

07-3 Installing Newer Packages

Living on the “Testing” Edge

apt install

- **apt install** installs a stable version of software
- May not be the most current version
- You can see what's available with

```
bone$ apt-cache pkgnames | sort > /tmp/list
```

```
bone$ wc /tmp/list
```

```
46677 46677 818844 /tmp/list <- 2016
```

```
55465 55465 1019470 /tmp/list
```

```
bone$ less /tmp/list
```

```
0ad-data
```

```
2ping
```

```
2vcard
```

```
3270-common
```

```
389-console
```

```
3dchess
```

```
3depict
```

Example: git

```
bone$ git --version
```

```
git version 2.11.0
```

This isn't the current version of git

- <https://packages.debian.org/stable/> shows current versions
- <https://packages.debian.org/stretch/git>
- May not be current version, but is well tested
- Here is what the Bone is running

```
bone$ cat /etc/apt/sources.list
```

```
deb http://deb.debian.org/debian stretch main contrib non-free
```

```
...
```

Installing a more recent version

- Debian has different distributions of packages
- Different levels of testing
- Packages start in *Unstable* distribution
- Move to *Testing*
- Finally move to *Stable* if it is a significant upgrade
- Currently *Stretch* (version 9) is stable (on Bone)
- *Buster* (version 10) is in testing
- What if you need a newer version than what Stretch has?

Backports

- If you don't want to risk a *Testing* distribution...
- Use backports
- Packages taken from the next release and compiled for the current release

```
bone$ cd /etc/apt/sources.list.d
```

```
bone$ sudo bash
```

```
bone$ echo "deb http://ftp.us.debian.org/debian/ stretch-backports  
main" > stretch-backports.list
```

```
bone$ echo "deb http://ftp.us.debian.org/debian/ buster main contrib  
non-free" > buster.list
```

```
bone$ echo " deb http://ftp.us.debian.org/debian/ sid main contrib non-  
free" > sid.list
```

```
bone$ apt update
```

- <http://linuxconfig.org/debian-apt-get-wheezy-sources-list>

*.list

deb url distribution main contrib non-free

- **url:** <http://ftp.us.debian.org/debian/>
- **distribution:** wheezy, jessie, stretch, sid OR oldstable, stable, testing, unstable
- **main:** DFSG-compliant packages, which do not rely on software outside this area to operate. These are the only packages considered part of the Debian distribution.
- **contrib:** DFSG-compliant software, but have dependencies not in **main** (possibly packaged for Debian in **non-free**).
- **non-free:** contains software that does not comply with the DFSG.

<https://wiki.debian.org/SourcesList>

https://www.debian.org/social_contract#guidelines

Installing from other releases

```
bone$ nano --version
```

```
GNU nano, version 2.7.4
```

- Install buster

```
bone$ sudo apt install nano/buster
```

```
bone$ nano --version
```

```
GNU nano, version 2.8.7
```

- Install Sid

```
bone$ sudo apt install nano/sid
```

```
nano is already the newest version (2.8.7-1).
```

```
bone$ sudo apt install nano/stretch
```

Clean up

- Best not to have unneeded releases in `/etc/apt/sources.list.d`
- They make **apt update** take extra time.

```
bone$ cd /etc/apt/sources.list.d
```

```
bone$ sudo mkdir hide
```

```
bone$ sudo mv stretch-backports.list hide
```

```
bone$ sudo mv buster.list sid.list hide
```

```
bone$ exit
```

```
bone$ sudo apt update
```