pacman Arch package manager

CONCEPTS

The capital letter picks the operation (S sync, R remove, Q query, U upgrade, F files, D database); lowercase letters modify it.

Repositories sync databases
↓ `-Sy`
Package cache /var/cache/pacman/pkg
↓ `-S / -U`
Installed system local database
↓ `-Q`
Query results owners, files, orphans

Never run -Sy alone or install after it without upgrading. A partial upgrade can break the system; use -Syu.

SYNC AND UPGRADE

`sudo pacman -Syu`
Refresh databases and upgrade all

`sudo pacman -S` *`<pkg>`*
Install a package with deps

`sudo pacman -S` *`<pkg1> <pkg2>`*
Install several at once

`sudo pacman -S --needed` *`<pkg>`*
Skip packages already current

`sudo pacman -S` *`<repo>`*`/`*`<pkg>`*
Install from a specific repo

REMOVE

`sudo pacman -R` *`<pkg>`*
Remove just the package

`sudo pacman -Rs` *`<pkg>`*
Remove with unused dependencies

`sudo pacman -Rns` *`<pkg>`*
Also skip .pacsave backups

Removed config files you edited are saved as .pacsave; changed upgrades leave .pacnew next to the live file.

SEARCH AND INSPECT

`pacman -Ss` *`<term>`*
Search repos by name and description

`pacman -Si` *`<pkg>`*
Show repo package details

`pacman -Qi` *`<pkg>`*
Show installed package details

`pacman -Qs` *`<term>`*
Search installed packages

`pacman -Ql` *`<pkg>`*
List files a package installed

`pacman -Qo` *`<file>`*
Which package owns a file

`pacman -Q`
List all installed packages

`pacman -Qe`
List explicitly installed packages

`pacman -Qm`
List foreign (AUR) packages

`pacman -Qu`
List out-of-date packages

ORPHANS AND INSTALL REASON

`pacman -Qdt`
List orphaned dependencies

`pacman -Qdtq | sudo pacman -Rns -`
Remove all orphans

`sudo pacman -D --asexplicit` *`<pkg>`*
Mark explicit, protect from cleanup

`sudo pacman -D --asdeps` *`<pkg>`*
Mark as dependency

FILES AND LOCAL PACKAGES

`pacman -F` *`<file>`*
Which repo package ships a file

`sudo pacman -U` *`<file>`*`.pkg.tar.zst`
Install a local package file