

## Introduction

**flox** is a developer tool that provides a simplified interface to the Nix package manager. It allows you to create portable, reproducible environments that work consistently across different operating systems.

## Project Initialization and Environments

- **flox init**: Initialize a new flox environment in the current directory (creates `.flox/`).
- **flox activate**: Activate the environment for the current directory.
- **flox services**: Manage background services associated with the environment.

## Package Management

- **flox install [package]**: Search for and install a package into the active environment.
- **flox search [query]**: Search for available packages in the flox/Nix catalog.
- **flox list**: List all packages installed in the current environment.
- **flox remove [package]**: Uninstall a package.
- **flox upgrade**: Upgrade installed packages to their latest versions.

## Running Commands

- **flox run [command]**: Run a command within the flox environment without activating it.
- **flox run -- [package] [args]**: Run a specific package directly.

## Remote and Sharing

- **flox push**: Push your environment configuration to the flox cloud for sharing.
- **flox pull**: Pull an environment configuration.
- **flox subscribe [user/env]**: Subscribe to someone else's environment.

## Global vs Local

- Flox environments are local by default (per directory).

- You can create named global environments that are accessible from anywhere on your system.

## Why flox? (Pro Tips)

### Built on Nix

Flox leverages the power of Nix (over 80,000 packages) but removes the complexity of learning the Nix language for basic environment management.

### Reproducibility

Environments are defined by configuration, ensuring that if it works on your machine, it will work on your teammate's machine or in CI.

### Multi-layer Environments

You can activate multiple flox environments simultaneously, layering tools as needed.

### Declarative Management

Everything about your environment is stored in code, making it easy to track changes via Git.