Lab Exercise 02

Working With Hosts and Groups

Objective: To work with hosts both individually and in groups for streamlined management and deployment across your network infrastructure

Tools required: Ubuntu OS

Prerequisites: You need to have Ansible, and the nodes connected with it installed to proceed with this demo. Refer Demo 1 of Lesson 3.

Steps to be followed:
1. List the hosts present in your host file
2. Create a file on the host
3. Remove the file from the host
4. Create and remove the file on the hosts using the group
5. Update the hosts using the group

Step 1: List the hosts present in your host file

1.1 Use the following command to list the hosts in your inventory file:
ansible all --list-hosts

```
[devops@ip-172-31-8-163 ~]$ ansible all --list-host
  hosts (2):
    172.31.15.102
    172.31.5.145
[devops@ip-172-31-8-163 ~]$ _
```

Note: The host list might change as per your system.

Step 2: Create a file on the host

2.1 Use the following command to list the contents of the current working directory:

ansible 172.31.44.85 -a "ls"

```
[devops@ip-172-31-8-163 ~]$ ansible 172.31.15.102 -a "ls"
[WARNING]: Platform linux on host 172.31.15.102 is using the discovered Python interpreter at /usr/bin/python, but
future installation of another Python interpreter could change this. See
https://docs.ansible.com/ansible/2.9/reference_appendices/interpreter_discovery.html for more information.
172.31.15.102 | CHANGED | rc=0 >>
test1
[devops@ip-172-31-8-163 ~]$ _
```

Note: You can create the file on any other host as per your host list.

2.2 Use the following command to create a file named **file1** on the host:

ansible 172.31.44.85 -a "touch file1"

```
[devops@ip-172-31-8-163 ~]$ ansible 172.31.15.102 -a "touch file1"
[WARNING]: Consider using the file module with state=touch rather than running 'touch'.  If you need to use command
because file is insufficient you can add 'warn: false' to this command task or set 'command_warnings=False' in
ansible.cfg to get rid of this message.
[WARNING]: Platform linux on host 172.31.15.102 is using the discovered Python interpreter at /usr/bin/python, but
future installation of another Python interpreter could change this. See
https://docs.ansible.com/ansible/2.9/reference_appendices/interpreter_discovery.html for more information.
172.31.15.102 | CHANGED | rc=0 >>

[devops@ip-172-31-8-163 ~]$ ansible 172.31.15.102 -a "ls"
[WARNING]: Platform linux on host 172.31.15.102 is using the discovered Python interpreter at /usr/bin/python, but
future installation of another Python interpreter could change this. See
https://docs.ansible.com/ansible/2.9/reference_appendices/interpreter_discovery.html for more information.
172.31.15.102 | CHANGED | rc=0 >>
file1
test1
```

Step 3: Remove the file from the host

3.1 Now, run the following command to remove the file from the host:

ansible 172.31.44.85 -a "rm file1"

```
[devops@ip-172-31-8-163 ~]$ ansible 172.31.15.102 -a "rm file1"
[WARNING]: Consider using the file module with state=absent rather than running 'rm'.  If you need to use command
because file is insufficient you can add 'warn: false' to this command task or set 'command_warnings=False' in
ansible.cfg to get rid of this message.
[WARNING]: Platform linux on host 172.31.15.102 is using the discovered Python interpreter at /usr/bin/python, but
future installation of another Python interpreter could change this. See
https://docs.ansible.com/ansible/2.9/reference_appendices/interpreter_discovery.html for more information.
172.31.15.102 | CHANGED | rc=0 >>

[devops@ip-172-31-8-163 ~]$ _
```

Step 4: Create and remove the file on the hosts using the group

4.1 Run the following command to create a new file on both the hosts using the group:

ansible dbservers -a "touch Ansible_learners"

```
syedsharozsimpl@ip-172-31-44-85:~$ ansible dbservers -a "touch Ansible_learners"
```

4.2 Use the following command to list the contents of the current working directory of all the hosts present in the group:

ansible dbservers -a "ls"

```
[devops@ip-172-31-8-163 ~]$ ansible devops -a "touch ANSIBLE_LEARNERS"
[WARNING]: Consider using the file module with state=touch rather than running 'touch'.  If you need to use command
because file is insufficient you can add 'warn: false' to this command task or set 'command_warnings=False' in
ansible.cfg to get rid of this message.
[WARNING]: Platform linux on host 172.31.5.145 is using the discovered Python interpreter at /usr/bin/python, but
future installation of another Python interpreter could change this. See
https://docs.ansible.com/ansible/2.9/reference_appendices/interpreter_discovery.html for more information.
172.31.5.145 | CHANGED | rc=0 >>

[WARNING]: Platform linux on host 172.31.15.102 is using the discovered Python interpreter at /usr/bin/python, but
future installation of another Python interpreter could change this. See
https://docs.ansible.com/ansible/2.9/reference_appendices/interpreter_discovery.html for more information.
172.31.15.102 | CHANGED | rc=0 >>

[devops@ip-172-31-8-163 ~]$ ansible devops -a "ls"
[WARNING]: Platform linux on host 172.31.15.102 is using the discovered Python interpreter at /usr/bin/python, but
future installation of another Python interpreter could change this. See
https://docs.ansible.com/ansible/2.9/reference_appendices/interpreter_discovery.html for more information.
172.31.15.102 | CHANGED | rc=0 >>
ANSIBLE_LEARNERS
test1
[WARNING]: Platform linux on host 172.31.5.145 is using the discovered Python interpreter at /usr/bin/python, but
future installation of another Python interpreter could change this. See
https://docs.ansible.com/ansible/2.9/reference_appendices/interpreter_discovery.html for more information.
172.31.5.145 | CHANGED | rc=0 >>
ANSIBLE_LEARNERS
[devops@ip-172-31-8-163 ~]$
```

4.3 Run the following command to remove the file on both hosts using the group:

ansible dbservers -a "rm Ansible_learners"

```
[devops@ip-172-31-8-163 ~]$ ansible devops -a "rm ANSIBLE_LEARNERS"
[WARNING]: Consider using the file module with state=absent rather than running 'rm'.  If you need to use command
because file is insufficient you can add 'warn: false' to this command task or set 'command_warnings=False' in
ansible.cfg to get rid of this message.
[WARNING]: Platform linux on host 172.31.5.145 is using the discovered Python interpreter at /usr/bin/python, but
future installation of another Python interpreter could change this. See
https://docs.ansible.com/ansible/2.9/reference_appendices/interpreter_discovery.html for more information.
172.31.5.145 | CHANGED | rc=0 >>

[WARNING]: Platform linux on host 172.31.15.102 is using the discovered Python interpreter at /usr/bin/python, but
future installation of another Python interpreter could change this. See
https://docs.ansible.com/ansible/2.9/reference_appendices/interpreter_discovery.html for more information.
172.31.15.102 | CHANGED | rc=0 >>

[devops@ip-172-31-8-163 ~]$
```