

"top" parancs a jelenleg futó processzeket és azok erőforrás igényét irja ki.

```
simon28@simon28-VirtualBox:~$ vmstat
procs -----
          buff cache
  b
     swpd
          free
                             SO
                                 bi
                                      bo
                                          in
                                             cs us sy id wa st
1
  0
       0 1516308 152916 757756
                                 1039
                                      245
                                          227
                                             440 5
                                                   3 90 1
```

A "vmstat" parancs opciói nélkül átlagokat listáz az utolsó bekapcsolás óta

```
simon28@simon28-VirtualBox:~$ vmstat -m
vmstat: your kernel does not support slabinfo or your permissions are insufficie
nt
simon28@simon28-VirtualBox:~$ vmstat -a
             ----memory------cpu-----io-----system-----cpu-----
procs -----
            free inact active
                                         bi
                                                 bo in
   b
       swpd
                                                          cs us sy id wa st
          0 1521080 578952 771696
                                   0
                                        0
                                            492
                                                      132
                                                          252 3 2 95
```

Az -m opciója nem fordul le nekem a virtualboxon(valoszinuleg hozzaferesi problemak miatt) A -a opció ugyan azt eredményezi mint az opció nélküli parancs

```
simon28@simon28-VirtualBox:-$ w
10:03:08 up 18 min, 1 user, load average: 0,05, 0,05, 0,11
USER TTY FROM LOGIN@ IDLE JCPU PCPU WHAT
simon28 tty7 :0 09:45 17:48 6.36s 0.56s cinnamon-sessio
simon28@simon28-VirtualBox:-$
```

A "w" parancs kilistázza a felhasználókat és azok néhány adatát :erőforrás felhasználásuk, belépés ideje, jelenlegi aktivitásuk.

```
simon28@simon28-VirtualBox:~$ w simon28

10:05:13 up 20 min, 1 user, load average: 0,00, 0,03, 0,09

USER TTY FROM LOGIN@ IDLE JCPU PCPU WHAT

simon28 tty7 :0 09:45 19:53 6.55s 0.56s cinnamon-sessio

simon28@simon28-VirtualBox:~$ w xzy

10:05:18 up 20 min, 1 user, load average: 0,00, 0,03, 0,09

USER TTY FROM LOGIN@ IDLE JCPU PCPU WHAT

simon28@simon28-VirtualBox:~$
```

Megfigyelésem szerint a "w" parancs után írt szó kulcsszóként működik és szűrést hajt végre a találatok közt.

```
simon28@simon28-VirtualBox:~$ who
simon28 tty7 2021-03-04 09:45 (:0)
simon28@simon28-VirtualBox:~$ whoami
simon28
simon28@simon28-VirtualBox:~$
```

Egyébb hasonló parancsok. Kevesebb adatot adnak mint a "w" parancs.

```
simon28@simon28-VirtualBox:~$ uname
Linux
simon28@simon28-VirtualBox:~$
```

uname parancs a kernell nevét írja ki, egyébb opcióival eltérő információkat érhetünk el:

```
The options are as follows:
```

- -s, (--kernel-name) Prints the kernel name.
- -n, (--nodename) Prints the system's node name (hostname). This is the name the system uses when communicating over the network. When used with the -n option, uname produces the same output as the hostname command.
- -r, (--kernel-release) Prints the kernel release.
- -v, (--kernel-version) Prints the kernel version.
- -m, (--machine) Prints the name of the machine's hardware name.
- -p, (--processor) Prints the architecture of the processor.
- -i, (--hardware-platform) Prints the hardware platform.
- -o, (--operating-system) Print the name of the operating system. On Linux systems that is "GNU/Linux"
- -a, (--all) When the -a option is used, uname behaves the same as if the -snrvmo options have been given.

```
simon28@simon28-VirtualBox:~$ ps

PID TTY TIME CMD

1657 pts/0 00:00:00 bash

1702 pts/0 00:00:00 ps
```

ps parancs avagy Process Status a jelenleg futó processzekről nyújt informaciókat.

```
imon28@simon28-VirtualBox:-$ ps -A
   PID TTY
                    TIME CMD
                00:00:01 systemd
                00:00:00 kthreadd
     2 ?
                00:00:00 rcu gp
                00:00:00 rcu par gp
                00:00:00 kworker/0:0H-kblockd
                00:00:00 mm percpu wq
                00:00:00 ksoftirqd/0
    10 ?
                00:00:00 rcu sched
    11 ?
    12 7
                00:00:00 migration/0
    13 ?
                00:00:00 idle inject/0
    14 ?
                00:00:00 cpuhp/0
    15 ?
                00:00:00 cpuhp/1
               00:00:00 idle inject/l
    16 ?
    17 ?
                00:00:00 migration/1
    18 ?
                00:00:00 ksoftirqd/1
    20 ?
                00:00:00 kworker/1:0H-kblockd
    21 ?
                00:00:00 kdevtmpfs
    22 ?
                00:00:00 netns
                00:00:00 rcu tasks kthre
    23 ?
    24
                00:00:00 kauditd
```

Kilistázza az összes process-t.

simo	n28@simo	n28-Virt	ualBox	:~\$	s ps	-Al							
F S	UID	PID	PPID	C	PRI	NI	ΑD	DR SZ	WC	CHAN	TTY	TIME	CMD
4 S	0	1	θ	Θ	80	0		41882			?	00:00:01	systemd
1 S	0	2	θ	Θ	80	0		0			?	00:00:00	kthreadd
1 I	0	3	2	Θ	60	-20		Θ			?	00:00:00	
1 I	0	4	2	0	60	-20		0			?	00:00:00	rcu_par_gp
1 I	0	6	2	Θ	60	-20		Θ			?		kworker/0:
1 I	0	9	2	Θ	60	-20		0			?	00:00:00	mm_percpu_
1 5	Θ	10	2	Θ	80	0		Θ			?		ksoftirqd/
1 I	0	11	2	Θ	80	Θ		Θ			?	00:00:00	rcu_sched
1 S	0	12	2	Θ	-40			0			?	00:00:00	migration/
5 S	Θ	13	2	Θ	9			Θ			?		idle_injec
1 S	0	14	2	Θ	80	0		Θ			?	00:00:00	cpuhp/0
1 5	0	15	2	Θ	80	0		Θ			?	00:00:00	
5 S	0	16	2	Θ	9			Θ			?	00:00:00	idle_injec
1 S	0	17	2	Θ	-40			0			?	00:00:00	migration/
1 S	Θ	18	2	Θ	80	Θ		Θ			?	00:00:00	ksoftirqd/
1 I	0	20	2	Θ	60	-20		0			?	00:00:00	kworker/1:
5 S	0	21	2	Θ	80	0		Θ			?	00:00:00	kdevtmpfs
1 I	0	22	2	Θ	60	-20		Θ			?	00:00:00	netns
1 S	0	23	2	0	80	0		0			?	00:00:00	rcu_tasks_
1 5	Θ	24	2	Θ	80	Θ		Θ			?	00:00:00	kauditd

Kilistázza az összes process-t adicionális információkkal.

```
simon28@simon28-VirtualBox:~$ ps -AlF
F S UID
                 PID
                       PPID C PRI NI ADDR SZ WCHAN
                                                         RSS PSR STIME TTY
   TIME CMD
4 S root
                           0 80
                                      0 - 41882 -
                                                       11580
                                                               0 09:45 ?
00:00:01 /sbin/init splash
1 S root
                           0 0 80
                                      0 -
                                              Θ-
                                                           θ
                                                               1 09:45 ?
00:00:00
        [kthreadd]
                           2 0 60 - 20 -
                                              0 -
                                                           Θ
                                                               0 09:45 ?
1 I root
                   3
00:00:00 [rcu_gp]
                   4
                           2 0 60 - 20 -
                                              Θ-
                                                           θ
                                                               0 09:45 ?
1 I root
00:00:00 [rcu_par_gp]
1 I root
                                              Θ-
                                                           θ
                                                               0 09:45 ?
        [kworker/0:0H-kblockd]
00:00:00
1 I root
                                 60 - 20 -
                                              Θ-
                                                           θ
                                                               0 09:45 ?
00:00:00 [mm_percpu_wq]
1 S root
                  10
                                 80
                                      0 -
                                              Θ -
                                                           θ
                                                               0 09:45 ?
00:00:00 [ksoftirqd/0]
1 I root
                  11
                           2 0
                                 80
                                      0 -
                                              0 -
                                                           Θ
                                                               0 09:45 ?
00:00:00
        [rcu_sched]
1 S root
                  12
                           2 0 -40
                                              Θ-
                                                               0 09:45 ?
                                                           θ
00:00:00 [migration/0]
5 S root
                           2 0
                                  9
                                              Θ-
                                                           θ
                                                               0 09:45 ?
                 13
00:00:00 [idle inject/0]
                           2 0 80
                                                           θ
                                                               0 09:45 ?
1 S root
                14
```

Kilistázza egyes process-eket adicionális információkkal.

simon28@s	imon28-VirtualBox	:~\$	ps	-A1	.FH							
F S UID		ID	Ċ	PRI	NI	ADDR	SZ	WCHAN	RSS	PSR	STIME	TTY
TIME												
	2	Θ	0	80	0		Θ		Θ	1	09:45	?
	[kthreadd]											
		2	Θ	60	-20		Θ		θ	0	09:45	?
00:00:00												
1 I root		2	Θ	60	-20		Θ		θ	Θ	09:45	?
00:00:00												
1 I root					-20		Θ		Θ	Θ	09:45	?
00:00:00	[kworker/0:0H-k											
1 I root	. 9	2	0	60	-20		Θ		Θ	0	09:45	?
00:00:00	·											
1 S root	10	2	Θ	80	Θ		Θ		Θ	0	09:45	?
00:00:00	[ksoftirqd/0]											- 1
1 I root	11	2	Θ	80	Θ		Θ		Θ	1	09:45	?
00:00:00	[rcu_sched]											•
1 S root	12	2	Θ	-40			Θ		θ	0	09:45	?
00:00:00	[migration/0]											
5 S root	13	2	0	9			Θ		Θ	Θ	09:45	?
00:00:00	[idle_inject/0]											
1 S root	14	2	0	80	0		0		Θ	0	09:45	?
00:00:00	[cpuhp/0]											

Kilistázza a szálakat.

```
simon28@simon28-VirtualBox:~$ ps ax
PID TTY STAT TIME COMMAND
                             0:01 /sbin/init splash
                             0:00 [kthreadd]
       2 ?
                           0:00 [rcu_gp]
                   I< 0:00 [rcu_par_gp]
I< 0:00 [kworker/0:0H-kblockd]
I< 0:00 [mm_percpu_wq]
       4 ?
                   I<
       6 ?
       9 ?
      10 7
                             0:00 [ksoftirqd/0]
      11 ?
                             0:00 [rcu sched]
                             0:00 [migration/0]
     13 ?
14 ?
15 ?
                             0:00 [idle_inject/0]
                             0:00
                                    [cpuhp/0]
                           0:00 [cpuhp/1]
0:00 [idle_inject/1]
      16 ?
                           0:00 [migration/1]
      18 ?
                             0:00 [ksoftirqd/1]
      20 ?
21 ?
                             0:00 [kworker/1:0H-kblockd]
0:00 [kdevtmpfs]
                    I<
      22 ?
23 ?
                              0:00 [netns]
                     I<
                             0:00 [rcu_tasks_kthre]
0:00 [kauditd]
      24 ?
                             0:00 [khungtaskd]
```

Kilistázza a szerver összes processzét.

```
simon28@simon28-VirtualBox:-$ ps -ejH
   PID
          PGID
                    SID TTY
                                     TIME CMD
             0
                     0 ?
                                 00:00:00 kthreadd
             0
                      0 7
                                 00:00:00
                                            rcu gp
                      0 ?
                                             rcu par gp
     4
             0
                                 00:00:00
                                             kworker/0:0H-kblockd
     6
             0
                      0
                                 00:00:00
     9
             0
                      0
                                 00:00:00
                                            mm percpu wq
    10
             θ
                      0 ?
                                 00:00:00
                                            ksoftirqd/0
                                 00:00:00
                                            rcu_sched
    12
             0
                                 00:00:00
                                            migration/0
    13
                                 00:00:00
                                             idle_inject/0
    14
                      0
                                 00:00:00
                                             cpuhp/0
    15
                      0 ?
                                             cpuhp/1
             0
                                 00:00:00
                      0 7
    16
             0
                                 00:00:00
                                            idle inject/1
    17
                                 00:00:00
                                            migration/1
    18
             0
                                 00:00:00
                                             ksoftirqd/1
             0
    20
                      0
                                 00:00:00
                                             kworker/1:0H-kblockd
    21
             θ
                      0
                                 00:00:00
                                             kdevtmpfs
    22
             0
                      0
                                 00:00:00
                                             netns
    23
                      0 ?
                                 00:00:00
                                             rcu tasks kthre
    24
             0
                      0
                                 00:00:00
                                             kauditd
    25
             0
                      0
                                 00:00:00
                                             khungtaskd
```

Kilistáz minden process-t a rendszerben valamilyen szűréssel.

```
simon28@simon28-VirtualBox:-$ pstree
            ModemManager---2*[{ModemManager}]
systemd-
           -NetworkManager---2*[{NetworkManager}]
           -accounts-daemon-2*[{accounts-daemon}]
           -acpid
           -agetty
           -avahi-daemon---avahi-daemon
           -colord--2*[{colord}]
           -cron
           -csd-printer---2*[{csd-printer}]
-cups-browsed---2*[{cups-browsed}]
           -cupsd
           -dbus-daemon
           -gnome-keyring-d---3*[{gnome-keyring-d}]
           -irqbalance---{irqbalance}
           -2*[kerneloops]
           -lightdm-
                                -{Xorg}
                       -lightdm---cinnamon-sessio--
                                                          -agent---2*[{agent}]
                                                          -applet.py
                                                          -blueberry-obex----3*[{blueberry+
-cinnamon-killer---3*[{cinnamon-+
                                                          -cinnamon-launch-
                                                                                -cinnamon---5*+
                                                          -cinnamon-taunch Cinnamon-+
-cinnamon-screen—3*[{cinnamon-+
```

Kilistázza a processz-fát

```
simon28@simon28-VirtualBox:-$ ps -p 1286 -o comm=
simon28@simon28-VirtualBox:-$ ps
PID TTY TIME CMD
1657 pts/0 00:00:00 bash
1734 pts/0 00:00:00 ps
simon28@simon28-VirtualBox:-$ ps -p 1657 -o comm=
bash
simon28@simon28-VirtualBox:-$
```

Nem volt 1286-os PID-vel rendelkező process.

```
simon28@simon28-VirtualBox:~$ ps -auxf | sort -nr -k 3 | head -5
            1100 0.9 4.6 3720548 143400 ?
simon28
                                                 Sl 09:45
                                                               0:28
__cinnamon --replace
             708 0.8 2.2 296136 70304 tty7
                                                 Ssl+ 09:45 0:26 \ /usr/lib/
root
xorg/Xorg -core :0 -seat seat0 -auth /var/run/lightdm/root/:0 -nolisten tcp vt7
novtswitch
simon28
            1650 0.3 1.3 467040 40048 ?
                                                 Ssl 09:57
                                                               0:08 \ /usr/libe
xec/gnome-terminal-server
            PID %CPU %MEM VSZ RSS TT
473 0.0 0.2 90552 6400 ?
USER
                                   RSS TTY
                                                 STAT START
                                                               TIME COMMAND
                                                 Ssl 09:45
                                                               0:00 /lib/systemd/
systemd+
systemd-timesyncd
simon28@simon28-VirtualBox:~$
```

CPU-t 5 legjobban megterhelő process adatai.

```
simon28@simon28-VirtualBox:~$ free
                                                          buff/cache
                                                                        available
              total
                           used
                                        free
                                                  shared
                                     1510608
Mem:
            3064428
                         608980
                                                    5908
                                                               944840
                                                                          2271988
           557020
                              Θ
                                     557020
Swap:
```

Hattertar hasznalati adatok.

```
simon28@simon28-VirtualBox: $ iostat
Linux 5.4.0-58-generic (simon28-VirtualBox)
                                                03/04/2021
                                                                 x86 64
2 CPU)
avg-cpu: %user
                  %nice %system %iowait %steal
                                                  %idle
           2,14
Device
                          kB read/s
                                       kB wrtn/s
                                                     kB dscd/s
                                                                             kB w
                   tps
                                                                  kB read
       kB dscd
rtn
                                                                   834503
```

Ki és bemeneti adatok.

```
simon28@simon28-VirtualBox:~$ sar
Cannot open /var/log/sysstat/sa04: No such file or directory
Please check if data collecting is enabled
simon28@simon28-VirtualBox:~$
```

"sar" parancs nem működik nálam

```
simon28@simon28-VirtualBox:-$ mpstat
Linux 5.4.0-58-generic (simon28-VirtualBox)
                                               03/04/2021
                                                               x86 64
2 CPU)
10:47:04 AM CPU
                   %usr
                          %nice
                                   %sys %iowait
                                                   %irq
                                                         %soft %steal %guest
 %gnice %idle
10:47:04 AM
                   2,09
                                                          8,18
simon28@simon28-VirtualBox:-$
```

```
Usage:
 pmap [options] PID [PID ...]
Options:
 -x, --extended
                                   show details
                                   show even more details
              WARNING: format changes according to /proc/PID/smaps
show everything the kernel provides
-rc read the default rc
 -c, --read-rc
 -C, --read-rc-from=<file> read the rc from file
 -n, --create-rc
 -n, --create-rc create new default rc
-N, --create-rc-to=<file> create new rc to file
              NOTE: pid arguments are not allowed with -n, -N
                                   show the device format
 -d, --device
 -q, --quiet
-p, --show-path
                                   do not display header and footer
                                   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).
simon28@simon28-VirtualBox:~$
```

"pmap" parancs csak egyébb opciók kiválasztásával működik