pipx Python app installer

CONCEPTS

pipx is for applications (black, httpie), not libraries: each gets its own venv, only its commands land on PATH.

pipx manager
- **One venv per app** ~/.local/share/pipx/venvs
  - **App + its deps** isolated
    - **Command link** ~/.local/bin

Use pip or uv to add libraries to a project; use pipx for command-line tools you run everywhere.

INSTALL

pipx install *<package>*
Install an app in its own venv

pipx install *<package>* **--python** *<python>*
Pick the Python version

pipx install "*<package>***[***<extra>***]"**
Install with an extra

pipx install git+*<url>*
Install from a git repository

pipx install ./*<path>*
Install a local project

pipx install --editable ./*<path>*
Editable local install

pipx install --force *<package>*
Overwrite an existing install

RUN WITHOUT INSTALLING

pipx run *<package>*
Run an app in a temporary venv

pipx run *<package> <args>*
Pass arguments to the app

pipx run --spec "*<package>***==***<version>***"** *<command>*
Run a specific version

RUN WITHOUT INSTALLING (cont.)

pipx run --python *<python> <package>*
Run on a chosen Python

pipx run *<script>***.py**
Run a script with its inline dependencies

MANAGE

pipx list
Show installed apps and versions

pipx list --short
One line per app

pipx upgrade *<package>*
Upgrade one app

pipx upgrade-all
Upgrade every app

pipx uninstall *<package>*
Remove an app and its venv

pipx reinstall *<package>*
Rebuild the venv

pipx reinstall-all
Rebuild every venv

INJECT AND PIN

pipx inject *<package> <dep>*
Add a library to an app's venv

pipx uninject *<package> <dep>*
Remove an injected library

pipx runpip *<package> <pip-args>*
Run pip inside an app's venv

SETUP AND ENVIRONMENT

pipx ensurepath
Put the app directory on PATH

python3 -m pip install --user pipx
Install pipx itself

pipx environment
Show paths and settings

On Debian/Ubuntu 23.04+ and Fedora, pip install --user is blocked; install pipx from the system package manager.