Environment Basics

```
ubuntu:/$ uname -a
Linux ubuntu 6.8.0-90-generic #91-Ubuntu SMP PREEMPT_DYNAMIC Tue Nov 18 14:14:30 UTC 2025 x86_64 x86_64 x86_64 GNU/Linux
ubuntu:/$
ubuntu:/$
ubuntu:/$
ubuntu:/$ cat /etc/os-release
PRETTY_NAME="Ubuntu 24.04.3 LTS"
NAME="Ubuntu"
VERSION_ID="24.04"
VERSION="24.04.3 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
ubuntu:/$
ubuntu:/$
ubuntu:/$
ubuntu:/$
```

CPU & Memory Snapshot

```
top - 18:26:15 up 53 min,  0 user,  load average: 0.00, 0.00, 0.00
Tasks: 118 total,   1 running, 117 sleeping,   0 stopped,   0 zombie
%Cpu(s):  0.3 us,  0.0 sy,  0.0 ni, 99.7 id,  0.0 wa,  0.0 hi,  0.0 si,  0.0 st
MiB Mem :   1903.3 total,    820.6 free,    418.6 used,    832.6 buff/cache
MiB Swap:   1024.0 total,   1024.0 free,      0.0 used.   1484.7 avail Mem

   PID USER      PR  NI    VIRT    RES    SHR S  %CPU  %MEM     TIME+ COMMAND
    29 root      20   0       0      0      0 S   0.3   0.0   0:00.08 kcompactd0
     1 root      20   0   22192  13136   9424 S   0.0   0.7   0:02.68 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_g
     5 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker/R-rcu_p
     6 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker/R-slub_
     7 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker/R-netns
     8 root      20   0       0      0      0 I   0.0   0.0   0:00.07 kworker/0:0-cgroup_destroy
    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   0:00.21 kworker/u2:0-flush-253:0
    12 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker/R-mm_pe
    13 root      20   0       0      0      0 I   0.0   0.0   0:00.00 rcu_tasks_kthread
    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
    16 root      20   0       0      0      0 S   0.0   0.0   0:00.06 ksoftirqd/0
    17 root      20   0       0      0      0 I   0.0   0.0   0:00.14 rcu_preempt
    18 root      rt   0       0      0      0 S   0.0   0.0   0:00.01 migration/0
    19 root     -51   0       0      0      0 S   0.0   0.0   0:00.00 idle_inject/0
    20 root      20   0       0      0      0 S   0.0   0.0   0:00.00 cpuhp/0
    21 root      20   0       0      0      0 S   0.0   0.0   0:00.00 kdevtmpfs
    22 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker/R-inet_
    23 root      20   0       0      0      0 S   0.0   0.0   0:00.00 kauditd
    24 root      20   0       0      0      0 S   0.0   0.0   0:00.00 khungtaskd
    26 root      20   0       0      0      0 S   0.0   0.0   0:00.00 oom_reaper
    28 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker/R-write
    30 root      25   5       0      0      0 S   0.0   0.0   0:00.00 ksmd
    31 root      39  19       0      0      0 S   0.0   0.0   0:00.00 khugepaged
    32 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker/R-kinte
    33 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker/R-kbloc
    34 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker/R-blkcg
    35 root     -51   0       0      0      0 S   0.0   0.0   0:00.00 irq/9-acpi
    36 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker/R-tpm_d
    37 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker/R-ata_s
    38 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker/R-md
    39 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker/R-md_bi
    40 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker/R-edac-
    41 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker/R-devfr
    42 root     -51   0       0      0      0 S   0.0   0.0   0:00.00 watchdogd
    43 root       0 -20       0      0      0 I   0.0   0.0   0:00.05 kworker/0:1H-kblockd
    44 root      20   0       0      0      0 S   0.0   0.0   0:00.00 kswapd0
    45 root      20   0       0      0      0 S   0.0   0.0   0:00.00 ecryptfs-kthread
    46 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker/R-kthro
    47 root     -51   0       0      0      0 S   0.0   0.0   0:00.00 irq/24-aerdrv
    48 root     -51   0       0      0      0 S   0.0   0.0   0:00.00 irq/25-aerdrv
    49 root     -51   0       0      0      0 S   0.0   0.0   0:00.00 irq/26-aerdrv
    50 root     -51   0       0      0      0 S   0.0   0.0   0:00.00 irq/27-aerdrv
```

```
ubuntu:/$ free -h
               total        used        free      shared  buff/cache   available
Mem:           1.9Gi       418Mi       820Mi       1.0Mi       832Mi       1.4Gi
Swap:          1.0Gi          0B       1.0Gi
ubuntu:/$
```

Disk & IO Check

```
ubuntu:/$ df -h
Filesystem      Size  Used Avail Use% Mounted on
tmpfs           191M  976K  190M   1% /run
/dev/vda1        19G  5.2G   14G  29% /
tmpfs           952M   84K  952M   1% /dev/shm
tmpfs           5.0M     0  5.0M   0% /run/lock
/dev/vda16      881M  117M  703M  15% /boot
/dev/vda15      105M  6.2M   99M   6% /boot/efi
ubuntu:/$ du -sh /var/log
20M     /var/log
ubuntu:/$ 
```

Network Check

```
ubuntu:/$ ping google.com
PING google.com (172.217.16.206) 56(84) bytes of data.
64 bytes from fra16s65-in-f14.1e100.net (172.217.16.206): icmp_seq=1 ttl=117 time=3.41 ms
64 bytes from fra16s65-in-f14.1e100.net (172.217.16.206): icmp_seq=2 ttl=117 time=3.61 ms
64 bytes from fra16s65-in-f14.1e100.net (172.217.16.206): icmp_seq=3 ttl=117 time=3.44 ms
64 bytes from fra16s65-in-f14.1e100.net (172.217.16.206): icmp_seq=4 ttl=117 time=3.23 ms
64 bytes from fra16s65-in-f14.1e100.net (172.217.16.206): icmp_seq=5 ttl=117 time=3.25 ms
64 bytes from fra16s65-in-f14.1e100.net (172.217.16.206): icmp_seq=6 ttl=117 time=3.60 ms
64 bytes from fra16s65-in-f14.1e100.net (172.217.16.206): icmp_seq=7 ttl=117 time=3.46 ms
^C
--- google.com ping statistics ---
7 packets transmitted, 7 received, 0% packet loss, time 6010ms
rtt min/avg/max/mdev = 3.226/3.427/3.605/0.139 ms
ubuntu:/$ 
```

Logs Check

```
ubuntu:/$ journalctl -u ssh
Feb 10 22:05:24 vm2 systemd[1]: Starting ssh.service - OpenBSD Secure Shell server...
Feb 10 22:05:24 vm2 sshd[1169]: Server listening on :: port 22.
Feb 10 22:05:24 vm2 systemd[1]: Started ssh.service - OpenBSD Secure Shell server.
Feb 10 22:05:32 vm2 sshd[1171]: Accepted password for kc-internal from 10.244.0.131 port 34164 ssh2
Feb 10 22:05:33 vm2 sshd[1171]: Received disconnect from 10.244.0.131 port 34164:11: disconnected by user
Feb 10 22:05:33 vm2 sshd[1171]: Disconnected from user kc-internal 10.244.0.131 port 34164
Feb 10 22:06:22 vm2 sshd[1190]: Failed password for kc-internal from 10.244.0.131 port 52862 ssh2
Feb 10 22:06:42 vm2 sshd[1190]: Accepted password for kc-internal from 10.244.0.131 port 52862 ssh2
Feb 10 22:06:43 vm2 systemd[1]: Stopping ssh.service - OpenBSD Secure Shell server...
Feb 10 22:06:43 vm2 sshd[1169]: Received signal 15; terminating.
Feb 10 22:06:44 vm2 systemd[1]: ssh.service: Deactivated successfully.
Feb 10 22:06:44 vm2 systemd[1]: ssh.service: Unit process 1190 (sshd) remains running after unit stopped.
Feb 10 22:06:44 vm2 systemd[1]: ssh.service: Unit process 1192 (bash) remains running after unit stopped.
Feb 10 22:06:44 vm2 systemd[1]: Stopped ssh.service - OpenBSD Secure Shell server.
Feb 10 22:06:44 vm2 sshd[1190]: Exiting on signal 15
-- Boot 0b7cd1ee55f644d7b1978710bfceb94e --
Jan 21 14:53:01 vm2 systemd[1]: Starting ssh.service - OpenBSD Secure Shell server...
Jan 21 14:53:01 vm2 sshd[788]: Server listening on :: port 22.
Jan 21 14:53:01 vm2 systemd[1]: Started ssh.service - OpenBSD Secure Shell server.
Jan 21 14:53:02 vm2 sshd[794]: Accepted password for kc-internal from 10.244.0.234 port 52864 ssh2
Jan 21 14:53:02 vm2 sshd[798]: Accepted password for kc-internal from 10.244.0.234 port 42374 ssh2
Jan 21 14:53:09 vm2 sudo[1359]:        root : unable to resolve host vm2: Name or service not known
Jan 21 14:53:09 vm2 sudo[1359]:        root : PWD=/run/kc-internal ; USER=root ; COMMAND=/usr/bin/fuser /var/lib/dpkg/lock
Jan 21 14:53:09 vm2 sudo[1359]: pam_unix(sudo:session): session opened for user root(uid=0) by (uid=0)
Jan 21 14:53:09 vm2 sudo[1359]: pam_unix(sudo:session): session closed for user root
Jan 21 14:53:09 vm2 sudo[1361]:        root : unable to resolve host vm2: Name or service not known
Jan 21 14:53:09 vm2 sudo[1361]:        root : PWD=/run/kc-internal ; USER=root ; COMMAND=/usr/bin/fuser /var/lib/apt/lists/lock
Jan 21 14:53:09 vm2 sudo[1361]: pam_unix(sudo:session): session opened for user root(uid=0) by (uid=0)
Jan 21 14:53:09 vm2 sudo[1361]: pam_unix(sudo:session): session closed for user root
Jan 21 14:54:07 vm2 sshd[788]: Received signal 15; terminating.
Jan 21 14:54:07 vm2 systemd[1]: Stopping ssh.service - OpenBSD Secure Shell server...
Jan 21 14:54:07 vm2 systemd[1]: ssh.service: Deactivated successfully.
Jan 21 14:54:07 vm2 systemd[1]: ssh.service: Unit process 798 (sshd) remains running after unit stopped.
Jan 21 14:54:07 vm2 systemd[1]: ssh.service: Unit process 1364 (bash) remains running after unit stopped.
Jan 21 14:54:07 vm2 systemd[1]: ssh.service: Unit process 1365 (bash) remains running after unit stopped.
Jan 21 14:54:07 vm2 systemd[1]: ssh.service: Unit process 1671 (apt-get) remains running after unit stopped.
Jan 21 14:54:07 vm2 systemd[1]: ssh.service: Unit process 4356 (dpkg) remains running after unit stopped.
Jan 21 14:54:07 vm2 systemd[1]: ssh.service: Unit process 4357 (sh) remains running after unit stopped.
Jan 21 14:54:07 vm2 systemd[1]: ssh.service: Unit process 4358 (sh) remains running after unit stopped.
Jan 21 14:54:07 vm2 systemd[1]: ssh.service: Unit process 4359 (dpkg-status) remains running after unit stopped.
Jan 21 14:54:07 vm2 systemd[1]: ssh.service: Unit process 4690 (preinst) remains running after unit stopped.
Jan 21 14:54:07 vm2 systemd[1]: ssh.service: Unit process 4695 (systemctl) remains running after unit stopped.
Jan 21 14:54:07 vm2 systemd[1]: Stopped ssh.service - OpenBSD Secure Shell server.
Jan 21 14:54:07 vm2 systemd[1]: ssh.service: Consumed 20.425s CPU time, 1.0G memory peak, 0B memory swap peak.
Jan 21 14:54:30 vm2 adduser[6906]: The system user `syslog' already exists. Exiting.
Jan 21 14:54:30 vm2 adduser[6908]: The user `syslog' is already a member of `adm'.
Jan 21 14:55:26 ubuntu systemd[1]: ssh.service: Found left-over process 798 (sshd) in control group while starting unit. Ignoring.
Jan 21 14:55:26 ubuntu systemd[1]: ssh.service: This usually indicates unclean termination of a previous run, or service implementation deficiencies.
Jan 21 14:55:26 ubuntu systemd[1]: ssh.service: Found left-over process 1364 (bash) in control group while starting unit. Ignoring.
Jan 21 14:55:26 ubuntu systemd[1]: ssh.service: This usually indicates unclean termination of a previous run, or service implementation deficiencies.
Jan 21 14:55:26 ubuntu systemd[1]: ssh.service: Found left-over process 1365 (bash) in control group while starting unit. Ignoring.
Jan 21 14:55:26 ubuntu systemd[1]: ssh.service: This usually indicates unclean termination of a previous run, or service implementation deficiencies.
Jan 21 14:55:26 ubuntu systemd[1]: ssh.service: Found left-over process 23709 (timeout) in control group while starting unit. Ignoring.
```