

SOFTWARE INSTALLATION

Gotta have it

DELIVERY!

- Software is delivered in one of two manners:
 - Source form - requires compiling
 - Binary form - generally wrapped up in a package

WHICH IS BEST?

- Both formats have their advantages and disadvantages..
 - Compiling from source can provide higher performing machine code, plus it gives the option of selecting features and configurations only available at compile time.
 - Pre-compiled software is easier - it alleviates the [possible] headaches of compiling, and if distributed in a package format, provides built-in management functionality.

PACKAGES

- Installing a software package is pretty straight forward.
- There are a few different package formats out there. The two most popular are:
 - rpm: Redhat Package Manager
 - deb: Debian package
- In this course, we'll only be focusing on rpm's. Deb's have similar functionality and capability, so learning the command syntax is about all that is needed for proficiency.

RPM

- RPM's provide full software packaging features: pre-install scripts, post-install scripts, dependencies, meta information, and an installed software database to name a few.
- The RPM system maintains a database of all installed software on a machine - this is useful for tracking and updating reasons, as well as dependency verification and software management.

RPM

- rpm: The Redhat Package Manager tool. Provides interface to RPM system, performing queries, installs, upgrades, uninstalls and general database maintenance operations.
 - -i option: install the given package
 - -q option: query the database
 - -e option: erase the given package from the system

YUM

- Not yum as in “This is yummy!”
- yum: Yellowdog Updater Modified
 - Supports package installation over the network through repositories.
 - RPM backend
 - Simple interface

EXERCISES

- Browse through the manpage for 'rpm'. Study the "Query" section.
- Use your new knowledge to produce an alphabetized listing of the names for every installed package on your system.
- To what package does '/usr/bin/time' belong?
- Browse the manpage for 'yum'