System Administration: Week 2 Notes

February 8, 2006

1 The Plan

Now you have at least two accounts: INST and OCF which are both running Solaris OS. For assignments you are welcome to use account of your choice. Try running Live CD for Ubuntu which will not alter the contents of your hard drive. Another option is to download and install cygwin which will give you a shell environment. We are also currently working on setting up servers with Xen running which virtually partitions the computers into different instances of OS so that everyone will have virtual root priviledges.

2 System Administration Tools

- know the commands
- know a text editor
- RTFM

3 Quick Intro to SSH

SSH is a network protocol (and a name of a program) used to connect to and execute commands on a computer connected to a network.

- The default port for a server to listen to ssh is 22.
- SSH is a replacement for rlogin, telnet, and rsh which are not as secured even though are still used by campus (like library).
- So web is a chaotic entity where you need to be certain that nobody will overhear
- Instructions on how to setup SSH from a windows machine by Eleen Chiang. http://www.ocf.berkeley.edu/~eleen/web/ssh.html

4 Quick Guide to Commands

- http://www.indiana.edu/~uitspubs/b017/
- screen allows to separate program from the shell
- watch execute a program periodically showing output screen

5 Text Editors

- VIM Shortcuts: http://tnerual.eriogerg.free.fr/vimqrc.html
- Nano: http://www.nano-editor.org/dist/v1.2/nano.html
- Emacs: http://refcards.com/refcards/gnu-emacs/emacs-refcard-fullpage.pdf

6 Shells

• zsh, ksh, bash (bourne-again shell), tcsh (tenex c shell), csh (c shell)

7 Process Control

- ps = gives a snapshot of the current processes. run man ps to find out more options ex: ps -ef
- top = lists the current processes ex: top
- kill = kills the processes by id ex: kill -9 232 (forcefully kills process #232)
- pkill = kills the processes by name ex: pkill firefox