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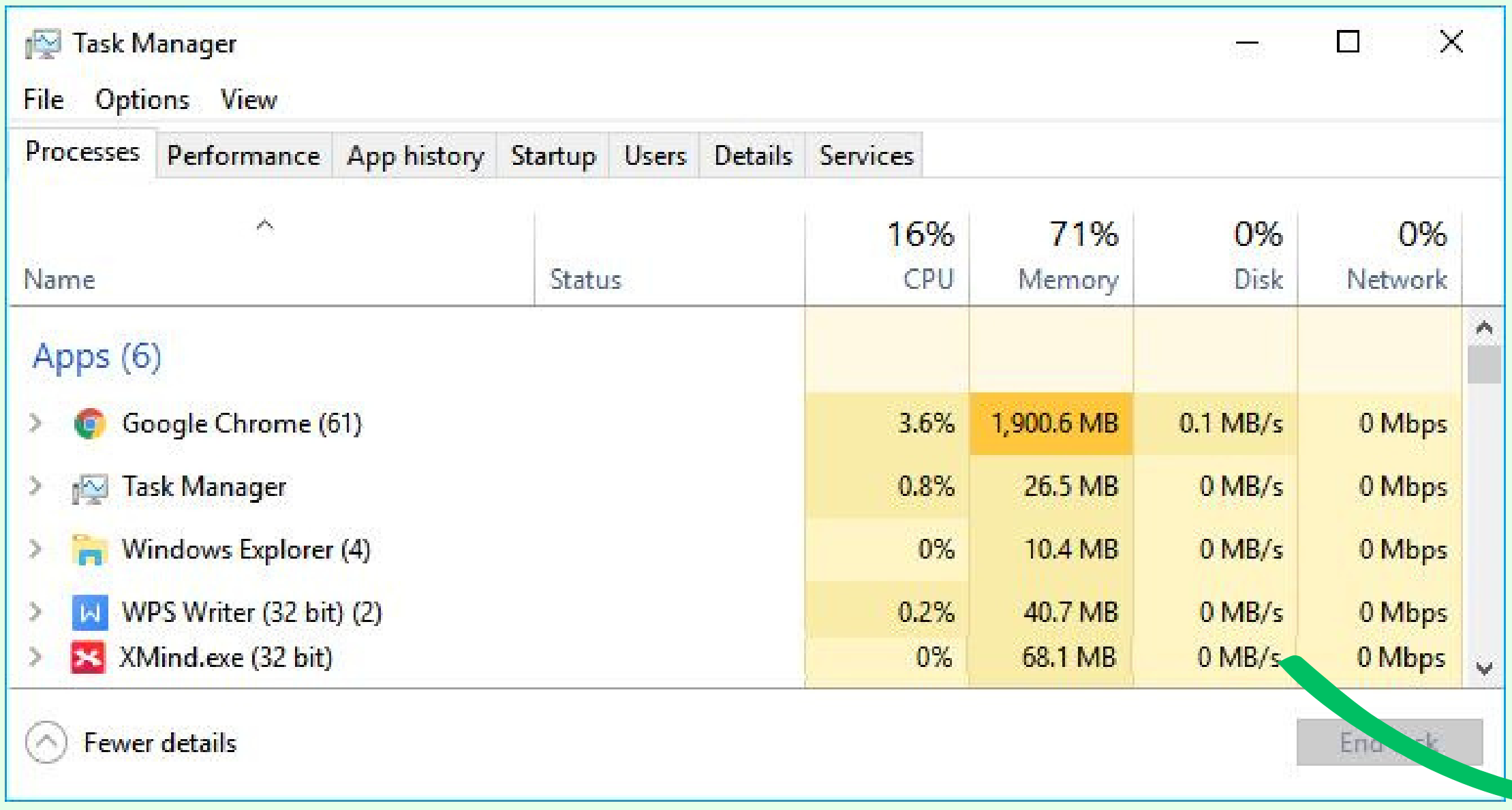
How to check CPU and Memory usage on Linux?



The commande: “Top”

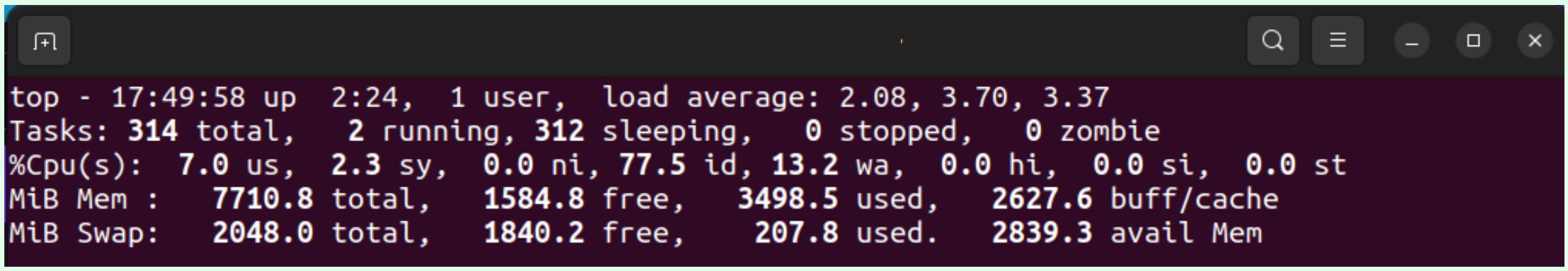
```
top - 17:49:58 up  2:24,  1 user,  load average: 2.08, 3.70, 3.37
Tasks: 314 total,   2 running, 312 sleeping,   0 stopped,   0 zombie
%Cpu(s):  7.0 us,  2.3 sy,  0.0 ni, 77.5 id, 13.2 wa,  0.0 hi,  0.0 si,  0.0 st
MiB Mem :   7710.8 total,   1584.8 free,   3498.5 used,   2627.6 buff/cache
MiB Swap:   2048.0 total,   1840.2 free,    207.8 used.   2839.3 avail Mem

    PID USER      PR  NI    VIRT    RES    SHR S  %CPU  %MEM     TIME+ COMMAND
  10891             20   0 1125.2g 348948 142580 S  25.0   4.4   2:42.33 msedge
   4471             20   0   33.1g 180828  98152 R  18.8   2.3   1:18.98 msedge
  15643             20   0 1125.0g 303032 129768 S  18.8   3.8   0:45.21 msedge
   2439             20   0 5654740 241412  80560 S   6.2   3.1   2:39.96 gnome-shell
      1 root        20   0  168836  13232   7472 S   0.0   0.2   0:04.41 systemd
      2 root        20   0       0      0      0 S   0.0   0.0   0:00.00 kthreadd
      3 root         0 -20       0      0      0 I   0.0   0.0   0:00.00 rcu_gp
      4 root         0 -20       0      0      0 I   0.0   0.0   0:00.00 rcu_par_gp
      5 root         0 -20       0      0      0 I   0.0   0.0   0:00.00 slub_flushwq
      6 root         0 -20       0      0      0 I   0.0   0.0   0:00.00 netns
      8 root         0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker/0:0H-event+
     10 root         0 -20       0      0      0 I   0.0   0.0   0:00.00 mm_percpu_wq
     11 root        20   0       0      0      0 I   0.0   0.0   0:00.00 rcu_tasks_kthread
     12 root        20   0       0      0      0 I   0.0   0.0   0:00.00 rcu_tasks_rude_kth+
     13 root        20   0       0      0      0 I   0.0   0.0   0:00.00 rcu_tasks_trace_kt+
     14 root        20   0       0      0      0 S   0.0   0.0   0:00.11 ksoftirqd/0
     15 root        20   0       0      0      0 I   0.0   0.0   0:02.55 rcu_preempt
```

Display Information

It provides a dynamic and continuously updated display of system-related information, including CPU usage, memory usage, running processes, and more.

Header Information

The top of the top display contains various header lines that provide summary information about system performance. These headers typically include details such as system uptime, load averages, CPU usage statistics, and memory usage statistics.



Process List

Below the header information, top displays a list of processes currently running on the system.

Each process entry includes information like process ID (PID), user, CPU usage, memory usage, and more.

The list is sorted by default based on CPU usage, but users can change the sorting criteria interactively.

Interactive Interface

It has an interactive text-based interface that allows users to view and manipulate the displayed data.

Users can sort processes by various criteria, change the update interval, and send commands to processes directly from the top interface.

Sorting Processes

- **P**: Sort by CPU usage (default).
- **M**: Sort by memory usage.
- **N**: Sort by process name.
- **T**: Sort by total CPU time.
- **U**: Sort by user.
- **K**: Sort by process ID (PID).
- **W**: Write current configuration to the **~/.toprc** file.

Sending Commands to Processes

- **k:** kills a process by PID.
- **r:** changes a process's priority (niceness).
- **S:** changes a process's priority by PID.
- **u:** filters processes by user.
- **h:** shows a help screen with commands.

Changing the Update Interval

The default update interval for **top** is 3 seconds. You can change the update interval while **top** is running:

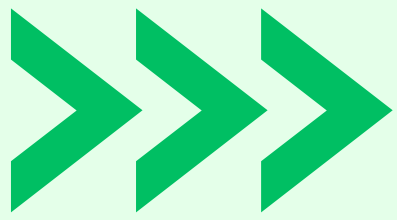
- Press the **d** key.
- Enter a new update interval in seconds (e.g., **5** for a 5-second update interval).
- Press Enter.

This will adjust the refresh rate to the value you entered. A longer update interval can be useful if you want to reduce the system load caused by **top**.

Configuration

Users can customize the **top** display and behavior by modifying its configuration file, typically located at **/etc/toprc**.

This allows users to set default sorting orders, column orders, and other preferences.

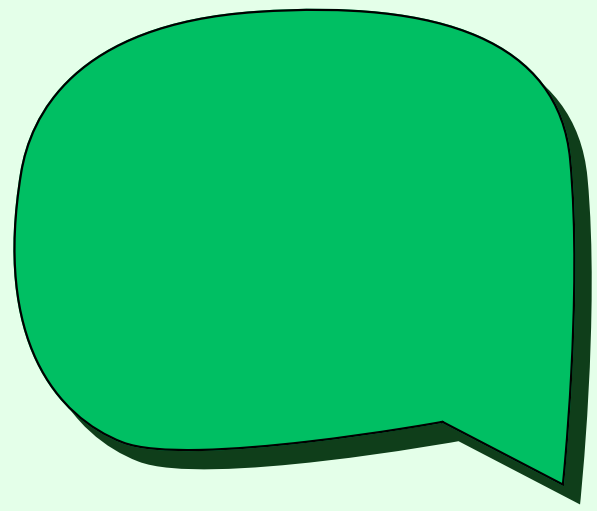


Exit

To exit top, you can press the '**q**' key, which will quit the program and return you to the command prompt.

Questions?

Comment.



Helpful?

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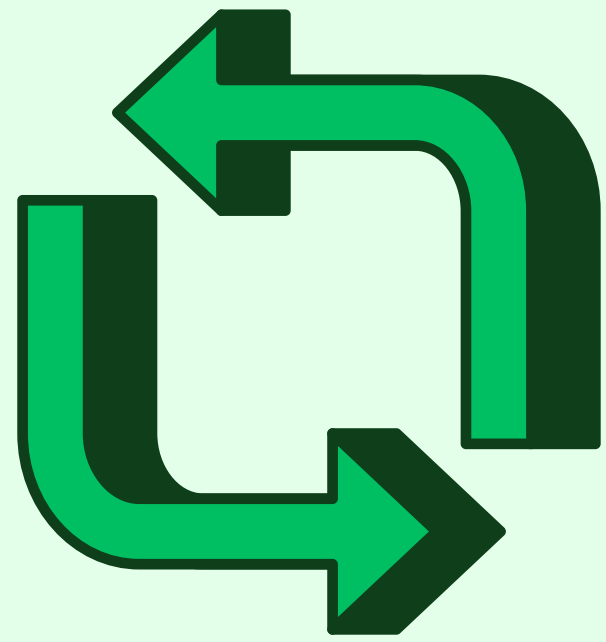

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