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
```