

Team - 03

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Assignment-3:

Add users to EC2 instances with SSH Access – Ansible.

Step1: Create a text file ansible-hosts.txt that contains the details of EC2 instances.

```
nikhil@Nikhil: ~  
nikhil@Nikhil:~$ nano ansible_hosts.txt  
nikhil@Nikhil:~$ nano ansible_hosts.txt  
nikhil@Nikhil:~$ cat ansible_hosts.txt  
[hosts_to_add_key]  
18.217.194.37 ansible_user=ubuntu ansible_port=22  
18.217.82.58 ansible_user=nikhil ansible_port=22  
  
[hosts_to_add_key:vars]  
ansible_ssh_common_args="-o StrictHostKeyChecking=no"
```

Step2: Create an Ansible playbook add-user.yml.

```
nikhil@Nikhil: ~
GNU nano 4.8 add-user.yml

- name: "Playbook to Create User and Add Key to EC2 Instance"
  hosts: hosts_to_add_key
  become: true
  tasks:

  - name: "Create Groups"
    group:
      name: "{{item}}"
      state: "present"
    with_items:
      - adminteam
      - devopsteam

  - name: "Create a user"
    user:
      name: "{{item.name}}"
      create_home: yes
      group: "{{item.group}}"
      state: present
      ssh_key_file: .ssh/id_rsa
      ssh_key_type: rsa
    with_items:
      - { name: 'nikhil', group: 'adminteam'}
      - { name: 'jeevan', group: 'devopsteam'}

  - name: "Copy the authorized key file from"
    authorized_key:
      user: "{{item.name}}"
      state: "{{item.userstate}}"
      key: "{{ lookup('file', '{{ item.key }}') }}"
    with_items:
      - { name: 'nikhil', key: '/home/nikhil/.ssh/nikhil.pub', userstate: 'present'}
      - { name: 'jeevan', key: '/home/nikhil/.ssh/jeevan.pub', userstate: 'present'}
```

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Step3: Generate the ssh-key key pair for all the ec2 instances.

```
nikhil@Nikhil:~$ ssh-keygen -t rsa
Generating public/private rsa key pair.
Enter file in which to save the key (/home/nikhil/.ssh/id_rsa): /home/nikhil/.ssh/nikhil
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /home/nikhil/.ssh/nikhil
Your public key has been saved in /home/nikhil/.ssh/nikhil.pub
The key fingerprint is:
SHA256:+/5ImYfU6i0aCOTjsfkk1ox7s833/CeV5vWyuZIImpU nikhil@Nikhil
The key's randomart image is:
+----[RSA 3072]-----+
|
|   +
|  o 0.
| 0+So .
| oo=0.E oo
| oo=+.. .o.o
| o=%00+.000
| oX+..o*o
+----[SHA256]-----+
nikhil@Nikhil:~$ ssh-keygen -t rsa
Generating public/private rsa key pair.
Enter file in which to save the key (/home/nikhil/.ssh/id_rsa): /home/nikhil/.ssh/jeevan
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /home/nikhil/.ssh/jeevan
Your public key has been saved in /home/nikhil/.ssh/jeevan.pub
The key fingerprint is:
SHA256:6pDXgf768r6+7LXVZ21/UWzZIdZCMoezvETe48nMSUY nikhil@Nikhil
The key's randomart image is:
+----[RSA 3072]-----+
|
|   oo=.+
|   +=E.oo
|   +=...
|   = = o
|   . S . 0 + .
|   o o . . 0 .
|   o + . . . .o+
|   +.o . o .oo
|   o0@o. o
+----[SHA256]-----+
nikhil@Nikhil:~$ nano add-user.yml
```



Step4: Run the ansible-playbook.

```
nikhil@Nikhil:~$ ansible-playbook add-user.yml -i ansible_hosts.txt --key-file=Devops.pem

< PLAY [Playbook to Create User and Add Key to EC2 Instance] >

  \   ^__^
   (oo)\_______
      (__)\       )\/\
         ||----w |
         ||     ||

< TASK [Gathering Facts] >

  \   ^__^
   (oo)\_______
      (__)\       )\/\
         ||----w |
         ||     ||

fatal: [18.217.82.58]: UNREACHABLE => {"changed": false, "msg": "Failed to connect to the host via ssh: nikhil@18.217.82.58: Permission denied (publickey).", "unreachable": true}
ok: [18.217.194.37]

< TASK [Create Groups] >

  \   ^__^
   (oo)\_______
      (__)\       )\/\
         ||----w |
         ||     ||

ok: [18.217.194.37] => (item=adminteam)
ok: [18.217.194.37] => (item=devopsteam)

< TASK [Create a user] >

  \   ^__^
   (oo)\_______
      (__)\       )\/\
         ||----w |
         ||     ||

ok: [18.217.194.37] => (item={'name': 'nikhil', 'group': 'adminteam'})
ok: [18.217.194.37] => (item={'name': 'jeevan', 'group': 'devopsteam'})

< TASK [Copy the authorized key file from] >

  \   ^__^
   (oo)\_______
      (__)\       )\/\
         ||----w |
         ||     ||
```

```
ok: [18.217.194.37] => (item=adminteam)
ok: [18.217.194.37] => (item=devopsteam)

< TASK [Create a user] >

  \   ^__^
   (oo)\_______
      (__)\       )\/\
         ||----w |
         ||     ||

ok: [18.217.194.37] => (item={'name': 'nikhil', 'group': 'adminteam'})
ok: [18.217.194.37] => (item={'name': 'jeevan', 'group': 'devopsteam'})

< TASK [Copy the authorized key file from] >

  \   ^__^
   (oo)\_______
      (__)\       )\/\
         ||----w |
         ||     ||

ok: [18.217.194.37] => (item={'name': 'nikhil', 'key': '/home/nikhil/.ssh/nikhil.pub', 'userstate': 'present'})
ok: [18.217.194.37] => (item={'name': 'jeevan', 'key': '/home/nikhil/.ssh/jeevan.pub', 'userstate': 'present'})

< PLAY RECAP >

  \   ^__^
   (oo)\_______
      (__)\       )\/\
         ||----w |
         ||     ||

18.217.194.37      : ok=4   changed=0    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
18.217.82.58      : ok=0   changed=0    unreachable=1    failed=0    skipped=0    rescued=0    ignored=0

nikhil@Nikhil:~$
```

After successful execution of the playbook, a user has been added to the instances and can log in using their private ssh-key.