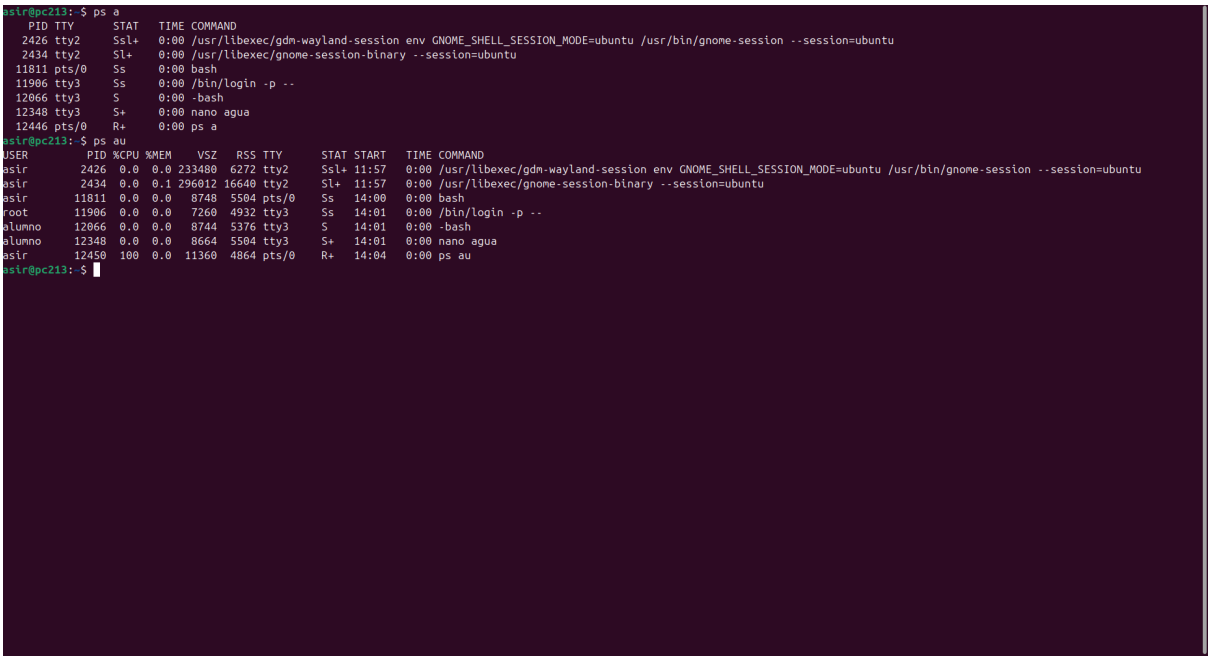
Monitorización de Linux

Cosas importantes de un servidor a monitorizar:

Procesos
Memoria ram
discos duros
Red

Ejercicios
Procesos (ps 1)
stat = R running
S = sleeping (+ en primer plano)
T = background



```
asir@pc213:~$ ps aux
USER         PID %CPU %MEM    VSZ   RSS TTY      STAT START   TIME COMMAND
root           1  0.1  0.0  23616 14080 ?        Ss   11:57   0:08 /sbin/init splash
root           2  0.0  0.0      0     0 ?        S    11:57   0:00 [kthreadd]
root           3  0.0  0.0      0     0 ?        S    11:57   0:00 [pool_workqueue_release]
root           4  0.0  0.0      0     0 ?        I<   11:57   0:00 [kworker/R-rcu_g]
root           5  0.0  0.0      0     0 ?        I<   11:57   0:00 [kworker/R-rcu_p]
root           6  0.0  0.0      0     0 ?        I<   11:57   0:00 [kworker/R-slub_]
root           7  0.0  0.0      0     0 ?        I<   11:57   0:00 [kworker/R-netns]
root           9  0.0  0.0      0     0 ?        I<   11:57   0:00 [kworker/0:0H-events_highpri]
root          12  0.0  0.0      0     0 ?        I<   11:57   0:00 [kworker/R-mm_pe]
root          13  0.0  0.0      0     0 ?        I    11:57   0:00 [rcu_tasks_kthread]
root          14  0.0  0.0      0     0 ?        I    11:57   0:00 [rcu_tasks_rude_kthread]
root          15  0.0  0.0      0     0 ?        I    11:57   0:00 [rcu_tasks_trace_kthread]
root          16  0.0  0.0      0     0 ?        S    11:57   0:00 [ksoftirqd/0]
root          17  0.0  0.0      0     0 ?        I    11:57   0:04 [rcu_preempt]
root          18  0.0  0.0      0     0 ?        S    11:57   0:00 [migration/0]
root          19  0.0  0.0      0     0 ?        S    11:57   0:00 [idle_inject/0]
root          20  0.0  0.0      0     0 ?        S    11:57   0:00 [cpuhp/0]
root          21  0.0  0.0      0     0 ?        S    11:57   0:00 [cpuhp/1]
root          22  0.0  0.0      0     0 ?        S    11:57   0:00 [idle_inject/1]
root          23  0.0  0.0      0     0 ?        S    11:57   0:00 [migration/1]
root          24  0.0  0.0      0     0 ?        S    11:57   0:00 [ksoftirqd/1]
root          26  0.0  0.0      0     0 ?        I<   11:57   0:00 [kworker/1:0H-events_highpri]
root          27  0.0  0.0      0     0 ?        S    11:57   0:00 [cpuhp/2]
root          28  0.0  0.0      0     0 ?        S    11:57   0:00 [idle_inject/2]
root          29  0.0  0.0      0     0 ?        S    11:57   0:00 [migration/2]
root          30  0.1  0.0      0     0 ?        S    11:57   0:12 [ksoftirqd/2]
root          32  0.0  0.0      0     0 ?        I<   11:57   0:00 [kworker/2:0H-events_highpri]
root          33  0.0  0.0      0     0 ?        S    11:57   0:00 [cpuhp/3]
root          34  0.0  0.0      0     0 ?        S    11:57   0:00 [idle_inject/3]
root          35  0.0  0.0      0     0 ?        S    11:57   0:00 [migration/3]
root          36  0.0  0.0      0     0 ?        S    11:57   0:00 [ksoftirqd/3]
root          38  0.0  0.0      0     0 ?        I<   11:57   0:00 [kworker/3:0H-events_highpri]
root          39  0.0  0.0      0     0 ?        S    11:57   0:00 [cpuhp/4]
root          40  0.0  0.0      0     0 ?        S    11:57   0:00 [idle_inject/4]
root          41  0.0  0.0      0     0 ?        S    11:57   0:00 [migration/4]
root          42  0.0  0.0      0     0 ?        S    11:57   0:00 [ksoftirqd/4]
root          44  0.0  0.0      0     0 ?        I<   11:57   0:00 [kworker/4:0H-events_highpri]
root          45  0.0  0.0      0     0 ?        S    11:57   0:00 [cpuhp/5]
root          46  0.0  0.0      0     0 ?        S    11:57   0:00 [idle_inject/5]
root          47  0.0  0.0      0     0 ?        S    11:57   0:00 [migration/5]
root          48  0.0  0.0      0     0 ?        S    11:57   0:00 [ksoftirqd/5]
root          50  0.0  0.0      0     0 ?        I<   11:57   0:00 [kworker/5:0H-events_highpri]
root          51  0.0  0.0      0     0 ?        S    11:57   0:00 [cpuhp/6]
```

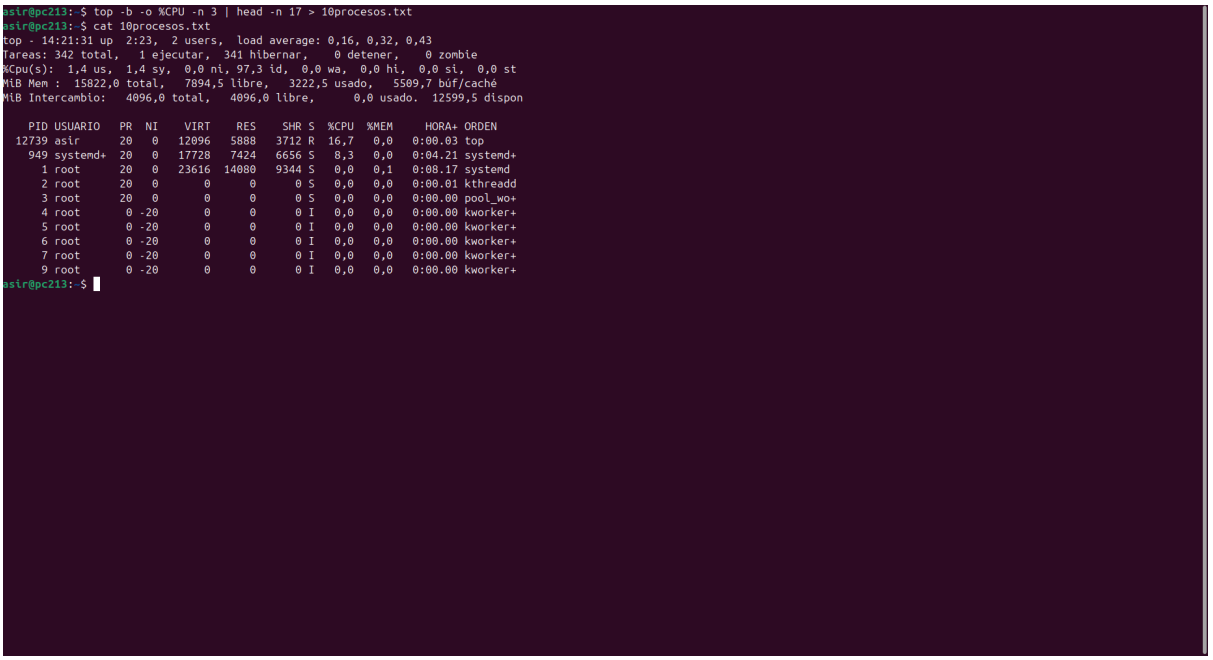
ps -C “Nombre del proceso”

```
asir@pc213:~$ ps u -C nano
USER         PID %CPU %MEM    VSZ   RSS TTY      STAT START   TIME COMMAND
alumno     12348  0.0  0.0   8664  5504 tty3     S+   14:01   0:00 nano agua
asir@pc213:~$
```

5 procesos que mas cpu consumen (Para entregar)

top
control + M = ordenar con memoria
control + p = CPU
control + P = PID
salir (q)

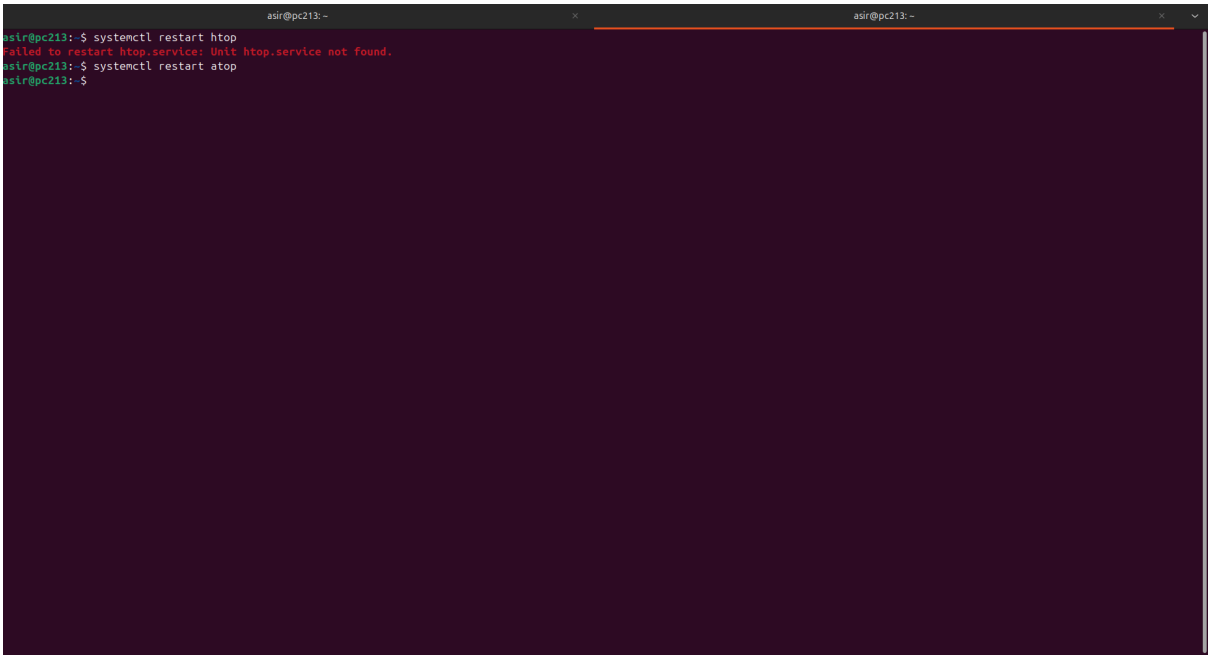
como hago que el comando top de linux me mande los 10 procesos que mas cpu consumen y en 3 periodos consecutivos

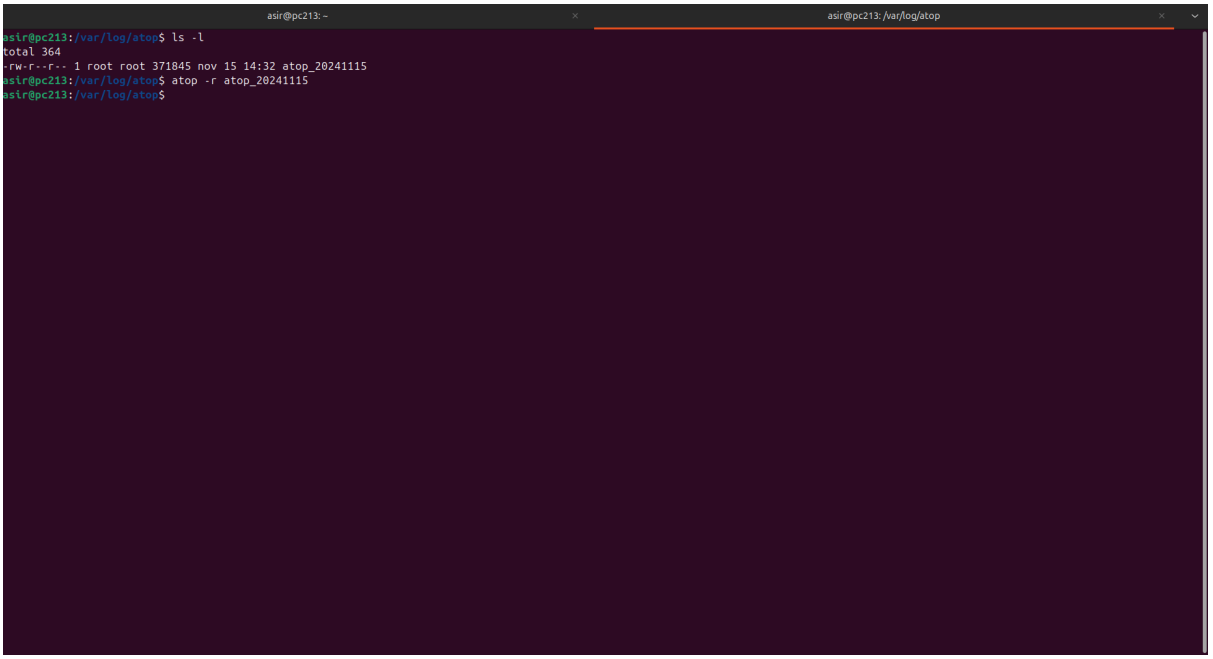


htop

atop fichero de configuración

(es un servicio, asi que hay que actualizarlo)





(d minuscula se ven los procesos)

Practicas con la memoria

```
asir@pc213:~$ free
               total        usado       libre  compartido   búf/caché  disponible
Mem:        16201704     3846892     6754060      529036     6476720    12354812
Inter:       4194300           0     4194300
asir@pc213:~$ free -h
               total        usado       libre  compartido   búf/caché  disponible
Mem:            15Gi       3,2Gi       6,9Gi       445Mi       6,1Gi        12Gi
Inter:         4,0Gi          0B       4,0Gi
asir@pc213:~$ free -s 3
               total        usado       libre  compartido   búf/caché  disponible
Mem:        16201704     3278420     7306508      452512     6416216    12923284
Inter:       4194300           0     4194300

               total        usado       libre  compartido   búf/caché  disponible
Mem:        16201704     3261444     7323468      434624     6398344    12940260
Inter:       4194300           0     4194300

               total        usado       libre  compartido   búf/caché  disponible
```

comando con la memoria (-s 3) se refresca

df -h para ver lo que está montado

```
asir@pc213:~$ df -h
S.ficheros     Tamaño Usados  Disp Uso% Montado en
tmpfs            1,6G   3,0M  1,6G   1% /run
/dev/nvme0n1p2   457G   376G   58G  87% /
tmpfs            7,8G    65M  7,7G   1% /dev/shm
tmpfs            5,0M   8,0K  5,0M   1% /run/lock
efivarfs         192K    35K  153K  19% /sys/firmware/efi/efivars
/dev/nvme0n1p1   1,1G   6,2M  1,1G   1% /boot/efi
tmpfs            1,6G   132K  1,6G   1% /run/user/1000
asir@pc213:~$ dh -h /
No se ha encontrado la orden «dh», pero se puede instalar con:
sudo apt install debhelper
asir@pc213:~$ df -h /
S.ficheros     Tamaño Usados  Disp Uso% Montado en
/dev/nvme0n1p2   457G   376G   58G  87% /
asir@pc213:~$
```

listar todo el sistema y ver que pesa cada cosa:

```
du: no se puede acceder a '/proc/52513/fd/3': No existe el archivo o el directorio
0       /proc/52513/fd
0       /proc/52513/map_files
du: no se puede acceder a '/proc/52513/fdinfo/3': No existe el archivo o el directorio
0       /proc/52513/fdinfo
0       /proc/52513/ns
0       /proc/52513/net/stat
0       /proc/52513/net/dev_snmp6
0       /proc/52513/net/netfilter
0       /proc/52513/net
0       /proc/52513/attr/smack
0       /proc/52513/attr/apparmor
0       /proc/52513/attr
0       /proc/52513
0       /proc
379G    /
asir@pc213:~$ ^C
asir@pc213:~$ du -h /
```

```
asir@pc213:~$ sudo du -hs /
du: no se puede acceder a '/run/user/1000/doc': Permiso denegado
du: no se puede acceder a '/run/user/1000/gvfs': Permiso denegado
du: no se puede acceder a '/proc/52534/task/52534/fd/4': No existe el archivo o el director
io
du: no se puede acceder a '/proc/52534/task/52534/fdinfo/4': No existe el archivo o el dire
ctorio
du: no se puede acceder a '/proc/52534/fd/3': No existe el archivo o el directorio
du: no se puede acceder a '/proc/52534/fdinfo/3': No existe el archivo o el directorio
379G    /
asir@pc213:~$ sudo du -hs /home
361G    /home
asir@pc213:~$
```

-s (para indicar el total del directorio)
información de o que ocupa cada directorio:

```
asir@pc213:~$ sudo du -hs /home/*
292K    /home/2smra
3,4M    /home/alumno
361G    /home/asir
asir@pc213:~$ sudo du -h --max-depth=1 /home/
3,4M    /home/alumno
292K    /home/2smra
361G    /home/asir
361G    /home/
asir@pc213:~$
```

Tamaño de discos:

```
asir@pc213:~$ iostat -m
Linux 6.8.0-48-generic (pc213)  25/11/24        _x86_64_        (12 CPU)

avg-cpu:  %user   %nice %system %iowait  %steal   %idle
           0,08    0,00    0,07    0,01    0,00   99,84

Device             tps    MB_read/s    MB_wrtn/s    MB_dscd/s    MB_read    MB_wrtn    MB_d
scd
loop0             0,00         0,00         0,00         0,00          0          0
  0
loop1             0,00         0,00         0,00         0,00          1          0
  0
loop10            0,00         0,00         0,00         0,00          0          0
  0
loop11            0,00         0,00         0,00         0,00          0          0
  0
loop12            0,00         0,00         0,00         0,00          0          0
  0
loop13            0,00         0,00         0,00         0,00          0          0
  0
loop14            0,00         0,00         0,00         0,00          0          0
  0
loop2             0,00         0,00         0,00         0,00          6          0
  0
loop3             0,00         0,00         0,00         0,00          1          0
  0
loop4             0,00         0,00         0,00         0,00          0          0
  0
loop5             0,00         0,00         0,00         0,00          2          0
  0
loop6             0,00         0,00         0,00         0,00         23          0
  0
loop7             0,01         0,00         0,00         0,00         11          0
  0
loop8             0,00         0,00         0,00         0,00          0          0
  0
loop9             0,00         0,00         0,00         0,00          0          0
  0
nvme0n1           1,46         0,01         0,02         0,16       3129      10908      90
504
sda               0,00         0,00         0,00         0,00         10          0
  0


asir@pc213:~$
```

```
loop1            0,00         0,00         0,00         0,00          1          0
loop10           0,00         0,00         0,00         0,00          0          0
loop11           0,00         0,00         0,00         0,00          0          0
loop12           0,00         0,00         0,00         0,00          0          0
loop13           0,00         0,00         0,00         0,00          0          0
loop14           0,00         0,00         0,00         0,00          0          0
loop2            0,00         0,00         0,00         0,00          6          0
loop3            0,00         0,00         0,00         0,00          1          0
loop4            0,00         0,00         0,00         0,00          0          0
loop5            0,00         0,00         0,00         0,00          2          0
loop6            0,00         0,00         0,00         0,00         23          0
loop7            0,01         0,00         0,00         0,00         11          0
loop8            0,00         0,00         0,00         0,00          0          0
loop9            0,00         0,00         0,00         0,00          0          0
nvme0n1          1,46         0,01         0,02         0,16       3129      10917      905
sda              0,00         0,00         0,00         0,00         10          0


asir@pc213:~$ iostat -mh
Linux 6.8.0-48-generic (pc213)  25/11/24        _x86_64_        (12 CPU)

avg-cpu:  %user   %nice %system %iowait  %steal   %idle
           0,1%    0,0%    0,1%    0,0%    0,0%   99,8%

      tps     MB_read/s     MB_wrtn/s     MB_dscd/s     MB_read     MB_wrtn     MB_dscd Device
     0,00          0,0k          0,0k          0,0k       17,0k        0,0k        0,0k loop0
     0,00          0,0k          0,0k          0,0k        2,0M        0,0k        0,0k loop1
     0,00          0,0k          0,0k          0,0k      367,0k        0,0k        0,0k loop10
     0,00          0,0k          0,0k          0,0k      440,0k        0,0k        0,0k loop11
     0,00          0,0k          0,0k          0,0k       55,0k        0,0k        0,0k loop12
     0,00          0,0k          0,0k          0,0k      335,0k        0,0k        0,0k loop13
     0,00          0,0k          0,0k          0,0k      154,0k        0,0k        0,0k loop14
     0,00          0,0k          0,0k          0,0k        6,0M        0,0k        0,0k loop2
     0,00          0,0k          0,0k          0,0k        1,1M        0,0k        0,0k loop3
     0,00          0,0k          0,0k          0,0k      347,0k        0,0k        0,0k loop4
     0,00          0,0k          0,0k          0,0k        2,0M        0,0k        0,0k loop5
     0,00          0,0k          0,0k          0,0k       23,7M        0,0k        0,0k loop6
     0,01          0,0k          0,0k          0,0k       11,3M        0,0k        0,0k loop7
     0,00          0,0k          0,0k          0,0k      380,0k        0,0k        0,0k loop8
     0,00          0,0k          0,0k          0,0k      347,0k        0,0k        0,0k loop9
     1,46          5,6k         19,5k        161,4k        3,1G       10,7G       88,4G nvme0n1
     0,00          0,0k          0,0k          0,0k       10,4M        0,0k        0,0k sda


asir@pc213:~$
```

```
loop14           0,00         0,00         0,00         0,00       154          0
loop2            0,00         0,01         0,00         0,00      6154          0
loop3            0,00         0,00         0,00         0,00      1152          0
loop4            0,00         0,00         0,00         0,00       347          0
loop5            0,00         0,00         0,00         0,00      2061          0
loop6            0,00         0,04         0,00         0,00     24309          0
loop7            0,01         0,02         0,00         0,00     11612          0
loop8            0,00         0,00         0,00         0,00       380          0
loop9            0,00         0,00         0,00         0,00       347          0
nvme0n1          1,46         5,58        19,51       161,36   3204779   11204673   926767
sda              0,00         0,02         0,00         0,00     10694          0


asir@pc213:~$ iostat -x nvme0n1
Linux 6.8.0-48-generic (pc213)  25/11/24        _x86_64_        (12 CPU)

avg-cpu:  %user   %nice %system %iowait  %steal   %idle
          0,08    0,00    0,07    0,01    0,00   99,84

Device            r/s     rkB/s   rrqm/s  %rrqm r_await rareq-sz     w/s     wkB/s   wrqm/s
aqu-sz  %util
nvme0n1          0,21      5,58     0,05  19,36    0,13    26,38    1,19     19,51     0,73
  0,00   0,01


asir@pc213:~$ iostat -xh nvme0n1
Linux 6.8.0-48-generic (pc213)  25/11/24        _x86_64_        (12 CPU)

avg-cpu:  %user   %nice %system %iowait  %steal   %idle
          0,1%    0,0%    0,1%    0,0%    0,0%   99,8%

     r/s     rkB/s   rrqm/s  %rrqm r_await rareq-sz Device
    0,21      5,6k     0,05  19,4%    0,13    26,4k nvme0n1

     w/s     wkB/s   wrqm/s  %wrqm w_await wareq-sz Device
    1,19     19,5k     0,73  38,0%    0,56    16,4k nvme0n1

     d/s     dkB/s   drqm/s  %drqm d_await dareq-sz Device
    0,06    161,4k     0,00   0,0%    0,45     2,6M nvme0n1

     f/s f_await  aqu-sz  %util Device
    0,16    0,26    0,00   0,0% nvme0n1


asir@pc213:~$
```

```
          0,08    0,00    0,07    0,01    0,00   99,84

Device             tps    kB_read/s     kB_w+d/s    kB_read     kB_w+d
nvme0n1           1,46         5,58       180,86    3205291  103887629


avg-cpu:  %user   %nice %system %iowait  %steal   %idle
          0,33    0,00    0,08    0,00    0,00   99,58

Device             tps    kB_read/s     kB_w+d/s    kB_read     kB_w+d
nvme0n1           0,00         0,00         0,00          0          0


avg-cpu:  %user   %nice %system %iowait  %steal   %idle
          0,42    0,00    0,25    0,08    0,00   99,25

Device             tps    kB_read/s     kB_w+d/s    kB_read     kB_w+d
nvme0n1           0,00         0,00         0,00          0          0

^C
asir@pc213:~$ iostat -3 1 nvme0n1
Uso: iostat [ opciones ] [ <intervalo> [ <iteraciones> ] ]
Options are:
[ -c ] [ -d ] [ -h ] [ -k | -m ] [ -N ] [ -s ] [ -t ] [ -V ] [ -x ] [ -y ] [ -z ]
[ { -f | +f } <directory> ] [ -j { ID | LABEL | PATH | UUID | ... } ]
[ --compact ] [ --dec={ 0 | 1 | 2 } ] [ --human ] [ --pretty ] [ -o JSON ]
[ [ -H ] -g <group_name> ] [ -p [ <device> [,...] | ALL ] ]
[ <device> [...] | ALL ]
asir@pc213:~$ iostat -s 3 nvme0n1
Linux 6.8.0-48-generic (pc213)  25/11/24        _x86_64_        (12 CPU)

avg-cpu:  %user   %nice %system %iowait  %steal   %idle
          0,08    0,00    0,07    0,01    0,00   99,84

Device             tps    kB_read/s     kB_w+d/s    kB_read     kB_w+d
nvme0n1           1,46         5,58       180,86    3205291  103888473


avg-cpu:  %user   %nice %system %iowait  %steal   %idle
          0,19    0,00    0,08    0,06    0,00   99,67

Device             tps    kB_read/s     kB_w+d/s    kB_read     kB_w+d
nvme0n1           0,00         0,00         0,00          0          0
```

```
asir@pc213:~$ iostat -x sda
Linux 6.8.0-48-generic (pc213)  25/11/24        _x86_64_        (12 CPU)

avg-cpu:  %user   %nice %system %iowait  %steal   %idle
          0,08    0,00    0,07    0,01    0,00   99,84

Device            r/s     rkB/s   rrqm/s  %rrqm r_await rareq-sz     w/s     wkB/s   wrqm/s  %wrqm w_await wareq-sz     d/s     dkB/s   drqm/s  %drqm d_await dareq-sz     f/s f_await  aqu-sz  %util
sda              0,00      0,02     0,00   0,00    5,29    28,14    0,00      0,00     0,00   0,00    0,00     0,00    0,00      0,00     0,00   0,00    0,00     0,00    0,00    0,00    0,00   0,00

asir@pc213:~$
```

El % util y el awaits sube mientras descargas algo.

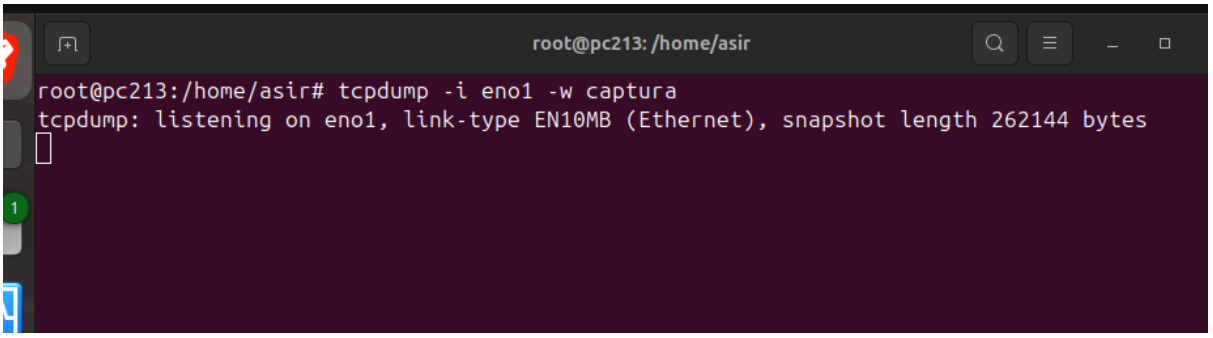
```
asir@pc213:~$ iostat -sx 1 nvme0n1
Linux 6.8.0-48-generic (pc213)  25/11/24        _x86_64_        (1

avg-cpu:  %user   %nice %system %iowait  %steal   %idle
           0,09    0,00    0,07    0,01    0,00   99,84

Device            tps      kB/s    rqm/s   await  areq-sz  aqu-sz
nvme0n1          1,49    188,29     0,79    0,49   126,39    0,00


avg-cpu:  %user   %nice %system %iowait  %steal   %idle
           4,19    0,00    0,67    0,17    0,00   94,97
```

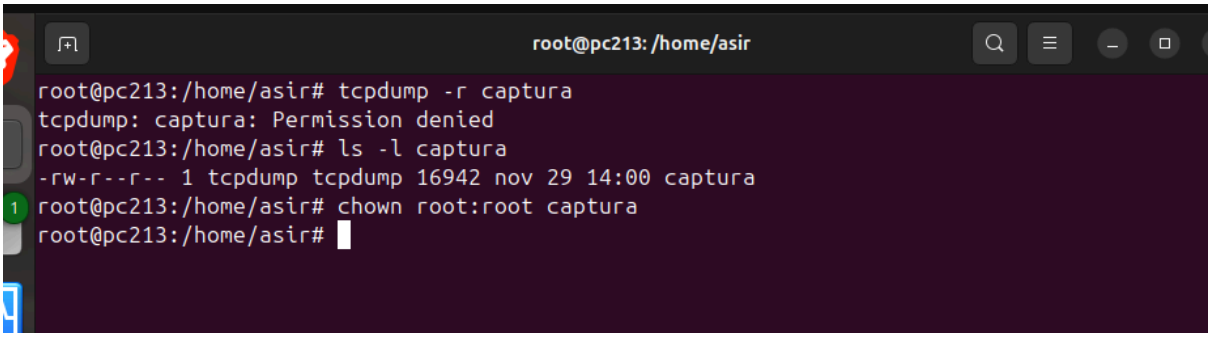
RED

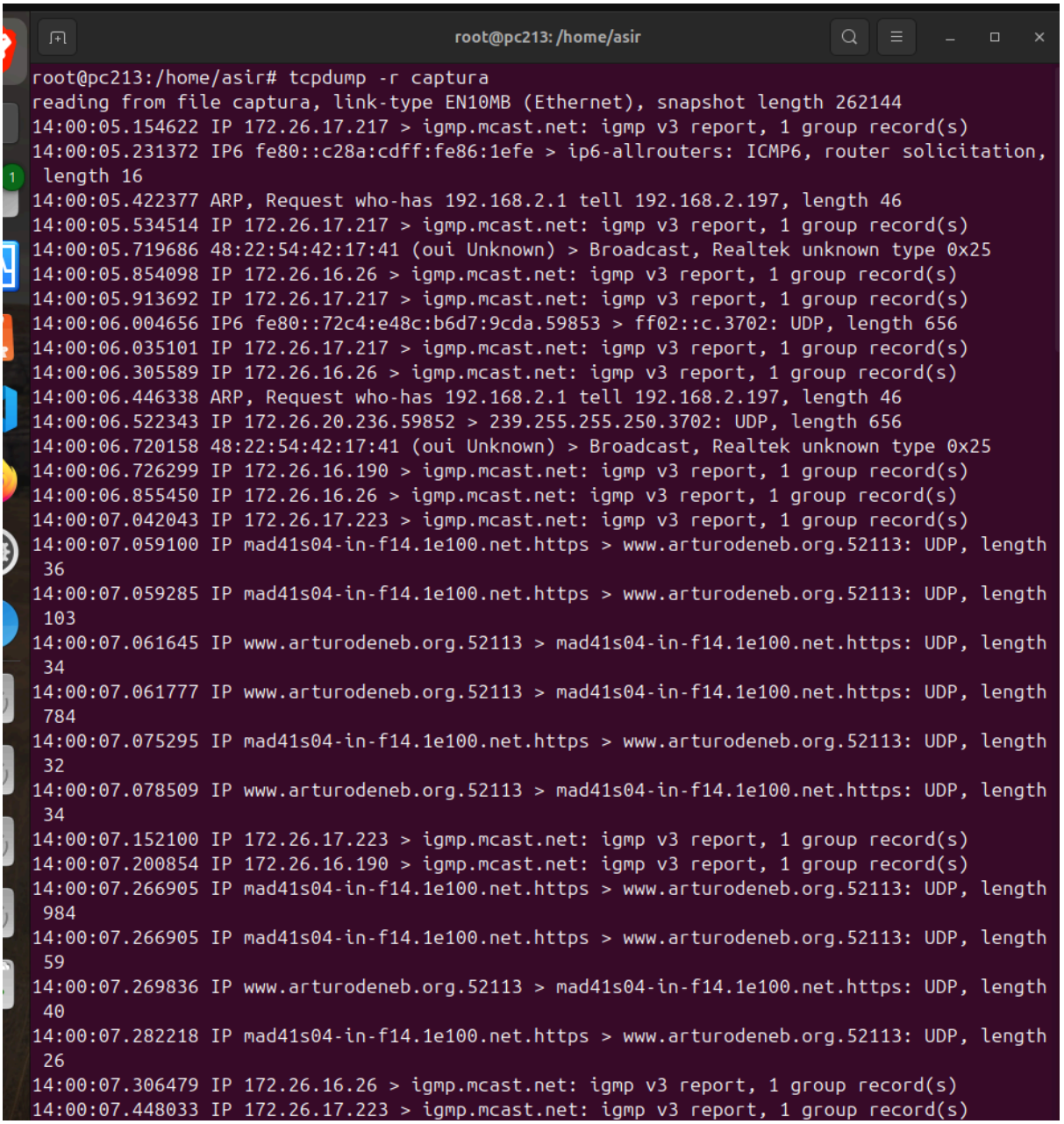
```
root@pc213: /home/
asir@pc213:~$ sudo su
[sudo] contraseña para asir:
root@pc213:/home/asir# tcpdump
```

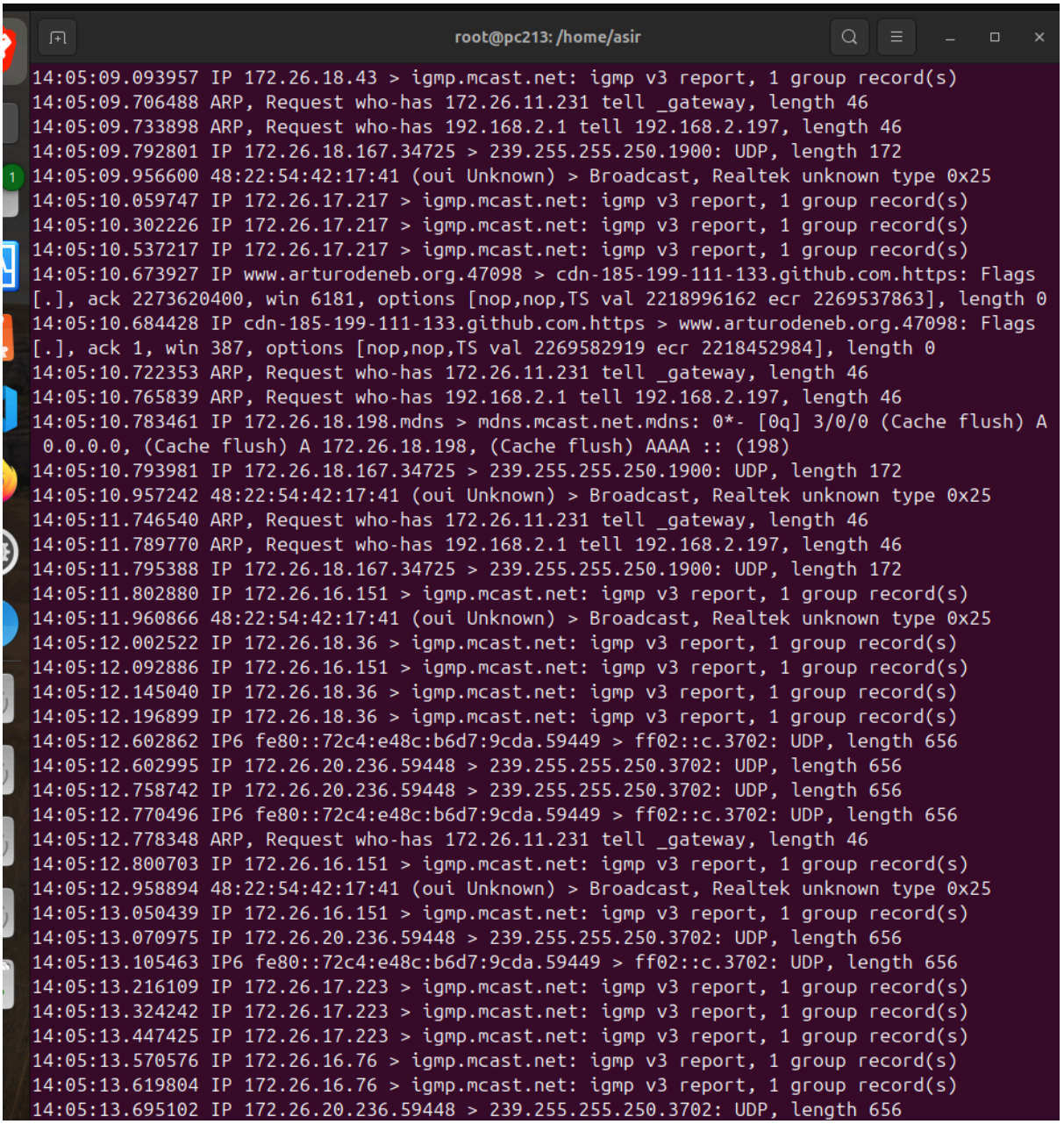
```
root@pc213:/home/asir# ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
       valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host noprefixroute
       valid_lft forever preferred_lft forever
2: eno1: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default q
len 1000
    link/ether f4:b5:20:40:52:72 brd ff:ff:ff:ff:ff:ff
    altname enp0s31f6
    inet 172.26.11.166/16 brd 172.26.255.255 scope global dynamic noprefixroute eno1
       valid_lft 69912sec preferred_lft 69912sec
3: wlp1s0: <BROADCAST,MULTICAST> mtu 1500 qdisc noop state DOWN group default qlen 1000
    link/ether 54:af:97:ce:15:10 brd ff:ff:ff:ff:ff:ff
4: docker0: <NO-CARRIER,BROADCAST,MULTICAST,UP> mtu 1500 qdisc noqueue state DOWN group def
ault
    link/ether 02:42:08:a6:16:25 brd ff:ff:ff:ff:ff:ff
    inet 172.17.0.1/16 brd 172.17.255.255 scope global docker0
       valid_lft forever preferred_lft forever
root@pc213:/home/asir# tcpdump -l eno1
```

para mandarlo a un fichero

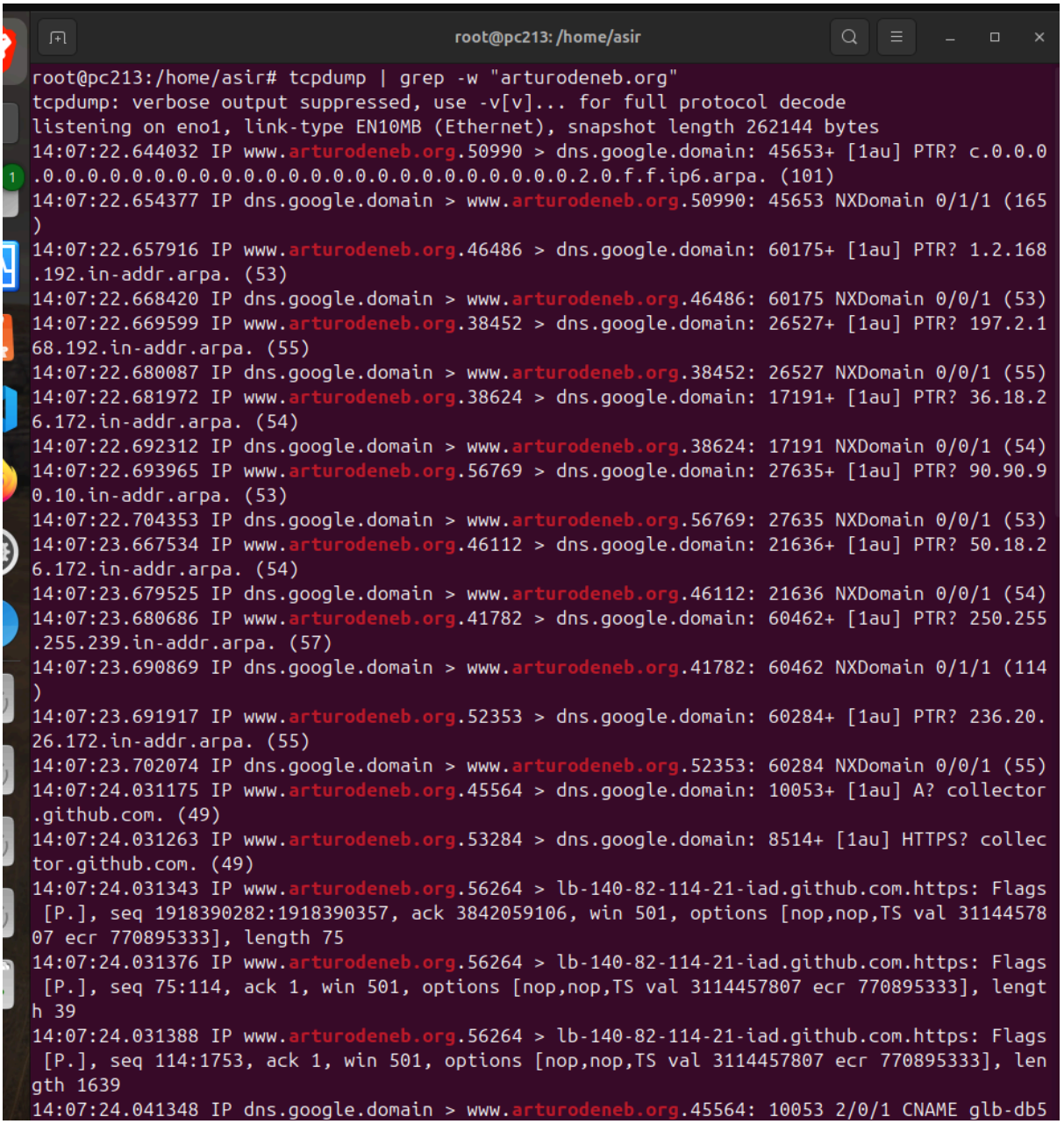




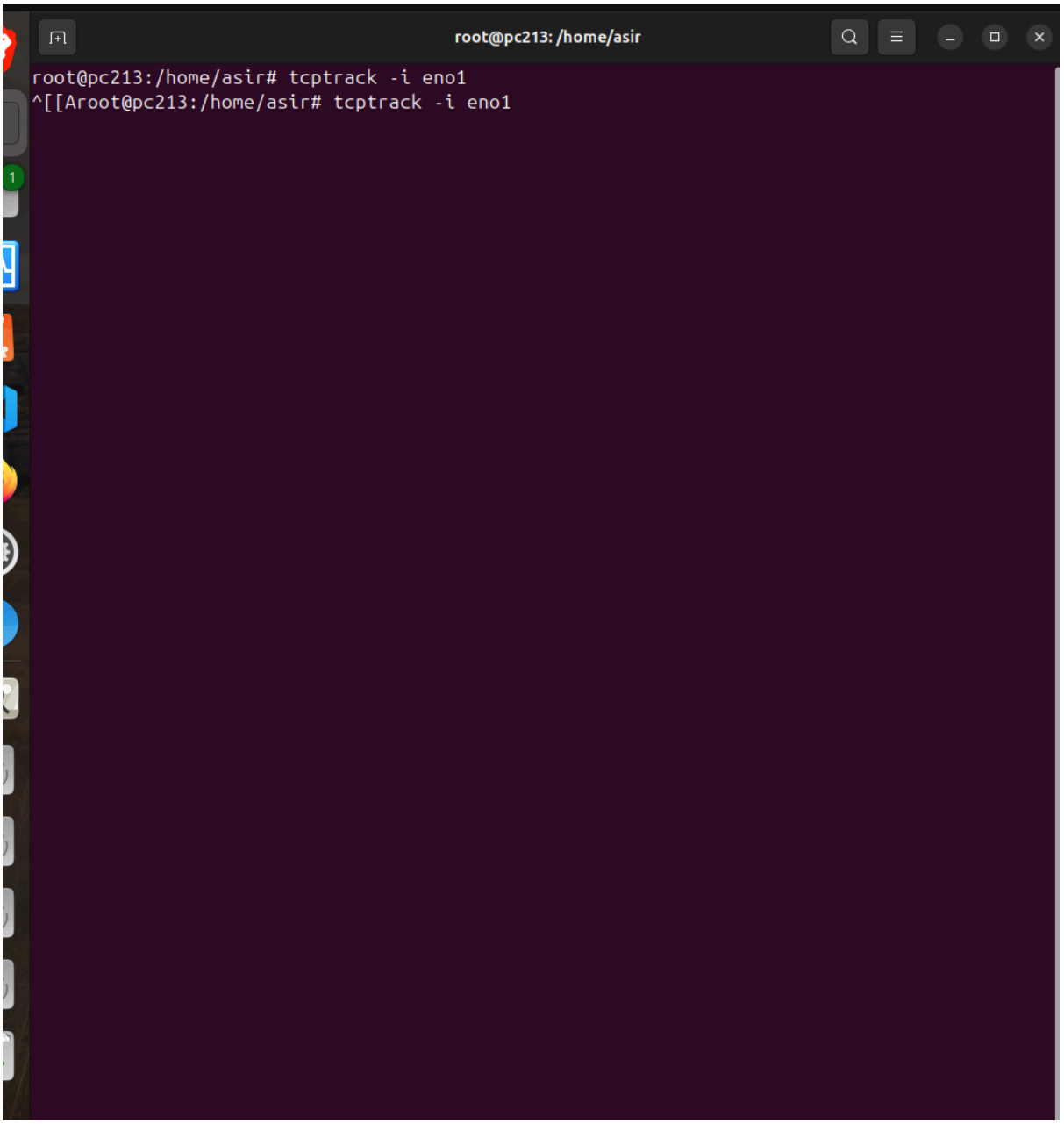

root@pc213: /home/asir
root@pc213:/home/asir# tcpdump -r captura
reading from file captura, link-type EN10MB (Ethernet), snapshot length 262144
14:00:05.154622 IP 172.26.17.217 > igmp.mcast.net: igmp v3 report, 1 group record(s)
14:00:05.231372 IP6 fe80::c28a:cdff:fe86:1efe > ip6-allrouters: ICMP6, router solicitation, length 16
14:00:05.422377 ARP, Request who-has 192.168.2.1 tell 192.168.2.197, length 46
14:00:05.534514 IP 172.26.17.217 > igmp.mcast.net: igmp v3 report, 1 group record(s)
14:00:05.719686 48:22:54:42:17:41 (oui Unknown) > Broadcast, Realtek unknown type 0x25
14:00:05.854098 IP 172.26.16.26 > igmp.mcast.net: igmp v3 report, 1 group record(s)
14:00:05.913692 IP 172.26.17.217 > igmp.mcast.net: igmp v3 report, 1 group record(s)
14:00:06.004656 IP6 fe80::72c4:e48c:b6d7:9cda.59853 > ff02::c.3702: UDP, length 656
14:00:06.035101 IP 172.26.17.217 > igmp.mcast.net: igmp v3 report, 1 group record(s)
14:00:06.305589 IP 172.26.16.26 > igmp.mcast.net: igmp v3 report, 1 group record(s)
14:00:06.446338 ARP, Request who-has 192.168.2.1 tell 192.168.2.197, length 46
14:00:06.522343 IP 172.26.20.236.59852 > 239.255.255.250.3702: UDP, length 656
14:00:06.720158 48:22:54:42:17:41 (oui Unknown) > Broadcast, Realtek unknown type 0x25
14:00:06.726299 IP 172.26.16.190 > igmp.mcast.net: igmp v3 report, 1 group record(s)
14:00:06.855450 IP 172.26.16.26 > igmp.mcast.net: igmp v3 report, 1 group record(s)
14:00:07.042043 IP 172.26.17.223 > igmp.mcast.net: igmp v3 report, 1 group record(s)
14:00:07.059100 IP mad41s04-in-f14.1e100.net.https > www.arturodeneb.org.52113: UDP, length 36
14:00:07.059285 IP mad41s04-in-f14.1e100.net.https > www.arturodeneb.org.52113: UDP, length 103
14:00:07.061645 IP www.arturodeneb.org.52113 > mad41s04-in-f14.1e100.net.https: UDP, length 34
14:00:07.061777 IP www.arturodeneb.org.52113 > mad41s04-in-f14.1e100.net.https: UDP, length 784
14:00:07.075295 IP mad41s04-in-f14.1e100.net.https > www.arturodeneb.org.52113: UDP, length 32
14:00:07.078509 IP www.arturodeneb.org.52113 > mad41s04-in-f14.1e100.net.https: UDP, length 34
14:00:07.152100 IP 172.26.17.223 > igmp.mcast.net: igmp v3 report, 1 group record(s)
14:00:07.200854 IP 172.26.16.190 > igmp.mcast.net: igmp v3 report, 1 group record(s)
14:00:07.266905 IP mad41s04-in-f14.1e100.net.https > www.arturodeneb.org.52113: UDP, length 984
14:00:07.266905 IP mad41s04-in-f14.1e100.net.https > www.arturodeneb.org.52113: UDP, length 59
14:00:07.269836 IP www.arturodeneb.org.52113 > mad41s04-in-f14.1e100.net.https: UDP, length 40
14:00:07.282218 IP mad41s04-in-f14.1e100.net.https > www.arturodeneb.org.52113: UDP, length 26
14:00:07.306479 IP 172.26.16.26 > igmp.mcast.net: igmp v3 report, 1 group record(s)
14:00:07.448033 IP 172.26.17.223 > igmp.mcast.net: igmp v3 report, 1 group record(s)

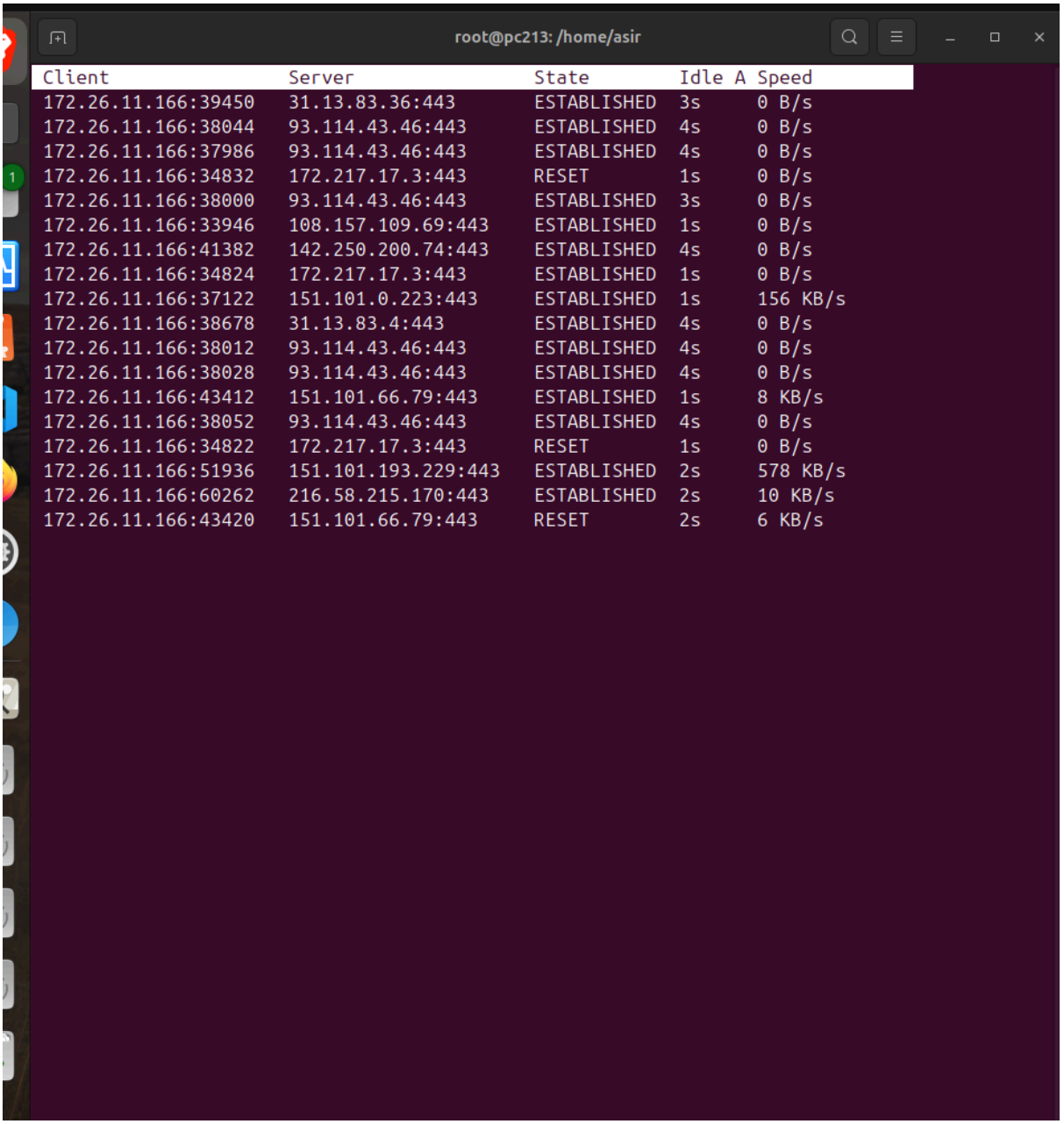


está aqui el github

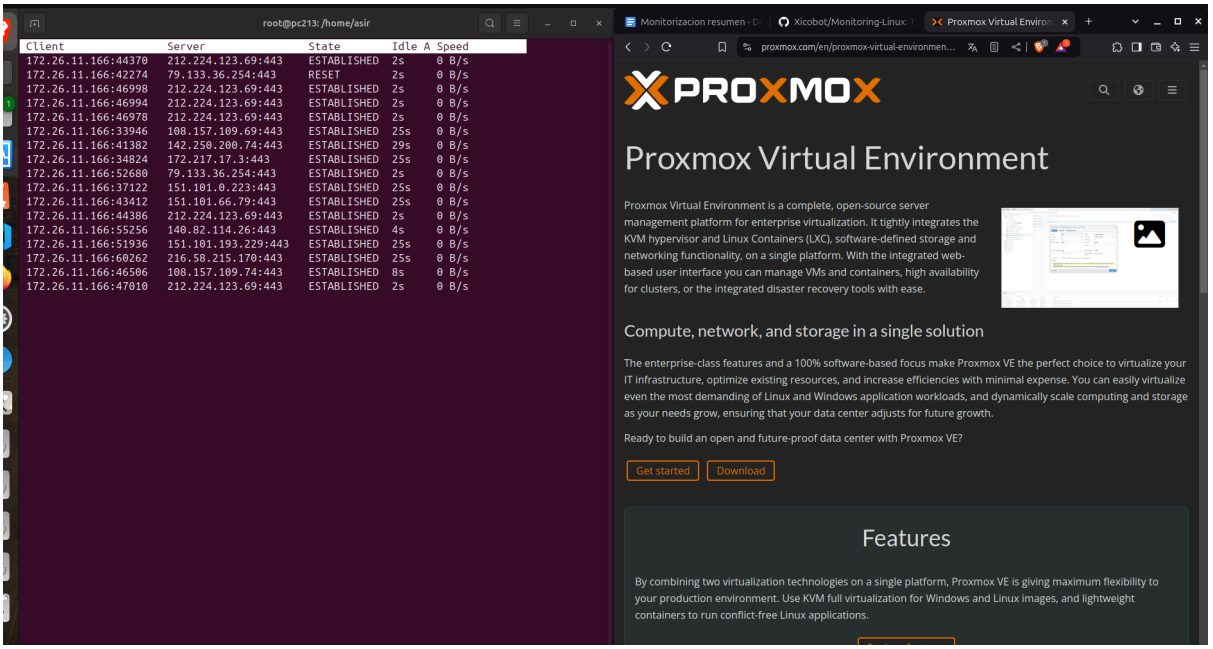


he puesto mi ip
tcptrack -i eno1

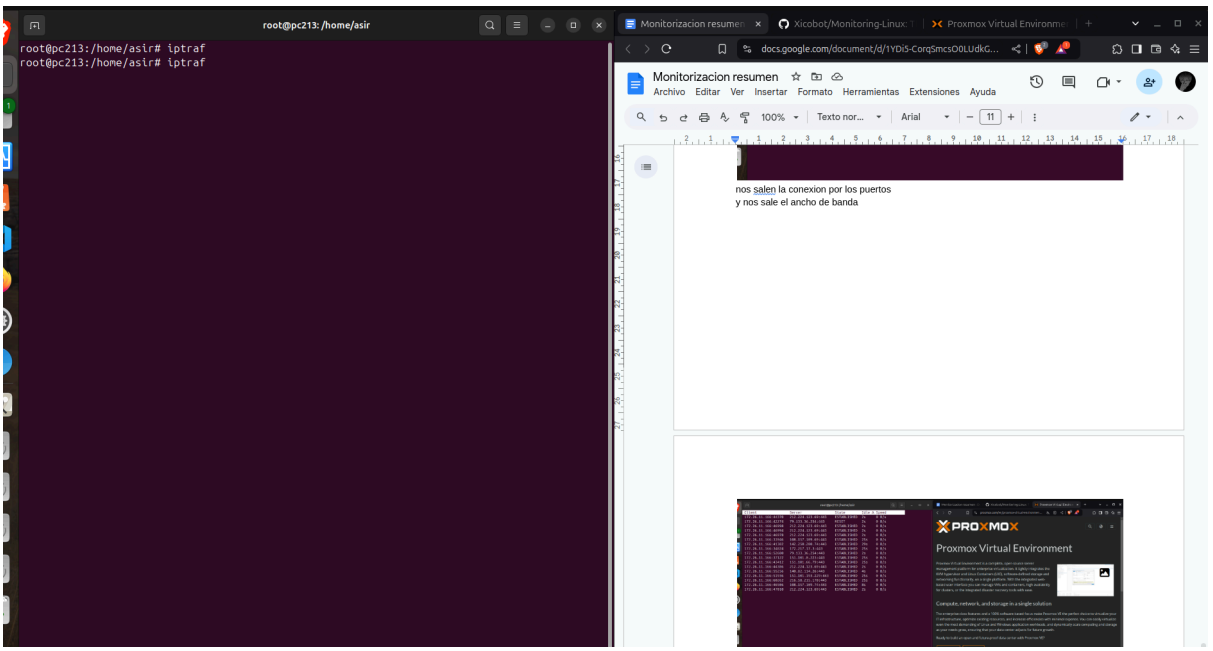

root@pc213: /home/asir
root@pc213:/home/asir# tcptrack -i eno1
^[[Aroot@pc213:/home/asir# tcptrack -i eno1

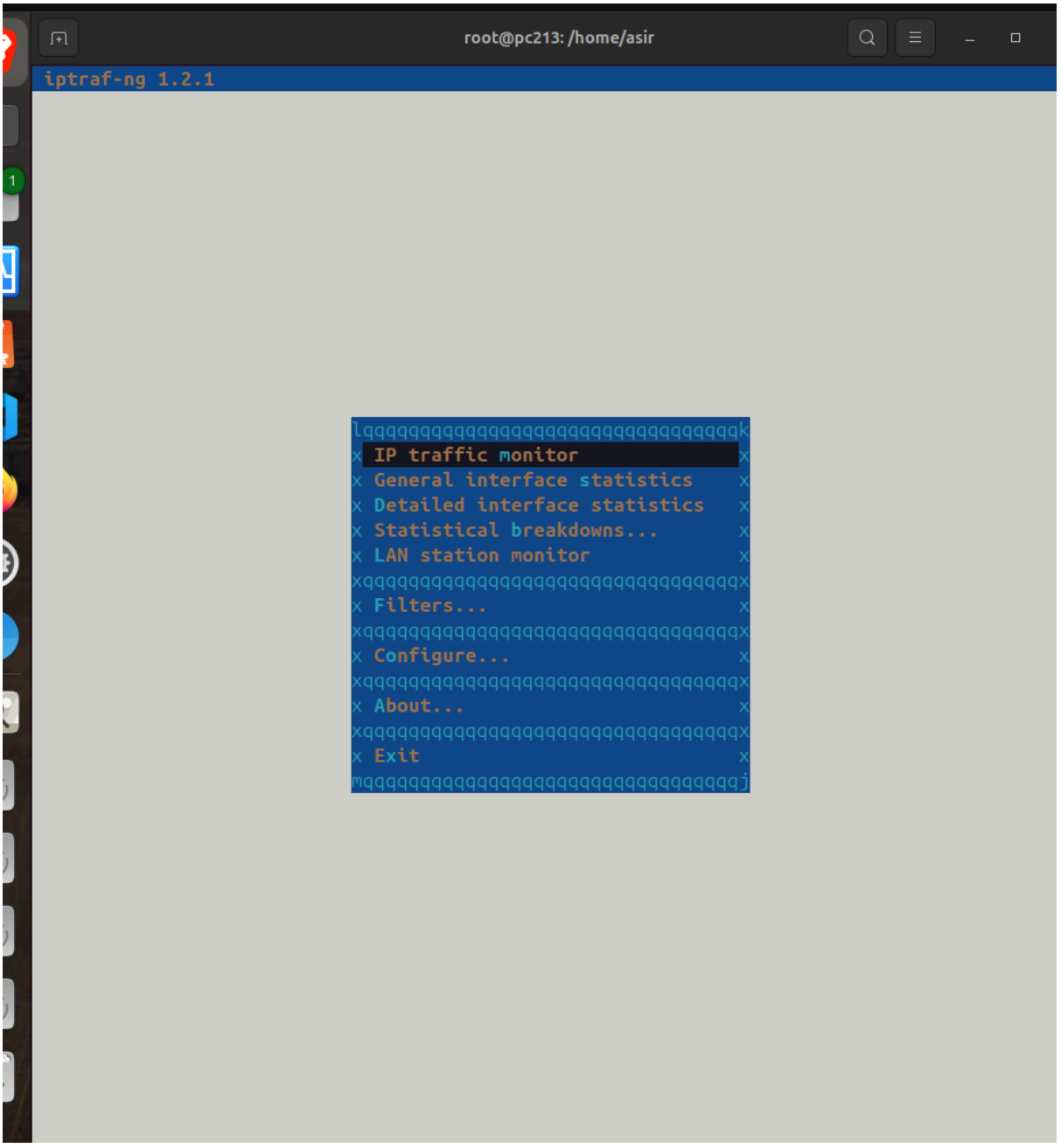


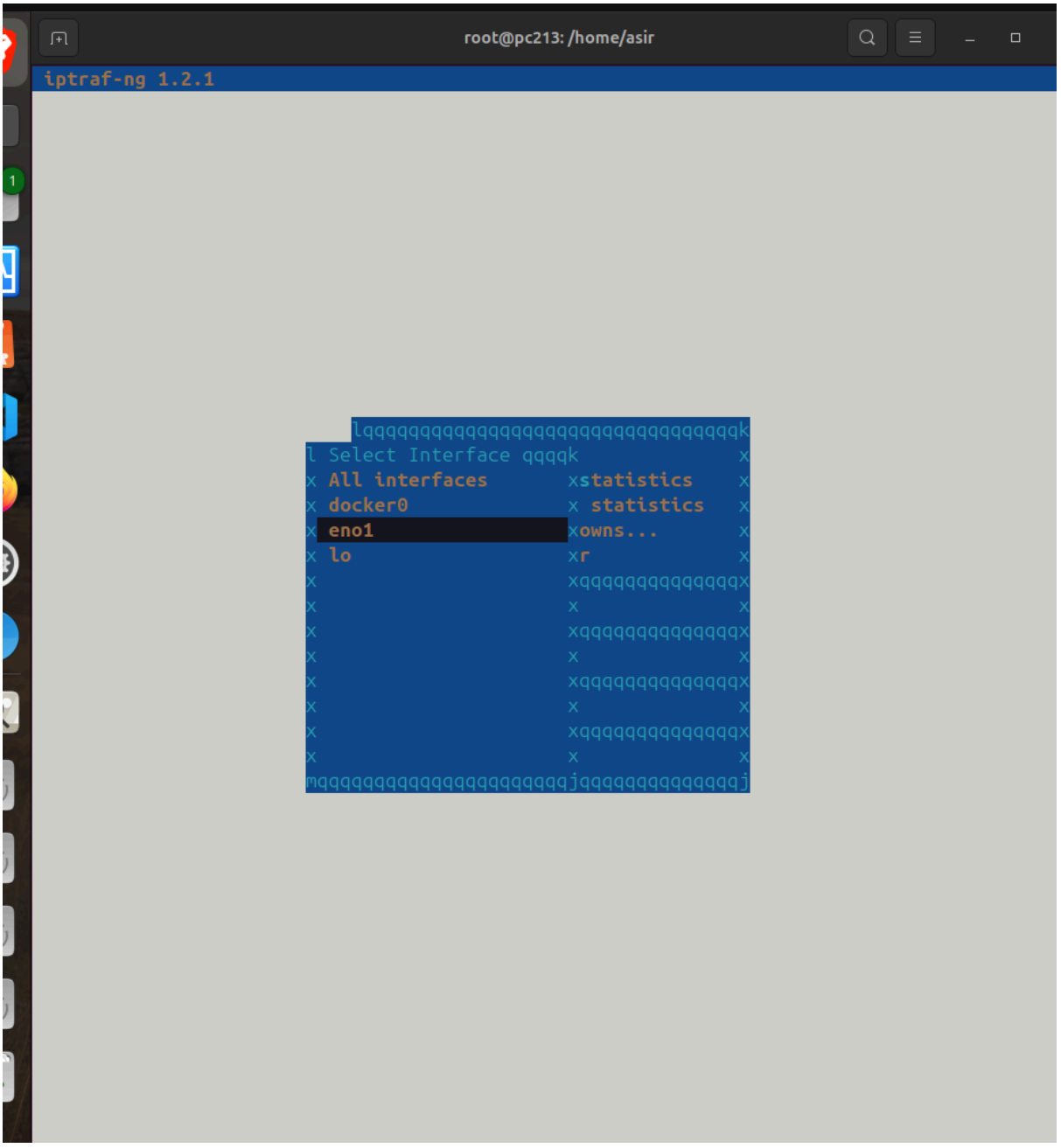
nos salen la conexion por los puertos
y nos sale el ancho de banda

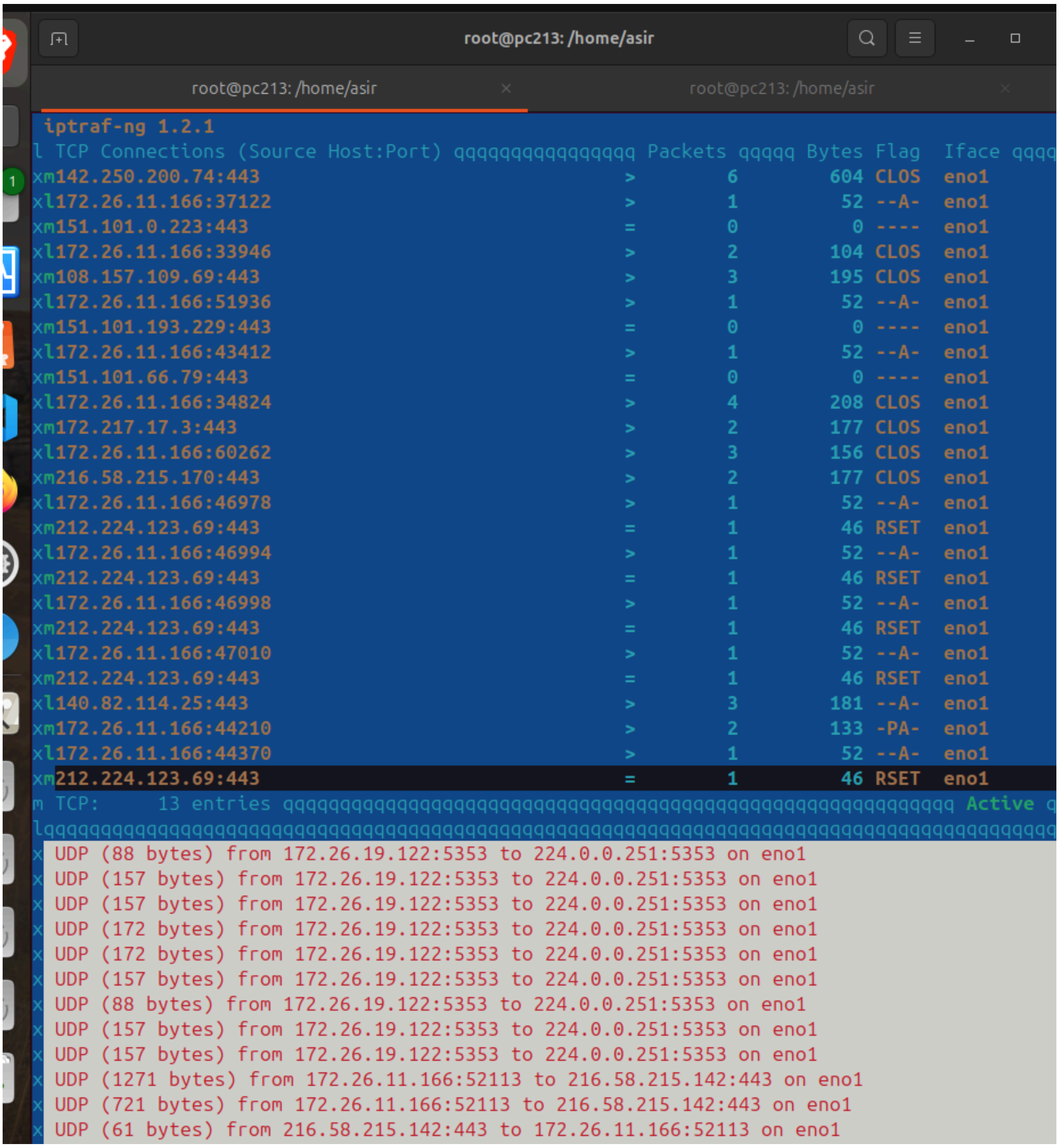

root@pc213: /home/asir
Client Server State Idle A Speed
172.26.11.166:44370 212.224.123.69:443 ESTABLISHED 2s 0 B/s
172.26.11.166:42274 79.133.36.254:443 RESET 2s 0 B/s
172.26.11.166:46998 212.224.123.69:443 ESTABLISHED 2s 0 B/s
172.26.11.166:46994 212.224.123.69:443 ESTABLISHED 2s 0 B/s
172.26.11.166:46978 212.224.123.69:443 ESTABLISHED 2s 0 B/s
172.26.11.166:33946 108.157.109.69:443 ESTABLISHED 25s 0 B/s
172.26.11.166:41382 142.250.200.74:443 ESTABLISHED 29s 0 B/s
172.26.11.166:34824 172.217.17.3:443 ESTABLISHED 25s 0 B/s
172.26.11.166:52680 79.133.36.254:443 ESTABLISHED 2s 0 B/s
172.26.11.166:37122 151.101.0.223:443 ESTABLISHED 25s 0 B/s
172.26.11.166:43412 151.101.66.79:443 ESTABLISHED 25s 0 B/s
172.26.11.166:44386 212.224.123.69:443 ESTABLISHED 2s 0 B/s
172.26.11.166:55256 140.82.114.26:443 ESTABLISHED 4s 0 B/s
172.26.11.166:51936 151.101.193.229:443 ESTABLISHED 25s 0 B/s
172.26.11.166:60262 216.58.215.170:443 ESTABLISHED 25s 0 B/s
172.26.11.166:46506 108.157.109.74:443 ESTABLISHED 8s 0 B/s
172.26.11.166:47010 212.224.123.69:443 ESTABLISHED 2s 0 B/s
Proxmox Virtual Environment
Proxmox Virtual Environment is a complete, open-source server management platform for enterprise virtualization. It tightly integrates the KVM hypervisor and Linux Containers (LXC), software-defined storage and networking functionality, on a single platform. With the integrated web-based user interface you can manage VMs and containers, high availability for clusters, or the integrated disaster recovery tools with ease.
Compute, network, and storage in a single solution
The enterprise-class features and a 100% software-based focus make Proxmox VE the perfect choice to virtualize your IT infrastructure, optimize existing resources, and increase efficiencies with minimal expense. You can easily virtualize even the most demanding of Linux and Windows application workloads, and dynamically scale computing and storage as your needs grow, ensuring that your data center adjusts for future growth.
Ready to build an open and future-proof data center with Proxmox VE?
Get started
Download
Features
By combining two virtualization technologies on a single platform, Proxmox VE is giving maximum flexibility to your production environment. Use KVM full virtualization for Windows and Linux images, and lightweight containers to run conflict-free Linux applications.

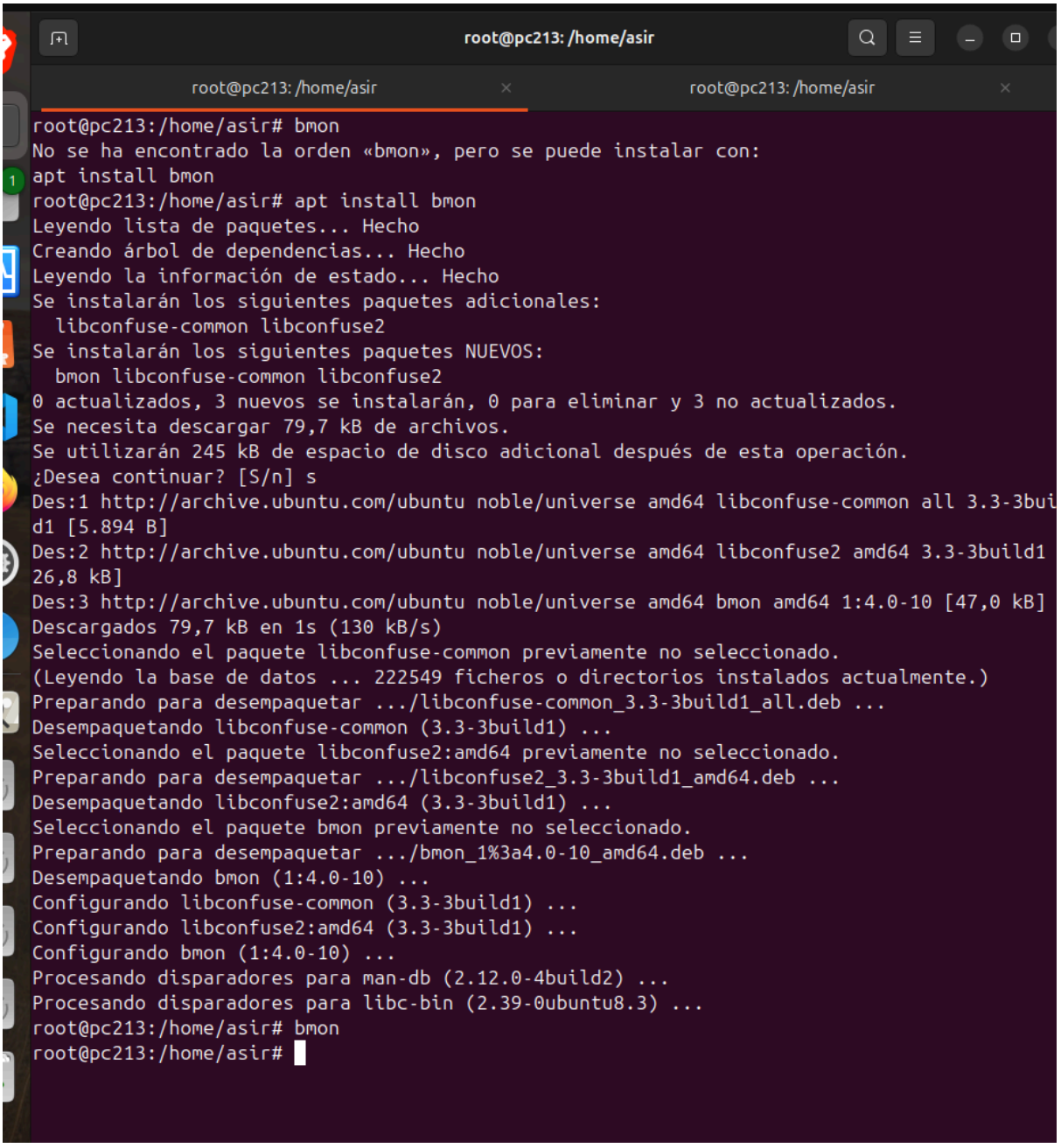
iptraf

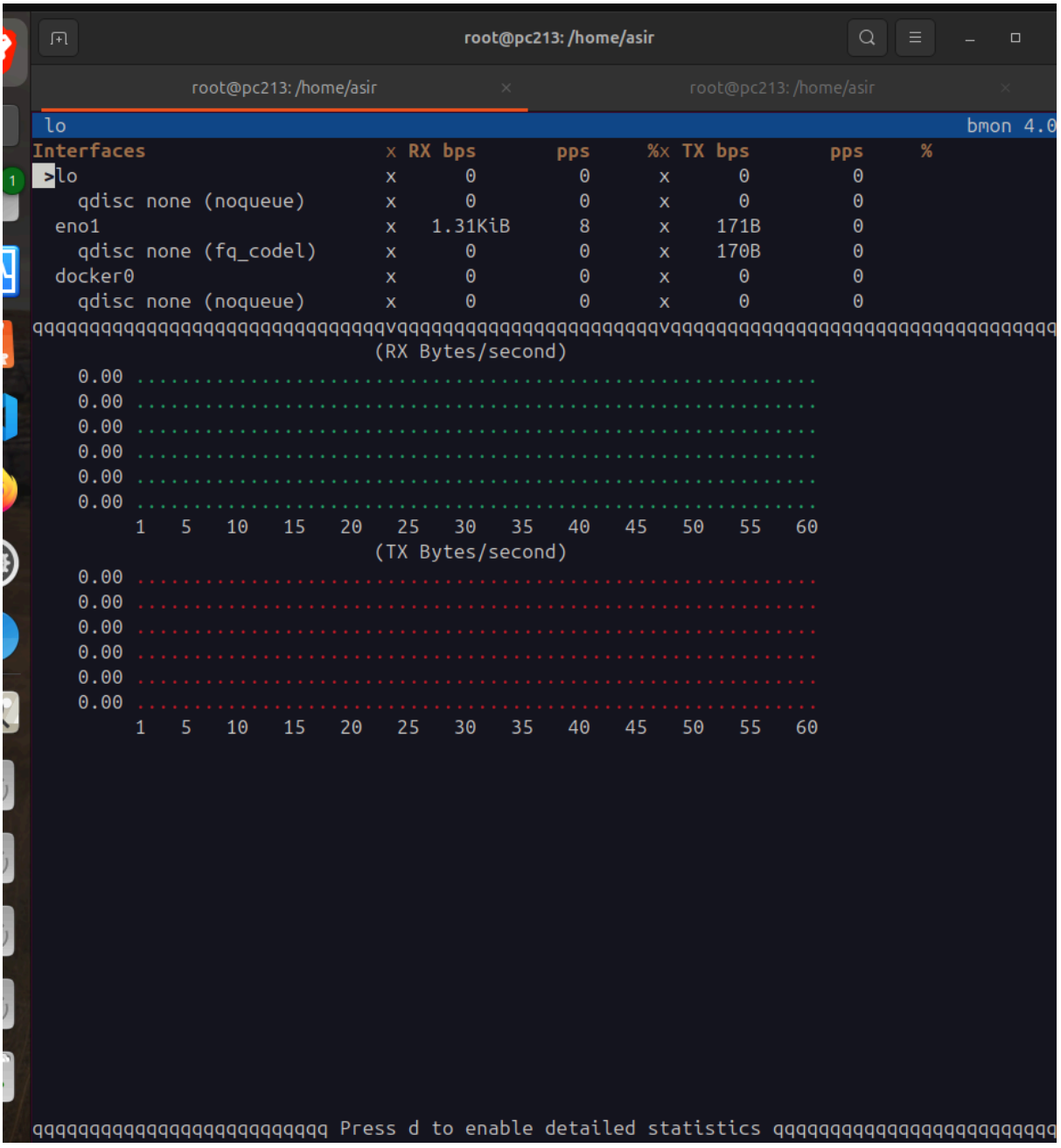

root@pc213:/home/asir# iptraf
root@pc213:/home/asir# iptraf
Monitorizacion resumen
Archivo Editar Ver Insertar Formato Herramientas Extensiones Ayuda
nos salen la conexion por los puertos
y nos sale el ancho de banda


root@pc213: /home/asir
iptraf-ng 1.2.1
IP traffic monitor
General interface statistics
Detailed interface statistics
Statistical breakdowns...
LAN station monitor
Filters...
Configure...
About...
Exit


root@pc213: /home/asir
iptraf-ng 1.2.1
Select Interface
All interfaces
docker0
eno1
lo
statistics
statistics
owns...
r


root@pc213: /home/asir
root@pc213: /home/asir
root@pc213: /home/asir
iptraf-ng 1.2.1
l TCP Connections (Source Host:Port) qqqqqqqqqqqqqqqq Packets qqqqq Bytes Flag Iface qqqq
xm142.250.200.74:443 > 6 604 CLOS eno1
xl172.26.11.166:37122 > 1 52 --A- eno1
xm151.101.0.223:443 = 0 0 ---- eno1
xl172.26.11.166:33946 > 2 104 CLOS eno1
xm108.157.109.69:443 > 3 195 CLOS eno1
xl172.26.11.166:51936 > 1 52 --A- eno1
xm151.101.193.229:443 = 0 0 ---- eno1
xl172.26.11.166:43412 > 1 52 --A- eno1
xm151.101.66.79:443 = 0 0 ---- eno1
xl172.26.11.166:34824 > 4 208 CLOS eno1
xm172.217.17.3:443 > 2 177 CLOS eno1
xl172.26.11.166:60262 > 3 156 CLOS eno1
xm216.58.215.170:443 > 2 177 CLOS eno1
xl172.26.11.166:46978 > 1 52 --A- eno1
xm212.224.123.69:443 = 1 46 RSET eno1
xl172.26.11.166:46994 > 1 52 --A- eno1
xm212.224.123.69:443 = 1 46 RSET eno1
xl172.26.11.166:46998 > 1 52 --A- eno1
xm212.224.123.69:443 = 1 46 RSET eno1
xl172.26.11.166:47010 > 1 52 --A- eno1
xm212.224.123.69:443 = 1 46 RSET eno1
xl140.82.114.25:443 > 3 181 --A- eno1
xm172.26.11.166:44210 > 2 133 -PA- eno1
xl172.26.11.166:44370 > 1 52 --A- eno1
xm212.224.123.69:443 = 1 46 RSET eno1
m TCP: 13 entries qqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqq Active q
x UDP (88 bytes) from 172.26.19.122:5353 to 224.0.0.251:5353 on eno1
x UDP (157 bytes) from 172.26.19.122:5353 to 224.0.0.251:5353 on eno1
x UDP (157 bytes) from 172.26.19.122:5353 to 224.0.0.251:5353 on eno1
x UDP (172 bytes) from 172.26.19.122:5353 to 224.0.0.251:5353 on eno1
x UDP (172 bytes) from 172.26.19.122:5353 to 224.0.0.251:5353 on eno1
x UDP (157 bytes) from 172.26.19.122:5353 to 224.0.0.251:5353 on eno1
x UDP (88 bytes) from 172.26.19.122:5353 to 224.0.0.251:5353 on eno1
x UDP (157 bytes) from 172.26.19.122:5353 to 224.0.0.251:5353 on eno1
x UDP (157 bytes) from 172.26.19.122:5353 to 224.0.0.251:5353 on eno1
x UDP (1271 bytes) from 172.26.11.166:52113 to 216.58.215.142:443 on eno1
x UDP (721 bytes) from 172.26.11.166:52113 to 216.58.215.142:443 on eno1
x UDP (61 bytes) from 216.58.215.142:443 to 172.26.11.166:52113 on eno1


root@pc213: /home/asir
root@pc213: /home/asir
root@pc213: /home/asir
root@pc213:/home/asir# bmon
No se ha encontrado la orden «bmon», pero se puede instalar con:
apt install bmon
root@pc213:/home/asir# apt install bmon
Leyendo lista de paquetes... Hecho
Creando árbol de dependencias... Hecho
Leyendo la información de estado... Hecho
Se instalarán los siguientes paquetes adicionales:
libconfuse-common libconfuse2
Se instalarán los siguientes paquetes NUEVOS:
bmon libconfuse-common libconfuse2
0 actualizados, 3 nuevos se instalarán, 0 para eliminar y 3 no actualizados.
Se necesita descargar 79,7 kB de archivos.
Se utilizarán 245 kB de espacio de disco adicional después de esta operación.
¿Desea continuar? [S/n] s
Des:1 http://archive.ubuntu.com/ubuntu noble/universe amd64 libconfuse-common all 3.3-3bui
d1 [5.894 B]
Des:2 http://archive.ubuntu.com/ubuntu noble/universe amd64 libconfuse2 amd64 3.3-3build1
26,8 kB]
Des:3 http://archive.ubuntu.com/ubuntu noble/universe amd64 bmon amd64 1:4.0-10 [47,0 kB]
Descargados 79,7 kB en 1s (130 kB/s)
Seleccionando el paquete libconfuse-common previamente no seleccionado.
(Leyendo la base de datos ... 222549 ficheros o directorios instalados actualmente.)
Preparando para desempaquetar .../libconfuse-common_3.3-3build1_all.deb ...
Desempaquetando libconfuse-common (3.3-3build1) ...
Seleccionando el paquete libconfuse2:amd64 previamente no seleccionado.
Preparando para desempaquetar .../libconfuse2_3.3-3build1_amd64.deb ...
Desempaquetando libconfuse2:amd64 (3.3-3build1) ...
Seleccionando el paquete bmon previamente no seleccionado.
Preparando para desempaquetar .../bmon_1%3a4.0-10_amd64.deb ...
Desempaquetando bmon (1:4.0-10) ...
Configurando libconfuse-common (3.3-3build1) ...
Configurando libconfuse2:amd64 (3.3-3build1) ...
Configurando bmon (1:4.0-10) ...
Procesando disparadores para man-db (2.12.0-4build2) ...
Procesando disparadores para libc-bin (2.39-0ubuntu8.3) ...
root@pc213:/home/asir# bmon
root@pc213:/home/asir#



Comparativa y Recomendaciones:

Herramienta	Detalles TCP	Tráfico UDP	Estadísticas de Interfaz	Análisis de Ancho de Banda	Fácil de usar
`tcptrack`	✅	×	×	×	✅
`iptraf-ng`	✅	✅	✅	✅	✅
`bandwidth`	×	×	✅	✅	✅
`netstat/ss`	✅	✅	×	×	×