

# Installing software & tools

Before diving into the installation and updating process of built in linux softwares. Let's understand packet manager first.

Package managers are tools that simplify the process of installing, upgrading, configuring, and removing software packages. They maintain a database of available packages and their dependencies, ensuring that your system remains stable and consistent.

Some popular package managers in Linux include:

1. **APT (Advanced Package Tool)**: Used by Debian-based distributions like Ubuntu.
2. **YUM (Yellowdog Updater, Modified)**: Used by Red Hat-based distributions like CentOS.
3. **DNF (Dandified YUM)**: Used by newer Red Hat-based distributions like Fedora.
4. **Pacman**: Used by Arch Linux and its derivatives.

Next, we will see how to install a package or software in Kali ?

```
sudo apt install neofetch
```

Moving on, we can update and upgrade our installed packages.

```
sudo apt update && sudo apt upgrade
```

Instead of updating all the packages we can only update a specify package too.

```
sudo apt install package_name --only-upgradable
```

We can also install third party scripts and tools from the internet. The biggest source is github. Suppose you want to get a new scanning tool from the internet, let say rustscan.

We will go to google and will find its github repository.

Now to download this on to our system.

We will use the git command

But before downloading anything from the github. You have to consider some things like the star rating or if the tool has been deprecated or not. If it is, then you might have to leave it there only or find some better alternative.

Coming back to git. We will use the git clone command to download the tool onto our machine.

```
git clone <github repo URL>
```

After that, we are able to interact with it like we do with any script.

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