nvtop GPU monitor

START HERE

Up / **Down**
Select a process

Left / **Right**
Scroll process row

F6
Choose sort field

q
Quit

F9
Signal selected process

F2
Open setup

F12
Save settings

Plus / **Minus**
Sort ascending / descending

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

PROCESS LIST (cont.)

Left / **Right**
Scroll process row sideways
Reveals long command lines.

F6 Pick the sort field
Choose by GPU use, memory, PID, user or command.

Plus Sort ascending

Minus Sort descending

F9
Send a signal to the process
Select a process first, then pick the signal to send.

SCREEN AND SETTINGS

F2 Open the setup window
Tabs: General, Devices, Chart, Processes.

F12 Save current options
Written to interface.ini; loaded on next start.

SCREEN AND SETTINGS (cont.)

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
-d 5 refreshes every 0.5 s.

nvtop -s
Print stats once and exit
No ncurses; handy for scripts.

COMMAND LINE (cont.)

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
Default 30; negative keeps them always visible.

COMMAND LINE (cont.)

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
```

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

CONFIG AND SUPPORT (cont.)

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
```