❖To install Ansible on Ubuntu and Add User with sudo privileges using Ansible:

Distributor ID: Ubuntu

Description: Ubuntu 20.04 LTS

Release: 20.04

Codename: focal

Overview:

This tutorial shows you how to install Ansible on Ubuntu and add a user into a Centos Linux server or multiple servers using Ansible automation.

1. Check your Ubuntu version:

```
root@DESKTOP-PN0VBQN:/home# lsb_release -a
No LSB modules are available.
Distributor ID: Ubuntu
Description:    Ubuntu 20.04 LTS
Release:        20.04
Codename:       focal
```

2. Install Ansible:

```
root@DESKTOP-PN0VBQN:/home# sudo apt install ansible
Reading package lists... Done
Building dependency tree
Reading state information... Done
ansible is already the newest version (2.9.6+dfsg-1).
0 upgraded, 0 newly installed, 0 to remove and 198 not upgraded.
root@DESKTOP-PN0VBQN:/home# ansible --version
ansible 2.9.6
  config file = /etc/ansible/ansible.cfg
  configured module search path = ['/root/.ansible/plugins/modules', '/usr/share/ansible/plugins/modules']
  ansible python module location = /usr/lib/python3/dist-packages/ansible
  executable location = /usr/bin/ansible
  python version = 3.8.2 (default, Mar 13 2020, 10:14:16) [GCC 9.3.0]
root@DESKTOP-PN0VBQN:/home#
```

Note: as you can see I already it installed it and I am using Ansible version 2.9.6

3. Now in order to create and grant a access to a user we need to have user's public key which is usually located at /home/"user"/.sshd/id_rsa.pub. If there's not any, you can generate one by running **ssh-keygen** in the command line.

4. Add a user to sudo user group:

- Create a file called **createuser-sudoadd.yml**

```
#This yaml to create user without pass , add it to wheel group , give access to sudo.
#change the user name below to any user you prefer.
# make sure you add the new user pubkey in the same folder.
- hosts: all
  strategy: free
  become: true
  tasks:
  - name: Allow wheel group to have passwordless sudo
    lineinfile:
      dest: /etc/sudoers
      state: present
      regexp: '^%wheel'
      line: '%wheel ALL=(ALL) NOPASSWD: ALL'
      validate: visudo -cf %s

- hosts: all
  strategy: free
  become: true
  tasks:
  - user: name=yourUser comment="PlaceAname" group=wheel
  - name: Placing key
    authorized_key: user=yourUser key="{{ lookup('file', 'pubkey') }}"
```

- Create a file called **inventory** and IP server you wish to add, it could be multiple IP servers. As you can see evetually you have to have the following

Createuser-sudoadd.eml # script to add a user to sudo group.

Inventory2 # list of you IP's you wish to add user to.

private # This is your private key assuming you already have access to the server.

pubkey # this is the user pubkey you wish to add which should be provided by the user.

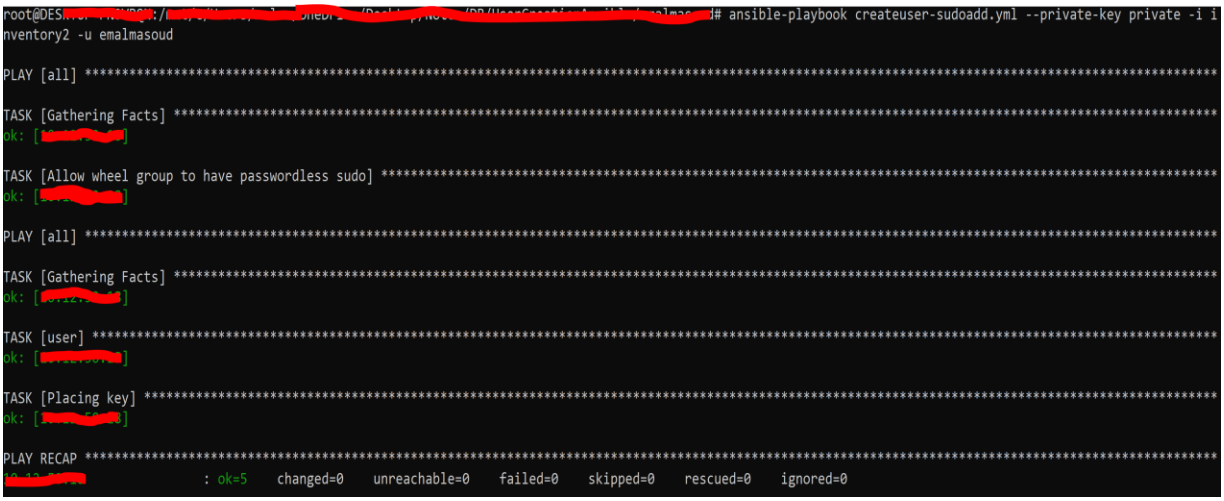
```
[redacted]@DESKTOP-PN0VBQN:~$ pwd
/home/emalmasoud
[redacted]@DESKTOP-PN0VBQN:~$ ls
createuser-sudoadd.yml  inventory  private  pubkey
[redacted]@DESKTOP-PN0VBQN:~$ cat inventory
1[redacted]
```

Note: script is attached to the repo as well as a script to add a normal user.

5. Now run the below command:

emalmasoud@DESKTOP:~$ ansible-playbook createuser-sudoadd.yml --private-key private -i inventory2 -u emalmasoud

Output:



And as you can see a user is already added to the server and now you could ssh to the server using your private key!! Imagine if there’re 100 servers or more that you need to add a user to all of them, one command could do them all in less than a mintue. Hope this helps!!