

A modern office lounge area with a wooden floor, a white brick wall, and a large white projector screen. Several blue and yellow beanbag chairs are arranged in the room. There are several indoor plants, including a large potted plant on the left and several smaller ones in the foreground. The ceiling has exposed black beams with recessed lighting. In the background, there is a bar area with a counter and stools.

**Changer son environnement fullstack
en un clin d'oeil
avec devenv**

Qui sommes-nous



Julien **Tanguy**

Developer

@jutanguy

hello@jtanguy.me

[sf≡ir]

Qui sommes-nous



Anthony **Pena**

Developer

@_Anthony_Pena

anthony.pena@outlook.fr

[sf≡ir]

Prérequis

Un environnement de développement linux-like

- Linux
- MacOS
- WSL2 pour Windows
- Github codespaces: <https://github.com/jtanguy/workshop-devenv>

Installation

- <https://github.com/jtanguy/workshop-devenv>
- Lancer un codespace

Étape: Installation

Installation (Alt)

<https://devenv.sh/getting-started/>

Étape: Installation

- installer Nix
- installer Cachix
- installer Devenv

Contexte



Problématique

Problématique

- Comment gérer les outils de développement ?

Problématique

- Comment gérer les outils de développement ?
- Comment faciliter l'installation d'un nouveau poste ?

Problématique

- Comment gérer les outils de développement ?
- Comment faciliter l'installation d'un nouveau poste ?
- Comment mettre à jour, maintenir et diffuser des évolutions de ces outils ?

Problématique

- Comment gérer les outils de développement ?
- Comment faciliter l'installation d'un nouveau poste ?
- Comment mettre à jour, maintenir et diffuser des évolutions de ces outils ?
- Comment faciliter le développement en local ?

Solutions

Solutions

- Gestion des versions des langages: nvm, sdkman, rvm

Solutions

- Gestion des versions des langages: nvm, sdkman, rvm
- Outils multi-langages et multi-outils: asdf

Solutions

- Gestion des versions des langages: nvm, sdkman, rvm
- Outils multi-langages et multi-outils: asdf
- Comment gérer les services annexes: db, reverse-proxy, process autres ?

Pourquoi de venir ?

A modern office lounge area with a wooden floor, white brick walls, and a ceiling with exposed beams and linear lighting. In the center, there is a large white projector screen flanked by two tall black speakers. Several large, plush beanbag chairs in shades of grey and yellow are arranged in a semi-circle in front of the screen. To the right, there is a dark wood bar counter with a stool. The room is decorated with several large indoor plants in grey pots. The overall atmosphere is bright and contemporary.

Avantages

Avantages

- Gestion de nombreux langages

Avantages

- Gestion de nombreux langages
- Gestion des services annexes

Avantages

- Gestion de nombreux langages
- Gestion des services annexes
- Se repose sur un vrai package manager: nix

Avantages

- Gestion de nombreux langages
- Gestion des services annexes
- Se repose sur un vrai package manager: nix
- Se repose sur le plus grand repository: nixpkgs

Introduction à Nix



“

Nix est un package manager déclaratif

”

Nix store

```
1 $ which lnav
2 /nix/store/hcv2abrklmhsnz67xjasg3pwz4wdkw7q-devenv-profile/bin/lnav
3
4 $ ls /nix/store/hcv2abrklmhsnz67xjasg3pwz4wdkw7q-devenv-profile/bin/ -la
5 total 36
6 dr-xr-xr-x 2 root root 4096 Jan 1 1970 ./
7 dr-xr-xr-x 6 root root 4096 Jan 1 1970 ../
8 lrwxrwxrwx 3 root root 71 Jan 1 1970 corepack -> /nix/store/x8vrc1c6r8nn454whr99bxc5hdy5ybjf-nodejs-18.18.0/bin/corepack*
9 lrwxrwxrwx 3 root root 67 Jan 1 1970 honcho -> /nix/store/am744diswph5ml71n562k2rwhwk3ipw0-honcho-1.1.0/bin/honcho*
10 lrwxrwxrwx 3 root root 76 Jan 1 1970 .honcho-wrapped -> /nix/store/am744diswph5ml71n562k2rwhwk3ipw0-honcho-1.1.0/bin/.honcho-wrapped*
11 lrwxrwxrwx 2 root root 64 Jan 1 1970 lnav -> /nix/store/c9psaxm0syj8rriqdy8zaxns9s997rhk-lnav-0.11.2/bin/lnav*
12 lrwxrwxrwx 3 root root 67 Jan 1 1970 node -> /nix/store/x8vrc1c6r8nn454whr99bxc5hdy5ybjf-nodejs-18.18.0/bin/node*
13 lrwxrwxrwx 3 root root 66 Jan 1 1970 npm -> /nix/store/x8vrc1c6r8nn454whr99bxc5hdy5ybjf-nodejs-18.18.0/bin/npm*
14 lrwxrwxrwx 3 root root 66 Jan 1 1970 npx -> /nix/store/x8vrc1c6r8nn454whr99bxc5hdy5ybjf-nodejs-18.18.0/bin/npx*
```

Nix store

```
1 $ which lnav
2 /nix/store/hcv2abrklmhsnz67xjasg3pwz4wdkw7q-devenv-profile/bin/lnav
3
4 $ ls /nix/store/hcv2abrklmhsnz67xjasg3pwz4wdkw7q-devenv-profile/bin/ -la
5 total 36
6 dr-xr-xr-x 2 root root 4096 Jan 1 1970 ./
7 dr-xr-xr-x 6 root root 4096 Jan 1 1970 ../
8 lrwxrwxrwx 3 root root 71 Jan 1 1970 corepack -> /nix/store/x8vrc1c6r8nn454whr99bxc5hdy5ybjf-nodejs-18.18.0/bin/corepack*
9 lrwxrwxrwx 3 root root 67 Jan 1 1970 honcho -> /nix/store/am744diswph5ml71n562k2rwhwk3ipw0-honcho-1.1.0/bin/honcho*
10 lrwxrwxrwx 3 root root 76 Jan 1 1970 .honcho-wrapped -> /nix/store/am744diswph5ml71n562k2rwhwk3ipw0-honcho-1.1.0/bin/.honcho-wrapped*
11 lrwxrwxrwx 2 root root 64 Jan 1 1970 lnav -> /nix/store/c9psaxm0syj8rriqdy8zaxns9s997rhk-lnav-0.11.2/bin/lnav*
12 lrwxrwxrwx 3 root root 67 Jan 1 1970 node -> /nix/store/x8vrc1c6r8nn454whr99bxc5hdy5ybjf-nodejs-18.18.0/bin/node*
13 lrwxrwxrwx 3 root root 66 Jan 1 1970 npm -> /nix/store/x8vrc1c6r8nn454whr99bxc5hdy5ybjf-nodejs-18.18.0/bin/npm*
14 lrwxrwxrwx 3 root root 66 Jan 1 1970 npx -> /nix/store/x8vrc1c6r8nn454whr99bxc5hdy5ybjf-nodejs-18.18.0/bin/npx*
```

Nix store

```
1 $ which lnav
2 /nix/store/hcv2abrklmhsnz67xjasg3pwz4wdkw7q-devenv-profile/bin/lnav
3
4 $ ls /nix/store/hcv2abrklmhsnz67xjasg3pwz4wdkw7q-devenv-profile/bin/ -la
5 total 36
6 dr-xr-xr-x 2 root root 4096 Jan 1 1970 ./
7 dr-xr-xr-x 6 root root 4096 Jan 1 1970 ../
8 lrwxrwxrwx 3 root root 71 Jan 1 1970 corepack -> /nix/store/x8vrc1c6r8nn454whr99bxc5hdy5ybjf-nodejs-18.18.0/bin/corepack*
9 lrwxrwxrwx 3 root root 67 Jan 1 1970 honcho -> /nix/store/am744diswph5ml71n562k2rwhwk3ipw0-honcho-1.1.0/bin/honcho*
10 lrwxrwxrwx 3 root root 76 Jan 1 1970 .honcho-wrapped -> /nix/store/am744diswph5ml71n562k2rwhwk3ipw0-honcho-1.1.0/bin/.honcho-wrapped*
11 lrwxrwxrwx 2 root root 64 Jan 1 1970 lnav -> /nix/store/c9psaxm0syj8rriqdy8zaxns9s997rhk-lnav-0.11.2/bin/lnav*
12 lrwxrwxrwx 3 root root 67 Jan 1 1970 node -> /nix/store/x8vrc1c6r8nn454whr99bxc5hdy5ybjf-nodejs-18.18.0/bin/node*
13 lrwxrwxrwx 3 root root 66 Jan 1 1970 npm -> /nix/store/x8vrc1c6r8nn454whr99bxc5hdy5ybjf-nodejs-18.18.0/bin/npm*
14 lrwxrwxrwx 3 root root 66 Jan 1 1970 npx -> /nix/store/x8vrc1c6r8nn454whr99bxc5hdy5ybjf-nodejs-18.18.0/bin/npx*
```

Nix store

```
1 $ which lnav
2 /nix/store/hcv2abrklmhsnz67xjasg3pwz4wdkw7q-devenv-profile/bin/lnav
3
4 $ ls /nix/store/hcv2abrklmhsnz67xjasg3pwz4wdkw7q-devenv-profile/bin/ -la
5 total 36
6 dr-xr-xr-x 2 root root 4096 Jan 1 1970 ./
7 dr-xr-xr-x 6 root root 4096 Jan 1 1970 ../
8 lrwxrwxrwx 3 root root 71 Jan 1 1970 corepack -> /nix/store/x8vrc1c6r8nn454whr99bxc5hdy5ybjf-nodejs-18.18.0/bin/corepack*
9 lrwxrwxrwx 3 root root 67 Jan 1 1970 honcho -> /nix/store/am744diswph5ml71n562k2rwhwk3ipw0-honcho-1.1.0/bin/honcho*
10 lrwxrwxrwx 3 root root 76 Jan 1 1970 .honcho-wrapped -> /nix/store/am744diswph5ml71n562k2rwhwk3ipw0-honcho-1.1.0/bin/.honcho-wrapped*
11 lrwxrwxrwx 2 root root 64 Jan 1 1970 lnav -> /nix/store/c9psaxm0syj8rriqdy8zaxns9s997rhk-lnav-0.11.2/bin/lnav*
12 lrwxrwxrwx 3 root root 67 Jan 1 1970 node -> /nix/store/x8vrc1c6r8nn454whr99bxc5hdy5ybjf-nodejs-18.18.0/bin/node*
13 lrwxrwxrwx 3 root root 66 Jan 1 1970 npm -> /nix/store/x8vrc1c6r8nn454whr99bxc5hdy5ybjf-nodejs-18.18.0/bin/npm*
14 lrwxrwxrwx 3 root root 66 Jan 1 1970 npx -> /nix/store/x8vrc1c6r8nn454whr99bxc5hdy5ybjf-nodejs-18.18.0/bin/npx*
```

“

Nix binary cache hosting

”

Devenv

“

Fast, Declarative, Reproducible, and Composable Developer Environments using Nix

”

Hello nix

A modern office lounge area with a wooden floor, white brick walls, and a ceiling with exposed beams and linear lighting. In the center, there is a large white projector screen flanked by two tall black speakers. Several large beanbag chairs are arranged in the room: two grey ones on the left, two yellow ones in the center, and two grey ones on the right. In the foreground, there are several large green indoor plants in grey pots. To the right, there is a dark wooden bar counter with a stool and a backlit shelf with bottles. The overall atmosphere is contemporary and relaxed.

Hello world

- Initialiser devenv
- Démarrer le devenv shell
- Observer les changements sur git
- `devenv info`

Étape: 01-hello-world

Devenv: syntaxe, doc et languges



devenv.yaml

```
inputs:  
  nixpkgs:  
    url: github:NixOS/nixpkgs/nixpkgs-unstable
```

devenv.yaml

```
allowUnfree: true
inputs:
  nixpkgs:
    url: github:NixOS/nixpkgs/nixpkgs-unstable
  myproject:
    url: github:owner/myproject
    flake: false
  myproject2:
    url: github:owner/myproject
    overlays:
      - default
imports:
  - ./frontend
  - ./backend
  - ./mymodule.nix
  - myproject
```

Syntaxe nix pour Devenv

Exemple de fichier devenv.nix

```
{ pkgs, ... }:  
  
{  
  languages.rust = {  
    enable = true;  
    channel = "nightly";  
    components = [ "rustc" "cargo" "clippy" "rustfmt" "rust-analyzer" ];  
  };  
  #pre-commit.hooks = {  
    # rustfmt.enable = true;  
    # clippy.enable = true;  
  };  
  packages = [ pkgs.git pkgs.curl pkgs.jq pkgs.usql ];  
}
```

 Chaque instruction se termine par un ;

Syntaxe nix

Fonctions

```
{ pkgs, lib, ... }:  
  
{  
  
    # ...  
  
}
```

⚠ Le `:` sépare les arguments de la fonction de son corps

Syntaxe nix

Attribute Sets – ou comment regrouper les clés

```
{  
  
  languages.rust.enable = true;  
  
  languages.rust.channel = "nightly";  
  
}
```

```
{  
  
  languages.rust = {  
  
    enable = true;  
  
    channel = "nightly";  
  
  }  
  
}
```

Syntaxe nix

Tableaux

```
{  
  packages = [ pkgs.git pkgs.curl pkgs.jq pkgs.usql ];  
}
```

⚠ Pas de , entre les éléments d'un tableau

Nix Package

<https://search.nixos.org/packages>



[Back to nixos.org](#)

[Packages](#)

[NixOS options](#)

[Flakes](#)

[Experimental](#)

🔍 Search more than **80 000 packages**

curl

Search

Channel:

23.05

unstable

Package sets

No package set

15

haskellPackages

11

ocamlPackages

3

sbclPackages

2

rPackages

2

php82Extensions

2

php81Extensions

2

php80Extensions

2

perl534Packages

1

nodePackages_latest

1

nodePackages

1

lua55Packages

1

lua54Packages

1

lua53Packages

1

lua52Packages

1

lua51Packages

1

Showing results 1-50 of **54 packages**.

Sort: Best match ▾

curlWithGnuTls

A command line tool for transferring files with URL syntax

Name: `curl` Version: `8.1.1` Outputs: `bin` `debug` `dev` `devdoc` `man` `out` [Homepage](#) [Source](#) License: [curl License](#)

curlMinimal

A command line tool for transferring files with URL syntax

Name: `curl` Version: `8.1.1` Outputs: `bin` `debug` `dev` `devdoc` `man` `out` [Homepage](#) [Source](#) License: [curl License](#)

curlHTTP3

A command line tool for transferring files with URL syntax

Name: `curl` Version: `8.1.1` Outputs: `bin` `debug` `dev` `devdoc` `man` `out` [Homepage](#) [Source](#) License: [curl License](#)

curlFull

A command line tool for transferring files with URL syntax

Name: `curl` Version: `8.1.1` Outputs: `bin` `debug` `dev` `devdoc` `man` `out` [Homepage](#) [Source](#) License: [curl License](#)

curl

Référence de toutes les clés du devenv.nix

<https://devenv.sh/reference/options/>



cachix/devenv
v0.6.3 ☆ 2.5k 🗣️ 178

Home Documentation Blog Community

Documentation

- Containers
- Pre-Commit Hooks
- Common Patterns
- Writing devenv.yaml
- Inputs
- Imports
- Overview
- Automatic Shell Activation
- Garbage Collection
- Guides
- Using With Flakes
- Using With flake.parts
- Integrations
- .env
- GitHub Actions
- Codespaces / devcontainer
- Diffastic
- Examples
- Editor Support
- VSCode
- Roadmap
- Reference

devenv.nix options

packages

A list of packages to expose inside the developer environment. Search available packages using `devenv search NAME`.

Type: list of package

Default: []

Declared by: - <https://github.com/cachix/devenv/blob/main/src/modules/top-level.nix>

certificates

List of domains to generate certificates for.

Type: list of string

Default: []

Example:

```
[  
  "example.com"  
  "*example.com"
```



- packages
- certificates
- container.isBuilding
- containers
- containers.<name>.copyToRoot
- containers.<name>.defaultCopyArgs
- containers.<name>.entrypoint
- containers.<name>.isBuilding
- containers.<name>.name
- containers.<name>.registry
- containers.<name>.startupCommand
- containers.<name>.version
- devcontainer.enable
- devcontainer.settings
- devcontainer.settings.customizati
- devcontainer.settings.image
- devcontainer.settings.overrideCom
- devcontainer.settings.updateConter
- devenv.debug
- devenv.flakesIntegration
- devenv.latestVersion
- devenv.warnOnNewVersion

Hello JQ

- On ajoute le package jq
- Help: devenv search jq

Étape: 02-jq

Interlude direnv



direnv, un outil pour gérer votre \$ENV

```
# .envrc
export WORKSHOP="devenv"
export CURRENT_STEP="jq"
```

```
1 $ cd 02-jq
2 direnv: loading /workspaces/workshop-devenv/steps/02-jq/.envrc
3 direnv: export +CURRENT_STEP +WORKSHOP
4
5 $ cd ..
6 direnv: unloading
```

direnv, un outil pour gérer votre \$ENV

```
# .envrc  
export WORKSHOP="devenv"  
export CURRENT_STEP="jq"
```

```
1 $ cd 02-jq  
2 direnv: loading /workspaces/workshop-devenv/steps/02-jq/.envrc  
3 direnv: export +CURRENT_STEP +WORKSHOP  
4  
5 $ cd ..  
6 direnv: unloading
```

direnv, un outil pour gérer votre \$ENV

```
# .envrc
export WORKSHOP="devenv"
export CURRENT_STEP="jq"
```

```
1 $ cd 02-jq
2 direnv: loading /workspaces/workshop-devenv/steps/02-jq/.envrc
3 direnv: export +CURRENT_STEP +WORKSHOP
4
5 $ cd ..
6 direnv: unloading
```

direnv, un outil pour gérer votre \$ENV

```
# .envrc
export WORKSHOP="devenv"
export CURRENT_STEP="jq"
```

```
1 $ cd 02-jq
2 direnv: loading /workspaces/workshop-devenv/steps/02-jq/.envrc
3 direnv: export +CURRENT_STEP +WORKSHOP
4
5 $ cd ..
6 direnv: unloading
```


Intégrations direnv

```
1 # .envrc
2 layout node
3
4 source_url "https://raw.githubusercontent.com/cachix/devenv/d1f7b48e35e6dee421cfd0f51481d17f77586997/direnvrc" "sha256-YBzqskFZxi
5
6 use devenv
```

L'intégration devenv lance automatiquement un `devenv shell` dans un dossier avec `devenv`

Intégrations direnv

```
1 # .envrc
2 layout node
3
4 source_url "https://raw.githubusercontent.com/cachix/devenv/d1f7b48e35e6dee421cfd0f51481d17f77586997/direnvrc" "sha256-YBzqskFZxi
5
6 use devenv
```

L'intégration devenv lance automatiquement un `devenv shell` dans un dossier avec `devenv`

Devenv: les langages



Avec des packages

```
{ pkgs, ... }:  
  
{  
  packages = [ pkgs.rustc pkgs.cargo pkgs.clippy pkgs.rustfmt pkgs.rust-analyzer ];  
}
```

Syntaxe des langages

```
{ pkgs, ... }:  
  
{  
  
  languages.rust = {  
    enable = true;  
    channel = "stable";  
  };  
  
}
```

<https://devenv.sh/languages/>

Comment garder devenv à jour ?

A modern office lounge area with a wooden floor, white brick walls, and a ceiling with exposed beams and track lighting. In the center, there is a large white projector screen flanked by two black speakers. Several large, plush beanbag chairs in shades of grey and yellow are arranged in a semi-circle in front of the screen. To the left, there are large windows and several tall indoor plants in grey planters. To the right, there is a dark wood bar counter with a stool and a shelf with bottles. The overall atmosphere is bright and contemporary.

devenv update

```
1 $ devenv update
2 warning: updating lock file '/home/jtanguy/Sfeir/workshop-devenv/docs/devenv.lock':
3 • Updated input 'devenv':
4   'github:cachix/devenv/895e8403410c3ec14d1e8cae94e88b4e7e2e8c2f?dir=src%2fmodules' (2023-12-10)
5   → 'github:cachix/devenv/0e68853bb27981a4ffd7a7225b59ed84f7180fc7?dir=src%2fmodules' (2024-02-03)
6 • Updated input 'nixpkgs':
7   'github:NixOS/nixpkgs/29d6c96900b9b576c2fb89491452f283aa979819' (2023-12-10)
8   → 'github:NixOS/nixpkgs/8cc79aa39bbc6eaedaf286ae655b224c71e02907' (2024-02-06)
9 • Updated input 'pre-commit-hooks':
10  'github:cachix/pre-commit-hooks.nix/e1d203c2fa7e2593c777e490213958ef81f71977' (2023-12-11)
11  → 'github:cachix/pre-commit-hooks.nix/0db2e67ee49910adfa13010e7f012149660af7f0' (2024-02-07)
12 • Updated input 'pre-commit-hooks/flake-compat':
13  'github:edolstra/flake-compat/35bb57c0c8d8b62bbfd284272c928ceb64ddbde9' (2023-01-17)
14  → 'github:edolstra/flake-compat/0f9255e01c2351cc7d116c072cb317785dd33b33' (2023-10-04)
15 • Updated input 'pre-commit-hooks/flake-utils':
16  'github:numtide/flake-utils/a1720a10a6cfe8234c0e93907ffe81be440f4cef' (2023-05-31)
17  → 'github:numtide/flake-utils/4022d587cbbfd70fe950c1e2083a02621806a725' (2023-12-04)
18 • Updated input 'pre-commit-hooks/gitignore':
19  'github:hercules-ci/gitignore.nix/a20de23b925fd8264fd7fad6454652e142fd7f73' (2022-08-14)
20  → 'github:hercules-ci/gitignore.nix/43e1aa1308018f37118e34d3a9cb4f5e75dc11d5' (2023-12-29)
21 • Updated input 'pre-commit-hooks/nixpkgs-stable':
22  'github:NixOS/nixpkgs/c37ca420157f4abc31e26f436c1145f8951ff373' (2023-06-03)
23  → 'github:NixOS/nixpkgs/3dc440faeee9e889fe2d1b4d25ad0f430d449356' (2024-01-10)
```

devenv update

```
1 $ devenv update
2 warning: updating lock file '/home/jtanguy/Sfeir/workshop-devenv/docs/devenv.lock':
3 • Updated input 'devenv':
4   'github:cachix/devenv/895e8403410c3ec14d1e8cae94e88b4e7e2e8c2f?dir=src%2fmodules' (2023-12-10)
5 → 'github:cachix/devenv/0e68853bb27981a4ffd7a7225b59ed84f7180fc7?dir=src%2fmodules' (2024-02-03)
6 • Updated input 'nixpkgs':
7   'github:NixOS/nixpkgs/29d6c96900b9b576c2fb89491452f283aa979819' (2023-12-10)
8 → 'github:NixOS/nixpkgs/8cc79aa39bbc6eaedaf286ae655b224c71e02907' (2024-02-06)
9 • Updated input 'pre-commit-hooks':
10  'github:cachix/pre-commit-hooks.nix/e1d203c2fa7e2593c777e490213958ef81f71977' (2023-12-11)
11 → 'github:cachix/pre-commit-hooks.nix/0db2e67ee49910adfa13010e7f012149660af7f0' (2024-02-07)
12 • Updated input 'pre-commit-hooks/flake-compat':
13  'github:edolstra/flake-compat/35bb57c0c8d8b62bbfd284272c928ceb64ddbde9' (2023-01-17)
14 → 'github:edolstra/flake-compat/0f9255e01c2351cc7d116c072cb317785dd33b33' (2023-10-04)
15 • Updated input 'pre-commit-hooks/flake-utils':
16  'github:numtide/flake-utils/a1720a10a6cfe8234c0e93907ffe81be440f4cef' (2023-05-31)
17 → 'github:numtide/flake-utils/4022d587cbbfd70fe950c1e2083a02621806a725' (2023-12-04)
18 • Updated input 'pre-commit-hooks/gitignore':
19  'github:hercules-ci/gitignore.nix/a20de23b925fd8264fd7fad6454652e142fd7f73' (2022-08-14)
20 → 'github:hercules-ci/gitignore.nix/43e1aa1308018f37118e34d3a9cb4f5e75dc11d5' (2023-12-29)
21 • Updated input 'pre-commit-hooks/nixpkgs-stable':
22  'github:NixOS/nixpkgs/c37ca420157f4abc31e26f436c1145f8951ff373' (2023-06-03)
23 → 'github:NixOS/nixpkgs/3dc440faeee9e889fe2d1b4d25ad0f430d449356' (2024-01-10)
```


devenv update

```
1 $ devenv update
2 warning: updating lock file '/home/jtanguy/Sfeir/workshop-devenv/docs/devenv.lock':
3 • Updated input 'devenv':
4   'github:cachix/devenv/895e8403410c3ec14d1e8cae94e88b4e7e2e8c2f?dir=src%2fmodules' (2023-12-10)
5   → 'github:cachix/devenv/0e68853bb27981a4ffd7a7225b59ed84f7180fc7?dir=src%2fmodules' (2024-02-03)
6 • Updated input 'nixpkgs':
7   'github:NixOS/nixpkgs/29d6c96900b9b576c2fb89491452f283aa979819' (2023-12-10)
8   → 'github:NixOS/nixpkgs/8cc79aa39bbc6eaedaf286ae655b224c71e02907' (2024-02-06)
9 • Updated input 'pre-commit-hooks':
10  'github:cachix/pre-commit-hooks.nix/e1d203c2fa7e2593c777e490213958ef81f71977' (2023-12-11)
11  → 'github:cachix/pre-commit-hooks.nix/0db2e67ee49910adfa13010e7f012149660af7f0' (2024-02-07)
12 • Updated input 'pre-commit-hooks/flake-compat':
13  'github:edolstra/flake-compat/35bb57c0c8d8b62bbfd284272c928ceb64ddbde9' (2023-01-17)
14  → 'github:edolstra/flake-compat/0f9255e01c2351cc7d116c072cb317785dd33b33' (2023-10-04)
15 • Updated input 'pre-commit-hooks/flake-utils':
16  'github:numtide/flake-utils/a1720a10a6cfe8234c0e93907ffe81be440f4cef' (2023-05-31)
17  → 'github:numtide/flake-utils/4022d587cbbfd70fe950c1e2083a02621806a725' (2023-12-04)
18 • Updated input 'pre-commit-hooks/gitignore':
19  'github:hercules-ci/gitignore.nix/a20de23b925fd8264fd7fad6454652e142fd7f73' (2022-08-14)
20  → 'github:hercules-ci/gitignore.nix/43e1aa1308018f37118e34d3a9cb4f5e75dc11d5' (2023-12-29)
21 • Updated input 'pre-commit-hooks/nixpkgs-stable':
22  'github:NixOS/nixpkgs/c37ca420157f4abc31e26f436c1145f8951ff373' (2023-06-03)
23  → 'github:NixOS/nixpkgs/3dc440faeee9e889fe2d1b4d25ad0f430d449356' (2024-01-10)
```

devenv update

```
1 $ devenv update
2 warning: updating lock file '/home/jtanguy/Sfeir/workshop-devenv/docs/devenv.lock':
3 • Updated input 'devenv':
4   'github:cachix/devenv/895e8403410c3ec14d1e8cae94e88b4e7e2e8c2f?dir=src%2fmodules' (2023-12-10)
5 → 'github:cachix/devenv/0e68853bb27981a4ffd7a7225b59ed84f7180fc7?dir=src%2fmodules' (2024-02-03)
6 • Updated input 'nixpkgs':
7   'github:NixOS/nixpkgs/29d6c96900b9b576c2fb89491452f283aa979819' (2023-12-10)
8 → 'github:NixOS/nixpkgs/8cc79aa39bbc6eaedaf286ae655b224c71e02907' (2024-02-06)
9 • Updated input 'pre-commit-hooks':
10  'github:cachix/pre-commit-hooks.nix/elld203c2fa7e2593c777e490213958ef81f71977' (2023-12-11)
11 → 'github:cachix/pre-commit-hooks.nix/0db2e67ee49910adfa13010e7f012149660af7f0' (2024-02-07)
12 • Updated input 'pre-commit-hooks/flake-compat':
13  'github:edolstra/flake-compat/35bb57c0c8d8b62bbfd284272c928ceb64ddbde9' (2023-01-17)
14 → 'github:edolstra/flake-compat/0f9255e01c2351cc7d116c072cb317785dd33b33' (2023-10-04)
15 • Updated input 'pre-commit-hooks/flake-utils':
16  'github:numtide/flake-utils/a1720a10a6cfe8234c0e93907ffe81be440f4cef' (2023-05-31)
17 → 'github:numtide/flake-utils/4022d587cbbfd70fe950c1e2083a02621806a725' (2023-12-04)
18 • Updated input 'pre-commit-hooks/gitignore':
19  'github:hercules-ci/gitignore.nix/a20de23b925fd8264fd7fad6454652e142fd7f73' (2022-08-14)
20 → 'github:hercules-ci/gitignore.nix/43e1aa1308018f37118e34d3a9cb4f5e75dc11d5' (2023-12-29)
21 • Updated input 'pre-commit-hooks/nixpkgs-stable':
22  'github:NixOS/nixpkgs/c37ca420157f4abc31e26f436c1145f8951ff373' (2023-06-03)
23 → 'github:NixOS/nixpkgs/3dc440faeee9e889fe2d1b4d25ad0f430d449356' (2024-01-10)
```

devenv update

```
1 $ devenv update
2 warning: updating lock file '/home/jtanguy/Sfeir/workshop-devenv/docs/devenv.lock':
3 • Updated input 'devenv':
4   'github:cachix/devenv/895e8403410c3ec14d1e8cae94e88b4e7e2e8c2f?dir=src%2fmodules' (2023-12-10)
5 → 'github:cachix/devenv/0e68853bb27981a4ffd7a7225b59ed84f7180fc7?dir=src%2fmodules' (2024-02-03)
6 • Updated input 'nixpkgs':
7   'github:NixOS/nixpkgs/29d6c96900b9b576c2fb89491452f283aa979819' (2023-12-10)
8 → 'github:NixOS/nixpkgs/8cc79aa39bbc6eaedaf286ae655b224c71e02907' (2024-02-06)
9 • Updated input 'pre-commit-hooks':
10  'github:cachix/pre-commit-hooks.nix/elld203c2fa7e2593c777e490213958ef81f71977' (2023-12-11)
11 → 'github:cachix/pre-commit-hooks.nix/0db2e67ee49910adfa13010e7f012149660af7f0' (2024-02-07)
12 • Updated input 'pre-commit-hooks/flake-compat':
13  'github:edolstra/flake-compat/35bb57c0c8d8b62bbfd284272c928ceb64ddbde9' (2023-01-17)
14 → 'github:edolstra/flake-compat/0f9255e01c2351cc7d116c072cb317785dd33b33' (2023-10-04)
15 • Updated input 'pre-commit-hooks/flake-utils':
16  'github:numtide/flake-utils/a1720a10a6cfe8234c0e93907ffe81be440f4cef' (2023-05-31)
17 → 'github:numtide/flake-utils/4022d587cbbfd70fe950c1e2083a02621806a725' (2023-12-04)
18 • Updated input 'pre-commit-hooks/gitignore':
19  'github:hercules-ci/gitignore.nix/a20de23b925fd8264fd7fad6454652e142fd7f73' (2022-08-14)
20 → 'github:hercules-ci/gitignore.nix/43e1aa1308018f37118e34d3a9cb4f5e75dc11d5' (2023-12-29)
21 • Updated input 'pre-commit-hooks/nixpkgs-stable':
22  'github:NixOS/nixpkgs/c37ca420157f4abc31e26f436c1145f8951ff373' (2023-06-03)
23 → 'github:NixOS/nixpkgs/3dc440faeee9e889fe2d1b4d25ad0f430d449356' (2024-01-10)
```

Hello python

A modern office lounge area with a wooden floor, white brick walls, and a ceiling with exposed beams and linear lighting. In the center, there is a large white projector screen flanked by two tall black speakers. Several large beanbag chairs are arranged in the room: two grey ones on the left, two yellow ones in the center, and two grey ones on the right. In the foreground, there are several large green indoor plants. To the right, there is a dark wooden bar counter with a stool and a backlit shelf with bottles. The overall atmosphere is contemporary and relaxed.

Hello python

- Ajouter le package python
- Lancer le script hello.py

Étape: 03-python

Hello python v2

- Migrer vers le langage python
- Lancer le script hello.py
- Mettre à jour l'environnement de dev

Étape: 03-python

Devenv: Scripts, processes et services



Scripts

Permet de définir des scripts utilitaires au projet

```
{ pkgs, ... }:  
  
{  
  packages = [ pkgs.curl pkgs.jq ];  
  
  scripts.silly-example.exec = ''  
    curl "https://httpbin.org/get?$1" | jq '.args'  
  '';  
}
```


Scripts

On peut utiliser les binaires sans les inclure dans le packages

```
{ pkgs, ... }:  
  
{  
  packages = [pkgs.jq];  
  scripts.devenv-bump-version.exec = ''  
    # TODO: ask for the new version  
    # TODO: update the version in the mkdocs.yml  
    echo assuming you bumped the version in mkdocs.yml, populating src/modules/latest-version  
    cat mkdocs.yml | ${pkgs.yaml2json}/bin/yaml2json | jq -r '.extra.devenv.version' > src/modules/latest-version  
  '';  
}
```

Processes

Les processus sont tous démarrés par devenv up (honcho est utilisé sous le capot)

```
{ pkgs, ... }:  
  
{  
  processes = {  
    silly-example.exec = "while true; do echo hello && sleep 1; done";  
    ping.exec = "ping example.com";  
  };  
}
```

```
$ devenv up  
Starting processes ...  
  
20:37:44 system          | ping.1 started (pid=4094686)  
20:37:44 system          | silly-example.1 started (pid=4094688)  
20:37:44 silly-example.1 | hello  
20:37:44 ping.1          | PING example.com (93.184.216.34) 56(84) bytes of data.  
20:37:44 ping.1          | 64 bytes from 93.184.216.34 (93.184.216.34): icmp_seq=1 ttl=55 time=125 ms  
20:37:45 silly-example.1 | hello  
20:37:45 ping.1          | 64 bytes from 93.184.216.34 (93.184.216.34): icmp_seq=2 ttl=55 time=125 ms  
20:37:46 silly-example.1 | hello  
20:37:46 ping.1          | 64 bytes from 93.184.216.34 (93.184.216.34): icmp_seq=3 ttl=55 time=125 ms  
20:37:47 silly-example.1 | hello  
20:37:47 ping.1          | 64 bytes from 93.184.216.34 (93.184.216.34): icmp_seq=4 ttl=55 time=125 ms  
...
```

Services

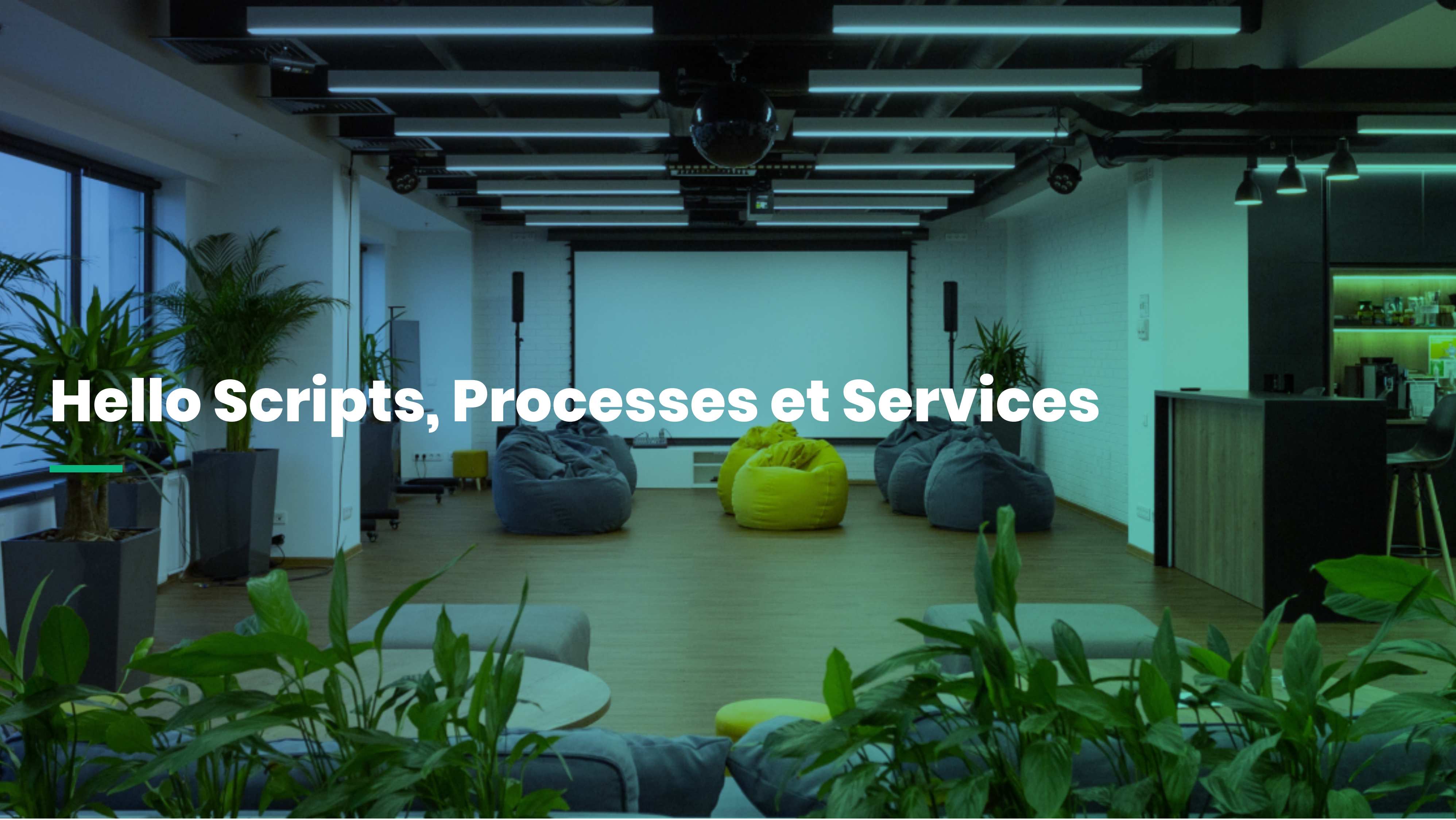
- packages → languages
- processes → services

<https://devenv.sh/services/#supported-services>

```
{ pkgs, ... }:
```

```
{  
  
  services.redis.enable = true;  
  
}
```

Hello Scripts, Processes et Services



Script, process et service

- Écrire un process docs qui lance `mkdocs serve`
- Configurer le service postgres pour créer une DB workshop avec `./db/init.sql`
- Créer un script pour se connecter à la DB avec `usql postgres://localhost:5432/workshop`

Étape: 04-scripts

Hello Realworld

A modern office lounge area with a wooden floor, white brick walls, and a ceiling with exposed beams and linear lighting. In the center, there is a large white projector screen flanked by two tall black speakers. Several large beanbag chairs are arranged in the room: two grey ones on the left, two yellow ones in the center, and two grey ones on the right. In the foreground, there are several large green indoor plants in grey pots. To the right, there is a dark wooden bar counter with a stool and a backlit shelf with bottles. The overall atmosphere is contemporary and relaxed.

Realworld app

- Backend + frontend
- PostgreSQL en DB

Étape: 05-realworld