ANSIBLE

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ANSIBLE is IT task automation tool.

suppose 10 EC2 instances and you are running an application on them and deploy new version of the application

now all 10 ec2 instances should have new version of the applications

ansible automates all the above tasks deployment, file managemnet, system managemnet are automated with ansible

install ansible and write ansible script (playbook) which contains tasks to be performed along with inventory.

inventory contains list of target hosts.

features involved:

> ansible have to be installed only in control machine

> Agentless application

> playbook inform of yaml script

> inventory s in form of list

playbooks

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module => task => play => playbook

module:

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module is the smallest/ganular step being executed

-> renaming file

-> copying file

-> download

-> run app

module 1 : create a file (touch filename)

module 2 : chmod u+x

module 3 : cat file

task:

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collection of modules run in an order

task : module1 : module 2:......

a file can contain multiple tasks

task1 : update installer (sudo apt update -> sudo apt-get unpdate -> sudo apt upgrade )

task2 :create and display (mod 1 touch file -> mod 2 chmod u+x -> mod 3 cat

play :

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play is a collection of tasks along with list of hosts (target hosts )

host details + user details + tasks

play book:

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Collection of plays

host:

user:

task1:

m1

m2

host:

user:

task2:

m1

m2

inventory file :

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default inventory file

/etc/ansible/hosts

inventory.txt contains list of target host webserver

server1 ansible host 'ip1'

server2 ansible host 'ip2'

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=> Create azure virtual machine (with SSH )

=> network security group -> add inbound security rules->

=> add through git

=> sudo apt uopdate

sudo apt-get update

sudo apt upgrade

create target machines on AWS:

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> go to aws create ansible targets t2 micro

> create a key pair

> store it in allow ssh http https

> add security group no of instnces (2)

> controller machine in azure

> and instances in AWS to execute task

install anisible:

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=> ssh -i

=> sudo apt update

=> sudo apt upgrade

=> sudo apt-add-repository ppa:ansible/ansible

=> sudo apt update

=> sudo apt install ansible

=> ansible --version

=> sudo vim /etc/ansible/hosts

=> mkdir first\_ansible

=> cd first\_ansible

=> vi sabihaansible.txt

contents :

[webservers]

server1 ansible-host = 13.40.2.11

server2 ansible-host = 3.10.235.149

=> vi awsconnect.pem

contents aws key

=> cd .ssh/

output is known hosts and authorised keys

# Now copy our pem file to this ssh directory inorder to give access (authorized keys)

=> chmod 400 awsconnect.pem

=> cd ..

=> cd first\_ansible

=> agent-ssh bash

=>cp awsconnect.pem ~/.ssh/

=> ssh-add ~/.ssh/awsconnect.pem

=> ansible webservers -m ping -i sabihaansible.txt -u ubuntu