Installing and Managing Software

What You Will Learn

- Packages
- Package Managers
- Managing software for RPM based distros
- Managing software for DEB based distros

Package

- A collection of files
- Data / Metadata
    - Package description
    - Version
    - Dependencies

Package Manager

- Installs, upgrades, and removes packages
- Manages dependencies
- Keeps track of what is installed

Installing Software on RPM Distros

- RedHat
- CentOS
- Fedora
- Oracle Linux
- Scientific Linux

yum

`yum search string`	Search for string
`yum info [package]`	`Display info`
`yum install [-y] package`	`Install package`
`yum remove package`	`Remove package`

rpm

rpm -qa

   List all installed packages.

rpm -qf /path/to/file

   List the file's package.

rpm

```
rpm -ql package
```
   List package's files.


```
rpm -ivh package.rpm
```
   Install package.

rpm

```
rpm -e package
```
   Erase (uninstall) package.

Demo - yum

Installing Software on DEB Distros

- Debian
- Linux Mint
- Ubuntu

APT - Advanced Packaging Tool

```
apt-cache search string
```
    Search for string.

```
apt-get install [-y] package
```
    Install package.

APT - Advanced Packaging Tool

```
apt-get remove package
```
   Remove package, leaving configuration.


```
apt-get purge package
```
   Remove package, deleting configuration.

APT - Advanced Packaging Tool

```
apt-cache show package
```
   Display information about package.

dpkg

```
dpkg -l
```
    List installed packages.

```
dpkg -S /path/to/file
```
    List file's package.

dpkg

```
dpkg -L package
```
   List all files in package.


```
dpkg -i package.deb
```
   Install package.

Demo - apt

Summary

- Package
- Package Manager
- RPM
  - yum
  - rpm
- DEB
  - apt
  - dpkg