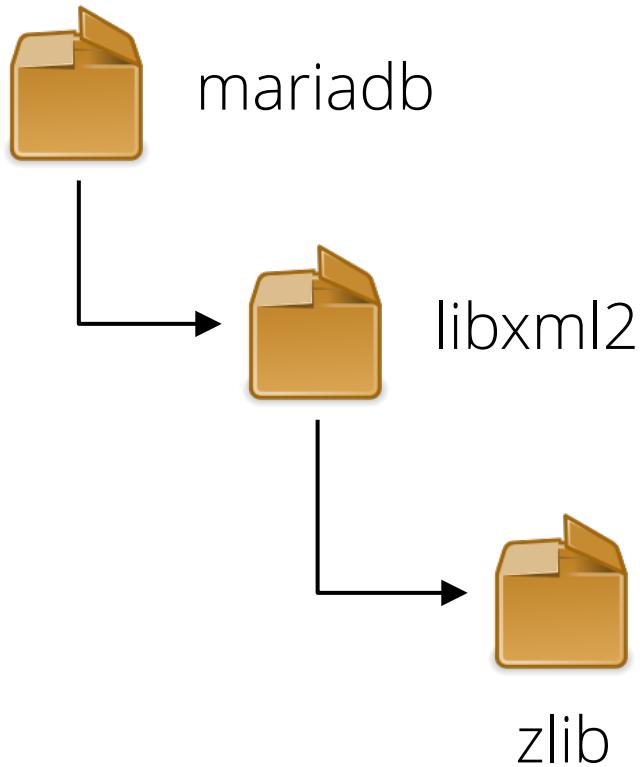


Package managers

COMS10012 / COMSM0085

Software Tools

Packages



```
$ apt search . | wc -l  
190508
```

```
$ apt search maria  
mariadb-static-10.3.23-r0  
mariadb-connector-c-dev-  
3.0.10-r0  
mariadb-bench-10.3.23-r0  
mariadb-10.3.23-r0  
mariadb-server-utils-10.3.23-  
r0  
mariadb-backup-10.3.23-r0  
mariadb-doc-10.3.23-r0  
mariadb-openrc-10.3.23-r0  
mariadb-client-10.3.23-r0  
...
```

APT

apt: Advanced Package Tool

.deb files (for Debian)

Debian/Ubuntu/Mint/...: **apt**

Alpine: **apk** (if you see us mistake **apt** for **apk** in any materials, it's because this course used to use Alpine.)

Red Hat: **rpm**

Arch: **pacman**

repositories

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

```
http://deb.debian.org/debian/
```

Index of /debian/dists/bookworm/main

	<u>Name</u>	<u>Last modified</u>	<u>Size</u>
	Parent Directory		-
	Contents-all.gz	2023-12-10 17:34	31M
	Contents-amd64.gz	2023-12-10 17:33	11M
	Contents-arm64.gz	2023-12-10 17:33	11M
	Contents-armel.gz	2023-12-10 17:33	9.2M
	Contents-armhf.gz	2023-12-10 17:33	9.8M
	Contents-i386.gz	2023-12-10 17:33	11M
	Contents-mips64el.gz	2023-12-10 17:33	9.8M
	Contents-mipsel.gz	2023-12-10 17:33	9.7M

Contents-<arch>.gz lists all packages for a system



finding packages

```
$ apt search [-v] [-d] STRING
```

```
$ apt info [-a] PACKAGE
```

```
$ apt list [-I] PACKAGE
```

```
$ apt [COMMAND] --help
```



update and upgrade

\$ sudo apt update

Download the new list of packages, but don't install anything yet.

\$ sudo apt upgrade

Upgrade all installed packages to the latest version.



installing

```
$ sudo apt install PACKAGE [PACKAGE...]
```

Installs one or more packages and their dependencies.

Vagrant:

```
$ cat /vagrant/Vagrantfile
```

...

```
    apt install emacs-nox
```

...



Find a command

By complete file path:

```
$ dpkg-query -S /bin/bash
```

The website:

<http://deb.debian.org/debian/>

