https://us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#Instances:

Import favorites   LastPass password...   Gmail   YouTube   Maps   Translate   Other favorites

aws   Search [Alt+S]   Account ID: 5905-9878-5839 ▼   United States (N. Virginia) ▼   surendra_07

EC2 > Instances

EC2

Dashboard
EC2 Global View ↗
Events

▼ Instances
   Instances
   Instance Types
   Launch Templates
   Spot Requests
   Savings Plans
   Reserved Instances
   Dedicated Hosts
   Capacity Reservations
   Capacity Manager **New**

▼ Images
   AMIs
   AMI Catalog

▼ Elastic Block Store
   Volumes

✓ Successfully initiated starting of i-020fc16a581c55290,i-0622c9bd0a4784a8b,i-00a107219ace0cfe3,i-0b551e153a56c32e2   ✕

Instances (4/6) Info   ↻   Connect   Instance state ▼   Actions ▼   Launch instances ▼

🔍 Find Instance by attribute or tag (case-sensitive)   All states ▼   ‹ 1 › ⚙

☑	Name ✎	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4
☐	Linux	i-06ae12bb862100b8c	⊖ Stopped 🔍 🔍	t2.micro	–	View alarms +	us-east-1d	–
☐	Docker	i-08f0208e54c706fb5	⊖ Stopped 🔍 🔍	t2.micro	–	View alarms +	us-east-1d	–
☑	server_2	i-00a107219ace0cfe3	✓ Running 🔍 🔍	t2.micro	–	View alarms +	us-east-1d	ec2-3-90-6
☑	server_1	i-0b551e153a56c32e2	✓ Running 🔍 🔍	t2.micro	–	View alarms +	us-east-1d	ec2-54-22
☑	server_3	i-020fc16a581c55290	✓ Running 🔍 🔍	t2.micro	–	View alarms +	us-east-1d	ec2-54-15
☑	Ansible	i-0622c9bd0a4784a8b	✓ Running 🔍 🔍	t2.micro	–	View alarms +	us-east-1d	ec2-54-14

4 instances selected   ⚙ ⌄

Monitoring

Configure CloudWatch agent

○ Alarm recommendations 💡 ⓘ Investigate with AI - *new*   1h   3h   12h   1d   3d   1w   Custom ▦   UTC timezone ▼   ↻ ▼   Explore related

CloudShell   Feedback   © 2025, Amazon Web Services, Inc. or its affiliates.   Privacy   Terms   Cookie preferences

```
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS C:\Users\suren> ssh -i "C:\Users\suren\Downloads\Ansible-master-key.pem" ubuntu@54.145.181.212
Welcome to Ubuntu 24.04.3 LTS (GNU/Linux 6.14.0-1014-aws x86_64)

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

 System information as of Thu Oct 16 17:38:19 UTC 2025

  System load:  0.01              Processes:             116
  Usage of /:   42.0% of 6.71GB   Users logged in:       1
  Memory usage: 21%               IPv4 address for enX0: 172.31.29.52
  Swap usage:   0%

 * Ubuntu Pro delivers the most comprehensive open source security and
   compliance features.

   https://ubuntu.com/aws/pro

Expanded Security Maintenance for Applications is not enabled.

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

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status


Last login: Thu Oct 16 17:35:50 2025 from 223.228.142.34
ubuntu@ip-172-31-29-52:~$ sudo su
root@ip-172-31-29-52:/home/ubuntu# cat /home/ansible/hosts
cat: /home/ansible/hosts: No such file or directory
root@ip-172-31-29-52:/home/ubuntu# ls
keys
root@ip-172-31-29-52:/home/ubuntu# cat /etc/ansible/hosts
# This is the default ansible 'hosts' file.
```

```
root@ip-172-31-29-52:/home/ubuntu# cat /etc/ansible/hosts
# This is the default ansible 'hosts' file.
#
# It should live in /etc/ansible/hosts
#
#   - Comments begin with the '#' character
#   - Blank lines are ignored
#   - Groups of hosts are delimited by [header] elements
#   - You can enter hostnames or ip addresses
#   - A hostname/ip can be a member of multiple groups

# Ex 1: Ungrouped hosts, specify before any group headers:

## green.example.com
## blue.example.com
## 192.168.100.1
## 192.168.100.10

# Ex 2: A collection of hosts belonging to the 'webservers' group:

## [webservers]
## alpha.example.org
## beta.example.org
## 192.168.1.100
## 192.168.1.110
[servers]
server_1 ansible_host=23.22.240.22
server_2 ansible_host=34.207.207.215
server_3 ansible_host=54.226.238.250

[servers:vars]
ansible_python_interpreter=/usr/bin/python3
ansible_user=ubuntu
ansible_ssh_private_key_file=/home/ubuntu/keys/Ansible-master-key.pem
# If you have multiple hosts following a pattern, you can specify
# them like this:

## www[001:006].example.com

# You can also use ranges for multiple hosts:
```

```
## www[001:006].example.com

# You can also use ranges for multiple hosts:

## db-[99:101]-node.example.com

# 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


# Ex4: Multiple hosts arranged into groups such as 'Debian' and 'openSUSE':

## [Debian]
## alpha.example.org
## beta.example.org

## [openSUSE]
## green.example.com
## blue.example.com

root@ip-172-31-29-52:/home/ubuntu# vim /etc/ansible/hosts
root@ip-172-31-29-52:/home/ubuntu# ansible servers -m ping
The authenticity of host '3.90.68.167 (3.90.68.167)' can't be established.
ED25519 key fingerprint is SHA256:Ha2izbqyPOdiYChwLpowlvkVfeLRUaAW18oYpYA4zl4.
This host key is known by the following other names/addresses:
    ~/.ssh/known_hosts:1: [hashed name]
    ~/.ssh/known_hosts:11: [hashed name]
The authenticity of host '54.221.37.206 (54.221.37.206)' can't be established.
ED25519 key fingerprint is SHA256:GkTpkyrCMkzWC1BYDNVFQkja+wxxuefk6fjLeJ422j0.
This host key is known by the following other names/addresses:
    ~/.ssh/known_hosts:7: [hashed name]
    ~/.ssh/known_hosts:10: [hashed name]
The authenticity of host '54.152.230.166 (54.152.230.166)' can't be established.
ED25519 key fingerprint is SHA256:dSwVaIbhzAFqZQbNchMmgIfvST9fdmle6FGIMQxqKPI.
This host key is known by the following other names/addresses:
```

```
ED25519 key fingerprint is SHA256:Ha2izbqyPOdiYChwLpowlvkVfeLRUaAW18oYpYA4zl4.
This host key is known by the following other names/addresses:
    ~/.ssh/known_hosts:1: [hashed name]
    ~/.ssh/known_hosts:11: [hashed name]
The authenticity of host '54.221.37.206 (54.221.37.206)' can't be established.
ED25519 key fingerprint is SHA256:GkTpkyrCMkzWC1BYDNVFQkja+wxxuefk6fjLeJ422j0.
This host key is known by the following other names/addresses:
    ~/.ssh/known_hosts:7: [hashed name]
    ~/.ssh/known_hosts:10: [hashed name]
The authenticity of host '54.152.230.166 (54.152.230.166)' can't be established.
ED25519 key fingerprint is SHA256:dSwVaIbhzAFqZQbNchMmgIfvST9fdmle6FGIMQxqKPI.
This host key is known by the following other names/addresses:
    ~/.ssh/known_hosts:4: [hashed name]
    ~/.ssh/known_hosts:12: [hashed name]
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
server_2 | SUCCESS => {
    "changed": false,
    "ping": "pong"
}
yes
server_1 | SUCCESS => {
    "changed": false,
    "ping": "pong"
}
yes
server_3 | SUCCESS => {
    "changed": false,
    "ping": "pong"
}
root@ip-172-31-29-52:/home/ubuntu#
```

```yaml
-
  name: Dates playbook
  hosts: servers
  tasks:
    - name: show date
      command: date

    - name: show uptime
      command: uptime
```

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"date_play.yml" 9L, 142B   9,21   All

```
}
yes
server_3 | SUCCESS => {
    "changed": false,
    "ping": "pong"
}
root@ip-172-31-29-52:/home/ubuntu# vim date_play.yml
root@ip-172-31-29-52:/home/ubuntu# ansible-playbook date_play.yml

PLAY [Dates playbook] ***********************************************************

TASK [Gathering Facts] **********************************************************
ok: [server_1]
ok: [server_3]
ok: [server_2]

TASK [show date] ****************************************************************
changed: [server_1]
changed: [server_3]
changed: [server_2]

TASK [show uptime] **************************************************************
changed: [server_1]
changed: [server_3]
changed: [server_2]

PLAY RECAP **********************************************************************
server_1                   : ok=3    changed=2    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
server_2                   : ok=3    changed=2    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
server_3                   : ok=3    changed=2    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0

root@ip-172-31-29-52:/home/ubuntu# ansible-playbook -v date_play.yml
Using /etc/ansible/ansible.cfg as config file

PLAY [Dates playbook] ***********************************************************

TASK [Gathering Facts] **********************************************************
ok: [server_2]
ok: [server_1]
ok: [server_3]
```

```
changed: [server_2]

PLAY RECAP *********************************************************************************************************
server_1                   : ok=3    changed=2    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
server_2                   : ok=3    changed=2    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
server_3                   : ok=3    changed=2    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0

root@ip-172-31-29-52:/home/ubuntu# ansible-playbook -v date_play.yml
Using /etc/ansible/ansible.cfg as config file

PLAY [Dates playbook] **********************************************************************************************

TASK [Gathering Facts] *********************************************************************************************
ok: [server_2]
ok: [server_1]
ok: [server_3]

TASK [show date] ***************************************************************************************************
changed: [server_1] => {"changed": true, "cmd": ["date"], "delta": "0:00:00.004573", "end": "2025-10-16 17:49:14.313816", "msg": "", "rc": 0, "start": "2025
-10-16 17:49:14.309243", "stderr": "", "stderr_lines": [], "stdout": "Thu Oct 16 17:49:14 UTC 2025", "stdout_lines": ["Thu Oct 16 17:49:14 UTC 2025"]}
changed: [server_2] => {"changed": true, "cmd": ["date"], "delta": "0:00:00.004705", "end": "2025-10-16 17:49:14.317947", "msg": "", "rc": 0, "start": "2025
-10-16 17:49:14.313242", "stderr": "", "stderr_lines": [], "stdout": "Thu Oct 16 17:49:14 UTC 2025", "stdout_lines": ["Thu Oct 16 17:49:14 UTC 2025"]}
changed: [server_3] => {"changed": true, "cmd": ["date"], "delta": "0:00:00.003661", "end": "2025-10-16 17:49:14.322217", "msg": "", "rc": 0, "start": "2025
-10-16 17:49:14.318556", "stderr": "", "stderr_lines": [], "stdout": "Thu Oct 16 17:49:14 UTC 2025", "stdout_lines": ["Thu Oct 16 17:49:14 UTC 2025"]}

TASK [show uptime] *************************************************************************************************
changed: [server_1] => {"changed": true, "cmd": ["uptime"], "delta": "0:00:00.003988", "end": "2025-10-16 17:49:14.701402", "msg": "", "rc": 0, "start": "20
25-10-16 17:49:14.697414", "stderr": "", "stderr_lines": [], "stdout": " 17:49:14 up 17 min,  1 user,  load average: 0.00, 0.01, 0.00", "stdout_lines": [" 1
7:49:14 up 17 min,  1 user,  load average: 0.00, 0.01, 0.00"]}
changed: [server_2] => {"changed": true, "cmd": ["uptime"], "delta": "0:00:00.004878", "end": "2025-10-16 17:49:14.709124", "msg": "", "rc": 0, "start": "20
25-10-16 17:49:14.704246", "stderr": "", "stderr_lines": [], "stdout": " 17:49:14 up 17 min,  1 user,  load average: 0.00, 0.00, 0.00", "stdout_lines": [" 1
7:49:14 up 17 min,  1 user,  load average: 0.00, 0.00, 0.00"]}
changed: [server_3] => {"changed": true, "cmd": ["uptime"], "delta": "0:00:00.004777", "end": "2025-10-16 17:49:14.725609", "msg": "", "rc": 0, "start": "20
25-10-16 17:49:14.720832", "stderr": "", "stderr_lines": [], "stdout": " 17:49:14 up 17 min,  1 user,  load average: 0.00, 0.05, 0.07", "stdout_lines": [" 1
7:49:14 up 17 min,  1 user,  load average: 0.00, 0.05, 0.07"]}

PLAY RECAP *********************************************************************************************************
server_1                   : ok=3    changed=2    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
server_2                   : ok=3    changed=2    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
server_3                   : ok=3    changed=2    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
```

```
root@ip-172-31-29-52:/home/ubuntu# ansible-playbook  install_nginx_play.yml

PLAY [install and start the nginx server] *********************************************

TASK [Gathering Facts] ****************************************************************
ok: [server_2]
ok: [server_3]
ok: [server_1]

TASK [update the system] **************************************************************
changed: [server_2]
changed: [server_1]
changed: [server_3]

TASK [install the nginx] **************************************************************
ok: [server_2]
ok: [server_1]
ok: [server_3]

TASK [start the nginx server] *********************************************************
ok: [server_1]
ok: [server_2]
ok: [server_3]

PLAY RECAP ****************************************************************************
server_1                   : ok=4    changed=1    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
server_2                   : ok=4    changed=1    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
server_3                   : ok=4    changed=1    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0

root@ip-172-31-29-52:/home/ubuntu# cat install_nginx_play.yml
-
  name: install and start the nginx server
  hosts: servers
  become: yes
  tasks:
    - name: update the system
      apt:
        update_cache: yes
```

```
changed: [server_1]
changed: [server_3]

TASK [install the nginx] ***********************************************************
ok: [server_2]
ok: [server_1]
ok: [server_3]

TASK [start the nginx server] ******************************************************
ok: [server_1]
ok: [server_2]
ok: [server_3]

PLAY RECAP *************************************************************************
server_1                   : ok=4    changed=1    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
server_2                   : ok=4    changed=1    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
server_3                   : ok=4    changed=1    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0

root@ip-172-31-29-52:/home/ubuntu# cat install_nginx_play.yml
-
  name: install and start the nginx server
  hosts: servers
  become: yes
  tasks:
    - name: update the system
      apt:
        update_cache: yes


    - name: install the nginx
      apt:
        name: nginx
        state: latest


    - name: start the nginx server
      service:
        name: nginx
        state: started
        enabled: yes
root@ip-172-31-29-52:/home/ubuntu#
```

System load: 0.08   Processes: 111
Usage of /:   34.6% of 6.71GB   Users logged in: 0
Memory usage: 22%   IPv4 address for enX0: 172.31.28.252
Swap usage: 0%

* Ubuntu Pro delivers the most comprehensive open source security and
  compliance features.

    https://ubuntu.com/aws/pro

Expanded Security Maintenance for Applications is not enabled.

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

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

Last login: Thu Oct 16 18:11:27 2025 from 54.145.181.212
ubuntu@ip-172-31-28-252:~$ sudo su
root@ip-172-31-28-252:/home/ubuntu# nginx --version
nginx: invalid option: "-"
root@ip-172-31-28-252:/home/ubuntu# nginx -version
nginx version: nginx/1.24.0 (Ubuntu)
root@ip-172-31-28-252:/home/ubuntu# ~

i-0b551e153a56c32e2 (server_1)

PublicIPs: 54.221.37.206   PrivateIPs: 172.31.28.252