



Linux Ubuntu 22.4.5 Manual Pages on command 'iotop.8'

\$ man iotop.8

IOTOP(8) System Manager's Manual IOTOP(8)

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 or? der, 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.

This manual page was started by Paul Wise for the Debian project and is placed in the public domain.

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