Department of Information Technology

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Class / Branch: TEIT/Div C Date of Performance:08-10-2025

Subject: DevOps Lab

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Date of Submission:08-10-2025

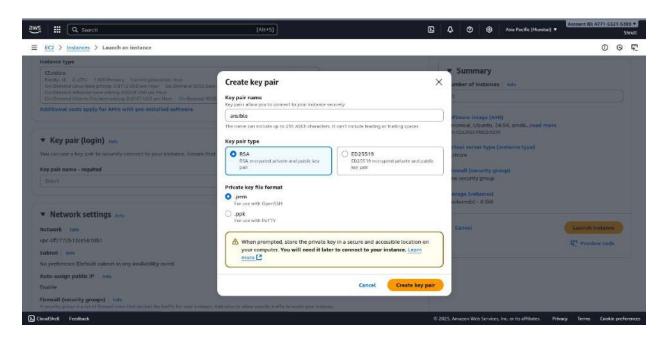
Experiment No. 10

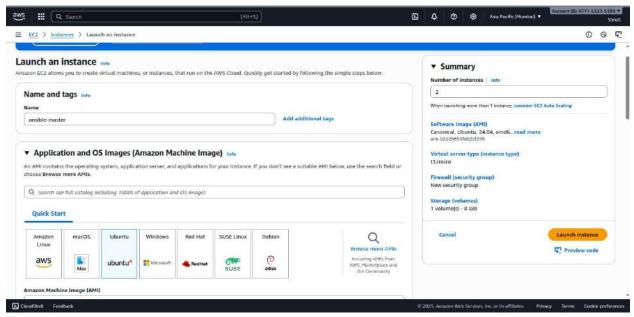
Aim:-Installation of Ansible on top of AWS instance. Configure SSH access to Ansible master/slave and setup ansible host and test the connection.

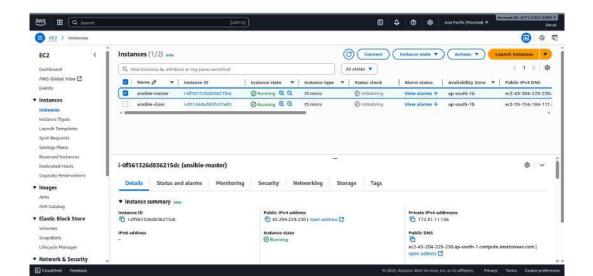
Code/Output with Screenshot:-

Step1:-Connect AWS console

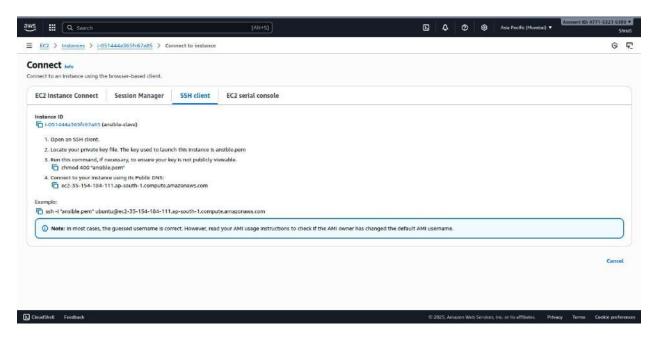
must have t3 micro, ubuntu 24.0.0.Lts, in netwrok settings allow all three http,https and the last option and in right side number of instances must be 2.







click on master then connect then click on SSH client then copy that client copy thing and then need to make a folder on desktop with your name themn move that ansible.pem to your folder then open that path in terminal and paste that ssh thing copied this made your master follow same for slave.



Master machine

```
apsttapst:-5 cd Desktop
apsttapsot:-7Desktop5 kiddr shrutt
apsttapsot:-7Desktop5 kiddr shrutt
apsttapsot:-7Desktop5 cd shrutt
```

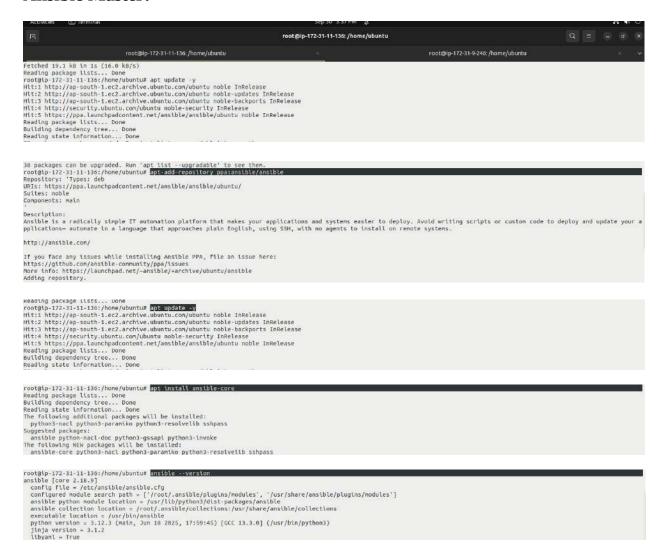
Slave machine

Step 2:-Now ping master and Slave

```
Last login: Tue Sep 30 09:33:15 2025 from 13.233.177.4 ubuntu@lp-172-31-9-246:-5 sudo su root@lp-172-31-9-246:/home/ubuntu# slave Command 'slave' not found, did you mean: command 'slave' from deb pwr-examples (3.4.6-5) command 'slave' from deb atfs (1.4pl6-16) Try: opt install <deb name> command 'save' from deb atfs (1.4pl6-16) Try: opt install <deb name> cot@lp-172-31-9-246:/home/ubuntu# plng 172.31.11.136 PlNG 172.31.11.136 (172.31.11.136) S6(84) bytes of data. ^C --- T72.31.11.136 plng statistics --- 26 packets transmitted, 0 received, 100% packet loss, time 25623ms root@lp-172-31-9-246:/home/ubuntu#
```

Step4:Ansible Installation

Ansible Master:-



Ansible Slave:-

```
rootgip-172-31-9-246:/howe/ubuntum got.update -y
Hitti http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble InRelease
Cet:2 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-updates InRelease [126 kB]
Cet:3 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-backports InRelease [126 kB]
Cet:4 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-dackports InRelease [126 kB]
Cet:5 http://security.ubuntu.com/ubuntu noble-security InRelease [126 kB]
Cet:6 http://security.ubuntu.com/ubuntu noble-funiverse Iransletion-en [5982 kB]
Cet:7 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble/universe Transletion-en [5982 kB]
Cet:8 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble/universe and64 Components [3871 kB]
Cet:8 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble/universe and64 Components [3871 kB]
```

Step5:

Ansible-master:-

```
| Jinja version = 3.1.2 | Jinua, Jon to Eds., 1.55.59 | Last 19.509 | Jost/punipyshons, | Jinja version = 3.1.2 | Jinua, Jon to Eds., 1.55.59 | Last 19.509 | Jinua |
```

```
This is the default ansible 'hosts' file.

# This is the default ansible 'hosts' file.

# It should live in /etc/ansible/hosts

# Comments begin with the '#' character

# Slimk lives are ignored

# Comments begin with the '#' character

# Slimk lives are ignored

# Occupie of hosts are delimited by [header] elements

# You can enter hostnames or in addresses

# A bostname/ip can be a member of multiple groups

# Ex I: Ungrouped hosts, specify before any group headers:

## green.example.com

## Divise.example.com

## Divise.labo.id

## 192.106.100.id

## 192.106.100.id

## 192.106.100.id

## 192.106.1.10.id

## 192.106.1.1.10

## [cthen i]

172.3.1.5.246

## If you have multiple hosts following a pattern, you can specify

## them like this:

## www[081:086].example.com

# You can also use ranges for multiple hosts:
```

STEP6: To create SSH Key: Ansible-master: root@ip-172-31-18-177:/home/ubuntu# ssh-keygen -t rsa

```
Tool@ip-172-31-11-136:/home/ubuntu# cd /root/.ssh/

Tool@ip-172-31-11-136:/home/ubuntu# cd /root/.ssh/
```

```
root@ip-172-31-11-136:/home/ubuntu# cd /root/.ssh/
root@ip-172-31-11-136:/.ssh# ls
authorized_keys_td_rsa_td_rsa.pub
root@ip-172-31-31-136:-/.ssh# case.pub
root@ip-172-31-31-11-36:-/.ssh# case.pub
rsh-rsh_AAA&BNzot1yc2EAAAAAA&BAQOUYOMM5z8cx12wzg4w30UB3cBEN77CAB3941b8eKOPaTsQoa7SUXMuvTOn1QOnpiYQfMphkhw2nDunc7gLrTMQSLGBqkmX0D1Lt2MbwFgr87c/kju12P1BgenV+GTHuksHt3ncH/F
DDnvrz/plWTXSESpnV13HLb03ab80QZL#nc2F75h34v82nuejdcrkcb7et3De3Et1MYLJe1oHuGxYNdrgyFv/Zd9HkCn9oVPY-nTQMHId/NXNghIQkOyELBMSS9REHYQv0XFOSROnDxXQljaSc47MTuaYj2nZkZCVEPH45/1r65xJ
mPLydhNS1oY9kEA8zceYH/OBSTOECbT09q1dxxU+KOr2xZ3zPXUZYfABaGBDQIaMMM1S6Ce0l+Sp9xn4KIAIWBX21WnIS+YqZFmq3gKSrcoQwVNVS7ImndEhNBwDCSU3SchwOjmIx3pbqDXRCuYXNG6eeG+Xg8yWLa4vnZrOKBaE7NMU
xbt1W2shw1B4X/bde6ikD+8-root@ip-172-31-11-136
root@ip-172-31-11-136:-/.ssh# |
```

Ansible slave:-

root@ip-172-31-16-10:/home/ubuntu# cd /root/.ssh/ root@ip-172-31-16-10:~/.ssh# ls root@ip-172-31-16-10:~/.ssh# nano authorized_keys

```
authorized keys
no-port-forwarding,no-agent-forwarding,no-X11-forwarding,command="echo 'Please login as the user \"ubuntu\" rather than the user \"root\".';echo;sleep 10;exit 142" ssh-rsa AAA
ssh-rsa AAAAB3NzaC1ycZEAAAADAQABAAABgQDUYOnMSz3kcXl2wzg4wJ0UBJcBEN77CAB3941b8eKOPaTsQoa7SUXMuvTOn1QOnplYQfMphkhwZn0umc7gLrTWQSlGBqkmX6D1LtZMbwFgr87c/kju12P1BgenV+GTHuKsMt3ncH/

38 packages can be upgraded. Run 'apt list --upgradable' to see them.
root@ip-172-31-9-246:/home/ubuntu# cd /root/.ssh/
root@ip-172-31-9-246:/.ssh# ls
authorized keys
root@ip-172-31-9-246:-/.ssh# nano authorized keys
root@ip-172-31-9-246:-/.ssh# nano authorized keys
root@ip-172-31-9-246:-/.ssh# nano authorized keys
root@ip-172-31-9-246:-/.ssh# nano /etc/ssh/sshd_config
```

```
# Expect .ssh/authorized_keys .ssh/authorized_keys .ssh/authorized_keys 2

# AuthorizedPrincipalsFile none

/etc/ssh/sshd config

//etc/ssh/sshd config

//etc/ssh/sshd
```

STEP7:

Ansible-master: 1] root@ip-172-31-18-177:~/.ssh# ansible -m ping all

2] root@ip-172-31-18-177:~/.ssh# ansible client_1 -m setup

3] Ansible-slave:

root@ip-172-31-16-10:~/.ssh# git --version

So let me remove it

root@ip-172-31-16-10:~/.ssh# apt remove git root@ip-172-31-16-10:~/.ssh# git –

version

```
Toolsip:172-319-266:-/.ssh# git version 2.43.0
rootsip:172-319-266:-/.ssh# git version 2.43.0
rootsip:172-319-266:-/.ssh# apt remove git
Reading package lists... Done
Reading state information... Done
The following packages were automatically installed and are no longer required:
git-man liberror-perl
Use 'sudo apt autoremove' to remove them.
The following packages will be REMOVED:
git ubuntu-server
O upgraded, 0 newly installed, 2 to remove and 38 not upgraded.
After this operation, 22.2 MB disk space will be freed.
O upgraded, o newly installed, ? In remove and 38 not upgraded.
After this operation, 27.2 MB disk space will be freed.
O upgraded to continue? [Vyn] y
(Reading database ... 73716 files and directories currently installed.)
Removing untur-server (1.539.2) ...
Removing git (1:2.43.6-Inbuntur.3) ...
Removing git (1:2.43.6-Inbuntur.3) ...
Removing git (1:2.43.6-Inbuntur.3) ...
Removing git (1:2.43.6-Inbuntur.3) ...
Removing git (1:2.33.9-246:-/.ssh# git -version
bash: /usr/bin/git: No such file or directory
rootgit-172-31-9-246:-/.ssh# git -version
```

Ansible-master: root@ip-172-31-18-177:~/.ssh# ansible client_1 -m apt -a "name=git state=present" -become

Ansible-slave:

root@ip-172-31-16-10:~/.ssh# git --version

How to uninstall package from a ansible-master machine?

In ansible-slave machine: root@ip-172-31-16-10:~/.ssh# nano test.txt

```
"No VM guests are running outdated hypervisor (qemu) binaries on this host."

| Tootgip-172-31-11-38:-/.ssh# ansible client_1 -m apt -a "name=nano state=absent" -become [HARRIMO]: Platforn linux on host 172.31.9.246 is using the discovered Python Interpreter at /usr/bin/python3.12, but future installation of another Python interpreter could change the neaning of that path. See https://docs.ansible.com/ansible-core/2.18/reference_appendices/interpreter_discovery.html for more information.

| Tansible facts": [
| "discovered interpreter_python": "/usr/bin/python3.12" |
| "changed": true,
| "stderr": "",
| "stderr": "
```

```
The following packages were automatically installed and are no longer required:
    git-man liberror-perl

Use 'sudo apt autoremove' to remove them.
The following packages will be REMOVED:
    git ubuntu-server

o upgraded, 8 newly installed, 2 to remove and 38 not upgraded.
After this operation, 22.2 MB disk space will be freed.

Do you want to continuer [Y/n] y

(Reading database ... 71716 files and directories currently installed.)

Removing ubuntu-server (1.539.2) ...
Removing ubuntu-server (1.539.2) ...
routip-172-31-9-246:-/,ssh# git --version
bash: /usr/bin/git: No such file or directory
routip-172-31-9-246:-/,ssh# git --version
git version 2-43.0

Tootip-172-31-9-246:-/,ssh# nano test.txt
routip-172-31-9-246:-/,ssh# nano test.txt
```

Conclusion:-

In the experiment, we successfully installed Ansible on top of AWS Instance. Also, configured SSH access to Ansible slave and setup ansible host and tested connection.