**Lesson 3 Demo 1**

**Creating Static Host Inventory**

**Objective:** Tocreate a static host inventory

**Tools required:** Ansible

**Prerequisites:** You need to have Ansible installed in order to proceed with this demo. If you don’t have it installed, refer to Demo 1 of Lesson 2

Steps to be followed:

1. Installing Ansible on the main node (Ansible server)
2. Generating an SSH key pair on the main node (Ansible server)
3. Copying the SSH key on other two nodes, which you need to manage through the Ansible server

ssh connection has been established between the main node an

1. Updating the hosts file with the host IP address
2. Establishing the connectivity between the hosts specified in the host file and the ansible server

**Note**: The node on which we install Ansible is called as Ansible Server.

**Step 1: Installing Ansible on the main node (Ansible server)**

* 1. Refer the demo 1 of lesson 2 to install ansible
  2. The node on which we install ansible, will call that node as ansible server from here onwards

**Step 2: Generate the private or public key for the Ansible server**

1. Use the following command to generate the SSH key on ansible server

***ssh-keygen***

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**Step 3: Copying the SSH key on the nodes, which you need to manage through the Ansible server**

**Note**: In this demo, we have two nodes, one is the localhost of the Ansible server itself and another one is node 1 with IP (172.31.18.193)

Another node

3.1 Use the following command to copy the public key in a file named authorized key in localhost

**cat .ssh/id\_rsa.pub >> .ssh/authorized\_keys**

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3.2 Use the following command to check the SSH connection with localhost (if you get a welcome screen as shown in the snippet then the SSH connection is successfully established)

**ssh localhost -p 42006**

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3.3 Now, use the following command to exit from the localhost

**exit**

3.3 Run the following command to go to .ssh directory of the Ansible server

**cd .ssh**

3.4 Then, run the following command to copy the public key to another node that will be connecting to the Ansible server.

**ssh-copy-id username@ip -p 42006**

**Note**: You must use a username@ip with your node's username and IP username, which is provided in the lab credential. Run the command **ifconfig** on the node whose IP address you want to know

Example: We want to connect with the Ansible server with username: prakharguptasim and IP of the node is 172.31.18.193   
We will write the above command as ssh-copy-id prakharguptasim@ip -p 42006

**![Text, letter

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3.5 Run the following command to come out of .ssh directory of the Ansible server

**cd**

3.6 Use the following command to check the SSH connection with localhost (if you get a welcome screen as shown in the snippet, then the SSH connection is successfully established)

**ssh username@ip -p 42006**

**![Graphical user interface, text, application, email

Description automatically generated]()**

3.7 Now, use the following command to exit from the node 1

**exit**

**Step 4: Updating the inventory or hosts file with the host’s IP address**

4.1 Now, add the host localhost in the ansible host file /etc/ansible/hosts.

**sudo vi /etc/ansible/hosts**

4.2 When the file opens, add the below two lines of the code at the end of the file:

**[dbbservers]**

**localhost:42006**

**172.31.18.193:42006**

**![Graphical user interface, text

Description automatically generated]()**

**Note**: In [dbservers] after localhost:42006 you need to write the ip address of the node which you want to manage with Ansible server

4.3 After entering the following press **esc**, then write :wq to save and quit from the inventory file

**Step 5: Establishing the connectivity between the hosts specified in the hosts file and the Ansible server**

5.1 Use the following to check whether the connection has been established between the hosts and the Ansible server

**ansible -m ping dbservers**

**![Graphical user interface, text, application

Description automatically generated]()**

5.1 Use the following command to check the number of hosts in hosts’ file

**ansible all --list-hosts**

**![A picture containing text

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