nethogs Bandwidth per process

CONCEPTS

nethogs groups traffic by process, not by host or port. It reads packets with libpcap and matches connections to PIDs through /proc, so it is Linux only.

Packets libpcap
↓ match
Connection socket inode
↓ /proc
Process PID, program
How a byte gets a name

Traffic it cannot tie to a process, such as short-lived connections, shows up as 'unknown TCP'. Ignore it unless it is large.

RUN

`sudo nethogs`
Monitor all running interfaces

`sudo nethogs <if> <if>`
Monitor only these interfaces

`sudo nethogs -a`
Include loopback and down interfaces

`sudo nethogs -d <sec>`
Set refresh interval (default 1)

`sudo nethogs -c <n>`
Quit after n refreshes

`sudo nethogs -P <pid>`
Show only this process

`sudo nethogs -C`
Count UDP as well as TCP

`nethogs -V`
Print version

`nethogs -h`
Print help

DISPLAY

`-v 0`
Rates in kB/s (default)

`-v 1`
Total kB

DISPLAY (cont.)

`-v 4`
Rates in MB/s

`-l`
Show full command line

`-b`
Show program basename only

`-s`
Start sorted by sent

INTERACTIVE KEYS

`q`
Quit

`r`
Sort by received

`s`
Sort by sent

`m`
Cycle kB/s, kB, B, MB, MB/s, GB/s

`l`
Toggle full command line

`b`
Toggle program basename

OUTPUT

`sudo nethogs -t`
Trace mode: plain text, no curses

`sudo nethogs -t -c <n>`
Print n samples and exit

`sudo nethogs -t -d <sec>`
Trace with a custom interval

Trace mode prints one line per process and refresh: program/PID/UID, then sent and received. Good for logs and pipes.

PERMISSIONS

Packet capture needs root. A permissions error or missing process names usually means root or the capabilities below are absent.