

top processz aktivitását mutatja

```
genesys@DESKTOP-3KB733B: ~  
top - 15:10:26 up 0 min, 0 users, load average: 0.52, 0.58, 0.59  
Tasks: 4 total, 1 running, 3 sleeping, 0 stopped, 0 zombie  
%Cpu(s): 5.1 us, 2.4 sy, 0.0 ni, 92.1 id, 0.0 wa, 0.4 hi, 0.0 si, 0.0 st  
KiB Mem : 8233272 total, 3449652 free, 4554268 used, 229352 buff/cache  
KiB Swap: 25165824 total, 24988864 free, 176960 used, 3545272 avail Mem  


| PID | USER    | PR | NI | VIRT  | RES  | SHR  | S | %CPU | %MEM | TIME+   | COMMAND |
|-----|---------|----|----|-------|------|------|---|------|------|---------|---------|
| 1   | root    | 20 | 0  | 8936  | 316  | 272  | S | 0.0  | 0.0  | 0:00.04 | init    |
| 7   | root    | 20 | 0  | 8936  | 224  | 180  | S | 0.0  | 0.0  | 0:00.00 | init    |
| 8   | genesys | 20 | 0  | 16792 | 3424 | 3328 | S | 0.0  | 0.0  | 0:00.07 | bash    |
| 23  | genesys | 20 | 0  | 17620 | 2040 | 1504 | R | 0.0  | 0.0  | 0:00.00 | top     |


```

vmstat -a-m

```
genesys@DESKTOP-3KB733B: ~  
See "man sudo_root" for details.  
genesys@DESKTOP-3KB733B:~$ sudo vmstat -a-m  
[sudo] password for genesys:  
vmstat: invalid option -- '-'  
  
Usage:  
vmstat [options] [delay [count]]  
  
Options:  
-a, --active          active/inactive memory  
-f, --forks           number of forks since boot  
-m, --slabs           slabinfo  
-n, --one-header      do not redisplay header  
-s, --stats           event counter statistics  
-d, --disk            disk statistics  
-D, --disk-sum       summarize disk statistics  
-p, --partition <dev> partition specific statistics  
-S, --unit <char>    define display unit  
-w, --wide            wide output  
-t, --timestamp       show timestamp  
  
-h, --help           display this help and exit  
-V, --version        output version information and exit  
  
For more details see vmstat(8).  
genesys@DESKTOP-3KB733B:~$
```

w felhasználó név

megmutatja hogy ki van bejelentkezve a rendszerbe

```
genesys@DESKTOP-3KB733B: ~  
To run a command as administrator (user "root"), use "sudo <command>".  
See "man sudo_root" for details.  
  
genesys@DESKTOP-3KB733B:~$ vmstat - [a, m]  
vmstat: failed to parse argument: '-'  
genesys@DESKTOP-3KB733B:~$ who  
genesys@DESKTOP-3KB733B:~$ w USER  
15:11:57 up 1 min, 0 users, load average: 0.52, 0.58, 0.59  
USER      TTY      FROM              LOGIN@   IDLE   JCPU   PCPU WHAT  
genesys@DESKTOP-3KB733B:~$
```

uname

ps -A kiválasztja az össze processzt

```
genesys@DESKTOP-3KB733B: ~  
To run a command as administrator (user "root"), use "sudo <command>".  
See "man sudo_root" for details.  
  
genesys@DESKTOP-3KB733B:~$ vmstat - [a, m]  
vmstat: failed to parse argument: '-'  
genesys@DESKTOP-3KB733B:~$ who  
genesys@DESKTOP-3KB733B:~$ w USER  
15:11:57 up 1 min, 0 users, load average: 0.52, 0.58, 0.59  
USER      TTY      FROM              LOGIN@   IDLE   JCPU   PCPU WHAT  
genesys@DESKTOP-3KB733B:~$ uname  
Linux  
genesys@DESKTOP-3KB733B:~$  
genesys@DESKTOP-3KB733B:~$ ps -A  
  PID TTY          TIME CMD  
    1 ?           00:00:00 init  
   25 tty1       00:00:00 init  
   26 tty1       00:00:00 bash  
   45 tty1       00:00:00 ps  
genesys@DESKTOP-3KB733B:~$
```

free megmutatja a memória és a swap által használt/ szabad területet

```
genesys@DESKTOP-3KB733B: ~  
To run a command as administrator (user "root"), use "sudo <command>".  
See "man sudo_root" for details.  
  
genesys@DESKTOP-3KB733B:~$ vmstat - [a, m]  
vmstat: failed to parse argument: '-'  
genesys@DESKTOP-3KB733B:~$ who  
genesys@DESKTOP-3KB733B:~$ w USER  
15:11:57 up 1 min, 0 users, load average: 0.52, 0.58, 0.59  
USER      TTY      FROM              LOGIN@   IDLE   JCPU   PCPU WHAT  
genesys@DESKTOP-3KB733B:~$ uname  
Linux  
genesys@DESKTOP-3KB733B:~$  
genesys@DESKTOP-3KB733B:~$ ps -A  
  PID TTY          TIME CMD  
    1 ?           00:00:00 init  
   25 tty1       00:00:00 init  
   26 tty1       00:00:00 bash  
   45 tty1       00:00:00 ps  
genesys@DESKTOP-3KB733B:~$ free  
              total        used        free      shared  buff/cache   available  
Mem:           8233272      4568632      3435288        17720       229352      3530908  
Swap:          25165824       174736      24991088  
genesys@DESKTOP-3KB733B:~$
```

sar aktivitási adatok jelzésé és összegyűjtése

```
root@DESKTOP-3KB733B: ~  
Suggested packages:  
  lm-sensors isag  
The following NEW packages will be installed:  
  libsensors4 sysstat  
0 upgraded, 2 newly installed, 0 to remove and 0 not upgraded.  
Need to get 323 kB of archives.  
After this operation, 1305 kB of additional disk space will be used.  
Do you want to continue? [Y/n] y  
Get:1 http://archive.ubuntu.com/ubuntu bionic/main amd64 libsensors4 amd64 1:3.4.0-4 [28.8 kB]  
Get:2 http://archive.ubuntu.com/ubuntu bionic/main amd64 sysstat amd64 11.6.1-1 [295 kB]  
Fetched 323 kB in 1s (613 kB/s)  
Preconfiguring packages ...  
Selecting previously unselected package libsensors4:amd64.  
(Reading database ... 28645 files and directories currently installed.)  
Preparing to unpack .../libsensors4_1%3a3.4.0-4_amd64.deb ...  
Unpacking libsensors4:amd64 (1:3.4.0-4) ...  
Selecting previously unselected package sysstat.  
Preparing to unpack .../sysstat_11.6.1-1_amd64.deb ...  
Unpacking sysstat (11.6.1-1) ...  
Processing triggers for ureadahead (0.100.0-21) ...  
Processing triggers for libc-bin (2.27-3ubuntu1) ...  
Processing triggers for systemd (237-3ubuntu10.21) ...  
Setting up libsensors4:amd64 (1:3.4.0-4) ...  
Processing triggers for man-db (2.8.3-2ubuntu0.1) ...  
Setting up sysstat (11.6.1-1) ...  
update-alternatives: using /usr/bin/sar.sysstat to provide /usr/bin/sar (sar) in auto mode  
Processing triggers for libc-bin (2.27-3ubuntu1) ...  
root@DESKTOP-3KB733B:~# sar  
Linux 4.4.0-19041-Microsoft (DESKTOP-3KB733B) 02/28/21 _x86_64_ (8 CPU)  
root@DESKTOP-3KB733B:~#
```

iostat CPU statisztika és a számítógép I/O eszközei

```
root@DESKTOP-3KB733B: ~  
The following NEW packages will be installed:  
  libsensors4 sysstat  
0 upgraded, 2 newly installed, 0 to remove and 0 not upgraded.  
Need to get 323 kB of archives.  
After this operation, 1305 kB of additional disk space will be used.  
Do you want to continue? [Y/n] y  
Get:1 http://archive.ubuntu.com/ubuntu bionic/main amd64 libsensors4 amd64 1:3.4.0-4 [28.8 kB]  
Get:2 http://archive.ubuntu.com/ubuntu bionic/main amd64 sysstat amd64 11.6.1-1 [295 kB]  
Fetched 323 kB in 1s (613 kB/s)  
Preconfiguring packages ...  
Selecting previously unselected package libsensors4:amd64.  
(Reading database ... 28645 files and directories currently installed.)  
Preparing to unpack .../libsensors4_1%3a3.4.0-4_amd64.deb ...  
Unpacking libsensors4:amd64 (1:3.4.0-4) ...  
Selecting previously unselected package sysstat.  
Preparing to unpack .../sysstat_11.6.1-1_amd64.deb ...  
Unpacking sysstat (11.6.1-1) ...  
Processing triggers for ureadahead (0.100.0-21) ...  
Processing triggers for libc-bin (2.27-3ubuntu1) ...  
Processing triggers for systemd (237-3ubuntu10.21) ...  
Setting up libsensors4:amd64 (1:3.4.0-4) ...  
Processing triggers for man-db (2.8.3-2ubuntu0.1) ...  
Setting up sysstat (11.6.1-1) ...  
update-alternatives: using /usr/bin/sar.sysstat to provide /usr/bin/sar (sar) in auto mode  
Processing triggers for libc-bin (2.27-3ubuntu1) ...  
root@DESKTOP-3KB733B:~# sar  
Linux 4.4.0-19041-Microsoft (DESKTOP-3KB733B) 02/28/21 _x86_64_ (8 CPU)  
root@DESKTOP-3KB733B:~# iostat  
Cannot find disk data  
root@DESKTOP-3KB733B:~#
```

mpstat több processzoros sz.gép esetén használják

```
root@DESKTOP-3KB733B: ~  
(Reading database ... 28645 files and directories currently installed.)  
Preparing to unpack .../libsensors4_1%3a3.4.0-4_amd64.deb ...  
Unpacking libsensors4:amd64 (1:3.4.0-4) ...  
Selecting previously unselected package sysstat.  
Preparing to unpack .../sysstat_11.6.1-1_amd64.deb ...  
Unpacking sysstat (11.6.1-1) ...  
Processing triggers for ureadahead (0.100.0-21) ...  
Processing triggers for libc-bin (2.27-3ubuntu1) ...  
Processing triggers for systemd (237-3ubuntu10.21) ...  
Setting up libsensors4:amd64 (1:3.4.0-4) ...  
Processing triggers for man-db (2.8.3-2ubuntu0.1) ...  
Setting up sysstat (11.6.1-1) ...  
update-alternatives: using /usr/bin/sar.sysstat to provide /usr/bin/sar (sar) in auto mode  
Processing triggers for libc-bin (2.27-3ubuntu1) ...  
root@DESKTOP-3KB733B:~# sar  
Linux 4.4.0-19041-Microsoft (DESKTOP-3KB733B) 02/28/21 _x86_64_ (8 CPU)  
root@DESKTOP-3KB733B:~# iostat  
Cannot find disk data  
root@DESKTOP-3KB733B:~# pmstat  
  
Command 'pmstat' not found, but can be installed with:  
  
apt install pcpt  
  
root@DESKTOP-3KB733B:~# mpstat  
Linux 4.4.0-19041-Microsoft (DESKTOP-3KB733B) 02/28/21 _x86_64_ (8 CPU)  
  
17:54:28 CPU %usr %nice %sys %iowait %irq %soft %steal %guest %gnice %idle  
17:54:28 all 4.26 0.00 1.95 0.00 0.31 0.00 0.00 0.00 0.00 93.48  
root@DESKTOP-3KB733B:~#
```

mpmap processz memória használatát jelzi

root@DESKTOP-3KB733B: ~

```
-q, --quiet          do not display header and footer
-p, --show-path      show path in the mapping
-A, --range=<low>[,<high>] limit results to the given range

-h, --help          display this help and exit
-V, --version        output version information and exit
```

For more details see pmap(1).

root@DESKTOP-3KB733B:~# ls /proc

ls: cannot access 'proc': No such file or directory

root@DESKTOP-3KB733B:~# /proc

-bash: /proc: Is a directory

root@DESKTOP-3KB733B:~# ls /proc

```
1  473  7  893  bus      cmdline filesystems loadavg  mounts  self  sys  uptime  version_signature
23 474  8  92   cgroups cpuinfo  interrupts meminfo net    stat  tty  version
```

root@DESKTOP-3KB733B:~# pmap 1

1: /init

0000000000200000 144K r---- init

0000000000224000 4K r---- init

0000000000225000 440K r-x-- init

0000000000293000 4K r-x-- init

0000000000294000 24K rw--- init

000000000029a000 24K rw--- [ anon ]

000000000091e000 12K rw--- [ anon ]

00007f45dddc0000 4K ----- [ anon ]

00007f45dddc1000 84K rw--- [ anon ]

00007ffff4428000 8192K rw--- [ anon ]

00007ffff50a3000 4K r-x-- [ anon ]

total 8936K

root@DESKTOP-3KB733B:~#