

Package installation/uninstallation in MSYS2

MSYS2 uses "Pacman" as its package manager.

References:

1. <https://www.maketecheasier.com/mastering-pacman-for-arch-linux/>
2. <https://www.maketecheasier.com/clear-package-cache-arch-linux/>

Update the System:

```
pacman -Syu
```

Force a full refresh of the package database and update the system:

```
pacman -Syuu
```

Search for Packages:

```
pacman -Ss {keyword}
```

```
pacman -Ss vim
```

```
pacman -Ss package_name
```

Search for installed packages:

```
pacman -Qs package_name
```

Installing Packages:

```
pacman -S package1 package2
```

Update the system and install packages simultaneously:

```
pacman -Syu package1 package2
```

Listing Installed Packages:

```
pacman -Ql
```

Download Packages without installing:

```
pacman -Sw package_name
```

Uninstall a Package

```
pacman -R package
```

Remove a package and its dependencies that aren't used by other packages:

```
pacman -Rsu package
```

Check for orphan files:

```
pacman -Qdt
```

Remove unused packages/orphans and their configuration files:

```
pacman -Rsnu $(pacman -Qtdq)
```

Clean up the Package Cache:

Clear out cached packages that aren't currently installed:

This option will delete all the cached packages in `/var/cache/pacman/pkg/` except for the versions matching packages installed on your system.

```
pacman -Sc
```

Keep all the installers of packages that are installed on the system **plus one previous** version of each installer in the cache directory. It **also deletes** installers of **any package not installed/found** on the system, much like `pacman -Sc` with an extra option.

```
paccache -rk 1
```

`paccache -rk 2` will keep two older versions of each installer.

Remove the tarballs of all packages not currently installed on your system.

```
paccache -ruk0
```

A crude assessment of the programs installed by the user.

To obtain a crude assessment of the programs installed by the user (not dependencies of other packages installed by MSYS2), try the following commands:

```
comm -23 <(pacman -Qqett | sort) <(pacman -Qqg base -g base-devel | sort | uniq)
```

Or

```
comm -23 <(pacman -Qqett | sort | uniq) <(pacman -Qqg base -g base-devel | sort | uniq)
```

Ref: <https://unix.stackexchange.com/questions/409895/pacman-get-list-of-packages-installed-by-user>

Or

```
pacman --query --explicit
```

Ref: <https://linuxcommandlibrary.com/man/pacman>

Also, you can redirect the output to a text file, for example:

```
cd c:  
cd Users/YOUR_USERNAME/Documents/  
pacman --query --explicit > progs_installed_by_me.txt
```

Nevertheless, you won't get an accurate program installation history from the package manager. It's always better to maintain a record of the utilities you need and the programs you usually install after re-installing MSYS2.