top Live process monitor

CONCEPTS

Keys are case sensitive: P and p are different commands. Top answers to what you type, so there is no Enter after a single key.

Load average is runnable plus waiting tasks over 1, 5 and 15 minutes; compare it with your CPU count, not with 1.

CPU line

Field	Time spent on
`us / ni`	user code / niced user code
`sy`	kernel code
`id`	idle
`wa`	waiting for disk I/O
`hi / si`	hardware / software interrupts
`st`	stolen by the hypervisor

S column (task state)

Code	Meaning
`R`	running or runnable
`S`	sleeping, interruptible
`D`	uninterruptible sleep (usually I/O)
`I`	idle kernel thread
`T / t`	stopped by job control / by a debugger
`Z`	zombie, waiting for its parent

Memory: judge by avail Mem, not free. Buff/cache is reclaimable and normally large.

SORTING

P
Sort by CPU

M
Sort by memory

T
Sort by cumulative CPU time

R
Reverse sort order

f
Choose sort field and columns

FILTERING AND VIEW

u
Show one user's tasks

c
Toggle command name / full line

i
Hide idle tasks

V
Forest (process tree) view

H
Show threads

o
Add filter, ignore case

SUMMARY AREA

1
One line per CPU

SIGNALS AND PRIORITY

k
Kill a task (asks PID, signal)

r
Renice a task

NAVIGATION AND CONTROL

Arrows
Scroll tasks / columns

d / **s**
Change refresh delay

? / **h**
Help

q
Quit

COMMAND LINE

`top -b -n 1`
One snapshot, no UI

`top -p <pid,pid>`
Watch only these PIDs