nvtop GPU monitor

CONCEPTS

nvtop is htop for GPUs: one screen shows every NVIDIA, AMD and Intel card, their load history and the processes using them.

```
Device info rows
GPU and memory bars
History chart
Process list
```

Main screen, top to bottom

Fields a driver cannot report show N/A. Process lists need a recent kernel on AMD and Intel.

Another user's processes may be hidden or unkillable; run as root only if you need to signal them.

PROCESS LIST

Up / **Down**
Move process selection

Left / **Right**
Scroll process row sideways

PROCESS LIST (cont.)

F6 Pick the sort field

Plus Sort ascending

Minus Sort descending

F9
Send a signal to the process

SCREEN AND SETTINGS

F2
Open the setup window

F12 Save current options

F10 / **q** / **Esc** Quit nvtop

Change the plotted metric under Chart in setup: utilization, temperature, power, fan, clocks or PCIe load.

Encoder (ENC) and decoder (DEC) meters appear only while in use and hide after inactivity.

COMMAND LINE

nvtop
Start the monitor

nvtop -d *<tenths>*
Update interval in tenths of a second

nvtop -s
Print stats once and exit

nvtop -l
Print stats repeatedly

nvtop -p
One plot for the max of all GPUs

nvtop -P
Hide the process list

nvtop -C
Monochrome output

nvtop -i
Show extra dynamic clock bar

nvtop -X
Also show static specs

nvtop -u
Scale process memory units

nvtop -r
Reverse plot time order

COMMAND LINE (cont.)

nvtop -f
Temperatures in Fahrenheit

nvtop -E *<seconds>*
Encode/decode meter hide timer

nvtop -c *<file>*
Use a custom config file

nvtop -v
Print version

nvtop -h
Print help

CONFIG AND SUPPORT

Supported hardware

Vendor	Driver
NVIDIA	Proprietary driver via NVML
AMD	amdgpu (kernel 5.14+ for processes)
Intel	i915 or xe (kernel 5.19+ for processes)
Adreno	msm (kernel 6.0+ for processes)

Config file location

```
# default path
~/.config/nvtop/interface.ini
# or under $XDG_CONFIG_HOME
```

CONFIG AND SUPPORT (cont.)

Do not hand-edit interface.ini; change options with F2 and save with F12.

Intel total memory and accurate clocks need CAP_PERFMON or CAP_SYS_ADMIN.

RECIPES

Fast refresh, no colour

```
nvtop -d 5 -C
```

Log stats from a script

```
nvtop -s > gpu-stats.txt
# or stream repeatedly
nvtop -l
```

Find the GPU hog and stop it

```
# F6  pick the memory field
# Minus  largest first
# Up / Down  select it
# F9  choose a signal
```

Compact view for many GPUs

```
nvtop -p -u
# F2, then F12 to keep the choice
```