NAME
iotop − simple top−like I/O monitor

SYNOPSIS
iotop [*OPTIONS*]

DESCRIPTION
iotop watches I/O usage information output by the Linux kernel (requires 2.6.20 or later) and displays a table of current I/O usage by processes or threads on the system. At least the CONFIG_TASK_DELAY_ACCT, CONFIG_TASK_IO_ACCOUNTING, CONFIG_TASKSTATS and CONFIG_VM_EVENT_COUNTERS options need to be enabled in your Linux kernel build configuration.

iotop displays columns for the I/O bandwidth read and written by each process/thread during the sampling period. It also displays the percentage of time the thread/process spent while swapping in and while waiting on I/O. For each process, its I/O priority (class/level) is shown.

In addition, the total I/O bandwidth read and written during the sampling period is displayed at the top of the interface. **Total DISK READ** and **Total DISK WRITE** values represent total read and write bandwidth between processes and kernel threads on the one side and kernel block device subsystem on the other. While **Current DISK READ** and **Current DISK WRITE** values represent corresponding bandwidths for current disk I/O between kernel block device subsystem and underlying hardware (HDD, SSD, etc.). Thus **Total** and **Current** values may not be equal at any given moment of time due to data caching and I/O operations reordering that take place inside Linux kernel.

Use the left and right arrows to change the sorting, r to reverse the sorting order, o to toggle the −−only option, p to toggle the −−processes option, a to toggle the −−accumulated option, q to quit or i to change the priority of a thread or a process' thread(s). Any other key will force a refresh.

OPTIONS
−−version
> Show the version number and exit

−h, **−−help**
> Show usage information and exit

−o, **−−only**
> Only show processes or threads actually doing I/O, instead of showing all processes or threads. This can be dynamically toggled by pressing o.

−b, **−−batch**
> Turn on non−interactive mode. Useful for logging I/O usage over time.

−n NUM, **−−iter**=*NUM*
> Set the number of iterations before quitting (never quit by default). This is most useful in non−interactive mode.

−d SEC, **−−delay**=*SEC*
> Set the delay between iterations in seconds (1 second by default). Accepts non-integer values such as 1.1 seconds.

−p PID, **−−pid**=*PID*
> A list of processes/threads to monitor (all by default).

−u USER, **−−user**=*USER*
> A list of users to monitor (all by default)

−P, **−−processes**
> Only show processes. Normally iotop shows all threads.

−a, **−−accumulated**
> Show accumulated I/O instead of bandwidth. In this mode, iotop shows the amount of I/O processes have done since iotop started.

−k, **−−kilobytes**
> Use kilobytes instead of a human friendly unit. This mode is useful when scripting the batch mode of iotop. Instead of choosing the most appropriate unit iotop will display all sizes in kilobytes.

−t, **−−time**
> Add a timestamp on each line (implies −−batch). Each line will be prefixed by the current time.

−q, **−−quiet**
> suppress some lines of header (implies −−batch). This option can be specified up to three times to remove header lines.

−−no−help
> Suppress the keyboard shortcuts help display.
>
> **−q**   column names are only printed on the first iteration,
>
> **−qq**   column names are never printed,
>
> **−qqq**   the I/O summary is never printed.

SEE ALSO
ionice(1), **top**(1), **vmstat**(1), **atop**(1), **htop**(1)

AUTHOR
iotop was written by Guillaume Chazarain.

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