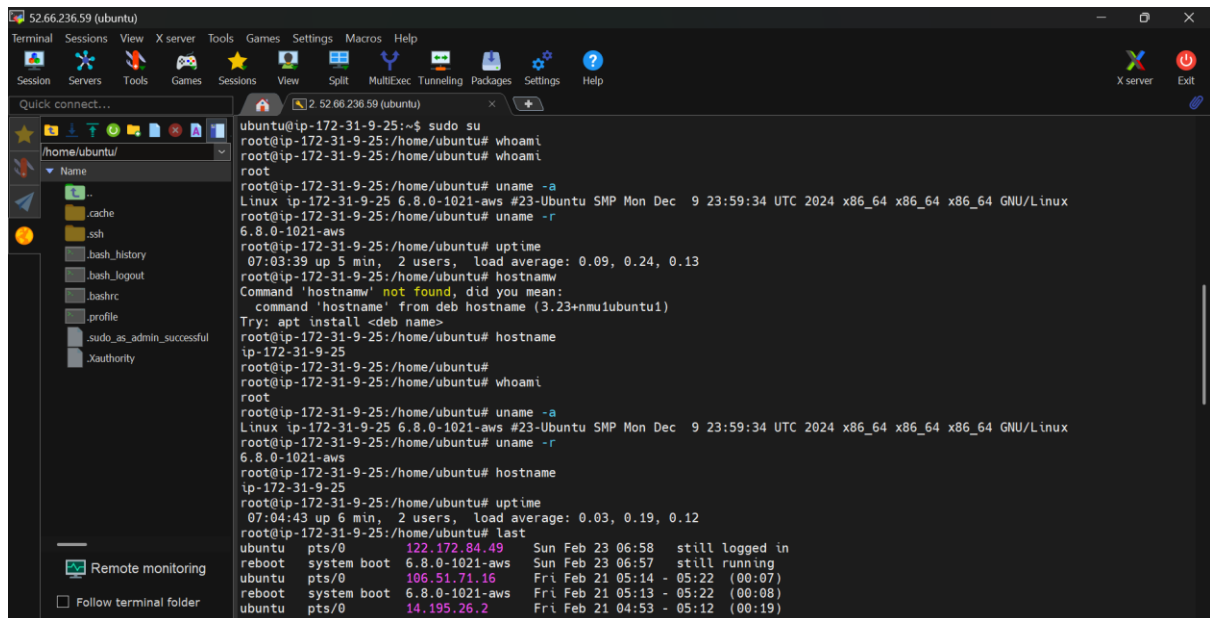


AWS LAB ASSIGNMENT – 1

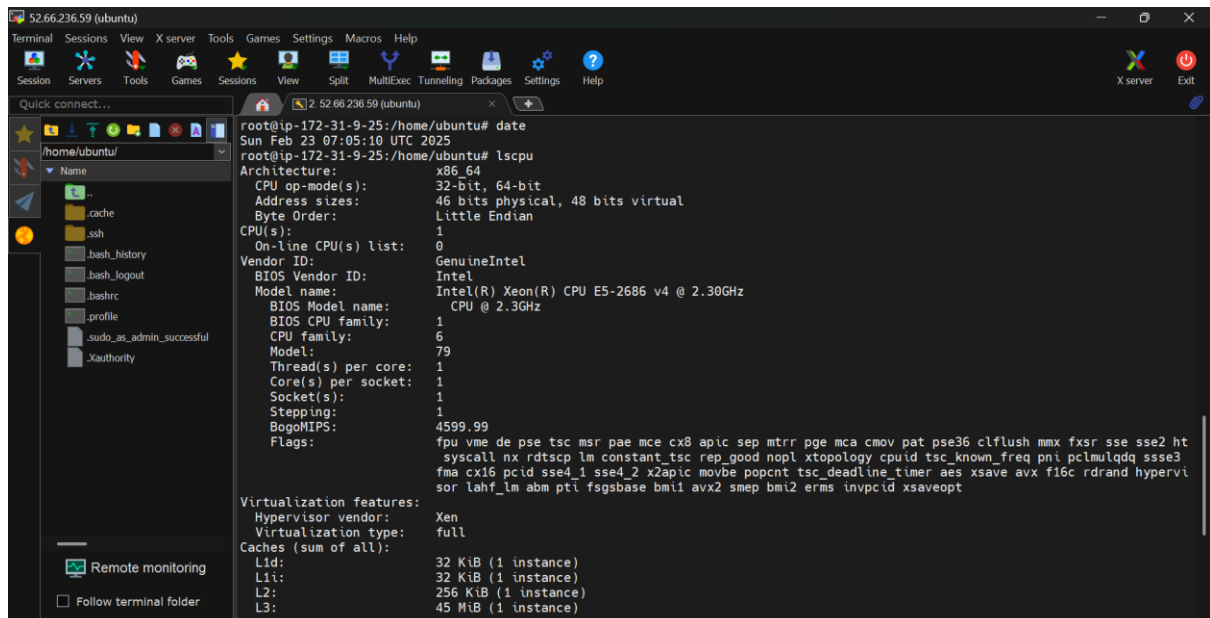
NAME: RASHID T TAHASILDAR

TOPIC: LINUX BASIC COMMANDS

System and hardware Information and User Information and mgt



```
ubuntu@ip-172-31-9-25:~$ sudo su
root@ip-172-31-9-25:/home/ubuntu# whoami
root
root@ip-172-31-9-25:/home/ubuntu# uname -a
Linux ip-172-31-9-25 6.8.0-1021-aws #23-Ubuntu SMP Mon Dec 9 23:59:34 UTC 2024 x86_64 x86_64 x86_64 GNU/Linux
root@ip-172-31-9-25:/home/ubuntu# uptime
 6.8.0-1021-aws
root@ip-172-31-9-25:/home/ubuntu# uptime
 07:03:39 up 5 min,  2 users,  load average: 0.09, 0.24, 0.13
root@ip-172-31-9-25:/home/ubuntu# hostname
Command 'hostname' not found, did you mean:
  command 'hostname' from deb hostname (3.23+nmulubuntu1)
Try: apt install <deb name>
root@ip-172-31-9-25:/home/ubuntu# hostname
ip-172-31-9-25
root@ip-172-31-9-25:/home/ubuntu# whoami
root
root@ip-172-31-9-25:/home/ubuntu# uname -a
Linux ip-172-31-9-25 6.8.0-1021-aws #23-Ubuntu SMP Mon Dec 9 23:59:34 UTC 2024 x86_64 x86_64 x86_64 GNU/Linux
root@ip-172-31-9-25:/home/ubuntu# uptime
 07:04:43 up 6 min,  2 users,  load average: 0.03, 0.19, 0.12
root@ip-172-31-9-25:/home/ubuntu# last
ubuntu pts/0      122.172.84.49    Sun Feb 23 06:58      still logged in
reboot system boot 6.8.0-1021-aws  Sun Feb 23 06:57      still running
ubuntu pts/0      106.51.71.16    Fri Feb 21 05:14 - 05:22 (00:07)
reboot system boot 6.8.0-1021-aws  Fri Feb 21 05:13 - 05:22 (00:08)
ubuntu pts/0      14.195.26.2     Fri Feb 21 04:53 - 05:12 (00:19)
```



```
root@ip-172-31-9-25:/home/ubuntu# date
Sun Feb 23 07:05:10 UTC 2025
root@ip-172-31-9-25:/home/ubuntu# lscpu
Architecture:          x86_64
CPU op-mode(s):        32-bit, 64-bit
Address sizes:          48 bits physical, 48 bits virtual
Byte Order:             Little Endian
CPU(s):                 1
On-line CPU(s) list:   0
Vendor ID:              GenuineIntel
BIOS Vendor ID:         Intel
Model name:             Intel(R) Xeon(R) CPU E5-2686 v4 @ 2.30GHz
BIOS Model name:        CPU @ 2.3GHz
CPU family:             1
CPU model:              79
Thread(s) per core:     1
Core(s) per socket:     1
Socket(s):              1
Stepping:               1
BogoMIPS:               4599.99
Flags:                  fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov pat pse36 clflush mmx fxsr sse sse2 ht
                        syscall nx rdtscp lm constant tsc rep_good nopl xtopology cpuid tsc_known_freq pni pclmulqdq ssse3
                        fma cx16 pcid sse4_1 sse4_2 x2apic movbe popcnt tsc_deadline_timer aes xsave avx f16c rdrand hypervi
                        sor lahf_lm abm ptl fsgsbase bmi1 avx2 smep bmi2 erms invpcid xsavesopt

Virtualization features:
Hypervisor vendor:      Xen
Virtualization type:    full
Caches (sum of all):
L1d:                    32 KiB (1 instance)
L1i:                    32 KiB (1 instance)
L2:                     256 KiB (1 instance)
L3:                     45 MiB (1 instance)
```

```
52.66.236.59 (ubuntu)
Terminal Sessions View X server Tools Games Settings Macros Help
Session Servers Tools Games Sessions View Split MultiExec Tunneling Packages Settings Help

Quick connect...
/home/ubuntu/
Name
.cache
.ssh
.bash_history
.bash_logout
.bashrc
.profile
.sudo_as_admin_successful
.Xauthority

Remote monitoring
Follow terminal folder

root@ip-172-31-9-25:/home/ubuntu#
root@ip-172-31-9-25:/home/ubuntu# pwd
/home/ubuntu
root@ip-172-31-9-25:/home/ubuntu# echo "rashid t tahasilardar"
rashid t tahasilardar
root@ip-172-31-9-25:/home/ubuntu# history
1 apt update
2 apt install apache2
3 sudo service apache2 start
4 systemctl status apache2
5 echo "Hello world from $(hostname) $(hostname -i)" > /var/www/html/index.html~
6 echo "Hello world from $(hostname) $(hostname -i)" > /var/www/html/index.html
7 whoami
8 uname -a
9 uname -r
10 uptime
11 hostnamew
12 hostname
13 whoami
14 uname -a
15 uname -r
16 hostname
17 uptime
18 last
19 date
20 lscpu
21 pwd
22 echo "rashid t tahasilardar"
23 history
root@ip-172-31-9-25:/home/ubuntu# df
Filesystem      1K-blocks    Used Available Use% Mounted on
/dev/root        7034376 2115856   4902136   31% /
tmpfs            490196      0    490196     0% /dev/shm
```

```
20 lscpu
21 pwd
22 echo "rashid t tahasilardar"
23 history
root@ip-172-31-9-25:/home/ubuntu# df
Filesystem      1K-blocks    Used Available Use% Mounted on
/dev/root        7034376 2115856   4902136   31% /
tmpfs            490196      0    490196     0% /dev/shm
tmpfs            196080     888    195192     1% /run
tmpfs             5120      0     5120     0% /run/lock
/dev/xvda16      901520    77044    761348    10% /boot
/dev/xvda15     106832    6246    100586     6% /boot/efi
tmpfs            98036     12     98024     1% /run/user/1000
root@ip-172-31-9-25:/home/ubuntu# id
uid=0(root) gid=0(root) groups=0(root)
root@ip-172-31-9-25:/home/ubuntu# dev
Command 'dev' not found, did you mean:
  command 'den' from snap den (1.2.0-0)
  command 'pev' from deb plc-utils-extra (0.0.6+git20230504.1ba7d5a0-1)
  command 'delv' from deb bind9-dnsutils (1:9.18.28-0ubuntu0.24.04.1)
  command 'dlv' from deb delve (1.21.2-2)
  command 'rev' from deb util-linux (2.39.3-9ubuntu6.1)
  command 'ddv' from deb ncbi-tools-x11 (6.1.20170106+dfsg1-10)
  command 'wev' from deb wev (1.0.0-2)
  command 'dex' from deb dex (0.9.0-2)
  command 'mev' from deb gpm (1.20.7-10build1)
  command 'xev' from deb x11-utils (7.7+6)
See 'snap info <snapname>' for additional versions.
root@ip-172-31-9-25:/home/ubuntu# sys
Command 'sys' not found, but can be installed with:
apt install openafs-client
root@ip-172-31-9-25:/home/ubuntu#
```

File and directory commands:

```
root@ip-172-31-9-25:/home/ubuntu# mkdir demo
root@ip-172-31-9-25:/home/ubuntu# ls
demo
root@ip-172-31-9-25:/home/ubuntu# gedit a.txt
Command 'gedit' not found, but can be installed with:
snap install gedit # version 46.1, or
apt install gedit # version 46.1-3
See 'snap info gedit' for additional versions.
root@ip-172-31-9-25:/home/ubuntu# vim a.txt
root@ip-172-31-9-25:/home/ubuntu# head a.txt
India is a country in Asia.
sky is blue
India is the second most populated country in the world
India is the largest democracy in the world
India has many different cultures and religions
India is famous for its food, music, and dance
India has many beautiful places to visit, such as the Taj Mahal and the Himalayas
India is a land of great diversity, with people from all walks of life
India is a country with a rich history and culture
India is a country with a bright future
root@ip-172-31-9-25:/home/ubuntu# head -n 3 a.txt
India is a country in Asia.
sky is blue
India is the second most populated country in the world
root@ip-172-31-9-25:/home/ubuntu# tail -n 2 a.txt
India is a country with a bright future
I am proud to be an Indian
root@ip-172-31-9-25:/home/ubuntu# mkdir tmp
root@ip-172-31-9-25:/home/ubuntu# ls
a.txt  demo  tmp
root@ip-172-31-9-25:/home/ubuntu# mv a.txt /tmp
root@ip-172-31-9-25:/home/ubuntu# ls
demo  tmp
```

```
root@ip-172-31-9-25:/home/ubuntu/tmp# cd ..
root@ip-172-31-9-25:/home/ubuntu# vim a.txt
root@ip-172-31-9-25:/home/ubuntu# ls
a.txt  tmp
root@ip-172-31-9-25:/home/ubuntu# vim b.txt
root@ip-172-31-9-25:/home/ubuntu# ls
a.txt  b.txt  tmp
root@ip-172-31-9-25:/home/ubuntu# diff a.txt b.txt
1,5c1,10
< 1. create aws account
< 2. aws iam user
< 3. Create EC2 instance as demonstrated in the session
< 4. Practice linux command on Ubuntu machine
<
---
> System and hardware informatation
>   User informatation and mgt
>   File and directory commands
>   file editing and navigation inside files
>   Piping and i/o redirection
>   Analysis and file manipulation commands
>   Wildcard chars
>   Package management
>   Services and Process mgt
>   file permission
root@ip-172-31-9-25:/home/ubuntu#
```

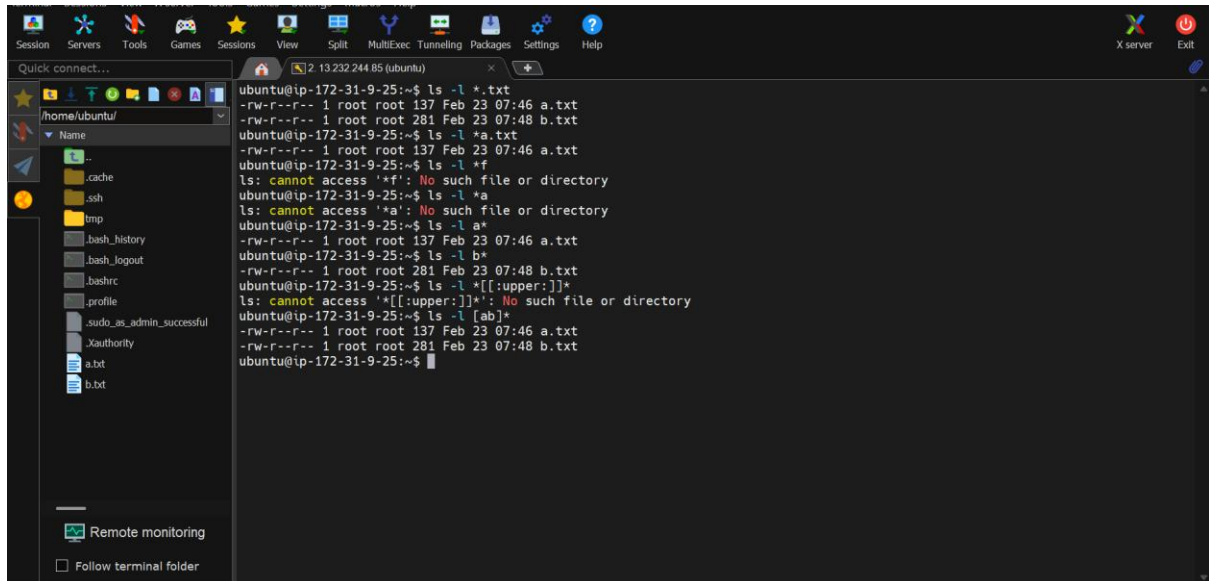
```
root@ip-172-31-9-25:/home/ubuntu# wc -l a.txt
5 a.txt
root@ip-172-31-9-25:/home/ubuntu# wc -w a.txt
24 a.txt
root@ip-172-31-9-25:/home/ubuntu# wc -c a.txt
137 a.txt
root@ip-172-31-9-25:/home/ubuntu# wc -l b.txt
10 b.txt
root@ip-172-31-9-25:/home/ubuntu# wc -w b.txt
37 b.txt
root@ip-172-31-9-25:/home/ubuntu# wc -c b.txt
281 b.txt
root@ip-172-31-9-25:/home/ubuntu#
```

```
root@ip-172-31-9-25:/home/ubuntu# sort a.txt
```

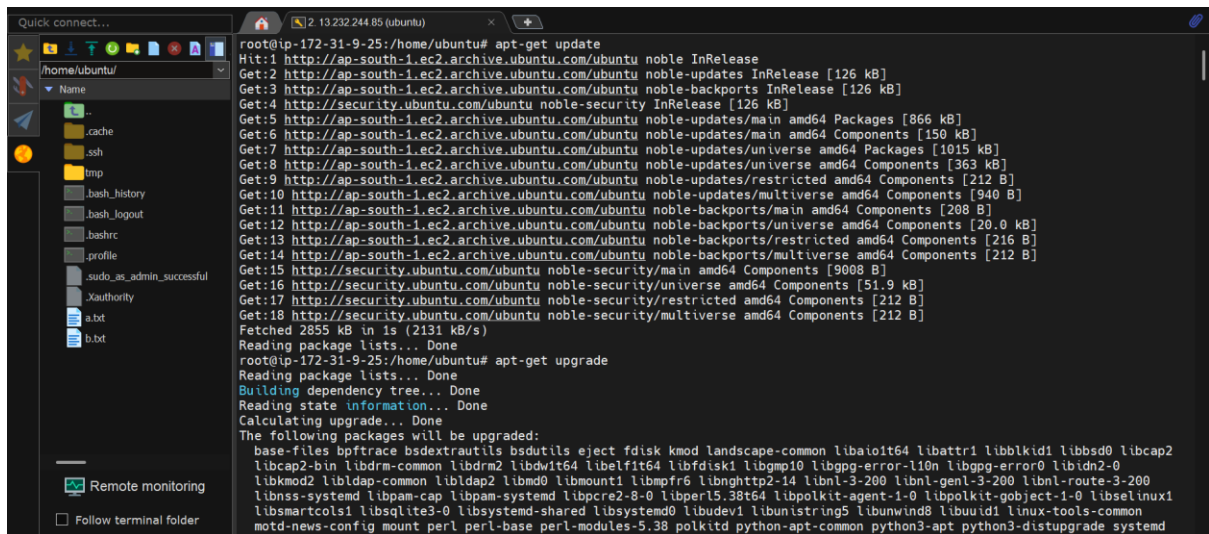
1. create aws account
2. aws iam user
3. Create EC2 instance as demonstrated in the session
4. Practice linux command on Ubuntu machine

```
root@ip-172-31-9-25:/home/ubuntu# sort b.txt
Analysis and file manipulation commands
File and directory commands
Package management
Piping and i/o redirection
Services and Process mgt
User information and mgt
Wildcard chars
file editing and navigation inside files
file permission
System and hardware information
root@ip-172-31-9-25:/home/ubuntu#
```

Wildcard chars



Package management




```
Quick connect... 2 13.232.244.85 (ubuntu)
systemd-dev systemd-resolved systemd-sysv ubuntu-kernel-accessories ubuntu-minimal ubuntu-release-upgrader-core
ubuntu-server ubuntu-standard udev util-linux uuid-runtime xfsprogs
72 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.
Need to get 27.8 MB of archives.
After this operation, 336 kB disk space will be freed.
Do you want to continue? [Y/n] y
Get:1 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 motd-news-config all 13ubuntu10.2 [4000 B]
Get:2 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 base-files amd64 13ubuntu10.2 [73.2 kB]
Get:3 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 bsdtls amd64 1:2.39.3-9ubuntu6.2 [95.2 kB]
Get:4 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 libperl5.38t64 amd64 5.38.2-3.2build2.1 [4867 k
B]
Get:5 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 perl amd64 5.38.2-3.2build2.1 [231 kB]
Get:6 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 perl-base amd64 5.38.2-3.2build2.1 [1823 kB]
Get:7 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 perl-modules-5.38 all 5.38.2-3.2build2.1 [3110
kB]
Get:8 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 util-linux amd64 2.39.3-9ubuntu6.2 [1127 kB]
Get:9 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 mount amd64 2.39.3-9ubuntu6.2 [118 kB]
Get:10 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 libcap2 amd64 1:2.66-5ubuntu2.1 [30.1 kB]
Get:11 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 libnss-systemd amd64 255.4-1ubuntu8.5 [159 kB]
Get:12 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 systemd-dev all 255.4-1ubuntu8.5 [104 kB]
Get:13 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 libblkid1 amd64 2.39.3-9ubuntu6.2 [123 kB]
Get:14 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 kmod amd64 31-20240202-2ubuntu7.1 [101 kB]
Get:15 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 libkmod2 amd64 31-20240202-2ubuntu7.1 [51.7 kB]
Get:16 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 libpcre2-8-0 amd64 10.42-4ubuntu2.1 [227 kB]
Get:17 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 libselinux1 amd64 3.5-2ubuntu2.1 [79.7 kB]
Get:18 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 systemd-resolved amd64 255.4-1ubuntu8.5 [296 k
B]
Get:19 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 libsystemd-shared amd64 255.4-1ubuntu8.5 [2069
kB]
Get:20 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 libsystemd0 amd64 255.4-1ubuntu8.5 [433 kB]
Get:21 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 systemd-sysv amd64 255.4-1ubuntu8.5 [11.9 kB]
Get:22 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 libpam-systemd amd64 255.4-1ubuntu8.5 [235 kB]
```

```
Quick connect... 2 13.232.244.85 (ubuntu)
Running kernel seems to be up-to-date.
Restarting services...
systemctl restart apache2.service chrony.service cron.service fwupd.service multipathd.service packagekit.service rsyslog.ser
vice ssh.service udisks2.service
Service restarts being deferred:
/etc/needrestart/restart.d/dbus.service
systemctl restart getty@tty1.service
systemctl restart networkd-dispatcher.service
systemctl restart serial-getty@ttyS0.service
systemctl restart systemd-logind.service
systemctl restart unattended-upgrades.service
No containers need to be restarted.
User sessions running outdated binaries:
ubuntu @ session #5: sshd[1171]
ubuntu @ session #7: sshd[1173]
ubuntu @ user manager service: systemd[1178]
No VM guests are running outdated hypervisor (qemu) binaries on this host.
root@ip-172-31-9-25:/home/ubuntu# apt-get install apache2
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
apache2 is already the newest version (2.4.58-1ubuntu8.5).
0 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.
root@ip-172-31-9-25:/home/ubuntu# systemctl status apache2
● apache2.service - The Apache HTTP Server
   Loaded: loaded (/usr/lib/systemd/system/apache2.service; enabled; preset: enabled)
   Active: active (running) since Sun 2025-02-23 14:46:00 UTC; 18s ago
     Docs: https://httpd.apache.org/docs/2.4/
```

```
Quick connect... 2 13.232.244.85 (ubuntu)
Memory: 5.3M (peak: 5.5M)
CPU: 25ms
CGroup: /system.slice/apache2.service
├─7554 /usr/sbin/apache2 -k start
├─7562 /usr/sbin/apache2 -k start
└─7563 /usr/sbin/apache2 -k start
Feb 23 14:46:00 ip-172-31-9-25 systemd[1]: Starting apache2.service - The Apache HTTP Server...
Feb 23 14:46:00 ip-172-31-9-25 systemd[1]: Started apache2.service - The Apache HTTP Server.
root@ip-172-31-9-25:/home/ubuntu# apt-get install cmatrix
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Suggested packages:
  cmatrix-xfont
The following NEW packages will be installed:
  cmatrix
0 upgraded, 1 newly installed, 0 to remove and 0 not upgraded.
Need to get 33.7 kB of archives.
After this operation, 75.8 kB of additional disk space will be used.
Get:1 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 cmatrix amd64 2.0-6 [33.7 kB]
Fetched 33.7 kB in 0s (129 kB/s)
Selecting previously unselected package cmatrix.
(Reading database ... 71279 files and directories currently installed.)
Preparing to unpack .../cmatrix_2.0-6_amd64.deb ...
Unpacking cmatrix (2.0-6) ...
Setting up cmatrix (2.0-6) ...
Processing triggers for man-db (2.12.0-4build2) ...
Scanning processes...
Scanning candidates...
Scanning linux images...
Running kernel seems to be up-to-date.
```

```
Quick connect... 2 13.232.244.85 (ubuntu) x +
/home/ubuntu/
Name
.cache
.ssh
tmp
.bash_history
.bash_logout
.bashrc
.profile
.sudo_as_admin_successful
.xauthority
a.bt
b.bt
Remote monitoring
Follow terminal folder

Restarting services...

Service restarts being deferred:
/etc/needrestart/restart.d/dbus.service
systemctl restart getty@tty1.service
systemctl restart networkd-dispatcher.service
systemctl restart serial-getty@ttyS0.service
systemctl restart systemd-logind.service
systemctl restart unattended-upgrades.service

No containers need to be restarted.

User sessions running outdated binaries:
ubuntu @ session #5: sshd[1171]
ubuntu @ session #7: sshd[1173]
root@ip-172-31-9-25:/home/ubuntu# cat /etc/os-release
PRETTY_NAME="Ubuntu 24.04.2 LTS"
NAME="Ubuntu"
VERSION_ID="24.04"
VERSION="24.04.2 LTS (Noble Numbat)"
VERSION_CODENAME=noble
ID=ubuntu
ID_LIKE=debian
HOME_URL="https://www.ubuntu.com/"
SUPPORT_URL="https://help.ubuntu.com/"
BUG_REPORT_URL="https://bugs.launchpad.net/ubuntu/"
PRIVACY_POLICY_URL="https://www.ubuntu.com/legal/terms-and-policies/privacy-policy"
UBUNTU_CODENAME=noble
LOGO=ubuntu-logo
root@ip-172-31-9-25:/home/ubuntu# apt show apache2
Package: apache2
Version: 2.4.58-1ubuntu8.5
```

```
.cache
.ssh
tmp
.bash_history
.bash_logout
.bashrc
.profile
.sudo_as_admin_successful
.xauthority
a.bt
b.bt
Remote monitoring
Follow terminal folder

Section: web
Origin: Ubuntu
Maintainer: Ubuntu Developers <ubuntu-devel-discuss@lists.ubuntu.com>
Original-Maintainer: Debian Apache Maintainers <debian-apache@lists.debian.org>
Bugs: https://bugs.launchpad.net/ubuntu/+filebug
Installed-Size: 465 kB
Provides: httpd, httpd-cgi
Pre-Depends: init-system-helpers (>= 1.54~)
Depends: apache2-bin (= 2.4.58-1ubuntu8.5), apache2-data (= 2.4.58-1ubuntu8.5), apache2-utils (= 2.4.58-1ubuntu8.5), media-types, perl:any, procps
Recommends: ssl-cert
Suggests: apache2-doc, apache2-suexec-pristine | apache2-suexec-custom, www-browser, ufw
Homepage: https://httpd.apache.org/
Task: lamp-server
Download-Size: 90.2 kB
APT-Manual-Installed: yes
APT-Sources: http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 Packages
Description: Apache HTTP Server
The Apache HTTP Server Project's goal is to build a secure, efficient and
extensible HTTP server as standards-compliant open source software. The
result has long been the number one web server on the Internet.

Installing this package results in a full installation, including the
configuration files, init scripts and support scripts.

N: There are 2 additional records. Please use the '-a' switch to see them.
root@ip-172-31-9-25:/home/ubuntu#
```

Services and Process mgt

```
Quick connect...
/home/ubuntu/
Name
...
.cache
.ssh
tmp
.bash_history
.bash_logout
.bashrc
.profile
.sudo_as_admin_successful
.Xauthority
a.bt
b.bt
Remote monitoring
Follow terminal folder

root@ip-172-31-9-25:/home/ubuntu# systemctl start apache2
root@ip-172-31-9-25:/home/ubuntu# systemctl disable apache2
Synchronizing state of apache2.service with SysV service script with /usr/lib/systemd/systemd-sysv-install.
Executing: /usr/lib/systemd/systemd-sysv-install disable apache2
Removed /etc/systemd/system/multi-user.target.wants/apache2.service".
root@ip-172-31-9-25:/home/ubuntu# systemctl status apache2
● apache2.service - The Apache HTTP Server
   Loaded: loaded (/usr/lib/systemd/system/apache2.service; disabled; preset: enabled)
   Active: active (running) since Sun 2025-02-23 14:46:00 UTC; 5min ago
     Docs: https://httpd.apache.org/docs/2.4/
    Main PID: 7554 (apache2)
      Tasks: 55 (limit: 1130)
     Memory: 5.3M (peak: 5.5M)
        CPU: 39ms
    CGroup: /system.slice/apache2.service
            └─7554 /usr/sbin/apache2 -k start
              7562 /usr/sbin/apache2 -k start
              7563 /usr/sbin/apache2 -k start

Feb 23 14:46:00 ip-172-31-9-25 systemd[1]: Starting apache2.service - The Apache HTTP Server...
Feb 23 14:46:00 ip-172-31-9-25 systemd[1]: Started apache2.service - The Apache HTTP Server.
root@ip-172-31-9-25:/home/ubuntu# systemctl enable apache2
Synchronizing state of apache2.service with SysV service script with /usr/lib/systemd/systemd-sysv-install.
Executing: /usr/lib/systemd/systemd-sysv-install enable apache2
Created symlink /etc/systemd/system/multi-user.target.wants/apache2.service → /usr/lib/systemd/system/apache2.service.
root@ip-172-31-9-25:/home/ubuntu# systemctl status apache2
● apache2.service - The Apache HTTP Server
   Loaded: loaded (/usr/lib/systemd/system/apache2.service; enabled; preset: enabled)
   Active: active (running) since Sun 2025-02-23 14:46:00 UTC; 5min ago
     Docs: https://httpd.apache.org/docs/2.4/
    Main PID: 7554 (apache2)
      Tasks: 55 (limit: 1130)
     Memory: 5.3M (peak: 5.5M)
```

```
tmp
.bash_history
.bash_logout
.bashrc
.profile
.sudo_as_admin_successful
.Xauthority
a.bt
b.bt
Remote monitoring
Follow terminal folder

Feb 23 14:46:00 ip-172-31-9-25 systemd[1]: Starting apache2.service - The Apache HTTP Server...
Feb 23 14:46:00 ip-172-31-9-25 systemd[1]: Started apache2.service - The Apache HTTP Server.
root@ip-172-31-9-25:/home/ubuntu# systemctl enable apache2
Synchronizing state of apache2.service with SysV service script with /usr/lib/systemd/systemd-sysv-install.
Executing: /usr/lib/systemd/systemd-sysv-install enable apache2
Created symlink /etc/systemd/system/multi-user.target.wants/apache2.service → /usr/lib/systemd/system/apache2.service.
root@ip-172-31-9-25:/home/ubuntu# systemctl status apache2
● apache2.service - The Apache HTTP Server
   Loaded: loaded (/usr/lib/systemd/system/apache2.service; enabled; preset: enabled)
   Active: active (running) since Sun 2025-02-23 14:46:00 UTC; 5min ago
     Docs: https://httpd.apache.org/docs/2.4/
    Main PID: 7554 (apache2)
      Tasks: 55 (limit: 1130)
     Memory: 5.3M (peak: 5.5M)
        CPU: 39ms
    CGroup: /system.slice/apache2.service
            └─7554 /usr/sbin/apache2 -k start
              7562 /usr/sbin/apache2 -k start
              7563 /usr/sbin/apache2 -k start

Feb 23 14:46:00 ip-172-31-9-25 systemd[1]: Starting apache2.service - The Apache HTTP Server...
Feb 23 14:46:00 ip-172-31-9-25 systemd[1]: Started apache2.service - The Apache HTTP Server.
root@ip-172-31-9-25:/home/ubuntu#
```

```
Quick connect...
/home/ubuntu/
Name
...
.cache
.ssh
tmp
.bash_history
.bash_logout
.bashrc
.profile
.sudo_as_admin_successful
.Xauthority
a.bt
b.bt
Remote monitoring
Follow terminal folder

root@ip-172-31-9-25:/home/ubuntu# ps
  PID TTY          TIME CMD
 1347 pts/1    00:00:00 sudo
 1348 pts/1    00:00:00 su
 1349 pts/1    00:00:00 bash
 8088 pts/1    00:00:00 ps
root@ip-172-31-9-25:/home/ubuntu# ps -e
  PID TTY          TIME CMD
   1 ?        00:00:04 systemd
   2 ?        00:00:00 kthreadd
   3 ?        00:00:00 pool_workqueue_release
   4 ?        00:00:00 kworker/R-rcu_g
   5 ?        00:00:00 kworker/R-rcu_p
   6 ?        00:00:00 kworker/R-slub
   7 ?        00:00:00 kworker/R-netns
  10 ?        00:00:00 kworker/0:0H-events_highpri
  11 ?        00:00:00 kworker/u30:0-events_power_efficient
  12 ?        00:00:00 kworker/R-mm_pg
  13 ?        00:00:00 rcu_tasks_rude_kthread
  14 ?        00:00:00 rcu_tasks_trace_kthread
  15 ?        00:00:00 ksoftirqd/0
  16 ?        00:00:00 rcu_sched
  17 ?        00:00:00 migration/0
  18 ?        00:00:00 idle_inject/0
  19 ?        00:00:00 cpuhp/0
  20 ?        00:00:00 kdevtmpfs
  21 ?        00:00:00 kworker/R-inet_
  23 ?        00:00:00 kauditd
  24 ?        00:00:00 khungtaskd
  25 ?        00:00:00 oom_reaper
  27 ?        00:00:00 kworker/R-write
  28 ?        00:00:00 kcompactd0
  29 ?        00:00:00 ksmd
```



```
Quick connect... 2 13.232.244.85 (ubuntu)
/home/ubuntu/
Name
.cache
.ssh
tmp
.bash_history
.bash_logout
.bashrc
.profile
.sudo_as_admin_successful
.Xauthority
a.b.t
b.b.t
Remote monitoring
Follow terminal folder

root@ip-172-31-9-25:/home/ubuntu# ps -f
      8086 ?        00:00:00 kworker/0:0
      8089 pts/1    00:00:00 ps
root@ip-172-31-9-25:/home/ubuntu# ps -ef
      UID          PID     PPID  C  STIME TTY          TIME CMD
      root         1         0  0  14:20 ?        00:00:00 systemd --system --deserialize=69
      root        1347        1  0  14:45 pts/1    00:00:00 su
      root        1348        1  0  14:45 pts/1    00:00:00 su
      root        1349        1  0  14:45 pts/1    00:00:00 bash
      root         8090        1  0  14:52 pts/1    00:00:00 ps -f
root@ip-172-31-9-25:/home/ubuntu# ps -ef
      UID          PID     PPID  C  STIME TTY          TIME CMD
      root         1         0  0  14:20 ?        00:00:00 systemd --system --deserialize=69
      root         2         0  0  14:20 ?        00:00:00 [kthreadd]
      root         3         2  0  14:20 ?        00:00:00 [pool_workqueue_release]
      root         4         2  0  14:20 ?        00:00:00 [kworker/R-rcu_g]
      root         5         2  0  14:20 ?        00:00:00 [kworker/R-rcu_p]
      root         6         2  0  14:20 ?        00:00:00 [kworker/R-slub_]
      root         7         2  0  14:20 ?        00:00:00 [kworker/R-netns]
      root        10         2  0  14:20 ?        00:00:00 [kworker/0:0H-events_highpri]
      root        11         2  0  14:20 ?        00:00:00 [kworker/u30:0-events_unbound]
      root        12         2  0  14:20 ?        00:00:00 [kworker/R-mm_pe]
      root        13         2  0  14:20 ?        00:00:00 [rcu_tasks_rude_kthread]
      root        14         2  0  14:20 ?        00:00:00 [rcu_tasks_trace_kthread]
      root        15         2  0  14:20 ?        00:00:00 [ksoftirqd/0]
      root        16         2  0  14:20 ?        00:00:00 [rcu_sched]
      root        17         2  0  14:20 ?        00:00:00 [migration/0]
      root        18         2  0  14:20 ?        00:00:00 [idle_inject/0]
      root        19         2  0  14:20 ?        00:00:00 [cpuhp/0]
      root        20         2  0  14:20 ?        00:00:00 [kdevtmpfs]
      root        21         2  0  14:20 ?        00:00:00 [kworker/R-inet_]
      root        23         2  0  14:20 ?        00:00:00 [kauditd]
      root        24         2  0  14:20 ?        00:00:00 [khungtaskd]
      root        25         2  0  14:20 ?        00:00:00 [oom_reaper]
      root        27         2  0  14:20 ?        00:00:00 [kworker/R-write]
```

```
Quick connect... 2 13.232.244.85 (ubuntu)
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a.b.t
b.b.t
Remote monitoring
Follow terminal folder

root      8091      1349      0 14:53 pts/1    00:00:00 ps -ef
root@ip-172-31-9-25:/home/ubuntu# df
Filesystem      1K-blocks    Used Available Use% Mounted on
/dev/root       7034376 2152668  4865324   31% /
tmpfs           490196      0    490196    0% /dev/shm
tmpfs          196080      884    195196    1% /run
tmpfs           5120        0     5120    0% /run/lock
/dev/xvda16     901520    77048   761344   10% /boot
/dev/xvda15    106832    6246   100586    6% /boot/efi
tmpfs          98036      12     98024    1% /run/user/1000
root@ip-172-31-9-25:/home/ubuntu# pstree
systemd--ModemManager--3*[{ModemManager}]
├──acpid
├──2*[agetty]
├──amazon-ssm-agent--6*[{amazon-ssm-agent}]
├──apache2--24[apache2--26*[{apache2}]]
├──chronyd--chronyd
├──cron
├──dbus-daemon
├──multipathd--6*[{multipathd}]
├──networkd-dispatcher
├──polkitd--3*[{polkitd}]
├──rsyslogd--3*[{rsyslogd}]
├──snappyd--7*[{snappyd}]
├──sshd--sshd--bash--sudo--sudo--su--bash--pstree
├──sshd--sshd--sftp-server
├──sshd
├──systemd--(sd-pam)
├──systemd-journald
├──systemd-logind
├──systemd-networkd
├──systemd-resolved
├──systemd-udev
```

```
Quick connect... 2 13.232.244.85 (ubuntu)
/home/ubuntu/
Name
.cache
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a.b.t
b.b.t
Remote monitoring
Follow terminal folder

root@ip-172-31-9-25:/home/ubuntu# free
      total        used        free      shared  buff/cache   available
Mem:    980396      332348      204584          1236       614044       648048
Swap:      0           0           0

root@ip-172-31-9-25:/home/ubuntu# ps -aux
USER      PID %CPU %MEM    VSZ   RSS TTY      STAT START   TIME COMMAND
root         1  0.2  1.4 22540 13824 ?        Ss   14:20   0:04 /usr/lib/systemd/systemd --system --deserialize=69
root         2  0.0  0.0      0     0 ?        Ss   14:20   0:00 [kthreadd]
root         3  0.0  0.0      0     0 ?        Ss   14:20   0:00 [pool_workqueue_release]
root         4  0.0  0.0      0     0 ?        I<   14:20   0:00 [kworker/R-rcu_g]
root         5  0.0  0.0      0     0 ?        I<   14:20   0:00 [kworker/R-rcu_p]
root         6  0.0  0.0      0     0 ?        I<   14:20   0:00 [kworker/R-slub_]
root         7  0.0  0.0      0     0 ?        I<   14:20   0:00 [kworker/R-netns]
root        10  0.0  0.0      0     0 ?        I<   14:20   0:00 [kworker/0:0H-events_highpri]
root        11  0.0  0.0      0     0 ?        I<   14:20   0:00 [kworker/u30:0-events_unbound]
root        12  0.0  0.0      0     0 ?        I<   14:20   0:00 [kworker/R-mm_pe]
root        13  0.0  0.0      0     0 ?        I<   14:20   0:00 [rcu_tasks_rude_kthread]
root        14  0.0  0.0      0     0 ?        I<   14:20   0:00 [rcu_tasks_trace_kthread]
root        15  0.0  0.0      0     0 ?        Ss   14:20   0:00 [ksoftirqd/0]
root        16  0.0  0.0      0     0 ?        I<   14:20   0:00 [rcu_sched]
root        17  0.0  0.0      0     0 ?        Ss   14:20   0:00 [migration/0]
root        18  0.0  0.0      0     0 ?        Ss   14:20   0:00 [idle_inject/0]
root        19  0.0  0.0      0     0 ?        Ss   14:20   0:00 [cpuhp/0]
root        20  0.0  0.0      0     0 ?        Ss   14:20   0:00 [kdevtmpfs]
root        21  0.0  0.0      0     0 ?        I<   14:20   0:00 [kworker/R-inet_]
root        23  0.0  0.0      0     0 ?        Ss   14:20   0:00 [kauditd]
root        24  0.0  0.0      0     0 ?        Ss   14:20   0:00 [khungtaskd]
root        25  0.0  0.0      0     0 ?        Ss   14:20   0:00 [oom_reaper]
root        27  0.0  0.0      0     0 ?        I<   14:20   0:00 [kworker/R-write]
root        28  0.0  0.0      0     0 ?        Ss   14:20   0:00 [kcompactd0]
root        29  0.0  0.0      0     0 ?        SN   14:20   0:00 [ksmd]
```

Quick connect...

/home/ubuntu/

Name

...

.cache

.ssh

tmp

.bash_history

.bash_logout

.bashrc

.profile

.sudo_as_admin_successful

.Xauthority

a.b.t

b.b.t

Remote monitoring

☐ Follow terminal folder

2 13.232.244.85 (ubuntu)

1349 pts/1 00:00:00 bash

8096 pts/1 00:00:00 ps

1173 ? 00:00:00 sshd

1299 ? 00:00:00 sshd

1311 ? 00:00:00 sftp-server

1178 ? 00:00:00 systemd

1181 ? 00:00:00 (sd-pam)

3408 ? 00:00:00 systemd-network

3425 ? 00:00:00 systemd-journal

3492 ? 00:00:00 systemd-udev

tmp 2025-02-23 13:08 root root drwxr-xr-x

3600 ? 00:00:00 putty

3701 ? 00:00:00 ModemManager

7501 ? 00:00:00 cron

7514 ? 00:00:00 multipathd

7517 ? 00:00:00 udisksd

7533 ? 00:00:00 sshd

7551 ? 00:00:00 chronyd

7553 ? 00:00:00 chronyd

7554 ? 00:00:00 apache2

7562 ? 00:00:00 apache2

7563 ? 00:00:00 apache2

7626 ? 00:00:00 rsyslogd

root@ip-172-31-9-25:/home/ubuntu# ps -u

USER	PID	%CPU	%MEM	VSZ	RSS	TTY	STAT	START	TIME	COMMAND
root	773	0.0	0.2	6148	2048	tty50	Ss+	14:20	0:00	/sbin/agetty -o -p -- \u --keep-baud 115200,57600,38400,960
root	781	0.0	0.1	6104	1920	tty1	Ss+	14:20	0:00	/sbin/agetty -o -p -- \u --noclear - linux
root	1346	0.0	0.7	17128	6912	pts/0	S+	14:45	0:00	sudo su
root	1347	0.0	0.2	17128	2480	pts/1	Ss	14:45	0:00	sudo su
root	1348	0.0	0.4	9784	4224	pts/1	S	14:45	0:00	su
root	1349	0.0	0.4	8004	4224	pts/1	S	14:45	0:00	bash
root	8097	0.0	0.4	11320	4352	pts/1	R+	14:53	0:00	ps -u

root@ip-172-31-9-25:/home/ubuntu#