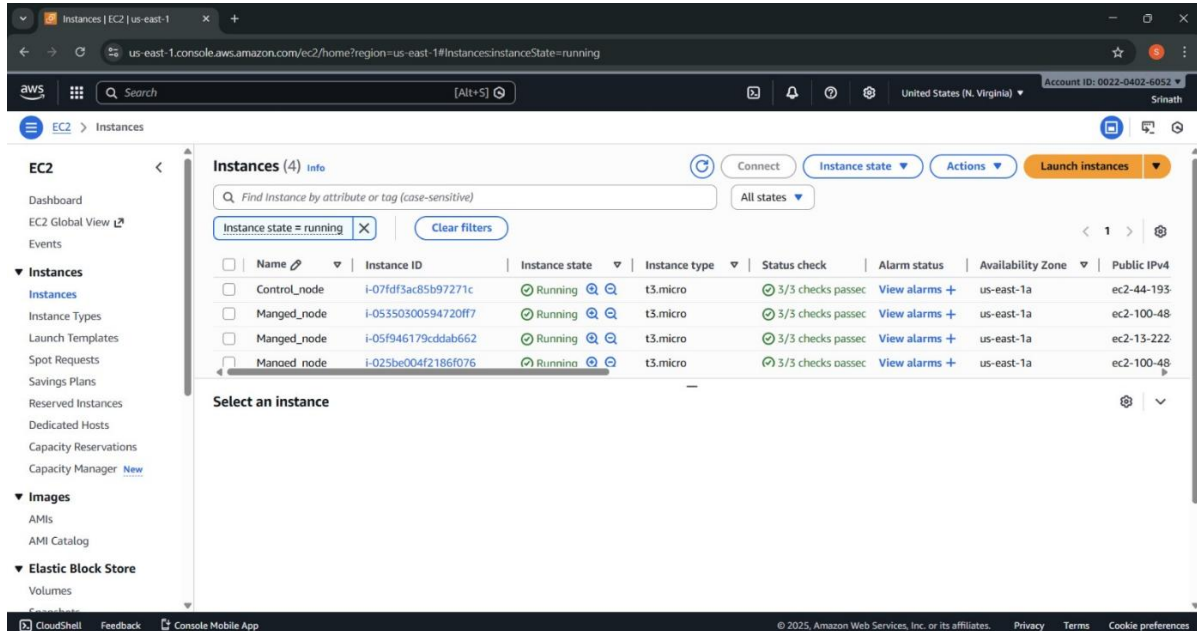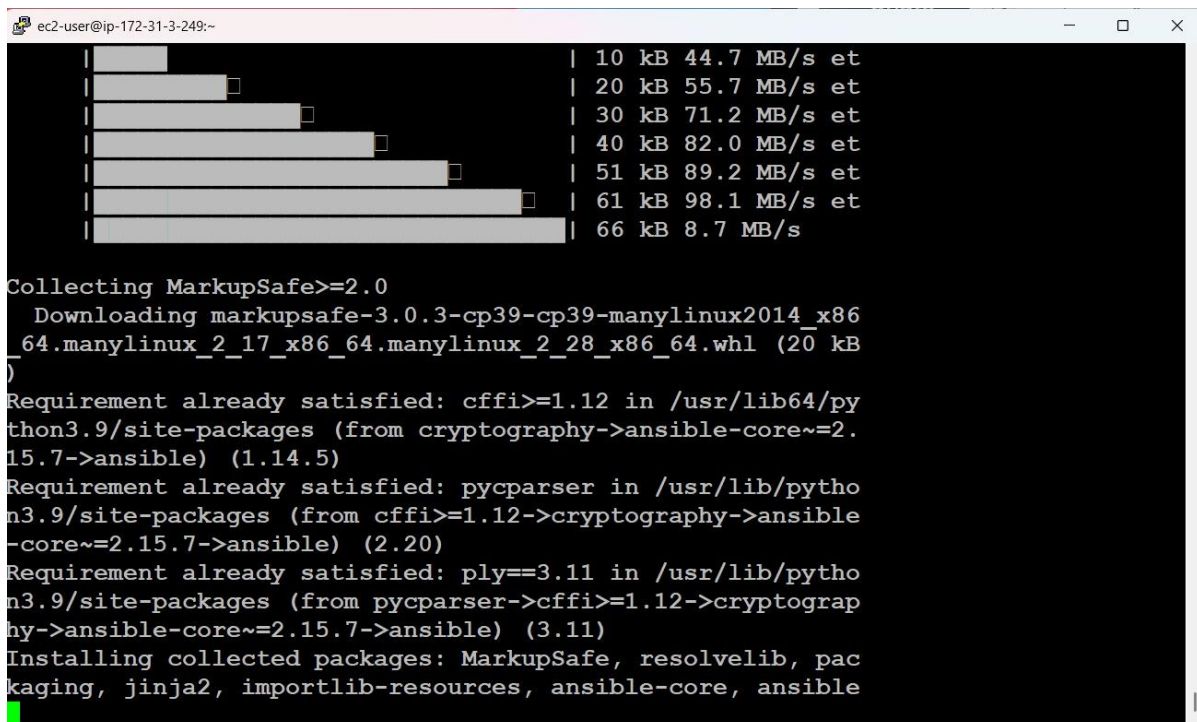# TASK - 25

Adhoc commands

Create instances and installing python by using user data

Installing ansible in control node

Then install the configuration files of ansible

```
[ec2-user@ip-172-31-3-249 ~]$ wget https://raw.githubusercontent.com/ansible/ans
ible/stable-2.11/examples/ansible.cfg
--2025-12-29 11:55:47--  https://raw.githubusercontent.com/ansible/ansible/stabl
e-2.11/examples/ansible.cfg
Resolving raw.githubusercontent.com (raw.githubusercontent.com)... 185.199.109.1
33, 185.199.110.133, 185.199.111.133, ...
Connecting to raw.githubusercontent.com (raw.githubusercontent.com)|185.199.109.
133|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 20353 (20K) [text/plain]
Saving to: 'ansible.cfg'

ansible.cfg          100%[===================>]  19.88K  --.-KB/s    in 0s

2025-12-29 11:55:48 (121 MB/s) - 'ansible.cfg' saved [20353/20353]

[ec2-user@ip-172-31-3-249 ~]$ ls
ansible.cfg
```

Create a inventory file and store the private ip of managed nodes

```
[ec2-user@ip-172-31-3-249 ~]$ nano inventory.txt
[ec2-user@ip-172-31-3-249 ~]$ ls
ansible.cfg  inventory.txt
```

After creating the inventory file and ping it using the below command

```
[ec2-user@ip-172-31-3-249 ~]$ ansible all -i inventory.txt -m ping
The authenticity of host '3.235.13.44 (3.235.13.44)' can't be established.
ED25519 key fingerprint is SHA256:41ep2UtldyALKof+vDLWvT3o7q2+lToB3ZsvCHkDmGU.
This key is not known by any other names
The authenticity of host '44.202.75.73 (44.202.75.73)' can't be established.
ED25519 key fingerprint is SHA256:3G9fpU/oKjfywbaFGjIL/Ho59Nh+mFyXPmnGBI2NMc8.
This key is not known by any other names
The authenticity of host '44.215.111.23 (44.215.111.23)' can't be established.
ED25519 key fingerprint is SHA256:4E9KDzbQffIkzoF1VtBjkQ8zQeg+LOS7dkAGekRxBbY.
This key is not known by any other names
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Please type 'yes', 'no' or the fingerprint: yes
Please type 'yes', 'no' or the fingerprint: yes
[WARNING]: Platform linux on host 3.235.13.44 is using the discovered Python
interpreter at /usr/bin/python3.9, but future installation of another Python
interpreter could change the meaning of that path. See
https://docs.ansible.com/ansible-
core/2.15/reference_appendices/interpreter_discovery.html for more information.
3.235.13.44 | SUCCESS => {
    "ansible_facts": {
        "discovered_interpreter_python": "/usr/bin/python3.9"
    },
    "changed": false,
    "ping": "pong"
}

Please type 'yes', 'no' or the fingerprint: yes
Please type 'yes', 'no' or the fingerprint: yes
Please type 'yes', 'no' or the fingerprint: yes
```

Then install httpd

```
ansible all -i inventory.txt -m yum -a "name=httpd state=present" -b
```

        },
        "changed": true,
        "msg": "",
        "rc": 0,
        "results": [
            "Installed: mailcap-2.1.49-3.amzn2023.0.3.noarch",
            "Installed: apr-1.7.5-1.amzn2023.0.4.x86_64",
            "Installed: httpd-core-2.4.65-1.amzn2023.0.2.x86_64",
            "Installed: apr-util-1.6.3-1.amzn2023.0.2.x86_64",
            "Installed: httpd-tools-2.4.65-1.amzn2023.0.2.x86_64",
            "Installed: mod_lua-2.4.65-1.amzn2023.0.2.x86_64",
            "Installed: apr-util-lmdb-1.6.3-1.amzn2023.0.2.x86_64",
            "Installed: libbrotli-1.0.9-4.amzn2023.0.2.x86_64",
            "Installed: httpd-filesystem-2.4.65-1.amzn2023.0.2.noarch",
            "Installed: mod_http2-2.0.27-1.amzn2023.0.3.x86_64",
            "Installed: apr-util-openssl-1.6.3-1.amzn2023.0.2.x86_64",
            "Installed: generic-logos-httpd-18.0.0-12.amzn2023.0.3.noarch",
            "Installed: httpd-2.4.65-1.amzn2023.0.2.x86_64"
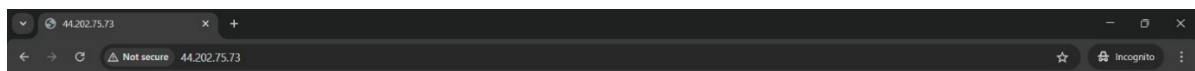   ]
}
[WARNING]: Platform linux on host 44.202.75.73 is using the discovered Python
interpreter at /usr/bin/python3.9, but future installation of another Python
interpreter could change the meaning of that path. See
https://docs.ansible.com/ansible-
core/2.15/reference_appendices/interpreter_discovery.html for more information.
44.202.75.73 | CHANGED => {
    "ansible_facts": {
        "discovered_interpreter_python": "/usr/bin/python3.9"
    },
    "changed": true,
    "msg": "",
    "rc": 0,
    "results": [

Then start httpd

ansible all -i inventory.txt -m service -a "name=httpd state=started" -b

[ec2-user@ip-172-31-3-249 ~]$ ansible all -i inventory.txt -m service -a "name=httpd state=started" -b
[WARNING]: Platform linux on host 3.235.13.44 is using the discovered Python interpreter at /usr/bin/python3.9, but future
installation of another Python interpreter could change the meaning of that path. See https://docs.ansible.com/ansible-
core/2.15/reference_appendices/interpreter_discovery.html for more information.
3.235.13.44 | CHANGED => {
    "ansible_facts": {
        "discovered_interpreter_python": "/usr/bin/python3.9"
    },
    "changed": true,
    "name": "httpd",
    "state": "started",
    "status": {
        "AccessSELinuxContext": "system_u:object_r:httpd_unit_file_t:s0",
        "ActiveEnterTimestampMonotonic": "0",
        "ActiveExitTimestampMonotonic": "0",
        "ActiveState": "inactive",
        "After": "systemd-tmpfiles-setup.service systemd-journald.socket nss-lookup.target system.slice network.target sysinit.target r
emote-fs.target -.mount tmp.mount httpd-init.service basic.target",
        "AllowIsolate": "no",
        "AssertResult": "no",
        "AssertTimestampMonotonic": "0",
        "Before": "shutdown.target",
        "BlockIOAccounting": "no",
        "BlockIOWeight": "[not set]",
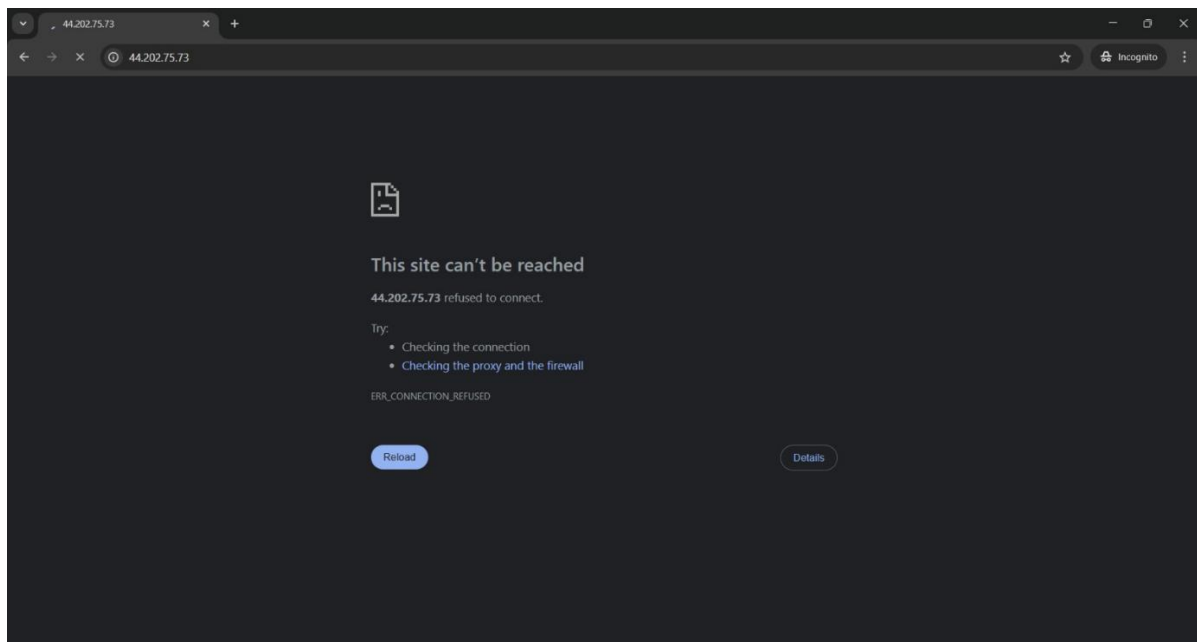   "CPUAccounting": "yes",

Output:

It works!

To stop the apache:

ansible all -i inventory.txt -m service -a "name=httpd state=stopped" -b

```
[ec2-user@ip-172-31-3-249 ~]$ ansible all -i inventory.txt -m serv
ice -a "name=httpd state=stopped" -b
[WARNING]: Platform linux on host 44.202.75.73 is using the discovered Python
interpreter at /usr/bin/python3.9, but future installation of another Python
interpreter could change the meaning of that path. See
https://docs.ansible.com/ansible-
core/2.15/reference_appendices/interpreter_discovery.html for more information.
44.202.75.73 | CHANGED => {
    "ansible_facts": {
        "discovered_interpreter_python": "/usr/bin/python3.9"
    },
    "changed": true,
    "name": "httpd",
    "state": "stopped",
    "status": {
        "AccessSELinuxContext": "system_u:object_r:httpd_unit_file_t:s0",
        "ActiveEnterTimestamp": "Mon 2025-12-29 12:11:14 UTC",
        "ActiveEnterTimestampMonotonic": "1315040047",
        "ActiveExitTimestampMonotonic": "0",
        "ActiveState": "active",
        "After": "httpd-init.service basic.target remote-fs.target nss-lookup.target sysinit.target system.slice systemd-journald.socke
t -.mount tmp.mount systemd-tmpfiles-setup.service network.target",
        "AllowIsolate": "no",
        "AssertResult": "yes",
```

Output:

History of command used for installing and stopping the httpd

```
[ec2-user@ip-172-31-3-249 ~]$ history
    1  python3 --version
    2  pip install ansible
    3  wget https://raw.githubusercontent.com/ansible/ansible/stab
le-2.11/examples/ansible.cfg
    4  ls
    5  nano inventory.txt
    6  ls
    7  ansbile all -i inventory.txt -m ping
    8  ansible all -i inventory.txt -m ping
    9  ansible all -i inventory.txt -m yum -a "name=httpd state=pr
esent" -b
```

```
    43  ansible all -i inventory.txt -m service -a "name=httd state
=started" -b
    44  ansible all -i inventory.txt -m service -a "name=httpd stat
e=started" -b
    45  ansible all -i inventory.txt -m service -a "name=httpd stat
e=stopped" -b
    46  history
```

NGINX:

ansible all -i inventory.txt -m yum -a "name=nginx state=present" -b

```
[ec2-user@ip-172-31-3-249 ~]$ ansible all -i inventory.txt -m yum
-a "name=nginx state=present" -b
[WARNING]: Platform linux on host 44.202.75.73 is using the discovered Python
interpreter at /usr/bin/python3.9, but future installation of another Python
interpreter could change the meaning of that path. See
https://docs.ansible.com/ansible-
core/2.15/reference_appendices/interpreter_discovery.html for more information.
44.202.75.73 | CHANGED => {
    "ansible_facts": {
        "discovered_interpreter_python": "/usr/bin/python3.9"
    },
    "changed": true,
    "msg": "",
    "rc": 0,
    "results": [
        "Installed: nginx-filesystem-1:1.28.0-1.amzn2023.0.2.noarch",
        "Installed: nginx-mimetypes-2.1.49-3.amzn2023.0.3.noarch",
        "Installed: nginx-1:1.28.0-1.amzn2023.0.2.x86_64",
        "Installed: libunwind-1.4.0-5.amzn2023.0.3.x86_64",
        "Installed: nginx-core-1:1.28.0-1.amzn2023.0.2.x86_64",
        "Installed: gperftools-libs-2.9.1-1.amzn2023.0.3.x86_64"
    ]
}
```

```
3.235.13.44 | CHANGED => {
    "ansible_facts": {
        "discovered_interpreter_python": "/usr/bin/python3.9"
    },
    "changed": true,
    "msg": "",
    "rc": 0,
    "results": [
        "Installed: nginx-filesystem-1:1.28.0-1.amzn2023.0.2.noarch",
        "Installed: nginx-mimetypes-2.1.49-3.amzn2023.0.3.noarch",
        "Installed: nginx-1:1.28.0-1.amzn2023.0.2.x86_64",
        "Installed: libunwind-1.4.0-5.amzn2023.0.3.x86_64",
        "Installed: nginx-core-1:1.28.0-1.amzn2023.0.2.x86_64",
        "Installed: gperftools-libs-2.9.1-1.amzn2023.0.3.x86_64"
    ]
}
[WARNING]: Platform linux on host 44.215.111.23 is using the discovered Python
interpreter at /usr/bin/python3.9, but future installation of another Python
interpreter could change the meaning of that path. See
https://docs.ansible.com/ansible-
core/2.15/reference_appendices/interpreter_discovery.html for more information.
44.215.111.23 | CHANGED => {
    "ansible_facts": {
        "discovered_interpreter_python": "/usr/bin/python3.9"
    },
    "changed": true,
    "msg": "",
    "rc": 0,
    "results": [
        "Installed: nginx-filesystem-1:1.28.0-1.amzn2023.0.2.noarch",
        "Installed: nginx-mimetypes-2.1.49-3.amzn2023.0.3.noarch",
        "Installed: nginx-1:1.28.0-1.amzn2023.0.2.x86_64",
        "Installed: libunwind-1.4.0-5.amzn2023.0.3.x86_64",
        "Installed: nginx-core-1:1.28.0-1.amzn2023.0.2.x86_64",
        "Installed: gperftools-libs-2.9.1-1.amzn2023.0.3.x86_64"
    ]
}
```

To start the installed nginx:

ansible all -i inventory.txt -m service -a "name=nginx state=started" -b

```
[ec2-user@ip-172-31-3-249 ~]$ ansible all -i inventory.txt -m service -a "name=nginx state=started" -b
[WARNING]: Platform linux on host 44.215.111.23 is using the discovered Python interpreter at /usr/bin/python3.9, but future
installation of another Python interpreter could change the meaning of that path. See https://docs.ansible.com/ansible-
core/2.15/reference_appendices/interpreter_discovery.html for more information.
44.215.111.23 | CHANGED => {
    "ansible_facts": {
        "discovered_interpreter_python": "/usr/bin/python3.9"
    },
    "changed": true,
    "name": "nginx",
    "state": "started",
    "status": {
        "AccessSELinuxContext": "system_u:object_r:httpd_unit_file_t:s0",
        "ActiveEnterTimestampMonotonic": "0",
        "ActiveExitTimestampMonotonic": "0",
        "ActiveState": "inactive",
        "After": "systemd-tmpfiles-setup.service basic.target systemd-journald.socket system.slice remote-fs.target -.mount sysinit.tar
get network-online.target tmp.mount nss-lookup.target",
```

Output: