PACKAGE MANAGMENT

How can I find a package in my distro?
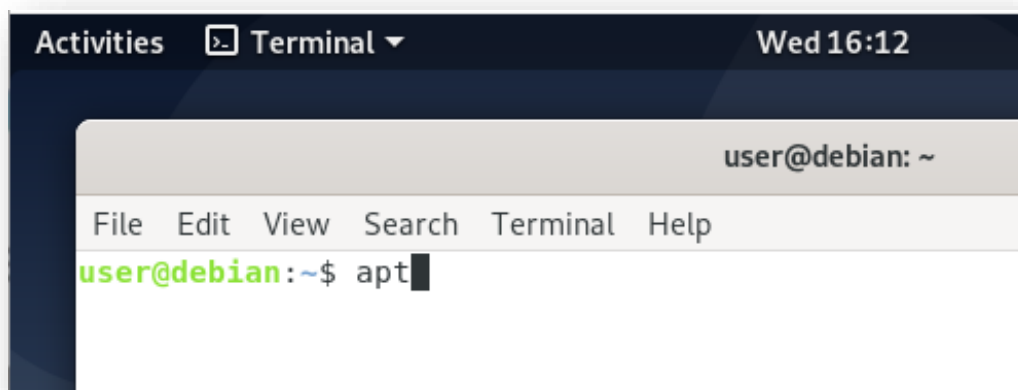
How can I install that package?

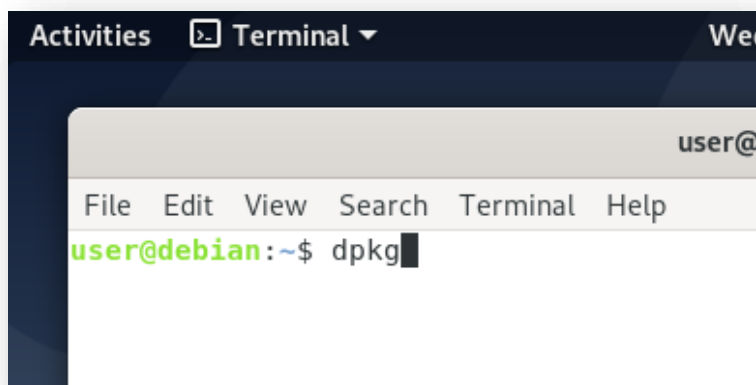**Can I remove it if I don´t want it anymore?**

Eventually, in the normal use of our Linux distributions, we will need to add different types of packages. For that, we have several ways to find information about the package and then install it. If for some reason we no longer want to continue with the installed package, we can also remove it and everything from our terminal.

Let´s talk about our distro, Debian. In this case we can use different commands:

1. **apt**: "Advance Package Tool" that search and download packages from the official repositories. It handles packages and their dependencies.
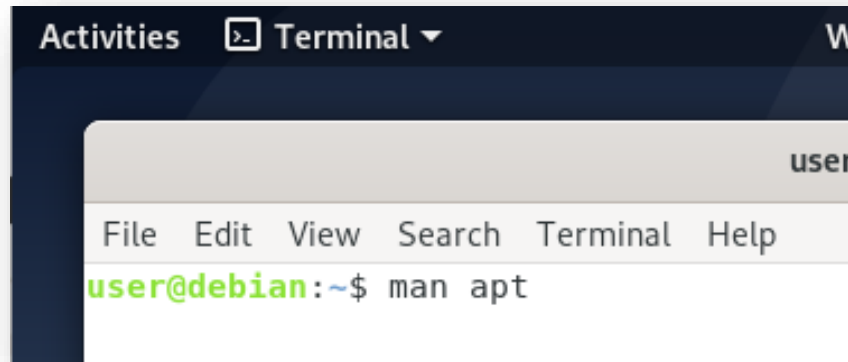

2. **dpkg**: "Debian Package": It interacts directly with the .deb package. It is often used to install packages that have already been downloaded.
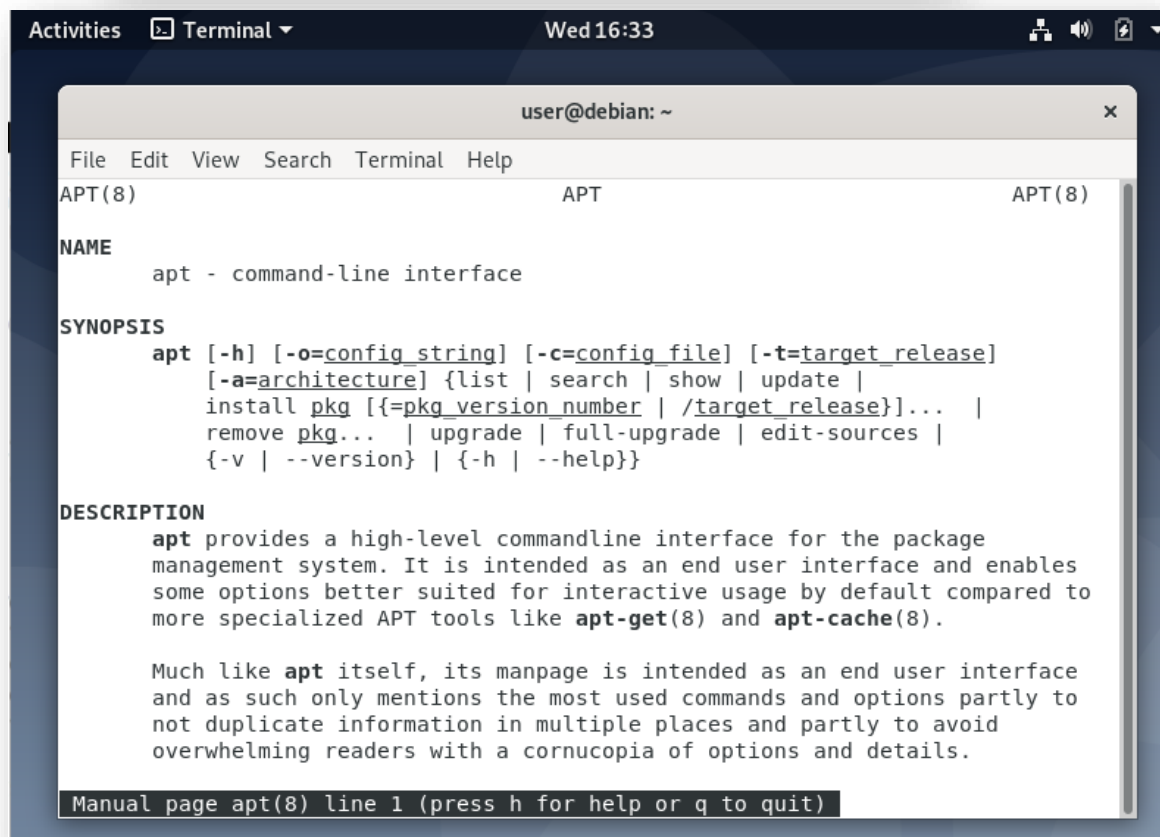
Let´s dive into apt with options

We can go to the internal documentation of apt through the command **man apt**

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File  Edit  View  Search  Terminal  Help
user@debian:~$ man apt
```

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                              user@debian: ~                              ×

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APT(8)                            APT                            APT(8)

NAME
       apt - command-line interface

SYNOPSIS
       apt [-h] [-o=config_string] [-c=config_file] [-t=target_release]
           [-a=architecture] {list | search | show | update |
           install pkg [{=pkg_version_number | /target_release}]...  |
           remove pkg...  | upgrade | full-upgrade | edit-sources |
           {-v | --version} | {-h | --help}}

DESCRIPTION
       apt provides a high-level commandline interface for the package
       management system. It is intended as an end user interface and enables
       some options better suited for interactive usage by default compared to
       more specialized APT tools like apt-get(8) and apt-cache(8).

       Much like apt itself, its manpage is intended as an end user interface
       and as such only mentions the most used commands and options partly to
       not duplicate information in multiple places and partly to avoid
       overwhelming readers with a cornucopia of options and details.

Manual page apt(8) line 1 (press h for help or q to quit)
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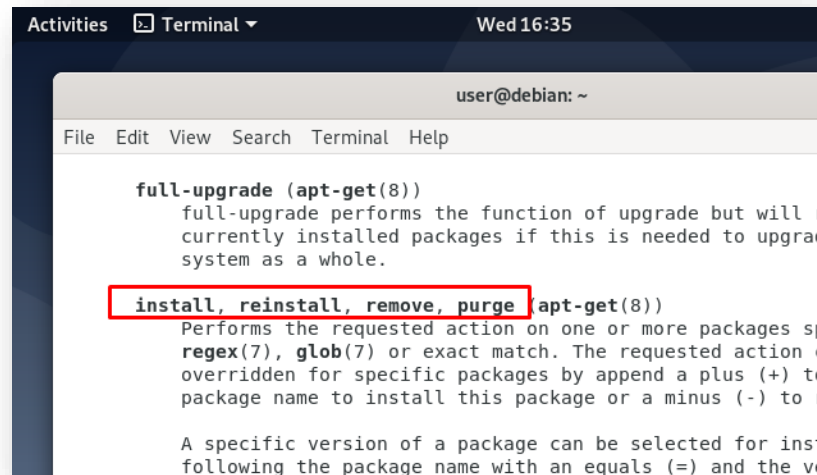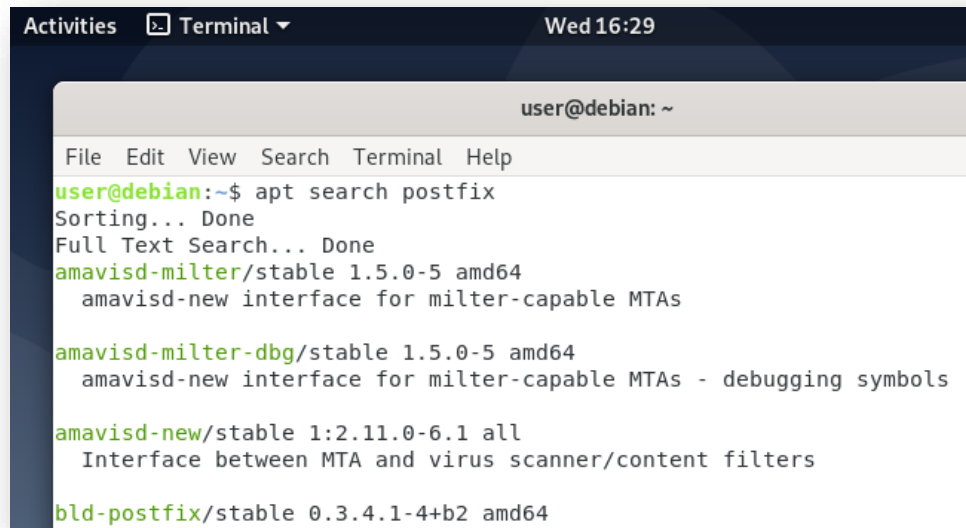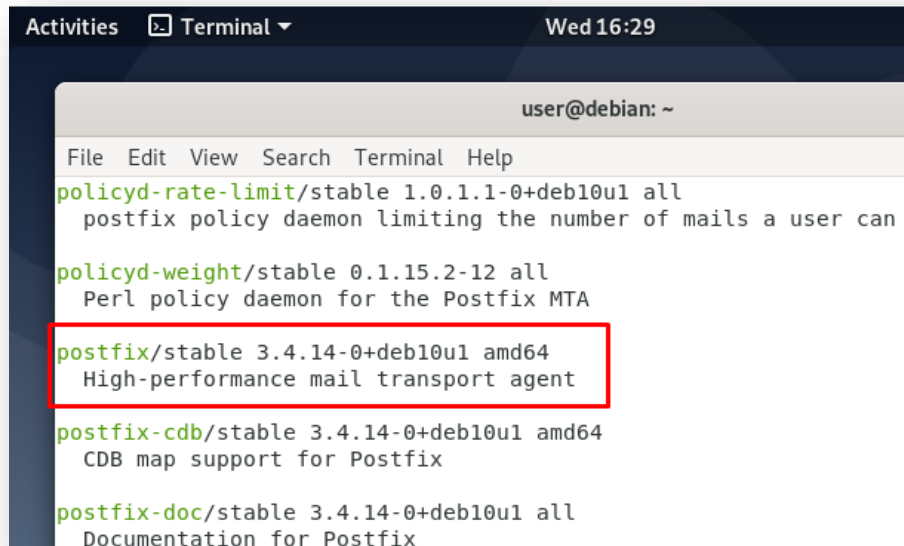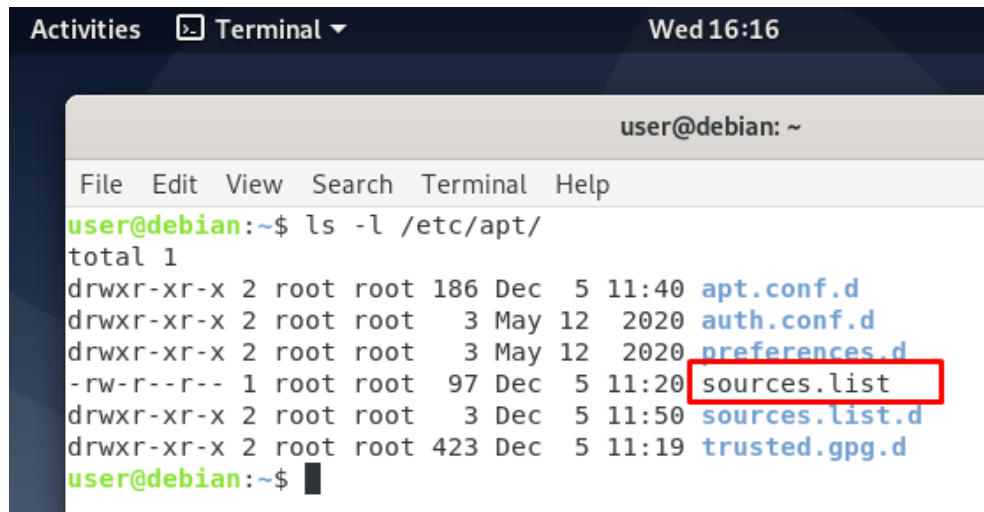
As we can see, we have different types of options in apt

apt search: when you need a specific package but you don't know if it is available in the repositories, you can go to apt search. In this example we´ll search postfix.
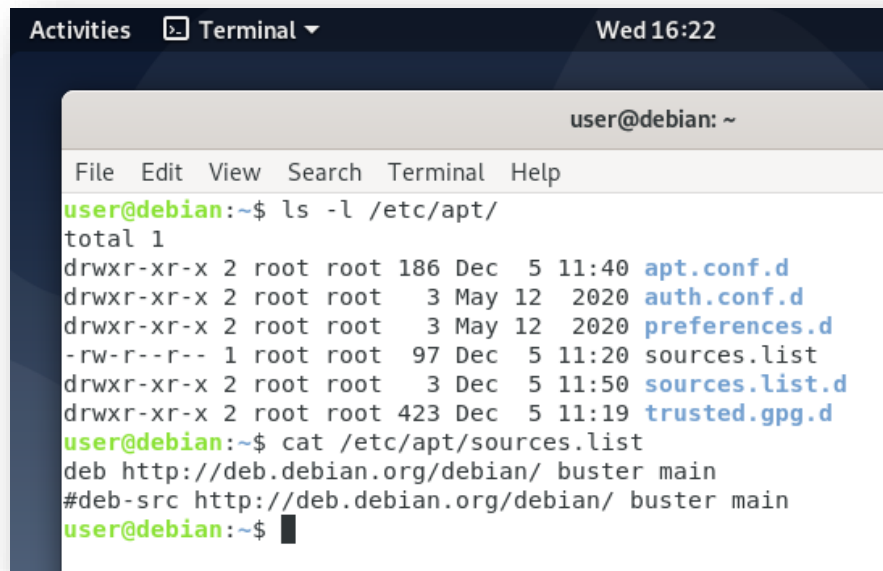
As we can see **apt search** found the package.

But, Where are those searches consulted? from where are the packages installed?

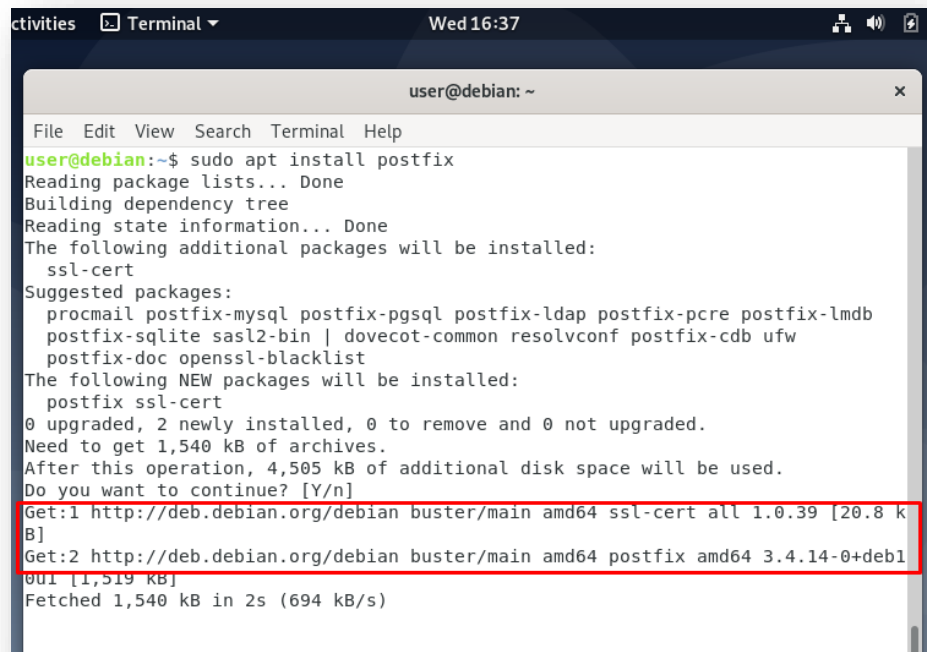all these configurations are set in the sources.list file inside the /etc/apt directory.

In that file are the url where the official repositories of our distribution are located

Now it´s time to install the package (Postfix) through **"apt install postfix"** and we will see the requests that are made to those url defined in the source.list.
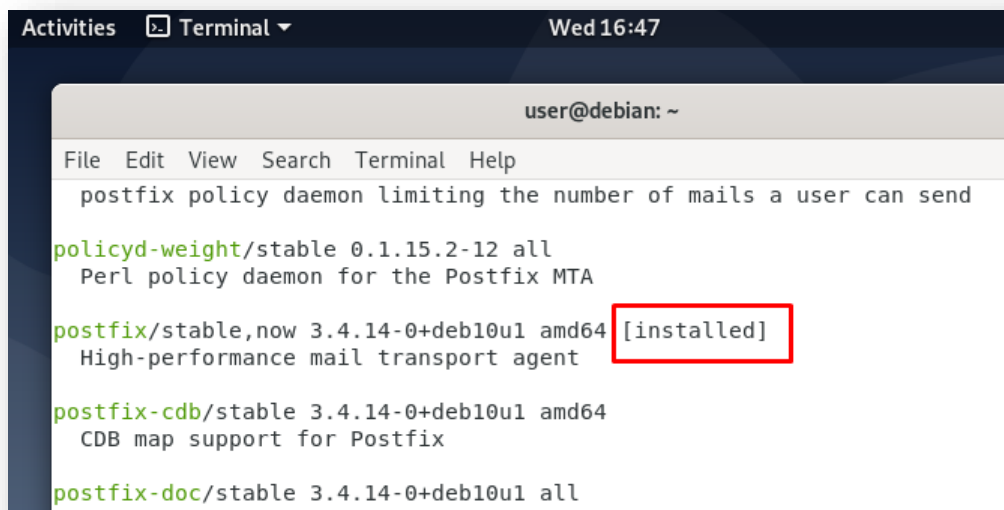
Once the installation is done. we are going to validate that we actually have the package using the command dpkg –l | grep postfix

If we try to search postfix one more time, we will notice a difference: **"apt search postfix"**

Now, when it finds the package, it classifies it as installed.
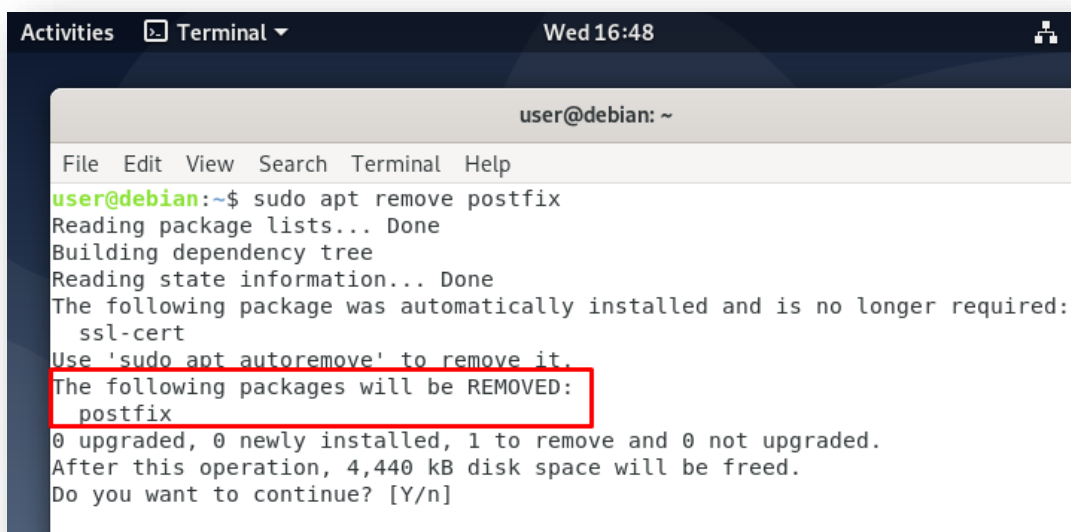
We can also check if we have a package through **"apt list –installed"** and we can filter by | grep postfix.
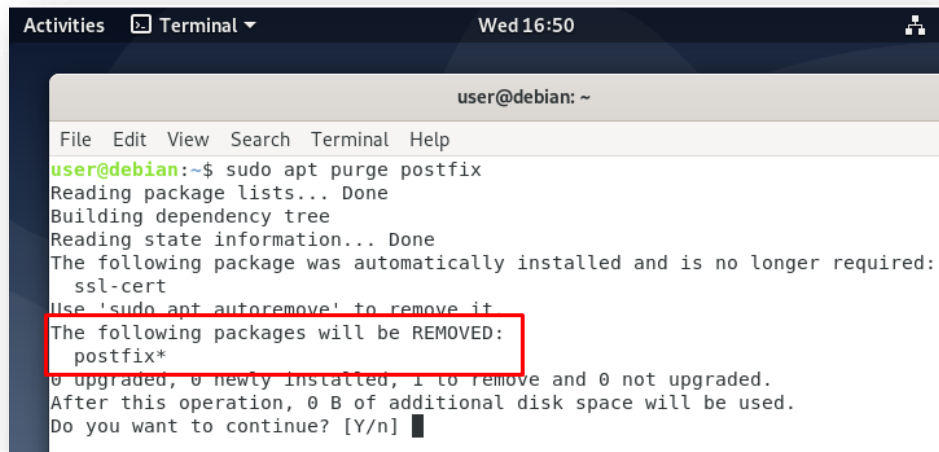

If for some reason, we no longer want to keep the package installed, we have alternatives to uninstall the package.

- **apt remove postfix** to uninstall the package, but maybe some files remain in our system as prevention for accidental uninstallation.
- **apt purge postfix** We use it when we want to completely remove any configuration level records and leftover files from the package.

In both cases, the system asks if we are really sure to execute this action to prevent mistakes.

Let's check if the package is actually uninstalled

Indeed, the package was completely uninstalled. I Hope you learned something new today. thanks