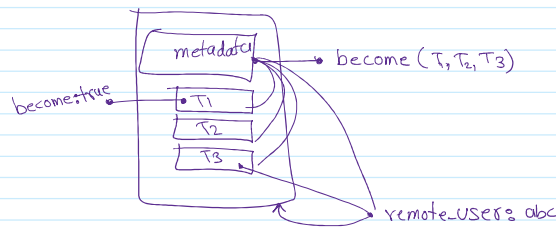
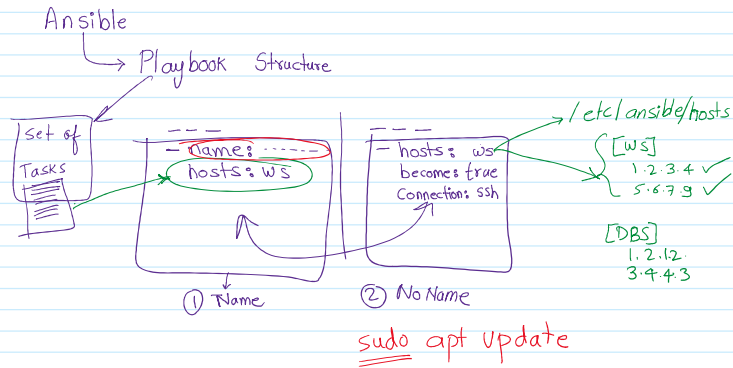


43.25May.Adv Ansible(Roles, Handlers, Variables, Users)

Thursday, May 25, 2023 7:02 PM



1] Order Server

User Data: Install Ansible
root (Single Node Cluster)

Shebang

```
#!/bin/bash
sudo apt update
sudo apt install python3-pip -y
sudo mkdir /etc/ansible
sudo bash -c 'cat < EOF > /etc/ansible/hosts'
[ws]
127.0.0.1
EOF'
sudo apt install ansible -y
ssh-keygen -b 3072 -t rsa -f ~/.ssh/sshkey -q -N ""
cat ~/.ssh/sshkey.pub | cat >> ~/.ssh/authorized_keys
sudo ansible --version > /tmp/ansibleVersion.txt
```

Inventory

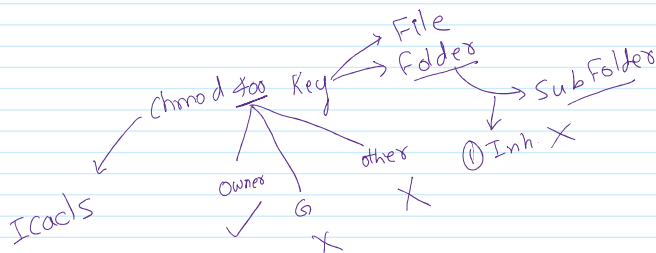
1 cmd to create Inventory.

root

2] Connect & verify Ansible.

\$ cat abc.txt --> Correct
OR
\$ sudo cat abc.txt --> Error
\$ sudo bash -c 'COMMAND'

Jenkins	=	Java
Ansible	=	python



Powershell

=====

Set Key File Variable:

New-Variable -Name Key -Value "\$env:UserProfile\.ssh\id_rsa"

Remove Inheritance:

Icacs \$Key /c /t /Inheritance:d

```
# Set Ownership to Owner:
# Key's within $env:UserProfile:
Icacls $Key /c /t /Grant $(env:UserName):F

# Key's outside of $env:UserProfile:
TakeOwn /F $Key
Icacls $Key /c /t /Grant:r $(env:UserName):F

# Remove All Users, except for Owner:
Icacls $Key /c /t /Remove:g Administrator "Authenticated Users" BUILTIN\Administrators BUILTIN
Everyone System Users

# Verify:
Icacls $Key

# Remove Variable:
Remove-Variable -Name Key
```

CMD

```
===
::# Set Key File Variable:
Set Key="%UserProfile%\ssh\id_rsa"

::# Remove Inheritance:
Icacls %Key% /c /t /Inheritance:d

::# Set Ownership to Owner:
:: # Key's within %UserProfile%:
Icacls %Key% /c /t /Grant %UserName%:F

:: # Key's outside of %UserProfile%:
TakeOwn /F %Key%
Icacls %Key% /c /t /Grant:r %UserName%:F

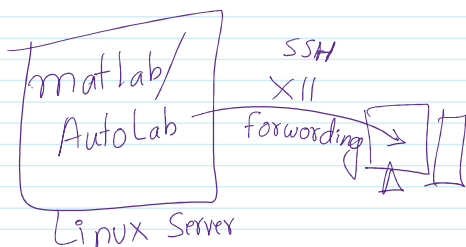
::# Remove All Users, except for Owner:
Icacls %Key% /c /t /Remove:g "Authenticated Users" BUILTIN\Administrators BUILTIN Everyone
System Users

::# Verify:
Icacls %Key%

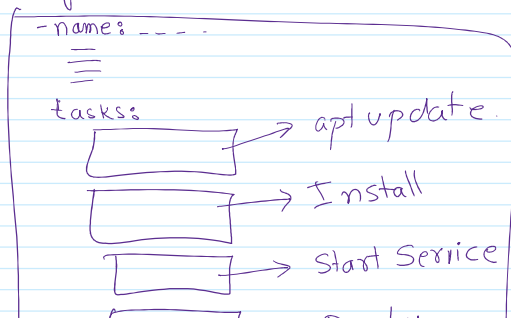
::# Remove Variable:
set "Key="
```

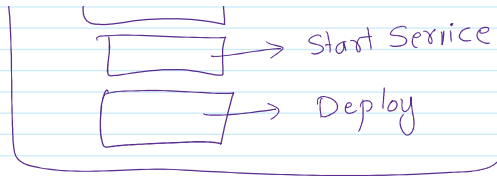
GUI:

```
====
[File] Properties → Security → Advanced
Owner: The key's user
Permission Entries: Remove all except for the key's user
Set key's user to Full Control
```



Playbook



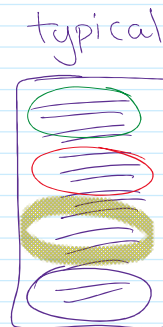
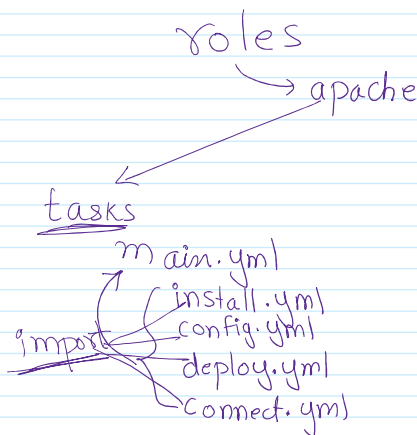
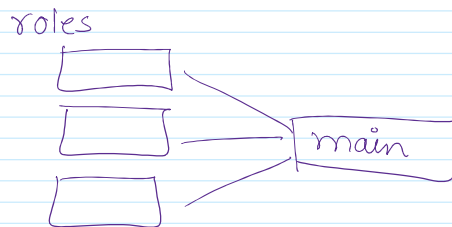


```

---
- name: Configuring and Deploy Application on container
  hosts: ws
  become: true
  connection: ssh
  tasks:
    - name: Update Repo
      command: sudo apt update

    - name: Install Docker
      command: sudo apt install -y docker.io
      become: yes
      become_user: root

    - name: Start Docker Service
      command: sudo systemctl start docker
      become: yes
      become_user: root
  
```



handler's
main.yml

vars
files
templates

\$ ansible-galaxy init path --offline

```
|-- README.md
|-- \
|-- defaults
|   |-- main.yml
|-- handlers
|   |-- main.yml
|-- meta
|   |-- main.yml
|-- tasks
|   |-- m1.yml
|   |-- m2.yml
|   |-- main.yml
|-- tests
|   |-- inventory
|   |-- test.yml
|-- vars
|   |-- main.yml
```

```
root@csms:/etc/ansible/roles/apache# cat tasks/m1.yml
```

```
---
- name: msg1
  debug: msg="message1"
```

```
root@csms:/etc/ansible/roles/apache# cat tasks/main.yml
```

```
---
# tasks file for /etc/ansible/roles/apache
- import_tasks: m1.yml
- import_tasks: m2.yml
```

```
root@csms:/etc/ansible# ls
hosts  roles  runsetup.yml
root@csms:/etc/ansible# cat runsetup.yml
```

```
---
- hosts: ws
  roles:
  - apache
root@csms:/etc/ansible# ansible-playbook /etc/ansible/runsetup.yml --syntax-check
```

```
root@csms:/etc/ansible# ansible-playbook /etc/ansible/runsetup.yml
```