direnv Per-directory environments

START HERE

`eval "$(direnv hook bash)"`
Hook into your shell

`direnv deny`
Revoke trust

`echo 'export FOO=1' > .envrc`
Write an .envrc

`direnv exec <dir> <cmd>`
Run with that env

`direnv allow`
Trust it, load it

`direnv status`
What is loaded?

`direnv edit .`
Edit and auto-allow

`direnv reload`
Force a reload

cd into dir shell prompt → `hook` → **Find .envrc** checks allow list → `allowed?` → **Run in bash** stdlib available → `export diff` → **Shell env** restored on leaving

CONCEPTS

direnv loads .envrc when you cd in and unloads it when you leave. It must be allowed first, and again after every edit.

The .envrc runs in bash, whatever your interactive shell is. Aliases and functions cannot be exported this way.

Never allow an .envrc you have not read: it is arbitrary code that runs on cd.

SETUP

`eval "$(direnv hook bash)"`
Hook for bash (end of ~/.bashrc)

`eval "$(direnv hook zsh)"`
Hook for zsh (end of ~/.zshrc)

`direnv hook fish | source`
Hook for fish (config.fish)

`direnv version`
Print the installed version

`direnv version <x.y.z>`
Fail if older than this version

`~/.config/direnv/direnv.toml`
Global config file

`direnv help`
Show the help text

TRUST

`direnv allow [<path>]`
Trust and load an .envrc
Needed again after every change to the file.

`direnv deny [<path>]`
Revoke trust for an .envrc

`direnv edit [<path>]`
Open in $EDITOR, allow on save

`direnv prune`
Drop stale entries from the allow list

`direnv allow .env`
Trust a .env file
Only loaded when load_dotenv is enabled.

`[whitelist] prefix = ["<dir>"]`
Auto-trust a directory tree
In direnv.toml. Dangerous: anyone able to write there can run code as you.

INSPECT AND RUN

`direnv status`
Show loaded file and allow state

`direnv reload`
Trigger a reload

`direnv exec <dir> <cmd>`
Run a command under that dir's env

INSPECT AND RUN (cont.)

`direnv export json`
Print the env diff as JSON

`direnv export bash`
Print the exports for a shell

`direnv stdlib`
Print the stdlib source

`direnv fetchurl <url> [<hash>]`
Download into the content store

ENVIRONMENT (.ENVRC)

`export <NAME>=<value>`
Set a variable

`PATH_add <dir>`
Prepend a directory to PATH

`path_add <VAR> <dir>`
Prepend to any path variable

`PATH_rm '<pattern>'`
Remove matching PATH entries

`env_vars_required <VAR> ...`
Complain when variables are unset

`has <command>`
True if a command exists

`load_prefix <dir>`
Set PATH, MANPATH, PKG_CONFIG_PATH for a prefix

`on_git_branch [<branch>]`
True on that git branch

ENVIRONMENT (.ENVRC) (cont.)

`strict_env`
Exit on errors and unset variables

LOADING FILES

`dotenv [<file>]`
Load a .env file

`dotenv_if_exists [<file>]`
Load .env only if present

`source_up`
Inherit the nearest parent .envrc
Returns 1 if there is none; use source_up_if_exists to stay silent.

`source_env <path>`
Load another .envrc
Not covered by the allow check.

`source_env_if_exists <file>`
Load another file if present

`watch_file <file> ...`
Reload when these files change

`watch_dir <dir>`
Reload when a directory changes

LAYOUTS AND TOOLS

`layout python3`
Project virtualenv in .direnv/

LAYOUTS AND TOOLS (cont.)

`layout python <exe>`
Virtualenv from a given Python

`layout pyenv <version>`
Virtualenv from pyenv

`layout uv`
Sync and activate the uv project env

`layout node`
Add node_modules/.bin to PATH

`layout go`
Project GOPATH and bin on PATH

`layout pixi`
Load the pixi environment

`use node [<version>]`
Pick Node from .nvmrc or a version

`use flake [<installable>]`
Load a Nix flake devShell

`use nix [-p <pkg>]`
Load nix-shell environment

`use rbenv`
Put rbenv Ruby wrappers on PATH

`use julia <version>`
Load a Julia version

CONFIG (DIRENV.TOML)

`load_dotenv = true`
Also load .env files

CONFIG (DIRENV.TOML) (cont.)

`strict_env = true`
Strict shell options for every .envrc

`hide_env_diff = true`
Hide the export diff on load

`warn_timeout = "<time>"`
Slow-command warning delay (default 5s)

`disable_stdin = true`
Stdin is /dev/null while evaluating

RECIPES

Python project

```
# .envrc
layout python3
dotenv_if_exists
.env.local
# then:
direnv allow
```

Layered config in a monorepo

```
# sub/.envrc
source_up
export SERVICE=api
PATH_add scripts
```

Nix flake dev shell

```
# .envrc
watch_file flake.nix flake.lock
use flake
```

Quiet, secret-safe setup

```
# .envrc
env_vars_required API_TOKEN
dotenv
# git: ignore .env and .direnv/
```