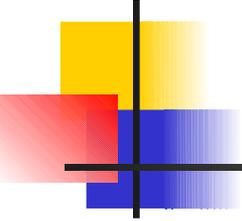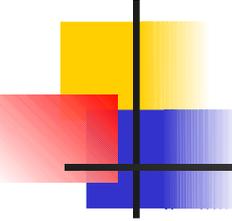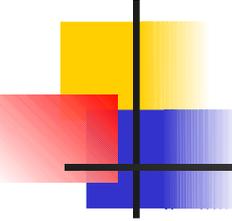# OPS235

PACKAGE MANAGEMENT

Lab 3 - Topics

Lab Time

- Package Management
  - Purpose
  - Install / Remove Packages
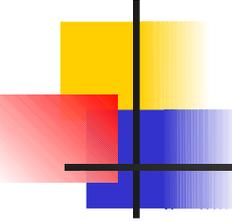 - Comparison of **yum** & **rpm**

Package Management

- Obviously, managing disk space or creating virtual machines is not the <u>only</u> job a system administrator performs.

- It is a necessary job for Unix, Linux system administrators to perform other routine tasks such as **adding/removing software** as well as **adding/removing user accounts**.
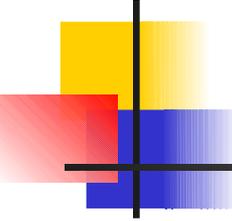
Package Management

- You will learn various methods to install software in this course:
  - **yum**
  - **rpm**
  - Download **zipped tarball** and compile (in future lab)

- So far, you have used yum to install packages and to update packages. Yum is a very useful tool, but it is important to understand each type of install method and their associated strengths / limitations.
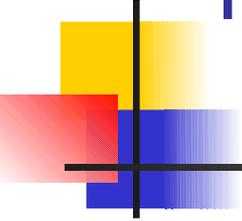
Package Management

- **rpm** (Redhat Package Manager)

  - Tool to install, remove, and generate information regarding software. We can already used rpm with query-mode to obtain information.

  - rpm command can also be used in select-mode (i.e. without -q (query) option. For example:
    rpm -i packagefilename (install)
    rpm -e package_name (remove)

  - You will be learning to install software (rpm files) contained in your **CENTOS FULL INSTALL DVD**.

  - rpm command is useful for queries, but difficult to install manually due to dependency issues.

Package Management

- **yum** (*Yellowdog* Update Modified)

  - *Yellowdog* was a MAC-based Linux distribution.
  - Created a neat command (using rpm command) to check for dependencies first, then downloading and installing application.
  - The term for a program to use another program is called a "Wrapper". Like a "candy wrapper".
  - Therefore, using yum command is like an easier automatic operation, whereby rpm is more manual.
  - Although, rpm is useful for keeping track of software (e.g. performing "queries")

Package Management

- Why is it important to query software with **rpm**?

- What types of additional options for an **rpm** query?

- How to add/remove applications with **rpm**?

- How to add/remove applications with **yum**?

- What are the differences with **rpm** and **yum**?