

OpenStack

Tutorial

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automate all
the things



vasabiLab

VIRTUALIZATION ARCHITECTURE AND
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OpenStack command-line interface

- Log in เข้าไปที่ controller

```
$ ssh openstack@10.0.0.11
```

```
$ cd OPSInstaller/controller
```

```
$ source admin-openrc.sh
```

Identity (keystone)

- List all users

```
$ openstack user list
```

- List all services in service catalog

```
$ openstack service list
```

- Create new user

```
$ openstack user create --password-prompt user1
```

- Create new tenant

```
$ openstack project create --description "Project1" project1
```

Images (glance)

- List images you can access

```
$ glance image-list
```

- Download the source image

```
$ wget http://10.100.20.149/images/bitnami-wordpress-4.2.2-2-ubuntu-14.04-OVF-disk1.vmdk
```

- Upload the image to the Image service

```
$ glance image-create --name "wordpress" --file bitnami-wordpress-4.2.2-2-ubuntu-14.04-OVF-disk1.vmdk --disk-format vmdk --container-format bare --visibility public --progress
```

Networking (neutron)

- Create network

```
$ neutron net-create net1
```

- Create a subnet

```
$ neutron subnet-create net1 192.168.1.0/24 --name net1-subnet --gateway  
192.168.1.1
```

- Create the router

```
$ neutron router-create router1
```

- Attach the router to the tenant subnet

```
$ neutron router-interface-add router1 net1-subnet
```

- Attach the router to the external network

```
$ neutron router-gateway-set router1 ext-net
```

Networking (neutron)

\$ neutron net-list

\$ neutron subnet-list

Compute (nova)

- List service components

\$ nova service-list

- List images

\$ nova image-list

- List flavors

\$ nova flavor-list

- List available security groups

\$ nova secgroup-list

Compute (nova)

- Launch the instance

```
$ nova boot --flavor m1.small --image wordpress --nic net-  
id=NET1_ID --security-group http wordpress
```

- Check the status of your instance

```
$ nova list
```

Compute (nova)

- Lists external networks

```
$ neutron net-list -- --router:external True
```

- Creates a floating IP address and associates it with a port

```
$ neutron floatingip-create EXT_NET_ID
```

```
$ neutron port-list
```

```
$ neutron floatingip-associate FLOATING_IP_ID  
INTERNAL_VM_PORT_ID
```