ANSIBLE Installation on AWS – EC2

- ANSIBLE needs Only Python
- Please choose an AMI which has Python
- Install ANSIBLE with pip command
- >sudo pip install ansible
- Check if installation is good
- >ansible --version

ANSIBLE Installation on Others

- Fedora/RHEL/CentOS:
  - $ sudo yum install epel-release
  - $ sudo yum -y install ansible
- Debian/Ubuntu:
  - $ sudo apt-add-repository -y ppa:ansible/ansible
  - $ sudo apt-get update
  - $ sudo apt-get install -y ansible

ANSIBLE Configuration

- Create /etc/ansible/hosts file and update it with all client details

[app]

174.129.120.55 ansible_ssh_user=ec2-user ansible_connection=ssh ansible_ssh_private_key_file=/etc/ansible/key-pair.pem

ANSIBLE Configuration

- Other configuration (Password Login)

[app]

IP-ADDRESS ansible_ssh_user=redhat ansible_ssh_pass=redhat

ANSIBLE Configuration

- You can add the following in hosts file to avoid ssh key checking

ansible_ssh_common_args='-o StrictHostKeyChecking=no'

ANSIBLE Configuration

- ANSIBLE server needs to have the SSH keys of all machines that it want to control
- Copy the PEM file of the other server to /etc/ansible & chmod 777

ANSIBLE Configuration

- Turn OFF host key checking by creating /etc/ansible/ansible.cfg

host_key_checking = False

ANSIBLE Adhoc Commands

- Fire adhoc commands against servers
- >ansible app –m ping
- >ansible app –a “hostname”
- By Default, Ansible will runs commands in parallel using multiple forks

>ansible app –a “hostname” –f 1

Will run the above command in single fork (one server at a time)

ANSIBLE Modules

- Install NTP daemon on the server

>ansible app –b –m yum –a “name=ntp state=present”

- Start daemon & enable it to run on boot

>ansible app –m service –a “name=ntpd state=started enabled=yes”

ANSIBLE Playbook

- Playbook for NTP
- Playbook for gathering facts of running services
- Playbook for shell command for file search & storing results

ANSIBLE Group Module

- Pretty common module across linux flavours and used for adding groups/users

>ansible app -b -m group -a "name=accenture state=present“

- Add a new user to this group, with home dir

>ansible app -b -m user -a "name=anand group=accenture createhome=yes"

ANSIBLE Group Module

- Delete/Remove a user

>ansible app -b -m user -a "name=anand state=absent remove=yes"

ANSIBLE File & Stat Module

- Important module used to copy/fetch files – configuration, deployments etc
- Get information about any specific file using “stat” module

>ansible app -b -m stat -a "path=/bin/bash"

ANSIBLE File & Stat Module

- Copy works well for small files

>ansible app -m copy -a "src=/etc/hosts dest=/tmp/hosts“

- To copy large files, consider using other modules such as unarchive, synchronize etc

ANSIBLE fetch module

- Works almost exactly as copy but in reverse order

>ansible app -m fetch -a "src=/etc/hosts dest=/tmp/hosts"

ANSIBLE file module

- Can be used to create files & folders

>ansible app -m file -a "dest=/tmp/test mode=644 state=directory“

- Deleting files & folders

>ansible app -m file -a "dest=/tmp/test state=absent"

ANSIBLE Playbook

- A bunch of commands for installing any service or configuration
- https://github.com/rchidana/Cred-Suisse/blob/master/nginx_playbook.yml
- >ansible-playbook nginx_playbook.yml

ANSIBLE Galaxy

- A collection of repeated tasks published by well known developers
- Can be re-used by anyone to create their own stack of work items
- https://galaxy.ansible.com/

ANSIBLE Galaxy

- To install any galaxy role

>ansible-galaxy install geerlingguy.apache

>ansible-galaxy list

>ansible-galaxy remove [role]

ANSIBLE Galaxy

- Sample playbook to use galaxy apache role

```
---
- hosts: all
  become: yes
  roles:
    - geerlingguy.apache
```

Questions??