Lab1: install your openstack lab

**Reference solutions**

1. What is your observation during installation of DevStack? List all the core service you notice or any other important packages you think. (The execution of the devstack scripts may run very fast, observe it carefully)

Answer: Since we use the minimum configuration for DevStack installation, the stack.sh script will automatically install the basic components of OpenStack services, which follows a sequential order: Keystone, Glance, Neutron, Nova and Horizon.

2. If your experienced some error happened during the installation of DevStack. What are they? How did you solve them?

Answer: During the installation of DevStack, some students may meet errors and the execution of installation will be stopped. The common reasons are:

1. **Lack of related libraries or packages. Students may have a wrong operating system. We recommend Ubuntu 16.04 which is the most tested. Before the installation, student should run “sudo apt-get update” and “sudo apt-get upgrade” commands in the terminal to update the newest version of system software.**
2. **Network error. The installation process needs stable Internet connection because DevStack downloads the necessary service packages online.**
3. **Configuration error. Students should first check if the configurations in the local.sh files are correct. Second, if students add more options in the local.sh files, they may meet the compatibility problems between the options and practical hardware or software environments of their computers.**

3. Try to login your OpenStack dashboard and save a screen shot.

Answer: Students can only get the screen shot of the dashboard after they succeed in installation and logging in the dashboard. The screen shot could be any pages of the dashboard interface. An example is:



4. Record all your observations during the experiments to check the service status. Since the system environment is different for the different person, you have some special information in your observation.

Answer:

Based on the lectures and introduction in this lab, the student should observe the status of Keystone, Neutron, Glance and Nova service. The typical differences between two observation results are service creation time and the hash value of service IDs, which is impossible to have the same value for different installations. These IDs could be image id, network id, flavor id.

5. Please describe your prerequisites of the hardware, software and network configuration of your machines.

Answer: Example prerequisites:

1. Hardware: 4GB memory, 80GB disk space
2. Software: Ubuntu 16.04
3. Network: a NIC (network interface card); wireless or wired Internet connection.