

Ansible Playbook with AWS

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Open AWS EC2

- Ubuntu Server 22.04 LTS EC2
- Connect 2 instances as below
 - Master
 - Slave

Putty Connection

- Download Putty
 - Copy Public IP of master
 - Connect with authentication
-
- Username: ubuntu

Update Master

Update the master server to make up to date system:

`sudo apt-get update`

```
ubuntu@ip-172-31-11-187: ~  
ubuntu@ip-172-31-11-187:~$ sudo apt-get update  
Hit:1 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy InRelease  
Get:2 http://security.ubuntu.com/ubuntu jammy-security InRelease [110 kB]  
Get:3 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates InRelease [114 kB]  
Get:4 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports InRelease [99.8 kB]  
Get:5 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy/universe amd64 Packages [14.1 MB]  
Get:6 http://security.ubuntu.com/ubuntu jammy-security/main amd64 Packages [461 kB]  
Get:7 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy/universe Translation-en [5652 kB]  
Get:8 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy/universe amd64 c-n-f Metadata [286 kB]  
Get:9 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy/multiverse amd64 Packages [217 kB]  
Get:10 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy/multiverse Translation-en [112 kB]  
Get:11 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy/multiverse amd64 c-n-f Metadata [8372 B]  
Get:12 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 Packages [695 kB]  
Get:13 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main Transl
```

Update Slave

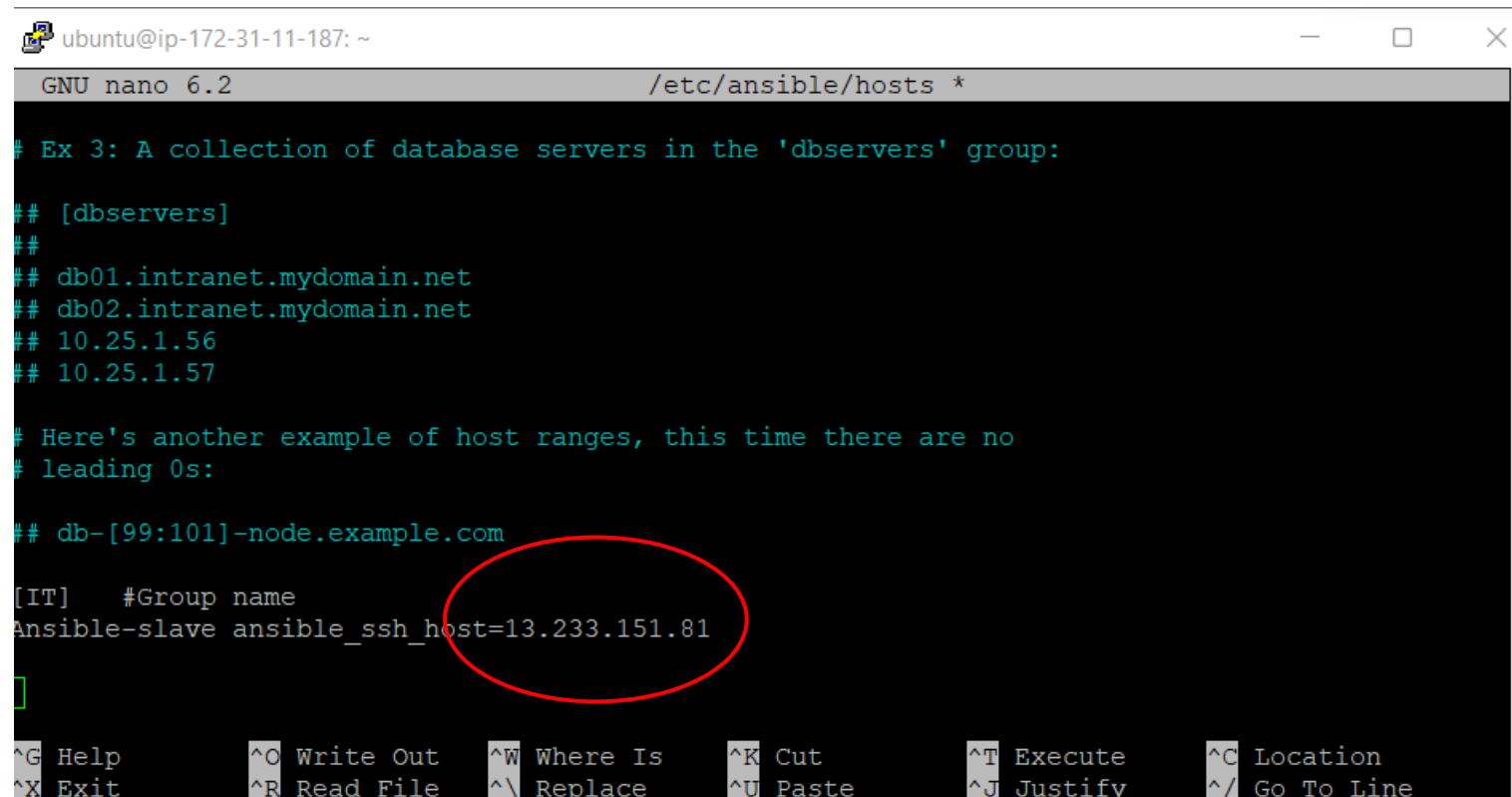
Update the slave server to make up to date system:

`sudo apt-get update`

```
ubuntu@ip-172-31-2-47: ~  
Get:32 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/multiverse  
amd64 c-n-f Metadata [420 B]  
Get:33 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/main amd6  
4 Packages [3008 B]  
Get:34 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/main Tran  
slation-en [1432 B]  
Get:35 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/main amd6  
4 c-n-f Metadata [272 B]  
Get:36 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/restricte  
d amd64 c-n-f Metadata [116 B]  
Get:37 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/universe  
amd64 Packages [6752 B]  
Get:38 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/universe  
Translation-en [9360 B]  
Get:39 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/universe  
amd64 c-n-f Metadata [356 B]  
Get:40 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/multivers  
e amd64 c-n-f Metadata [116 B]  
Fetched 24.6 MB in 5s (5164 kB/s)  
Reading package lists... Done  
Building dependency tree... Done  
Reading state information... Done  
78 packages can be upgraded. Run 'apt list --upgradable' to see them.  
ubuntu@ip-172-31-2-47:~$
```

Update host IP in the hosts file

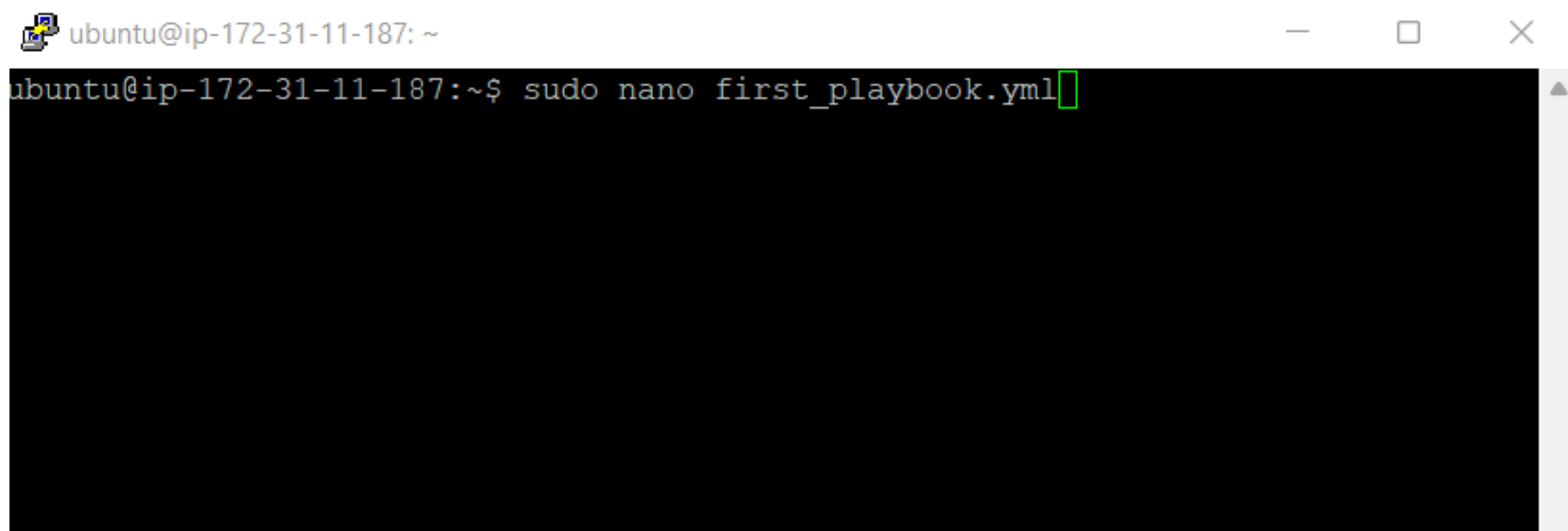
```
sudo nano /etc/ansible/hosts
```



```
ubuntu@ip-172-31-11-187: ~  
GNU nano 6.2 /etc/ansible/hosts *  
  
# Ex 3: A collection of database servers in the 'dbservers' group:  
  
## [dbservers]  
##  
## db01.intranet.mydomain.net  
## db02.intranet.mydomain.net  
## 10.25.1.56  
## 10.25.1.57  
  
# Here's another example of host ranges, this time there are no  
# leading 0s:  
  
## db-[99:101]-node.example.com  
  
[IT] #Group name  
Ansible-slave ansible_ssh_host=13.233.151.81  
  
^G Help      ^O Write Out  ^W Where Is   ^K Cut        ^T Execute    ^C Location  
^X Exit      ^R Read File  ^\ Replace    ^U Paste      ^J Justify    ^_ Go To Line
```

Create playbook

```
sudo nano first_playbook.yml
```

A terminal window with a black background and white text. The window title bar shows 'ubuntu@ip-172-31-11-187: ~' and standard window controls. The command 'sudo nano first_playbook.yml' has been entered, and a green cursor is visible at the end of the line.

```
ubuntu@ip-172-31-11-187: ~  
ubuntu@ip-172-31-11-187:~$ sudo nano first_playbook.yml
```

Create playbook

- name: First Playbook

hosts: IT

remote_user: ubuntu

become: true

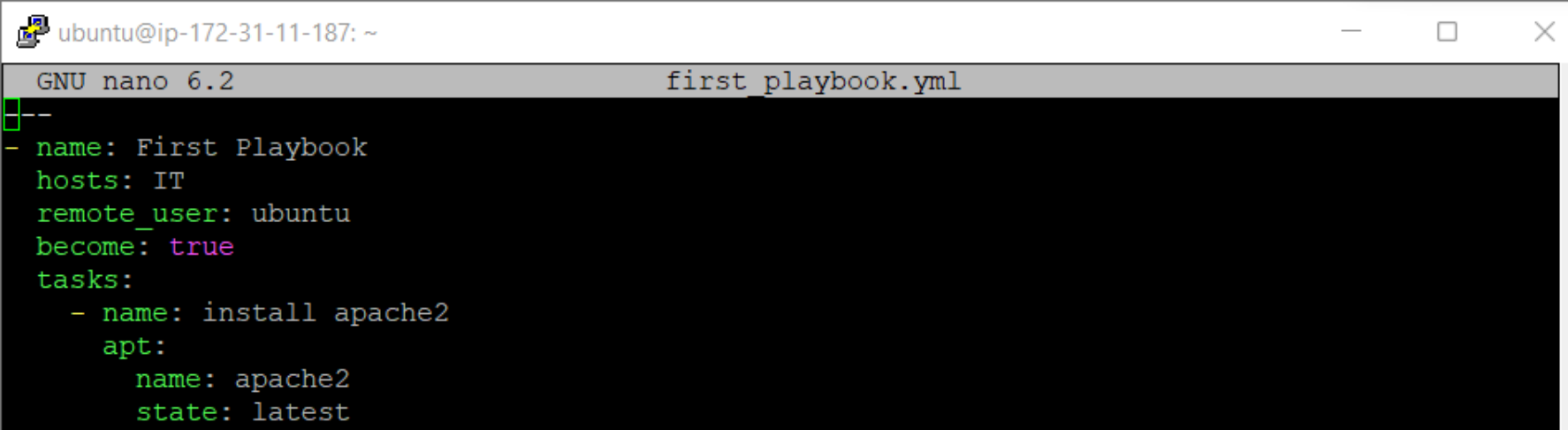
tasks:

- name: install apache2

apt:

name: apache2

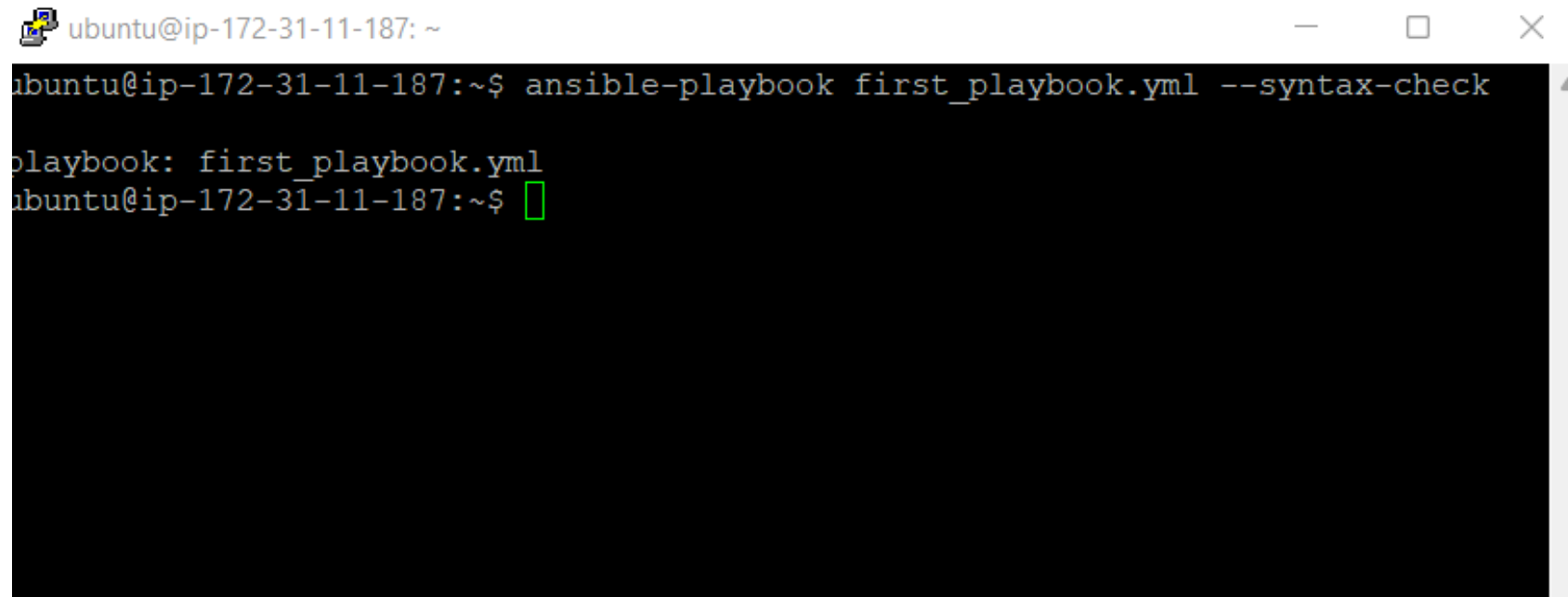
state: latest



```
ubuntu@ip-172-31-11-187: ~
GNU nano 6.2 first_playbook.yml
---
- name: First Playbook
  hosts: IT
  remote_user: ubuntu
  become: true
  tasks:
    - name: install apache2
      apt:
        name: apache2
        state: latest
```


Check Error in the Playbook

`ansible-playbook first_playbook.yml --syntax-check`



```
ubuntu@ip-172-31-11-187: ~  
ubuntu@ip-172-31-11-187:~$ ansible-playbook first_playbook.yml --syntax-check  
playbook: first_playbook.yml  
ubuntu@ip-172-31-11-187:~$
```

Check the Slave for Apache installation



This site can't be reached

; refused to connect.

Try:

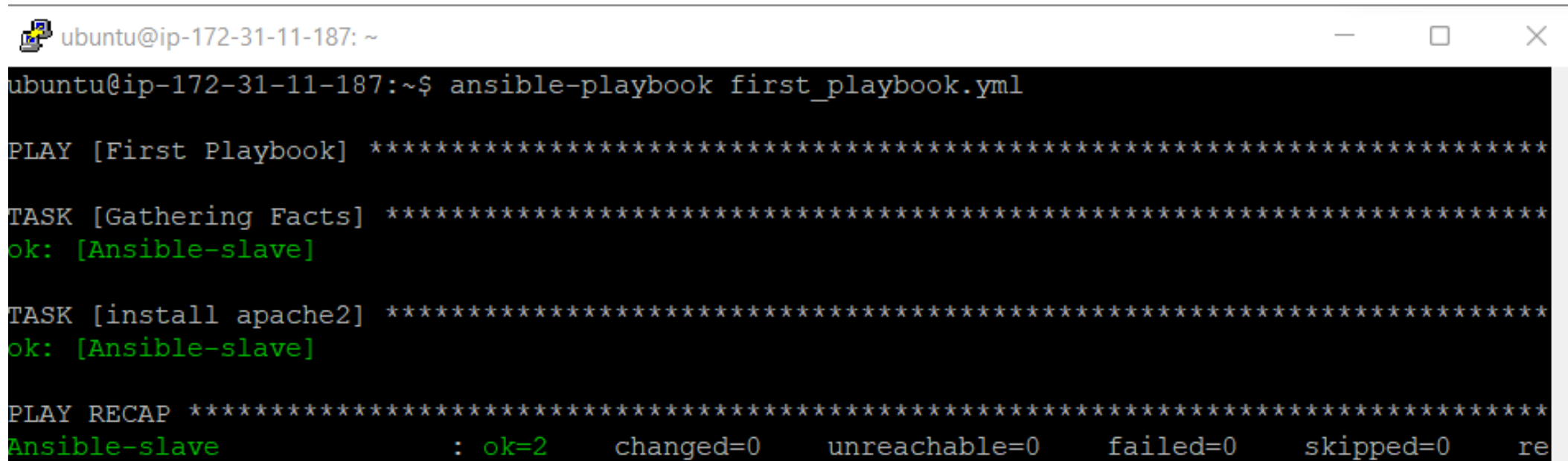
- Checking the connection
- [Checking the proxy and the firewall](#)

ERR_CONNECTION_REFUSED

Reload

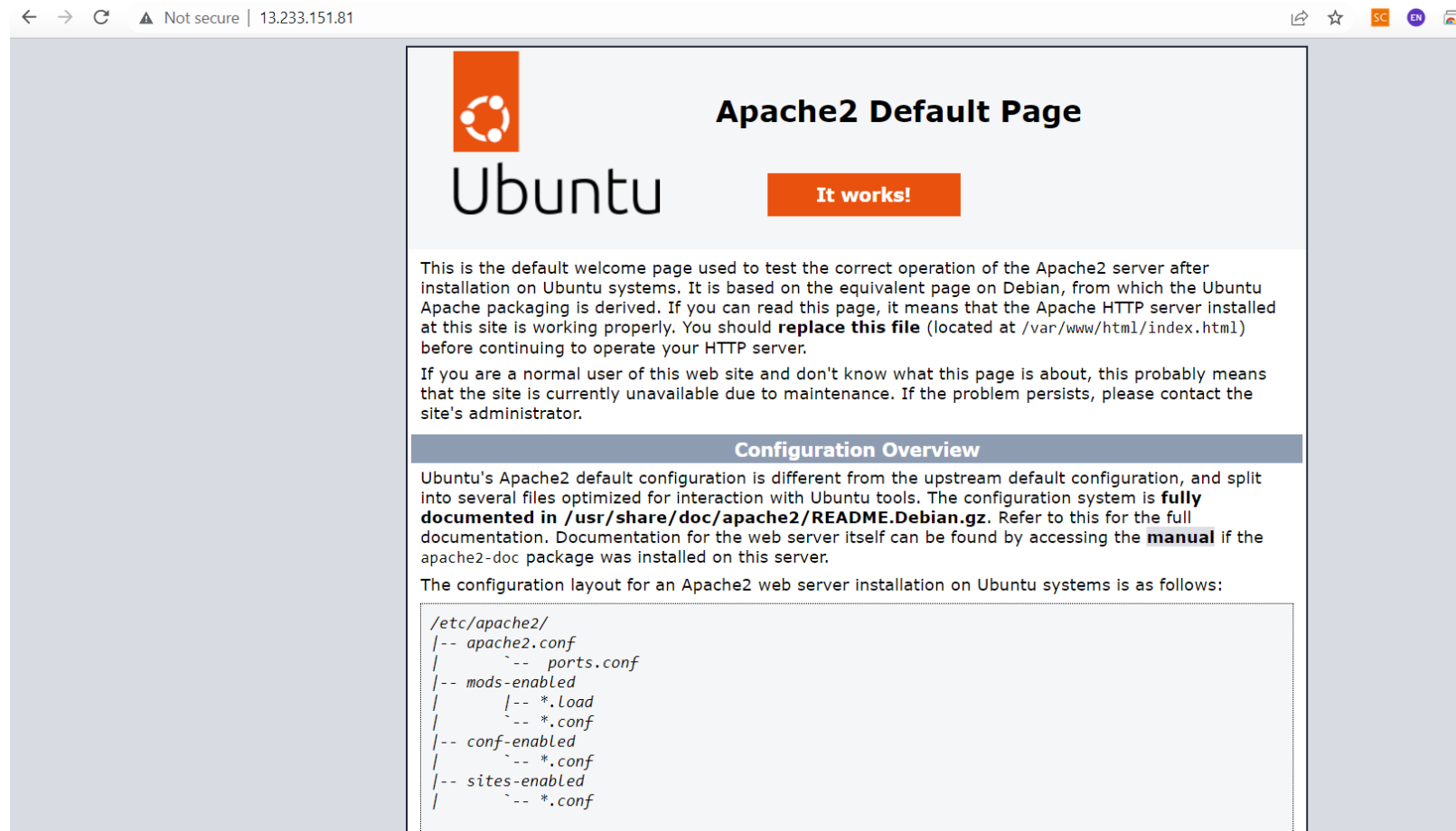
Run Playbook

ansible-playbook first_playbook.yml



```
ubuntu@ip-172-31-11-187: ~  
ubuntu@ip-172-31-11-187:~$ ansible-playbook first_playbook.yml  
  
PLAY [First Playbook] *****  
  
TASK [Gathering Facts] *****  
ok: [Ansible-slave]  
  
TASK [install apache2] *****  
ok: [Ansible-slave]  
  
PLAY RECAP *****  
Ansible-slave : ok=2    changed=0    unreachable=0    failed=0    skipped=0    re
```

Check the Slave for Apache installation



Update the Playbook

sudo nano first_playbook.yml

```
---
- name: First Playbook

  hosts: IT

  remote_user: ubuntu

  become: true

  tasks:

    - name: install apache2

      apt:

        name: apache2

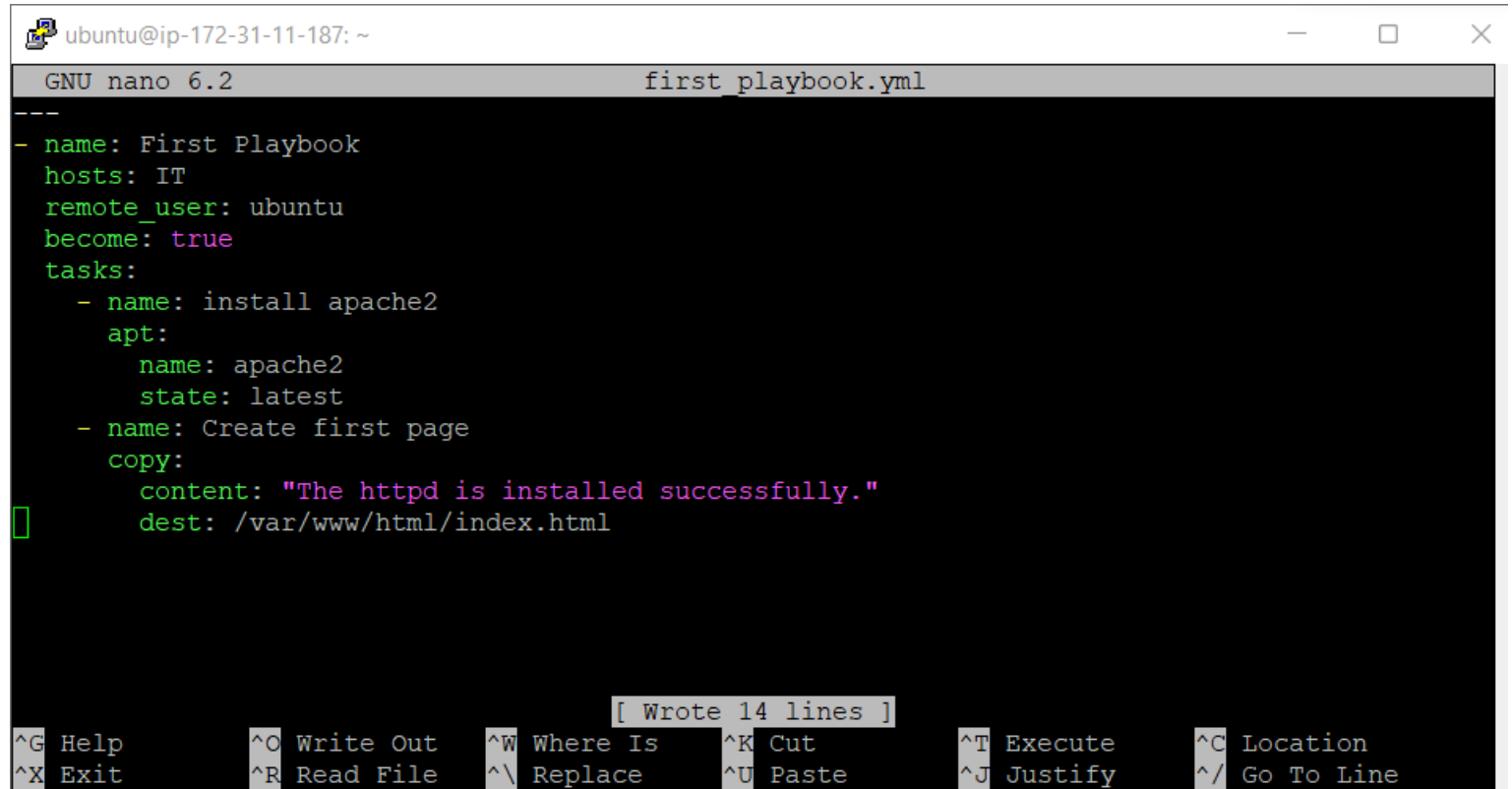
        state: latest

    - name: Create first page

      copy:

        content: "The httpd is installed successfully."

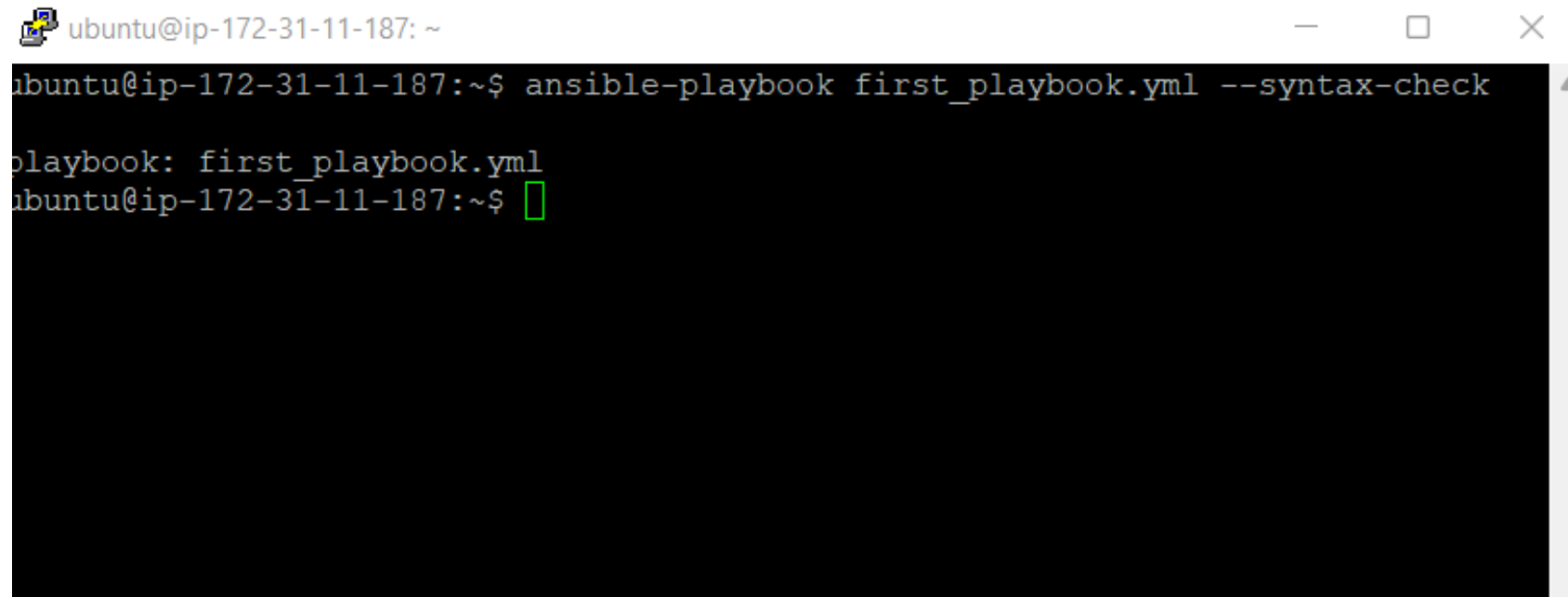
        dest: /var/www/html/index.html
```



```
ubuntu@ip-172-31-11-187: ~
GNU nano 6.2 first_playbook.yml
---
- name: First Playbook
  hosts: IT
  remote_user: ubuntu
  become: true
  tasks:
    - name: install apache2
      apt:
        name: apache2
        state: latest
    - name: Create first page
      copy:
        content: "The httpd is installed successfully."
        dest: /var/www/html/index.html
[ Wrote 14 lines ]
^G Help      ^O Write Out ^W Where Is  ^K Cut       ^T Execute   ^C Location
^X Exit      ^R Read File ^\ Replace   ^U Paste     ^J Justify   ^/ Go To Line
```

Check Error in the Playbook

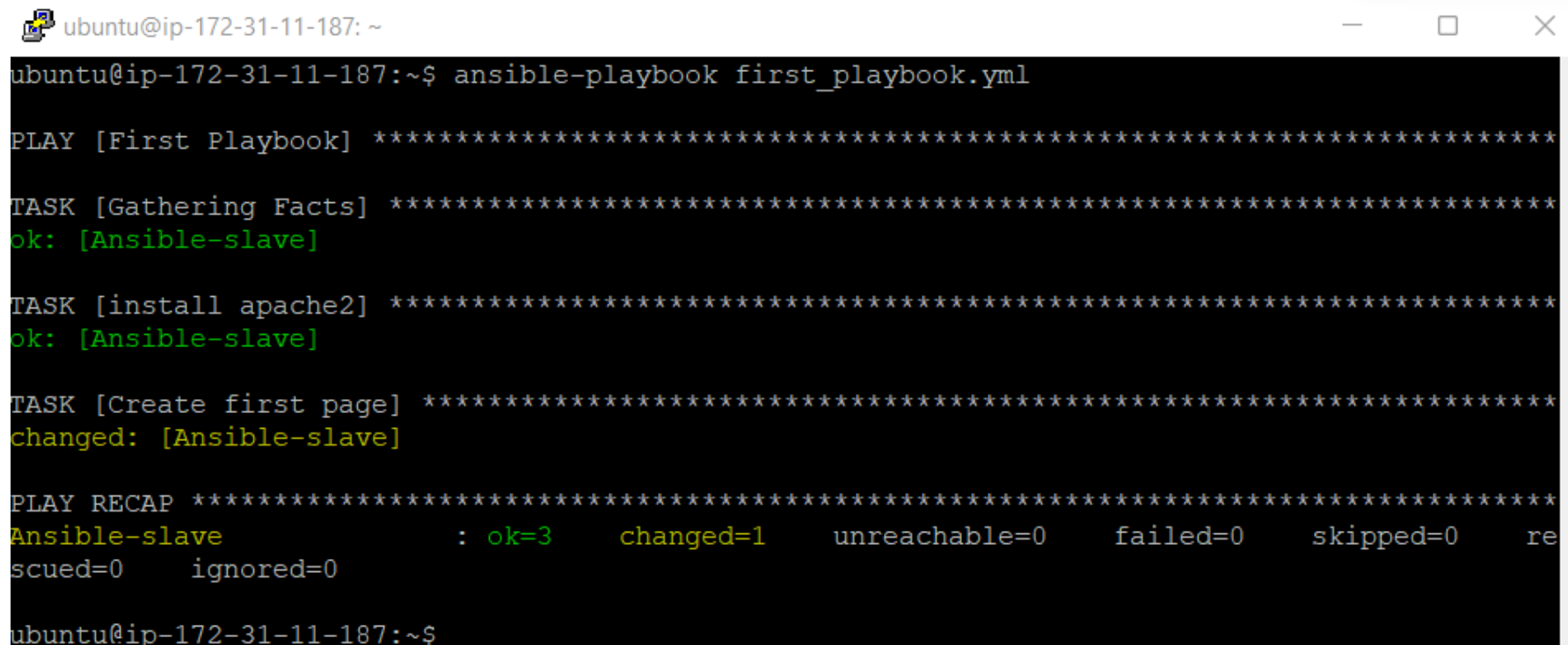
`ansible-playbook first_playbook.yml --syntax-check`

A terminal window with a black background and white text. The window title bar shows 'ubuntu@ip-172-31-11-187: ~' and standard window controls. The terminal content shows the command 'ansible-playbook first_playbook.yml --syntax-check' being executed, followed by the output 'playbook: first_playbook.yml'. The prompt 'ubuntu@ip-172-31-11-187:~\$' is visible at the end of the line.

```
ubuntu@ip-172-31-11-187: ~  
ubuntu@ip-172-31-11-187:~$ ansible-playbook first_playbook.yml --syntax-check  
playbook: first_playbook.yml  
ubuntu@ip-172-31-11-187:~$
```

Run Playbook

ansible-playbook first_playbook.yml

A terminal window with a black background and white text. The window title is 'ubuntu@ip-172-31-11-187: ~'. The prompt is 'ubuntu@ip-172-31-11-187:~\$'. The command entered is 'ansible-playbook first_playbook.yml'. The output shows the execution of a playbook named 'First Playbook'. It includes tasks for 'Gathering Facts', 'install apache2', and 'Create first page'. The status for each task is 'ok' or 'changed'. The output ends with a 'PLAY RECAP' section showing statistics for 'Ansible-slave'.

```
ubuntu@ip-172-31-11-187: ~  
ubuntu@ip-172-31-11-187:~$ ansible-playbook first_playbook.yml  
  
PLAY [First Playbook] *****  
  
TASK [Gathering Facts] *****  
ok: [Ansible-slave]  
  
TASK [install apache2] *****  
ok: [Ansible-slave]  
  
TASK [Create first page] *****  
changed: [Ansible-slave]  
  
PLAY RECAP *****  
Ansible-slave : ok=3    changed=1    unreachable=0    failed=0    skipped=0    re  
scued=0    ignored=0  
ubuntu@ip-172-31-11-187:~$
```

Check the Slave for Apache installation



Thank you