



Process Management in Linux

```
pandit@ip-172-31-41-74:~$ hostnamectl
Static hostname: ip-172-31-41-74
    Icon name: computer-vm
    Chassis: vm
    Machine ID: ec21c213bac9c9db90ec4472c7d40bdd
    Boot ID: 3c5c81812eba4c40bc5a9ab58e79c2d3
    Virtualization: amazon
Operating System: Ubuntu 24.04.3 LTS
    Kernel: Linux 6.14.0-1018-aws
    Architecture: x86_64
    Hardware Vendor: Amazon EC2
    Hardware Model: t3.micro
Firmware Version: 1.0
    Firmware Date: Mon 2017-10-16
    Firmware Age: 8y 3month 1w
pandit@ip-172-31-41-74:~$ ps
  PID TTY          TIME CMD
 1539 pts/0    00:00:00 bash
 1585 pts/0    00:00:00 ps
pandit@ip-172-31-41-74:~$
```




i-0e0734f25287e5574 (Ubuntu Server)

PublicIPs: 13.234.239.118 PrivateIPs: 172.31.41.74





[Alt+S]



top - 14:24:25 up 14 min, 1 user, load average: 0.00, 0.00, 0.00
Tasks: 112 total, 1 running, 111 sleeping, 0 stopped, 0 zombie
%Cpu(s): 0.0 us, 0.2 sy, 0.0 ni, 99.8 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st
MiB Mem : 914.2 total, 327.1 free, 362.6 used, 382.7 buff/cache
MiB Swap: 0.0 total, 0.0 free, 0.0 used. 551.6 avail Mem

PID	USER	PR	NI	VIRT	RES	SHR	S	%CPU	%MEM	TIME+	COMMAND
9	root	20	0	0	0	0	I	0.3	0.0	0:00.12	kworker/0:0-events
1	root	20	0	22508	13804	9628	S	0.0	1.5	0:01.65	systemd
2	root	20	0	0	0	0	S	0.0	0.0	0:00.00	kthreadd
3	root	20	0	0	0	0	S	0.0	0.0	0:00.00	pool_workqueue_release
4	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	kworker/R-rcu_gp
5	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	kworker/R-sync_wq
6	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	kworker/R-kvfree_rcu_reclaim
7	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	kworker/R-slub_flushwq
8	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	kworker/R-netns
10	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	kworker/0:0H-events_highpri
11	root	20	0	0	0	0	I	0.0	0.0	0:00.00	kworker/0:1-cgroup_destroy
12	root	20	0	0	0	0	I	0.0	0.0	0:00.09	kworker/u8:0-flush-259:0
13	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	kworker/R-mm_percpu_wq
14	root	20	0	0	0	0	I	0.0	0.0	0:00.00	rcu_tasks_rude_kthread
15	root	20	0	0	0	0	I	0.0	0.0	0:00.00	rcu_tasks_trace_kthread

i-0e0734f25287e5574 (Ubuntu Server)

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```
pandit@ip-172-31-41-74:~$ ps -ef
UID          PID    PPID  C  STIME TTY          TIME CMD
root           1        0  0  14:10 ?          00:00:01 /sbin/init
root           2        0  0  14:10 ?          00:00:00 [kthreadd]
root           3        2  0  14:10 ?          00:00:00 [pool_workqueue_release]
root           4        2  0  14:10 ?          00:00:00 [kworker/R-rcu_gp]
root           5        2  0  14:10 ?          00:00:00 [kworker/R-sync_wq]
root           6        2  0  14:10 ?          00:00:00 [kworker/R-kvfree_rcu_reclaim]
root           7        2  0  14:10 ?          00:00:00 [kworker/R-slub_flushwq]
root           8        2  0  14:10 ?          00:00:00 [kworker/R-netns]
root           9        2  0  14:10 ?          00:00:00 [kworker/0:0-events]
root          10        2  0  14:10 ?          00:00:00 [kworker/0:0H-events_highpri]
root          12        2  0  14:10 ?          00:00:00 [kworker/u8:0-flush-259:0]
root          13        2  0  14:10 ?          00:00:00 [kworker/R-mm_percpu_wq]
root          14        2  0  14:10 ?          00:00:00 [rcu_tasks_rude_kthread]
root          15        2  0  14:10 ?          00:00:00 [rcu_tasks_trace_kthread]
root          16        2  0  14:10 ?          00:00:00 [ksoftirqd/0]
root          17        2  0  14:10 ?          00:00:00 [rcu_sched]
root          18        2  0  14:10 ?          00:00:00 [rcu_exp_par_gp_kthread_worker/0]
root          19        2  0  14:10 ?          00:00:00 [rcu_exp_gp_kthread_worker]
root          20        2  0  14:10 ?          00:00:00 [migration/0]
root          21        2  0  14:10 ?          00:00:00 [idle_inject/0]
```

i-0e0734f25287e5574 (Ubuntu Server)

PublicIPs: 13.234.239.118 PrivateIPs: 172.31.41.74

```
ubuntu@ip-172-31-41-74:~$ sudo systemctl enable ModemManager.service
ubuntu@ip-172-31-41-74:~$ sudo systemctl disable ModemManager.service
Removed "/etc/systemd/system/multi-user.target.wants/ModemManager.service".
Removed "/etc/systemd/system/dbus-org.freedesktop.ModemManager1.service".
ubuntu@ip-172-31-41-74:~$
```

i-0e0734f25287e5574 (Ubuntu Server)

PublicIPs: 13.234.239.118 PrivateIPs: 172.31.41.74

```
Removed "/etc/systemd/system/multi-user.target.wants/ModemManager.service".
Removed "/etc/systemd/system/dbus-org.freedesktop.ModemManager1.service".
ubuntu@ip-172-31-41-74:~$ ^C
ubuntu@ip-172-31-41-74:~$ sudo systemctl enable ModemManager.service
Created symlink /etc/systemd/system/dbus-org.freedesktop.ModemManager1.service → /usr/lib/systemd/system/ModemManager.service.
Created symlink /etc/systemd/system/multi-user.target.wants/ModemManager.service → /usr/lib/systemd/system/ModemManager.service.
ubuntu@ip-172-31-41-74:~$ systemctl status ModemManager.service
● ModemManager.service - Modem Manager
   Loaded: loaded (/usr/lib/systemd/system/ModemManager.service; enabled; preset: enabled)
   Active: active (running) since Thu 2026-01-22 14:10:18 UTC; 48min ago
     Main PID: 796 (ModemManager)
        Tasks: 4 (limit: 1008)
      Memory: 7.7M (peak: 8.0M)
         CPU: 83ms
    CGroup: /system.slice/ModemManager.service
            └─796 /usr/sbin/ModemManager

Jan 22 14:10:17 ip-172-31-41-74 systemd[1]: Starting ModemManager.service - Modem Manager...
Jan 22 14:10:18 ip-172-31-41-74 ModemManager[796]: <msg> ModemManager (version 1.23.4) starting in system bus...
Jan 22 14:10:18 ip-172-31-41-74 systemd[1]: Started ModemManager.service - Modem Manager.
Jan 22 14:10:22 ip-172-31-41-74 ModemManager[796]: <msg> [base-manager] couldn't check support for device '/sys/devices/pci0000:00/
lines 1-14/14 (END)
```

i-0e0734f25287e5574 (Ubuntu Server)

PublicIPs: 13.234.239.118 PrivateIPs: 172.31.41.74

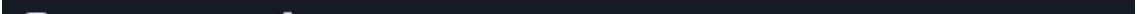


```
Jan 22 14:10:18 ip-172-31-41-74 ModemManager[796]: <msg> ModemManager (version 1.23.4) s
Jan 22 14:10:18 ip-172-31-41-74 systemd[1]: Started ModemManager.service - Modem Manager
Jan 22 14:10:22 ip-172-31-41-74 ModemManager[796]: <msg> [base-manager] couldn't check s

[2]+ Stopped                                systemctl status ModemManager.service
ubuntu@ip-172-31-41-74:~$ systemctl status
● ip-172-31-41-74
   State: running
     Units: 414 loaded (incl. loaded aliases)
       Jobs: 0 queued
    Failed: 0 units
     Since: Thu 2026-01-22 14:10:07 UTC; 49min ago
  systemd: 255.4-1ubuntu8.11
   CGroup: /
           └─init.scope
               └─1 /sbin/init
                   └─system.slice
                       └─ModemManager.service
                           └─796 /usr/sbin/ModemManager
                           └─acpid.service
                               └─594 /usr/sbin/acpid
                           └─chrony.service
```

i-0e0734f25287e5574 (Ubuntu Server)

PublicIPs: 13.234.239.118 PrivateIPs: 172.31.41.74




```
ubuntu@ip-172-31-41-74:~$ script test_script
Script started, output log file is 'test_script'.
ubuntu@ip-172-31-41-74:~$ ls
test_script  timingfile.tm  typescript.txt
ubuntu@ip-172-31-41-74:~$ pwd
/home/ubuntu
ubuntu@ip-172-31-41-74:~$ whoami
ubuntu
ubuntu@ip-172-31-41-74:~$ exit
exit
Script done.
ubuntu@ip-172-31-41-74:~$ ls
test_script  timingfile.tm  typescript.txt
ubuntu@ip-172-31-41-74:~$
```

i-0e0734f25287e5574 (Ubuntu Server)

PublicIPs: 13.234.239.118 PrivateIPs: 172.31.41.74

```
ubuntu@ip-172-31-41-74:~$ pstree
systemd--ModemManager--3*[{ModemManager}]
--acpid
--2*[{agetty}]
--amazon-ssm-agen--8*[{amazon-ssm-agen}]
--chronyd--chronyd
--cron
--dbus-daemon
--irqbalance--{irqbalance}
--multipathd--6*[{multipathd}]
--networkd-dispat
--polkitd--3*[{polkitd}]
--rsyslogd--3*[{rsyslogd}]
--snapd--10*[{snapd}]
--sshd--sshd--sshd--bash--script--bash--pstree
--sudo--sudo--systemctl--less
--2*[{systemctl--pager}]
--su--bash--2*[{sudo}]
--systemd--(sd-pam)
--systemd-journal
--systemd-logind
--systemd-network
```

i-0e0734f25287e5574 (Ubuntu Server)

PublicIPs: 13.234.239.118 PrivateIPs: 172.31.41.74