

Beginning System Administration DeCal

Week 5

March 8, 2010

Types of Accounts

`inst` *.cs.berkeley.edu, EECS instructional servers

`OCF` *.ocf.berkeley.edu, Open Computing Facility

`vservers` decal.ocf.berkeley.edu, virtual servers

*NIX User Accounts

- Users, User Groups
- Super-Users
 - root
 - wheel
- Local Users
 - system accounts
- /etc/passwd
- /etc/groups
- /etc/shadow

*NIX Filesystem Structure

- / Root directory
- /bin Binaries
- /sbin System binaries
- /home Home directories
- /usr User Shareable
- /dev Devices
- /var Variable data
- /tmp Temporary files
- /boot Boot files
- /proc System hardware and processes
- /etc System configuration

Administrivia

- Start forming groups of 2-3 for this week's lab.
- Each group will be given a VM to work with.
- Also, start thinking about final project ideas.
 - Will be with the same group as the one formed for this week's lab.
 - Base concept is setting up a web server.
 - More details in this week's notes.
- Put `inst` logins on HW/labs.
- Homework/Lab comments
 - Permissions
 - Format: input/output/comments
 - For multiple choice, small description with answer/letter.

Virtual Server

- Each group will be given a server named "iXY", where XY is a number.
- If your server is iXY, login by running `ssh -p 2XY22 root@decal.ocf.berkeley.edu`.
- Change your root password immediately using `passwd`.
- The lab will walk you through getting everything else set up.

Server Daemons

- Programs that provide services
- 'Listen' for requests
- Application Level
 - Protocols - HTTP, FTP, DHCP, DNS
 - Ports - 1 – 1024, 1025 – 65535
- Examples
 - Web, SSH, FTP
- Distribution by Source
 - Other methods of distribution?

Package Installation

Source to Application

- Acquire source packages
 - Check file signatures, hashes, checksums
 - MD5, SHA1, GPG
- Read README, INSTALL files first
 - `./configure` Configuration Options
 - `make` Compile the software
 - `make install` Install the software
- Additional configuration with `.conf` files