watchexec Run on file change

CONCEPTS

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

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

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

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

RUNNING (cont.)

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

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

watchexec -q *<cmd>*
Hide watchexec's own start/stop messages

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

BUSY AND SIGNALS (cont.)

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

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

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

--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
```