SIX MONTHS WITH NIX AND DEVENV

fosdem

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WHO AM I

- software engineer @ zscaler
- NixOS user > 4 years
- @jm2dev

OVERVIEW

My experience migrating Linux Nix set up projects to OSX

Or being in OSX without missing NixOS too much

SOME CONTEXT

- Previous experience with Nix & NixOS
  - and with homebrew, macports, pkgsrc, etc
- NodeJS & Golang projects with Nix
- Reuse as much as possible
- Simple setup
- Portability

THE JOURNEY

REQUISITES

- Nix using determinate systems installer
- Minimum setup for darwin-nix with flakes
  - `darwin-rebuild switch --flake .`
- User configuration managed by home-manager
- Optionally direnv
  - but highly recommended

THE ISSUES

- mixing languages gave me headaches
- lack of clear examples

A SOLUTION

devenv

declarative, reproducible & composable developer environments with Nix

WORKFLOW

1. (devenv init)

2. modify devenv.nix

3. sometimes .envrc too

4. pay attention to messages

PACKAGES

```
# https://devenv.sh/packages/
packages = [ pkgs.quarto ];
```

LANGUAGES

```
# https://devenv.sh/languages/
languages = {
  go.enable = true;
  terraform.enable = true;
};
```

SCRIPTS

```
# https://devenv.sh/scripts/
scripts = {
  hello.exec = "echo $GREET";
  quarto2html.exec = "quarto render $1 --to html";
  slides.exec = "quarto render $1";
};
```

SERVICES

```
# https://devenv.sh/services/
services.postgres.enable = true;
services.nginx = {
  enable = true;
  httpConfig = ''
    server {
      listen 127.0.0.1:8080;
      root /tmp/some-site;
      location / {
      }
    }
  '';
};
```

BENEFITS

- cd into project and dependencies will be provided
  - or `devenv shell` if you are not into direnv
- isolate and reproducible projects
- sensitive abstractions
- just enough context
- less cognitive load

THE BAD PARTS

- not all nix packages are available for OSX
- outdated versions in devenv
  - i.e. latest golang version

Q & A