watchexec Run on file change

File event save, create, delete → debounce → **Filters** paths, ignores, -e, -f → pass → **Command** start or restart → exit → **Wait** for next change

CONCEPTS

Put -- before your command so its own flags are not read by watchexec.

By default it watches the current directory recursively and honours .gitignore and .ignore, so build output folders are usually skipped already.

The default shell is $SHELL (sh if unset); with -n the command is split on spaces, so no pipes, globs or redirects.

RUNNING

watchexec *<cmd>* **[args]**
Run a command whenever files change

watchexec -- *<cmd>* **--flag**
Stop option parsing before the command

watchexec -p *<cmd>*
Postpone: skip the initial run

watchexec -r *<cmd>*
Restart the command on change

RUNNING (cont.)

watchexec -c *<cmd>*
Clear the screen before each run

watchexec -n *<cmd>*
No shell: run the program directly

watchexec --shell *<shell>* *<cmd>*
Choose the shell, e.g. bash or zsh

watchexec -E *<KEY=VALUE>* *<cmd>*
Set an env var for the command only

watchexec --workdir *<dir>* *<cmd>*
Run the command in another directory

watchexec -I *<cmd>*
Interactive: r restart, s stop, p pause, q quit

watchexec --exit-on-error *<cmd>*
Quit when the command fails

watchexec --timeout *<time>* *<cmd>*
Stop a run that takes too long

watchexec --delay-run *<time>* *<cmd>*
Sleep before each run

RUNNING (cont.)

watchexec --timings *<cmd>*
Print how long each run took

WHAT TO WATCH

-w *<path>*
Watch a file or directory (repeatable)

-W *<dir>*
Watch a directory without recursion

-e *<ext,ext>*
Only react to these extensions

-f *<glob>*
Only react to paths matching a pattern

-i *<glob>*
Ignore paths matching a pattern

--no-vcs-ignore
Watch files that .gitignore excludes

--fs-events *<list>*
Filter by event: create, remove, rename, modify, access

--no-meta
Skip metadata-only events

BUSY AND SIGNALS

-o *<mode>*
If busy: do-nothing, queue, restart or signal

-r
Same as -o restart

-s *<signal>*
Send a signal to the running command on change

--stop-signal *<signal>*
Signal used to stop it (default SIGTERM)

--stop-timeout *<time>*
Grace time before a force kill (default 10s)

--wrap-process *<mode>*
auto, group, session or none

DEBOUNCE AND POLLING

-d *<time>*
Wait for quiet before acting (default 50ms)

--poll [interval]
Poll instead of OS events (network drives)

CHANGED PATHS

--emit-events-to *<mode>*
none, environment, stdio, file, json-stdio, json-file

CHANGED PATHS (cont.)

--print-events
Print the events that triggered a run

SETUP AND DEBUG

watchexec --completions *<shell>*
Print shell completions

watchexec --manual
Show the full manual

watchexec -v / -vvvv
More diagnostic logging

watchexec -V
Show the version

RECIPES

Run tests on Rust changes

```
watchexec -c -e rs,toml -- cargo test
```

Dev server with restart

```
watchexec -r -e py,html -- python manage.py runserver --noreload
```

Rebuild assets, skip output

```
watchexec -w src -i "dist/**" -e js,css -- npm run build
```

Debounced build, then notify

```
watchexec -d 500 -N -p -e md -- make site
```