watch Rerun a command

CONCEPTS

watch runs the command through sh -c, then redraws the screen; pipes and variables in unquoted form are handled by your shell first.

Run command sh -c or exec
↓ capture output
Draw screen header + first page
↓ sleep -n secs
Repeat until Ctrl+C or exit flag

Options must come before the command: everything after the command is passed to it, not to watch.

BASICS

`watch <cmd>`
Run a command every 2 seconds

`watch -n <secs> <cmd>`
Set the update interval

`watch -n 0.5 <cmd>`
Sub-second interval (minimum 0.1)

`watch -d <cmd>`
Highlight what changed since last run

`watch -d=permanent <cmd>`
Keep highlighting all changes since start

`watch -t <cmd>`
Turn off the header line

`watch -c <cmd>`
Interpret ANSI colours

`watch -w <cmd>`
Truncate long lines instead of wrapping

`watch -b <cmd>`
Beep when the command fails

`watch -r <cmd>`
Do not rerun on terminal resize

`WATCH_INTERVAL=<secs>`
Set a default interval via environment

`Ctrl+C`
Quit watch

EXIT CONDITIONS

`watch -g <cmd>`
Exit when the visible output changes

EXIT CONDITIONS (cont.)

`watch -q <cycles> <cmd>`
Exit when output is unchanged for N cycles

`watch -e <cmd>`
Freeze and exit on command error

`watch -g <cmd>; <next>`
Chain an action after the change

`echo $?`
Exit status of watch after -g, -e

QUOTING AND SHELL

`watch '<cmd1> | <cmd2>'`
Quote pipelines so watch runs them

`watch -x <cmd> <args>`
Exec directly, no sh -c

`watch -x sh -c '<script>'`
Exec a shell you choose

`watch 'echo $$'`
Single quotes: expanded on each run

`watch echo $$`
Unquoted: expanded once by your shell

`watch "<cmd> $VAR"`
Double quotes expand the variable first

`watch 'date +%s.%N'`
See the time drift between runs

TIMING

`watch -p -n <secs> <cmd>`
Run at precise intervals

`watch -n 10 sleep 1`
Without -p the gap adds the command's run time

`watch -n 60 <cmd>`
Slow poll for mail or a status page

`watch -n 0.1 <cmd>`
Fastest allowed refresh

EVERYDAY TARGETS

`watch df -h`
Disk space

`watch -d free -m`
Memory use

EVERYDAY TARGETS (cont.)

`watch 'ss -tulpn'`
Listening ports

`watch -d ls -l <dir>`
Directory changes

`watch 'ps aux --sort=-%cpu | head'`
Top CPU processes

`watch -n 1 'cat /proc/loadavg'`
Load average

`watch kubectl get pods`
Pod status

`watch -n 1 'docker ps'`
Running containers

`watch 'wc -l <file>'`
Line count of a growing file

`watch 'sensors'`
Temperatures

`watch -d 'ip -s link show <iface>'`
Interface counters

`watch 'systemctl status <unit>'`
Service state

`watch -d cat /proc/interrupts`
Interrupt counters

`watch 'nvidia-smi'`
GPU use

`watch 'curl -sI <url> | head -1'`
Poll an HTTP status

`watch 'du -sh <dir>'`
Directory size

RECIPES

Wait for a pod rollout

```
watch -g -n 2 'kubectl get pod
<name> -o
jsonpath={.status.phase}'
echo done
```

Highlight a changing counter

```
watch -d -n 1 'grep MemFree /
proc/meminfo'
```

Notify when a site returns 200

```
watch -g -n 30 'curl -s -o /dev/
null -w %{http_code} <url>' ;
notify-send up
```

Coloured output in watch

```
watch -c -n 2 'ls --color=always
-l'
```