

Repository: <https://github.com/gabriellukechen/cmpe272hw1>

Below shows 4 ansible commands.

1. Copying the server application binary from vm ubuntu1 to vm's ubuntu2 and ubuntu3
2. Running the server application
 - a. Curling the path '/' at port 8080 of each VM and receiving the message "Hello World from SJSU"
3. Stopping the server application
4. Removing the binary

```

gchen@ubuntu1: ~/272/hw1
gchen@ubuntu1: ~/272/hw1
gchen@ubuntu1:~/272/hw1$ ansible-playbook hellosjsu_deploy_ansibleplaybook.yml --tags "deploy"

PLAY [Deploy helloworldsjsu server] *****

TASK [Gathering Facts] *****
ok: [ubuntu3]
ok: [ubuntu2]

TASK [copy server binary] *****
changed: [ubuntu2]
changed: [ubuntu3]

PLAY RECAP *****
ubuntu2      : ok=2    changed=1    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
ubuntu3      : ok=2    changed=1    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0

gchen@ubuntu1:~/272/hw1$ ansible-playbook hellosjsu_deploy_ansibleplaybook.yml --tags "run"

PLAY [Deploy helloworldsjsu server] *****

TASK [Gathering Facts] *****
ok: [ubuntu2]
ok: [ubuntu3]

TASK [run server binary] *****
changed: [ubuntu3]
changed: [ubuntu2]

PLAY RECAP *****
ubuntu2      : ok=2    changed=1    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
ubuntu3      : ok=2    changed=1    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0

gchen@ubuntu1:~/272/hw1$ curl 192.168.122.174:8080/
Hello World from SJSU
gchen@ubuntu1:~/272/hw1$ curl 192.168.122.225:8080/
Hello World from SJSU
gchen@ubuntu1:~/272/hw1$ ansible-playbook hellosjsu_deploy_ansibleplaybook.yml --tags "stop"

PLAY [Deploy helloworldsjsu server] *****

TASK [Gathering Facts] *****
ok: [ubuntu2]
ok: [ubuntu3]

TASK [kill server process] *****
changed: [ubuntu2]
changed: [ubuntu3]

PLAY RECAP *****
ubuntu2      : ok=2    changed=1    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
ubuntu3      : ok=2    changed=1    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0

gchen@ubuntu1:~/272/hw1$ curl 192.168.122.174:8080/
curl: (7) Failed to connect to 192.168.122.174 port 8080: Connection refused
gchen@ubuntu1:~/272/hw1$ curl 192.168.122.225:8080/
curl: (7) Failed to connect to 192.168.122.225 port 8080: Connection refused
gchen@ubuntu1:~/272/hw1$ ansible-playbook hellosjsu_deploy_ansibleplaybook.yml --tags "remove"

PLAY [Deploy helloworldsjsu server] *****

TASK [Gathering Facts] *****
ok: [ubuntu2]
ok: [ubuntu3]

TASK [delete binary] *****
[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.
changed: [ubuntu2]
changed: [ubuntu3]

PLAY RECAP *****
ubuntu2      : ok=2    changed=1    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
ubuntu3      : ok=2    changed=1    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0

gchen@ubuntu1:~/272/hw1$

```

Below shows that the binary is no longer installed on the VMs ubuntu2 and ubuntu3

```
gchen@ubuntu1: ~/272/hw1
gchen@ubuntu1: ~/272/hw1
gchen@ubuntu1: ~/272/hw1$ ssh ubuntu2
Welcome to Ubuntu 20.04.3 LTS (GNU/Linux 5.4.0-81-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

System information as of Wed 01 Sep 2021 12:32:24 AM UTC

System load:  0.0           Processes:      144
Usage of /:   32.7% of 18.57GB Users logged in: 0
Memory usage: 5%          IPv4 address for enp1s0: 192.168.122.174
Swap usage:  0%

 * Super-optimized for small spaces - read how we shrank the memory
   footprint of MicroK8s to make it the smallest full K8s around.

https://ubuntu.com/blog/microk8s-memory-optimisation

1 update can be applied immediately.
To see these additional updates run: apt list --upgradable

Last login: Wed Sep  1 00:30:00 2021 from 192.168.122.45
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

gchen@ubuntu2:~$ ls
gchen@ubuntu2:~$ exit
logout
Connection to 192.168.122.174 closed.
gchen@ubuntu1:~/272/hw1$ ssh ubuntu3
Welcome to Ubuntu 20.04.3 LTS (GNU/Linux 5.4.0-81-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

System information as of Wed 01 Sep 2021 12:32:33 AM UTC

System load:  0.0           Processes:      148
Usage of /:   32.6% of 18.57GB Users logged in: 0
Memory usage: 5%          IPv4 address for enp1s0: 192.168.122.225
Swap usage:  0%

 * Super-optimized for small spaces - read how we shrank the memory
   footprint of MicroK8s to make it the smallest full K8s around.

https://ubuntu.com/blog/microk8s-memory-optimisation

1 update can be applied immediately.
To see these additional updates run: apt list --upgradable

Last login: Wed Sep  1 00:23:05 2021 from 192.168.122.45
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

gchen@ubuntu3:~$ ls
gchen@ubuntu3:~$ exit
logout
Connection to 192.168.122.225 closed.
gchen@ubuntu1:~/272/hw1$
```