iotop Per-process disk I/O

START HERE

sudo › **iotop** › **-o**
Only active I/O

i
Set ionice

Left / **Right**
Sort column

q
Quit

r
Reverse sort

o
Toggle active only

p
Processes / threads

a
Accumulated totals

CONCEPTS

Per-process I/O accounting needs privileges: run with sudo, or grant cap_net_admin to the binary. Check the Ctrl+T delay-accounting toggle if all rows stay at zero.

Without -o every process is listed; press o early so only processes actually reading or writing remain.

iotop -o who does I/O
Sort READ / WRITE / IO>
ionice lower its class
From a slow disk to a fix

SORTING AND NAVIGATION

Left / **Right**
Change sort column

r / **Space**
Reverse sort order

Up / **Down** Scroll the list

SORTING AND NAVIGATION (cont.)

Page › **Up** / **Page** › **Down**
Scroll a page

Home / **End**
Jump to first / last row

s Freeze data collection

Ctrl + **L** Redraw the screen

q / **Q** Quit

DISPLAY TOGGLES

o Only show active I/O

p Switch processes / threads

a
Cycle accumulated, accum-bw, current
Accumulated shows totals since start; accum-bw shows them per second.

c Toggle full command line

e Toggle exited processes

DISPLAY TOGGLES (cont.)

x Toggle exited marker style

1-9 Toggle a column

0 Show all columns

g / **G** Cycle graph source

R Reverse graph direction

b Toggle SI units

t Cycle unit threshold

T Toggle clock

l Toggle colour

n Toggle inverse interface

u Toggle Unicode drawing

ACTIONS

i Change I/O priority (ionice)
Pick the TID, press Tab, set class and priority, Enter to apply.

f Set UID / PID filter

ACTIONS (cont.)

/ Search by regex

Esc Cancel dialog or search

Ctrl + **T**
Toggle kernel task_delayacct
Needs Linux 5.14+; leave it off when not monitoring.

W Save settings to config

D Reset settings to defaults

h / **H** Toggle window help

? Toggle inline help

COMMAND LINE

iotop › **-o** Only active I/O

iotop › **-P**
Processes only, no threads

iotop › **-a**
Accumulated I/O since start

iotop › **-b** › **-n** › *<n>*
Batch mode, n iterations

COMMAND LINE (cont.)

iotop › **-d** › *<sec>*
Refresh interval

iotop › **-p** › *<pid>*
Watch one PID

iotop › **-u** › *<user>*
Watch one user

iotop › **-t**
Timestamp each line (batch)

iotop › **-k** Show sizes in KB

iotop › **-c** Full command line

iotop › **-q**
Quiet: fewer headers (batch)

iotop › **--filter=<regex>**
Match TID or command

iotop › **-A**
Accumulated as bandwidth

iotop › **--si** SI units (1000)

iotop › **-W**
Save options to config

iotop › **-H** › *<type>*
Help style: none, win, inline

COMMAND LINE (cont.)

iotop › **-e**
Hide exited processes

iotop › **-l** Disable colours

iotop › **-v** Show version

RECIPES

Log active I/O to a file

```
sudo iotop -obtqqq -d 5 -n 120
> io.log
# 10 minutes, timestamped, one
line per active task
```

Watch one service

```
sudo iotop -oP -p $(pidof
<name>)
# add -a for totals instead of
rates
```

Throttle a heavy writer

```
sudo ionice -c3 -p <pid>
# idle class: only gets disk
time when nobody else wants it
```

Enable accounting at runtime

```
sudo sysctl
kernel.task_delayacct=1
sudo iotop -o
# set back to 0 afterwards
```