Ansible Installation Guide

Installation Notes

edureka!

Connect to an EC2 instance(Ubuntu).

Setting up SSH:

Please follow the below steps to solve the ssh problem:

- At first, you need to transfer your AWS EC2 instance **.pem file** from your local to AWS EC2 instance using Filezilla software.

Please follow the steps as given in the below video which will help you to transfer files from your local windows system to AWS EC2 instance:

https://www.youtube.com/watch?v=Qxs7CYguo70

Note: The .pem is the private key file which you will get while creating the instance.

- 2. After that follow the steps given below for getting passwordless ssh connection in between two EC2 instances.

1. su - ubuntu
2. sudo service ufw stop
3. sudo service ssh start
4. eval `ssh-agent -s`

Note: Where ` in the above command refers to grave(`) and it is not a single quote(')

5. chmod 400 file_name.pem
6. ssh-add file_name.pem

Note: The file_name.pem is the file which you have transferred using Filezilla software in the first step.

7. ssh ubuntu@<private_IP_of_the_other_instance>

```
ubuntu@master:~$ sudo su
root@master:/home/ubuntu# su - ubuntu
ubuntu@master:~$ sudo service ufw stop
ubuntu@master:~$ sudo service ssh start
ubuntu@master:~$ eval  `ssh-agent -s`
Agent pid 2860
ubuntu@master:~$ chmod 400 test.pem
ubuntu@master:~$ ssh-add test.pem
Identity added: test.pem (test.pem)
ubuntu@master:~$ ssh ubuntu@172.31.83.230
Welcome to Ubuntu 16.04.5 LTS (GNU/Linux 4.4.0-1066-aws x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:     https://landscape.canonical.com
 * Support:        https://ubuntu.com/advantage

  Get cloud support with Ubuntu Advantage Cloud Guest:
    http://www.ubuntu.com/business/services/cloud

6 packages can be updated.
0 updates are security updates.

New release '18.04.1 LTS' available.
Run 'do-release-upgrade' to upgrade to it.


Last login: Sat Sep 29 16:07:02 2018 from 106.200.199.49
ubuntu@slave:~$ exit
logout
Connection to 172.31.83.230 closed.
```

Installing Ansible

▪ Before installing ansible package add ansible repository to your system

Syntax: sudo apt-add-repository ppa:ansible/ansible

```
ubuntu@master:~$ sudo apt-add-repository ppa:ansible/ansible
 Ansible is a radically simple IT automation platform that makes your applicatio
ns and systems easier to deploy. Avoid writing scripts or custom code to deploy
and update your applications— automate in a language that approaches plain Engli
sh, using SSH, with no agents to install on remote systems.

http://ansible.com/
 More info: https://launchpad.net/~ansible/+archive/ubuntu/ansible
Press [ENTER] to continue or ctrl-c to cancel adding it

gpg: keyring `/tmp/tmpna682v0m/secring.gpg' created
gpg: keyring `/tmp/tmpna682v0m/pubring.gpg' created
gpg: requesting key 7BB9C367 from hkp server keyserver.ubuntu.com
gpg: /tmp/tmpna682v0m/trustdb.gpg: trustdb created
gpg: key 7BB9C367: public key "Launchpad PPA for Ansible, Inc." imported
gpg: Total number processed: 1
gpg:               imported: 1  (RSA: 1)
OK
```

▪ Run the update command before installing to update existing packages

Syntax: sudo apt-get update

```
ubuntu@master:~$ sudo apt-get update
Hit:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial InRelease
Hit:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial-updates InRelease
Hit:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial-backports InRelease
Ign:4 http://apt.puppetlabs.com xenial InRelease
Hit:5 http://apt.puppetlabs.com xenial Release
Get:6 http://security.ubuntu.com/ubuntu xenial-security InRelease [107 kB]
Get:7 http://ppa.launchpad.net/ansible/ansible/ubuntu xenial InRelease [18.0 kB]
Get:9 http://ppa.launchpad.net/ansible/ansible/ubuntu xenial/main amd64 Packages
 [536 B]
Get:10 http://ppa.launchpad.net/ansible/ansible/ubuntu xenial/main Translation-e
n [344 B]
Fetched 126 kB in 0s (205 kB/s)
```

▪ Now install the ansible package

Syntax: sudo apt-get install ansible

```
ubuntu@master:~$ sudo apt-get install ansible
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  libpython-stdlib libpython2.7-minimal libpython2.7-stdlib python
  python-cffi-backend python-crypto python-cryptography python-ecdsa
  python-enum34 python-httplib2 python-idna python-ipaddress python-jinja2
  python-markupsafe python-minimal python-paramiko python-pkg-resources
  python-pyasn1 python-setuptools python-six python-yaml python2.7
  python2.7-minimal sshpass
Suggested packages:
  python-doc python-tk python-crypto-dbg python-crypto-doc
  python-cryptography-doc python-cryptography-vectors python-enum34-doc
  python-jinja2-doc doc-base python-setuptools-doc python2.7-doc
  binfmt-support
The following NEW packages will be installed:
  ansible libpython-stdlib libpython2.7-minimal libpython2.7-stdlib python
  python-cffi-backend python-crypto python-cryptography python-ecdsa
  python-enum34 python-httplib2 python-idna python-ipaddress python-jinja2
```

▪ You can check if you're on the latest version of ansible by running the version command

Syntax: ansible --version

```
ubuntu@master:~$ ansible --version
ansible 2.6.4
  config file = /etc/ansible/ansible.cfg
  configured module search path = [u'/home/ubuntu/.ansible/plugins/modules', u'/
usr/share/ansible/plugins/modules']
  ansible python module location = /usr/lib/python2.7/dist-packages/ansible
  executable location = /usr/bin/ansible
  python version = 2.7.12 (default, Dec  4 2017, 14:50:18) [GCC 5.4.0 20160609]
```

Setting up hosts

▪ To set up hosts you need to edit the hosts file in the ansible directory

Syntax: sudo nano /etc/ansible/hosts

```
ubuntu@master:~$ sudo nano /etc/ansible/hosts
```

```
  GNU nano 2.5.3                                File: /etc/ansible/hosts

## alpha.example.org
## beta.example.org
## 192.168.1.100
## 192.168.1.110

# If you have multiple hosts following a pattern you can specify
# them like this:

## www[001:006].example.com

# Ex 3: A collection of database servers in the 'dbservers' group

## [dbservers]
##
## db01.intranet.mydomain.net
## db02.intranet.mydomain.net
## 10.25.1.56
## 10.25.1.57

# Here's another example of host ranges, this time there are no
# leading 0s:

## db-[99:101]-node.example.com

[appservers]
slave
```

▪ Change your directory to /etc/ansible

Syntax: cd /etc/ansible

```
ubuntu@master:~$ cd /etc/ansible
```

▪ Now you can check if ansible's connection with your hosts in your inventory file is good

▪ Use the ansible's ping module to check whether or not ansible is connecting to hosts

Syntax: ansible –m ping <hosts>