asdf Multi-tool version manager

START HERE

`asdf` **`plugin add`** *`<name>`*
Add a tool plugin

`asdf` **`install`**
Install all pinned

`asdf` **`list all`** *`<name>`*
Available versions

`asdf` **`which`** *`<command>`*
Resolve a binary

`asdf` **`install`** *`<name>`* *`<version>`*
Install a version

`asdf` **`set`** *`<name>`* *`<version>`*
Pin in .tool-versions

`asdf` **`current`**
Versions in use here

`asdf` **`list`** *`<name>`*
Installed versions

Plugin knows the tool → `install` → **Installed version** in the data dir → `set` → **.tool-versions** per directory → `shim` → **Command** resolved version

CONCEPTS

asdf is one version manager for many tools. Each tool comes from a plugin; versions are pinned per directory in a .tool-versions file.

Shims in PATH pick the version by looking up from the current directory. After installing a package that adds executables, run asdf reshim if a command is not found.

Version 0.16 removed asdf global and asdf local; use asdf set instead. Older releases still use the old commands.

PLUGINS

`asdf` **`plugin add`** *`<name>`*
Add a plugin from the official list

`asdf` **`plugin add`** *`<name>`* *`<git-url>`*
Add a plugin from a Git repo

`asdf` **`plugin list`**
List installed plugins

PLUGINS (cont.)

`asdf` **`plugin list --urls --refs`**
Show plugin URLs and refs

`asdf` **`plugin list all`**
Browse all registered plugins

`asdf` **`plugin update --all`**
Update every plugin

`asdf` **`plugin update`** *`<name>`*
Update one plugin

`asdf` **`plugin remove`** *`<name>`*
Remove a plugin and its versions
Also deletes every installed version of that tool.

INSTALL VERSIONS

`asdf` **`list all`** *`<name>`*
List all available versions

`asdf` **`list all`** *`<name>`* *`<prefix>`*
Filter available versions

`asdf` **`install`** *`<name>`* *`<version>`*
Install a specific version

`asdf` **`install`** *`<name>`* **`latest`**
Install the latest stable

INSTALL VERSIONS (cont.)

`asdf` **`install`** *`<name>`* **`latest:`***`<prefix>`*
Latest matching a prefix

`asdf` **`install`** *`<name>`*
Install the version in .tool-versions

`asdf` **`install`**
Install everything in .tool-versions

`asdf` **`latest`** *`<name>`*
Show the latest stable version

`asdf` **`latest --all`**
Latest versions of all tools

`asdf` **`uninstall`** *`<name>`* *`<version>`*
Remove an installed version

`asdf` **`help`** *`<name>`* **`[`***`<version>`***`]`**
Show plugin help and notes

SELECT VERSIONS

`asdf` **`set`** *`<name>`* *`<version>`*
Pin version in ./.tool-versions

SELECT VERSIONS (cont.)

`asdf` **`set -u`** *`<name>`* *`<version>`*
Pin in the home .tool-versions
Replaces the old asdf global.

`asdf` **`set -p`** *`<name>`* *`<version>`*
Pin in the nearest parent file

`asdf` **`set`** *`<name>`* *`<version>`* *`<fallback>`*
Pin several versions in order

`asdf` **`current`**
Show versions in use here

`asdf` **`current`** *`<name>`*
Show version of one tool

`asdf` **`list`** *`<name>`*
List installed versions

`asdf` **`list`** *`<name>`* *`<prefix>`*
Filter installed versions

`asdf` **`where`** *`<name>`* **`[`***`<version>`***`]`**
Print the install path

`asdf` **`which`** *`<command>`*
Print the path to an executable

SHIMS AND UTILITIES

`asdf` **`reshim`** *`<name>`* *`<version>`*
Rebuild shims for a version

`asdf` **`exec`** *`<command>`*
Run a shim with the current version

`asdf` **`env`** *`<command>`*
Print the shim environment of a command

`asdf` **`shimversions`** *`<command>`*
Which plugins provide a command

`asdf` **`info`**
Print OS, shell and asdf debug info

`asdf` **`version`**
Print the asdf version

.tool-versions lines

Line	Meaning
`nodejs 22.4.0`	Exact version
`python 3.12.4 3.11.9`	First found wins, rest fallback
`ruby latest`	Resolved at use time
`golang system`	Use the system binary
`# note`	Comment

SHIMS AND UTILITIES (cont.)

Commit .tool-versions so a team and CI use the same tool versions. Pair with mise or direnv for env handling.

RECIPES

Set up a tool in a project

```
asdf plugin add nodejs
asdf install nodejs latest:22
asdf set nodejs 22.4.0
asdf current
```

Bootstrap from a checkout

```
# add every plugin named
in .tool-versions
cut -d' ' -f1 .tool-versions |
grep -v '^#' | xargs -n1 asdf
plugin add
asdf install
```

Refresh everything

```
asdf plugin update --all
asdf latest --all
```

Clean out an old version

```
asdf list nodejs
asdf uninstall nodejs 18.20.0
asdf reshim nodejs
```