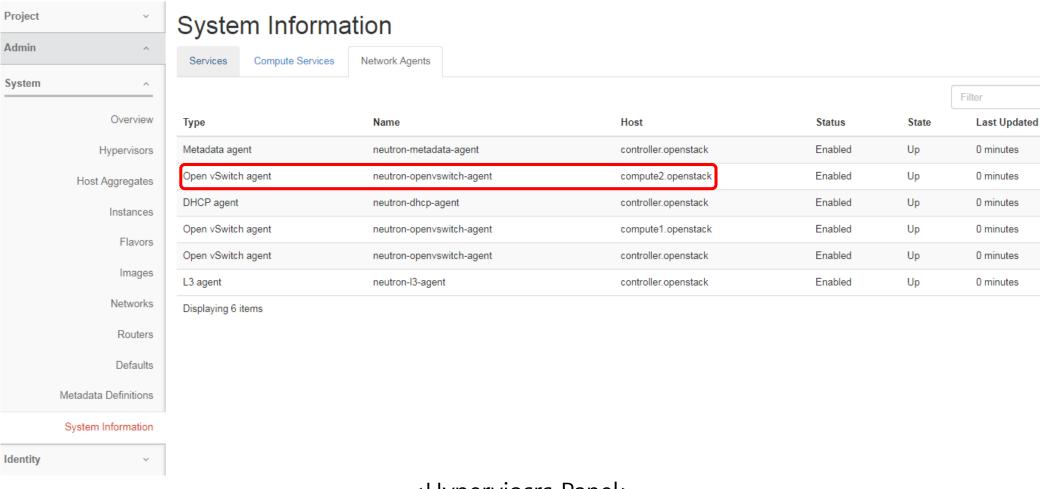


<Hyperviosrs Panel>

<After Packstack completion>



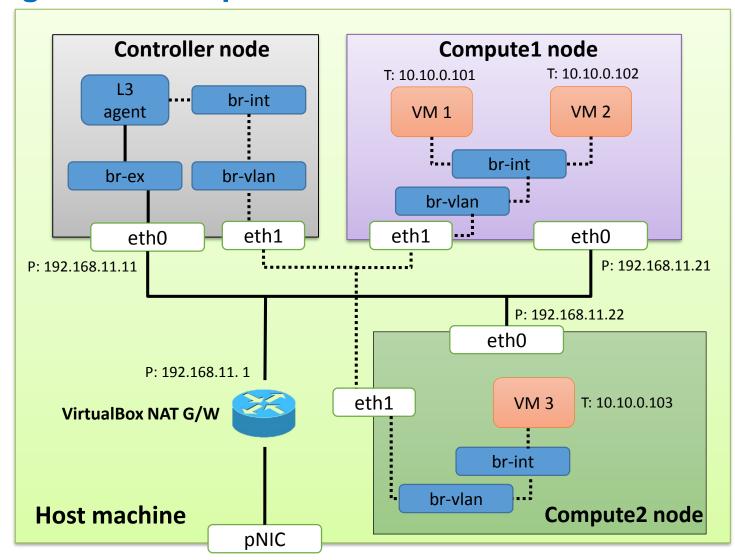
#### Add a New Compute Node



<Hyperviosrs Panel>



#### After Adding a New Compute Node



P: Provider network IP

T: Tenant network IP

### Demo

```
Welcome to Ubuntu 16.04.2 LTS (GNU/Linux 4.8.0-58-generic x86_64)
 * Documentation: https://help.ubuntu.com
* Management:
                   https://landscape.canonical.com
* Support:
                   https://ubuntu.com/advantage
204 packages can be updated.
106 updates are security updates.
Last login: Tue Aug 22 16:20:41 2017 from 141.223.107.210
dpnm@monaco:~$
dpnm@monaco:~$
dpnm@monaco:~$ sudo virtualbox
[sudo] password for dpnm:
Ot WARNING: OXcbConnection: Failed to initialize XRandr
Qt WARNING: Qt: XKEYBOARD extension not present on the X server.
libGL error: No matching fbConfigs or visuals found
libGL error: failed to load driver: swrast
dpnm@monaco:~$
dpnm@monaco:~$
dpnm@monaco:~$ virtualbox
Ot WARNING: OXcbConnection: Failed to initialize XRandr
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dpnm@monaco:~$
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dpnm@monaco:~$
dpnm@monaco:~$
dpnm@monaco:~$
```

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