Ansible-8th-oct

Welcome to the session

Introduction

Session

Environment setup

Kevin

System admin

Banu
Hadoop

Sudhir:

Middleware techlead

Manoharan:

mUraliMurali Reddy - workign in Middleware Admin team and looking fwd to learn Automation techniques.....

Sudhir:

Mohammed:

TIN 2013

Prakash:

DBA

Anthony:

Liu:
Automation
Danial
Developer

Ansible

Linux administrator

servers build, os setup, kernel, patching, creating file systems, grps, security setup,

2 linux admin

5 server

Db
Web
Proxy

5 hrs

100 servers

100 server

1000 users

10

Linux admin
Programming language

Shell script

Idempotency
Execution

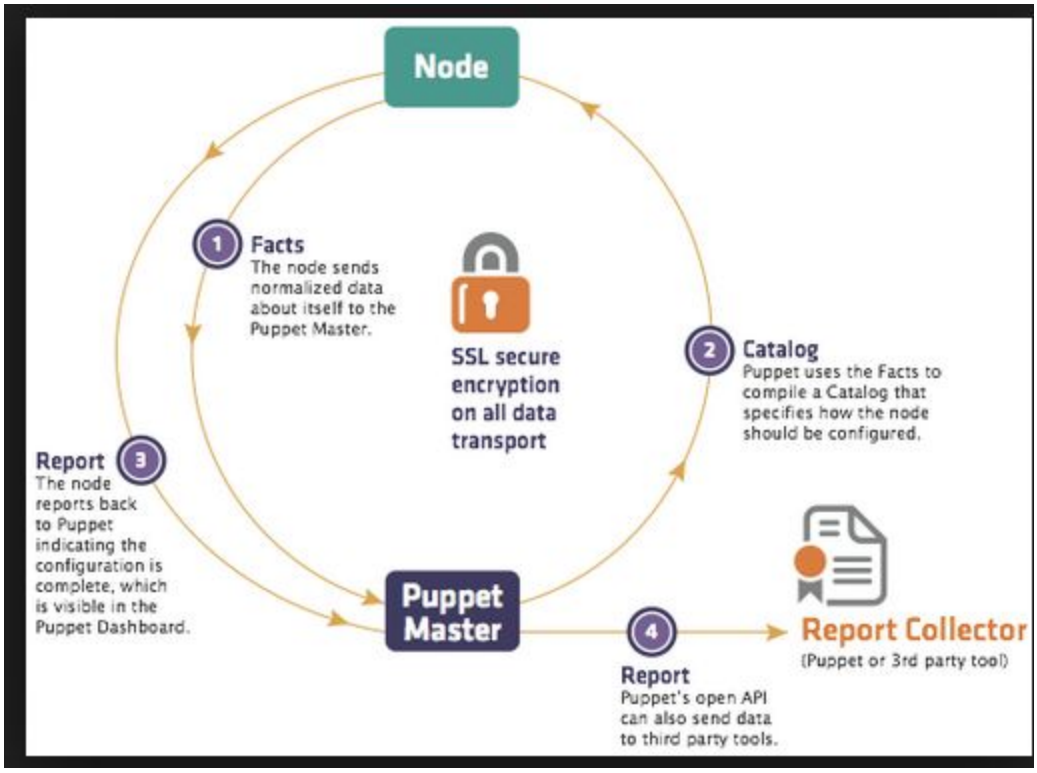
1. Reduce declarative approach
2. Idempotency
3. Remote execution
4. feedback

addiiton
Subtraction
div
multi

Puppet or chef

DSL
Idempotent
Agent
Report

Agent
Master
DSL
Ruby



5. Reduce declarative approach
6. Idempotency
7. Remote execution
8. feedback

Master
Agent
mcollective

DSL

Pull

Push

	Chef	Puppet	Ansible	SaltStack	CloudFormation	Terraform
Code	Open source	Open source	Open source	Open source	Closed source	Open source
Cloud	All	All	All	All	AWS only	All
Type	Config Mgmt	Config Mgmt	Config Mgmt	Config Mgmt	Orchestration	Orchestration
Infrastructure	Mutable	Mutable	Mutable	Mutable	Immutable	Immutable
Language	Procedural	Declarative	Procedural	Declarative	Declarative	Declarative
Architecture	Client/Server	Client/Server	Client-Only	Client/Server	Client-Only	Client-Only

Push
Agent less
Master less

Infra as a code
Idempotent

Dbservers
Webservers
Loadbalacer

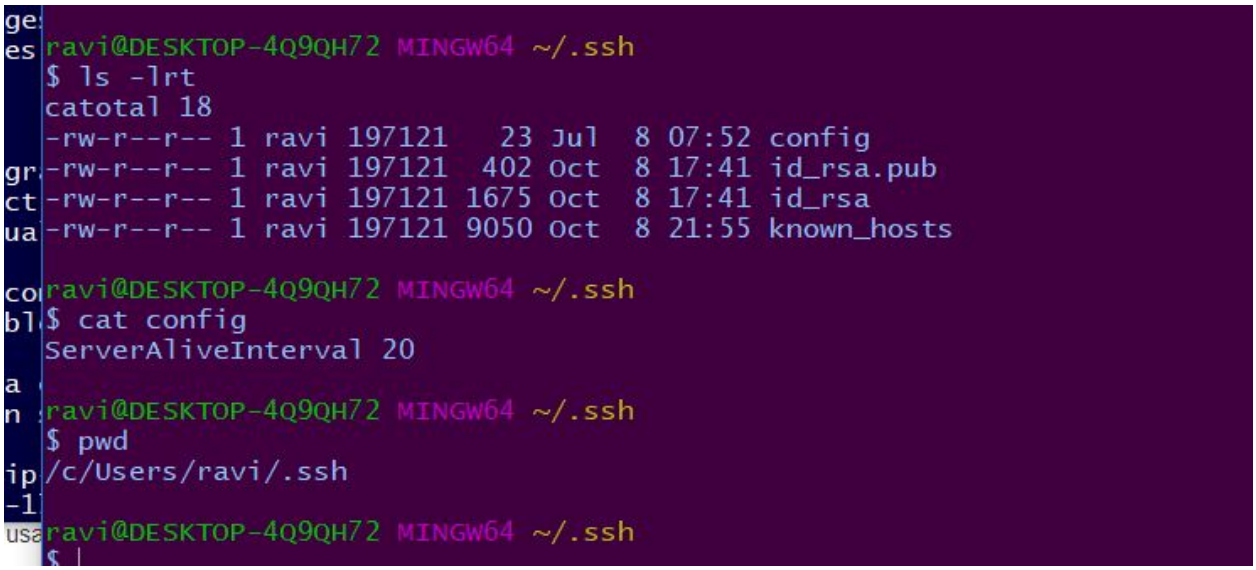
Minimum two server

Ansible host

Target servers

Cloud server
Data centers

AWS/GCP/AZURE
Vm



Touch config

Puttygen
Putty

Ppk

Ansible Installation:

```
sudo apt-get install software-properties-common  && \
 sudo apt-add-repository ppa:ansible/ansible && \
 sudo apt-get update && \
sudo apt-get install ansible
```

ansible-host:
Ssh-keygen

Copy the id_rsa.pub

Targethost:

Authorized_keys

we should be back by 2pm EST

1. Virtual box
2. Vagrant
3. Github url

Vagrant up

Please follow below instructions to setup the virtual machines:

1. Download and install vagrant:

    windows: https://releases.hashicorp.com/vagrant/2.1.5/vagrant_2.1.5_x86_64.msi
    mac: https://releases.hashicorp.com/vagrant/2.1.1/vagrant_2.1.1_x86_64.dmg

2. Download and install virtual box:
    windows:
https://download.virtualbox.org/virtualbox/5.2.18/VirtualBox-5.2.18-124319-Win.exe
    mac or other:
http://download.virtualbox.org/virtualbox/5.1.22/VirtualBox-5.1.22-115126-OSX.dmg

3. Download this github repo and extract the zip file.

https://github.com/quickfixtech/vagrant-env-setup.git

4. Download putty and winscp :

putty :: http://www.chiark.greenend.org.uk/~sgtatham/putty/download.html

winscp: https://winscp.net/eng/docs/guide_install

GITBashshell

5. Restart the machine and press F2 or F10 to go into Bios mode. VT-x/AMD-v virtualization must be enabled in BIOS

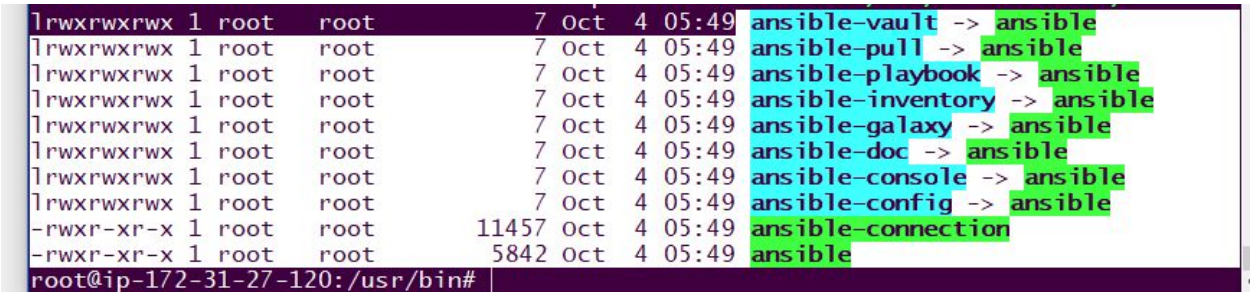
6. open cmd prompt in windows machine and go into the unzipped multivagrant directory:

#cd dir-of-multi-vagrant
#vagrant up gitlab.example.com

7. Enter ip address through putty:

username /password : vagrant/vagrant

Sudo -i



Inventory file --hosts

Push

Ansible -i hosts -m ping
Ansible -i hosts -m setup

Module

Facters setup

Tree
Nginx
Screen
Tomcat
Yum install tree -y
Apt-get install tree -y

Module

Ansible -i hosts all -m file -a state=directory path=/tmp/avc

Nginx

Apt install nginx

Service start nginx

Yml

Site.yml

- Name: “ file”

```
- hosts: all
  tasks:
        - name: "nginx" install
          apt:
             Name: nginx
             state: installed
    -    name: "start "nginx" service
         service:
            Name: nginx
            state: started
```