# iotop Per-process disk I/O

**START HERE**

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

**p**
Processes / threads

**Left** / **Right**
Sort column

**a**
Accumulated totals

**r**
Reverse sort

**i**
Set ionice

**o**
Toggle active only

**q**
Quit

## 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

**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

## DISPLAY TOGGLES (cont.)

**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

**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

**/** Search by regex

## ACTIONS (cont.)

**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

**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)

## COMMAND LINE (cont.)

**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

**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
```