

# OPS235: Week 4

## Part 2 - Misc System Admin

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# Lab 4 – Part 2 - Topics

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## Lab Time

- Package Management
  - Purpose
  - Install / Remove Packages
  - Comparison of **yum** & **rpm**
- User / Group Management
  - Purpose
  - **/etc/passwd**, **/etc/group**
  - **Add / Remove** users and groups



# Package Management

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- Obviously, managing disk space or creating virtual machines is not the only 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

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- 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**?



# Managing Users

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- Ability to create users, and the use of groups **allows system to be more secure** (safe).
- For example, **system administrators should only login as “super-user” for special admin tasks** since “super-user” has no restrictions on permissions and do damage from everyday use.
- Users can be viewed as records in **/etc/passwd** . **What does each field represent?**
- The “**x**” in the password field indicates the password is **shadowed** (in a file that only root can access)



# Managing Users

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- Purpose:
  - Ability to create users, and the use of groups **allows system to be more secure** (safe).
- How to **add / remove** user **graphically**?
- How to **add / remove** user by **command-line**?
- Which method would you use?
- What does the term **UID** represent?



# Group Management

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- Purpose:
  - **Groups allow for protection** to allow users to belong to particular groups for file sharing and file security. Imagine the chaos if any user could access and write any file for any user? Although, there may be special situations where you would want file sharing (eg. Project planning, etc...)
- Groups are stored and managed via the **/etc/group** file.



# Group Management

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- How to **view group information**?
- How to **add/remove groups**?
- What does the term **GID** represent?
- How to **add users to existing groups**?
- How to **automate user and groups assignment** (so you don't have to manually perform these tasks every time you create a user account)?