

Module 4: Ansible on Cloud

Demo Document - 3

Demo: Password less authentication on AWS with Ansible.

Problem Statement:

Password less authentication on AWS with Ansible playbook.

1. Login to **EC2** host/machine.

NOTE – Refer Module 13 Demo 2 for steps to create Amazon EC2 machine.

2. Create the file **hosts** inside the directory **Add-SSH-Key-EC2-Ansible** and update the hosts to which ssh key must be copied and define **HostKeyChecking** as no.

```
mkdir Add-SSH-Key-EC2-Ansible
```

```
vi hosts
```

```
[hosts_add_key]
```

```
18.191.56.95
```

```
18.217.65.201
```

```
[hosts_to_add_key:vars]
```

```
ansible_ssh_common_args="-o StrictHostKeyChecking=no"
```

```
root@DESKTOP-IDDOUJF:~/sanju/Add-SSH-Key-EC2-Ansible# cat hosts
[hosts_add_key]
18.191.56.95
18.217.65.201

[hosts_to_add_key:vars]
ansible_ssh_common_args="-o StrictHostKeyChecking=no"
root@DESKTOP-IDDOUJF:~/sanju/Add-SSH-Key-EC2-Ansible#
```

3. Create a playbook **key.yml** and paste the contents as shown below. Variables used and their definitions are given below.

```
- name: " Add Public key to AWS EC2 Instances"
```

```
hosts: hosts_add_key
```

```
vars:
```

```
- status : "present"
```

```
- public_key : "~/ssh/id_rsa.pub"
```

tasks:

```
- name: "Copy key file from"
  authorized_key:
    user: "{{ansible_user}}"
    state: "{{status}}"
    public_key: "{{ lookup('file', '{{ public_key }}') }}"
```

Status: add/remove ssh key from remote server.

Key: Public key which will be copied to the remote servers. If no value is passed default “~/.ssh/id_rsa.pub” will be copied

Ansible_user: EC2 instance username to connect remote machine.

- Now run the playbook with your **.pem** file which is downloaded to login to AWS EC2 instances as shown below to copy the public key to the remote hosts. This will enable password less authentication to the remote hosts.

```
ansible-playbook key.yml -i hosts --user ec2-user --key-file /root/sanju/<your EC2 instance private key> -e "key=/root/.ssh/id_rsa.pub"
```

Example

```
ansible-playbook key.yml -i hosts --user ec2-user --key-file /root/sanju/sanjeevkey.pem -e "key=/root/.ssh/id_rsa.pub"
```

```
root@DESKTOP-1000UJF:~/sanju/Add-SSH-Key-EC2-Ansible# ansible-playbook key.yml -i hosts --user ec2-user --key-file /root/sanju/sanjeevkey.pem -e "key=/root/.ssh/id_rsa.pub"
[WARNING]: * Failed to parse /root/sanju/Add-SSH-Key-EC2-Ansible/hosts with yaml plugin: We were unable to read either as JSON nor YAML, these are the errors we got from each:
decoded: Syntax Error while loading YAML. did not find expected <document start> The error appears to be in '/root/sanju/Add-SSH-Key-EC2-Ansible/hosts': line 2, column 1, but
depending on the exact syntax problem. The offending line appears to be: [hosts_add_key] 18.191.56.95 ^ here
[WARNING]: * Failed to parse /root/sanju/Add-SSH-Key-EC2-Ansible/hosts with ini plugin: /root/sanju/Add-SSH-Key-EC2-Ansible/hosts:5: Section [hosts_to_add_key:vars] not valid
hosts_to_add_key
[WARNING]: Unable to parse /root/sanju/Add-SSH-Key-EC2-Ansible/hosts as an inventory source
[WARNING]: No inventory was parsed, only implicit localhost is available
[WARNING]: provided hosts list is empty, only localhost is available. Note that the implicit localhost does not match 'all'

PLAY [Add Public key to EC2 Instances] *****

TASK [Gathering Facts] *****
[WARNING]: Platform linux on host 18.217.65.201 is using the discovered Python interpreter at /usr/bin/python, but future installation of another Python interpreter could change
https://docs.ansible.com/ansible/2.9/reference_appendices/interpreter_discovery.html for more information.
ok: [18.217.65.201]
[WARNING]: Platform linux on host 18.191.56.95 is using the discovered Python interpreter at /usr/bin/python, but future installation of another Python interpreter could change
https://docs.ansible.com/ansible/2.9/reference_appendices/interpreter_discovery.html for more information.
ok: [18.191.56.95]

TASK [Copy the authorized key file from] *****
changed: [18.217.65.201]
changed: [18.191.56.95]

PLAY RECAP *****
18.191.56.95      : ok=2    changed=1    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
18.217.65.201   : ok=2    changed=1    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
```

5. Now the user can validate using the below command that he can login to the server using his private key and without password.

ssh -i /root/sanju/<your EC2 instance private key>@EC2 instance public IP

Example:-

ssh -i /root/sanju/sanjeevkey.pem [ec2-user@18.191.56.95](#)

```
root@DESKTOP-IDDOUJF:~/sanju/Add-SSH-Key-EC2-Ansible# ssh -i /root/sanju/sanjeevkey.pem ec2-user@18.191.56.95
Last login: Sun Jun 20 11:04:52 2021 from 175.100.148.61

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 _ | ( _ _ | _ _ /   Amazon Linux 2 AMI
 _ | \ _ _ | _ _ |

https://aws.amazon.com/amazon-linux-2/
[ec2-user@ip-172-31-16-53 ~]$
```