

# Lab3 - Vagrant

## Lab environment setup

1. Make sure all the required softwares are installed :
  - *Git*
  - *Vagrant*
2. Create the *~/vagrantfiles* directory, and cd to it .
3. Clone the git repository : <https://github.com/xiaopeng163/docker-k8s-lab>

## Vagrant with one node

4. cd to : *docker-k8s-lab/lab/docker/single-node/vagrant-centos7*
  - Describe the content of *Vagrantfile* file .
5. Start and provision the vagrant environment with the command :  
*vagrant up*
6. Output status of the vagrant machine with command :  
*vagrant status*
7. Connect to machine via SSH  
*vagrant ssh*
  - What is the authentication method ?
8. Exit and stop the vagrant machine with the command:  
*vagrant halt*
9. cd to : *docker-k8s-lab/lab/docker/single-node/vagrant-ubuntu1604*.
10. Do the same thing as centos7 (4 to 8).

## Vagrant with two nodes

11. cd to *docker-k8s-lab/lab/docker/multi-node/vagrant*
  - Describe the content of *Vagrantfile* file.
  - What is the difference between this vagrantfile and that described in question 4 ?
12. Start and provision the vagrant environment.
13. Connect to each vagrant machine via SSH.

14. Exit and stop the each vagrant machine.

## **Vagrant with three nodes**

15. cd to *lab/k8s/multi-node/vagrant/* and do the same thing.

## **Other vagrant commands**

16. Output status Vagrant environments for this user.
17. Stop and delete all traces of the *centos7* vagrant machine.
18. List the vagrant boxes.