

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 ...
```

Rationale using PPA's

Problems:

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- Version outdated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