

Preparation for Fabric workshop (2)

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- Preparation for Fabric(2) -

Please check following before the workshop.

- Previous studies
 - DevOps: What's DevOps
 - <http://www.slideshare.net/nemo-mulodo/devops1-whats-devops-mosg>
 - DevOps: Vagrant
 - <http://www.slideshare.net/nemo-mulodo/devops2-vagrant-mosg>
 - DevOps: Ansible
 - <http://www.slideshare.net/nemo-mulodo/devops3-ansible-mosg>
 - DevOps: Ansible(2)
 - <http://www.slideshare.net/nemo-mulodo/devops4-ansible2-mosg>
 - DevOps: Fabric
 - <http://www.slideshare.net/nemo-mulodo/fabric-workshop1-mosg>
- Preparation for workshop (tools)
 - <http://www.slideshare.net/nemo-mulodo/instruction-dev-environment>



Install tools

Create environments

Install tools

- List
 - Vagrant
 - box file of CentOS6.5
 - some plugins
 - Ansible
 - Fabric

Install Vagrant

- get DMG and install it to your OSX.

<https://www.vagrantup.com/>

<https://www.vagrantup.com/downloads.html>

The screenshot shows the Vagrant website's download section. On the left, there's a sidebar with a blue header containing the word "DOWNLOAD". Below it are two buttons: "Latest" and "Old Versions". The main content area has a white background. At the top, there's a navigation bar with links: "VMWARE INTEGRATION" (which is highlighted in a blue button), "DOWNLOADS", "DOCUMENTATION", "BLOG", and "ABOUT". Below the navigation, the text "DOWNLOAD VAGRANT" is centered. A red arrow points from the word "HERE" in the text below to the "MAC OS X Universal (32 and 64-bit)" link. The text reads: "Below are all available downloads for the latest version of Vagrant (1.7.4). Please download the proper package for your operating system and architecture. You can find SHA256 checksums for packages [here](#), and you can find the version changelog [here](#).
MAC OS X
Universal (32 and 64-bit)

Install Vagrant box file

- Using box : CentOS6.5

https://github.com/2creatives/vagrant-centos/releases/download/v6.5.3/centos65-x86_64-20140116.box

```
YOUR_DIR$ vagrant box list  
YOUR_DIR$
```

```
YOUR_DIR$ vagrant box install Centos6.5 https://github.com/2creatives/vagrant-centos/releases/download/v6.5.3/centos65-x86\_64-20140116.box  
:  
YOUR_DIR$
```

```
YOUR_DIR$ vagrant box list  
centos6.5 (virtualbox, 0)  
YOUR_DIR$
```

- see) Instruction, DevOps(1)-Vagrant

Install Vagrant plug-ins

- Using Plug-ins

vagrant-fabric

```
YOUR_DIR$ vagrant plugin list  
vagrant-share (1.1.5, system)  
YOUR_DIR$
```

```
YOUR_DIR$ vagrant plugin install vagrant-fabric  
:  
YOUR_DIR$
```

```
YOUR_DIR$ vagrant plugin list  
vagrant-fabric (0.2.2)  
vagrant-share (1.1.5, system)  
YOUR_DIR$
```

- Note) New version of Vagrant is including snapshot(instead of sahara) and Ansible provider.

Install Ansible

```
YOUR_DIR$ brew install ansible  
:  
YOUR_DIR$
```

Install Fabric

```
YOUR_DIR$ pip install fabric  
:  
YOUR_DIR$
```

If you got errors related python, please try following.

```
YOUR_DIR$ brew install python --framework  
:  
YOUR_DIR$ pip install fabric  
:  
YOUR_DIR$
```

Install tools



Create environments

Put sources to 'your dir'

Source of Fabric(1) is on github.

git@github.com:nemo-soshi-mulodo/OpenDevStudyGroup.git

* Branch : Fabric

```
YOUR_DIR$ git clone -b Fabric git@github.com:nemo-soshi-mulodo/OpenDevStudyGroup.git
```

:

```
YOUR_DIR$ ls
./          .gitignore    Vagrantfile   hosts      setup.yml
../         FABRIC_TEST/ fabfile.py    index.html
.git/       README.md     fabric_files/ playbooks/
YOUR_DIR$
```

Edir config files (1)

Edit files :

See) [https://github.com/nemo-soshi-mulodo/
OpenDevStudyGroup/tree/Fabric](https://github.com/nemo-soshi-mulodo/OpenDevStudyGroup/tree/Fabric)

Edit config files (2)

a edit "Vagrantfile" and fix IP address of your vagrant machine.

- {IP_ADDRESS_OF_YOUR_VAGRANT_MACHINE}

```
config.vm.network "private_network", ip: "{IP_ADDRESS_OF_YOUR_VAGRANT_MACHINE}"
```



ex.)

```
config.vm.network "private_network", ip: "192.168.33.60"
```

b edit "hosts" file to set IP address of the vagrant machine.

- {IP_ADDRESS_OF_YOUR_VAGRANT_MACHINE}

```
{IP_ADDRESS_OF_YOUR_VAGRANT_MACHINE}
```



ex.)

```
192.168.33.60
```

Edir config files (3)

c put ssh private key for github access to "fabric_files/resources/".

```
YOUR_DIR$ cp -i {YOUR_GITHUB_KEY} /YOUR_DIR/fabric_files/resources/  
YOUR_DIR$ ls fabric_files/resources/{YOUR_GITHUB_KEY_NAME}  
{YOUR_GITHUB_KEY_NAME}  
YOUR_DIR$
```

Edir config files (4)

Following 3 steps should be done after creating target Vagrant machine.

- d edit "fabric_files/resources/ssh_config".
- e edit "fabric_files/resource.py".
- f edit your ssh config file (~/.ssh/config)

Create Vagrant machine and check

```
YOUR_DIR$ vagrant up
:
YOUR_DIR$ vagrant status
Current machine states:

default                         running (virtualbox)
:
YOUR_DIR$
```

This process will take minutes.

Edit config files (5)

d edit "fabric_files/resources/ssh_config".

- {PRIVATE_KEY_FILE_FOR_GITHUB}

```
IdentityFile {PRIVATE_KEY_FILE_FOR_GITHUB}
```



```
IdentityFile ~/.ssh/{KEY_FILE_NAME}
```

The file is copied to "resources/" by step(3)

Edir config files (6)

e edit "fabric_files/resource.py".

- {PRIVATE_KEY_FILE_FOR_GITHUB}

```
env.ssh['sshkey_name'] = '{PRIVATE_KEY_FILE_FOR_GITHUB}'
```



```
env.ssh['sshkey_name'] = './resources/{KEY_FILE_NAME}'
```

The filename is same as set by step(4).

* Only its path is different from step(4) setting.

Edit config files (7)

f edit your ssh config file (~/.ssh/config)

- {IP_ADDRESS_OF_YOUR_VAGRANT_MACHINE}
- {PRIVATE_KEY_FILE_FOR_VAGRANT_MACHINE}

Get path of the private key.

```
YOUR_DIR$ vagrant ssh-config
      :
IdentityFile "/YOUR_SETTING/private_key"
      :
YOUR_DIR$
```

Set key name to the file

```
IdentityFile "/YOUR_SETTING/private_key"
```

Edit config files (8)

f edit your ssh config file (~/.ssh/config)

Get path of the private key.

```
YOUR_DIR$ vagrant ssh-config
:
IdentityFile '/YOUR_SETTING/private_key'
:
YOUR_DIR$
```

Add following lines to the ~/.ssh/config

```
Host *
  StrictHostKeyChecking no

Host 192.168.33.60
  User vagrant
  TCPKeepAlive yes
  IdentityFile /YOUR_SETTING/private_key
  IdentitiesOnly yes
  ControlPersist 2h
```

IP of your Vagrant machine

Preparation has...

Finished !!

TEST for Fabric

test

```
YOUR_DIR$ fab help  
Usage:  
<Deploy>  
fab -R [ROLE] deploy
```

:

:

```
YOUR_DIR$ fab -R httpd-server tags  
[192.168.33.60] Executing task 'tags'  
[current tag]: None
```

Done.

```
Disconnecting from vagrant@192.168.33.60... done.  
YOUE_DIR$
```

You are now ready for Fabric(2).