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

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

SCREEN AND SETTINGS (cont.)

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

nvtop -f
Temperatures in Fahrenheit

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

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

COMMAND LINE (cont.)

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
```

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
```