

Ubuntu / Debian Package management  
⇒ Prerequisites

## Suggested readings:

- Debian package management [introduction](#) and [reference](#).
- [15 Practical Examples of “dpkg commands” for Debian Based Distros](#)
- [Using PPA in Ubuntu Linux](#)

# .deb packages

- Sample: `firefox_75.0-2_amd64.deb`
- Archive containing:
  - Files
  - Pre- and post installation scripts
  - trigger

# The `dpkg` command

- Query installed, install / update from file system and purge packages, i.e.:

```
> dpkg -i skypeforlinux-64.deb
```

```
> dpkg -l apt*
Desired=Unknown/Install/Remove/Purge/Hold
| Status=Not/Inst/Conf-files/Unpacked/halF-conf/...
++-=====...
ii apt 2.0.2 amd64...
ii apt-config-icons 0.12.10-2 all
un apt-config-icons-hidpi <none> <none>
un apt-doc <none> <none>
un apt-listbugs <none> <none> ...
```

- Low level package management
- Dependency unaware

# The `apt` command

- Network based
- Dependency aware
- Automated system updates

```
#> apt update ❶  
Hit:1 http://security.debian.org buster/updates InRelease  
...  
4 packages can be upgraded  
  
#> apt upgrade ❷  
... The following packages will be upgraded:  
  libldap-2.4-2 libldap-common libssl1.1 openssl  
...  
Get:1 http://security.debian.org buster/updates/main ...  
Get:2 http://security.debian.org buster/updates/main ...
```

## Problems:

- “Not available here”
- Version outdated
- Needing “bleeding edge” version