

### Installation

#### Linux & macOS

```
curl -LsSf https://astral.sh/uv/install.sh | sudo sh
```

#### Windows (PowerShell)

```
powershell -ExecutionPolicy ByPass -c "irm https://astral.sh/uv/install.ps1 | iex"
```

#### Homebrew (macOS)

```
brew install uv
```

#### Basic Commands

*Check Installed Version*

```
uv version
```

*Get Help*

```
uv help uv --help
```

#### Project Initialization

*Create a New Project*

```
uv init projec t-name # Basic project
```

### Project Management

uv init — initialize project (creates pyproject.toml, .venv)

uv add [pkg], --dev — add dependencies

uv lock, uv sync — lock & sync to universal  
uv.lock file gist.github.com docs.astral.sh +3  
horoscopo-astral.com +3 docs.astral.sh +3  
docs.astral.sh +1 docs.astral.sh +1

### Virtual Environments

uv venv [--python X.Y] — create venv  
(downloads Python if missing)

uv python install ..., uv python pin X.Y —  
install and pin Python versions

### Script Support

Inline script metadata (# /// script ...) for  
dependencies & Python version

uv run --script ..., uv add --script ..., uv lock  
--script ... for isolated script execution

### Tool Execution

uvx <tool> ... — run tools in ephemeral envs

uv tool install <tool> — globally install tools  
like pipx

### pip-Compatible Interface

uv pip install, sync, compile, freeze, show,  
tree, etc. — speedier, pip-compatible

### Lockfiles

uv.lock (universal) captures exact package  
versions across platforms

.lock next to script for script-specific  
dependencies

### Extras & Utilities

uv self update, uv cache clean/prune, uv  
python dir, uv tool dir, shell completions

### Typical Workflow

uv init myproj # start project  
uv add requests --dev # add dependencies  
uv lock # generate uv.lock  
uv sync # sync venv  
uv run pytest # run tests in environment  
uv tool install black # globally install tools  
uv pip compile reqs.in # generate platform--  
independent reqs  
uv pip sync reqs.txt # sync environments

If you're migrating from a requirements.txt  
file

# Add all dependencies from requirements.txt.

uv add -r requirements.txt -c constraints.txt

Updating Dependencies To upgrade a  
package

uv lock --upgrade-package requests



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