Lab 4: Installing software

The purpose of this lab is to practice installing software on Linux systems. VMware systems are available for you to use in the CTC and the CIS Lab (room 2504).

In short you will:

1. Install FileZilla using a tarball from the FileZilla web site.
2. Install the chess program from the installation DVD with the rpm command.
3. Install the compilers and kernel development packages using yum.
4. Install Wireshark using Package Manager GUI

Forum

If you get stuck on one of the steps below don't beat your head against the wall. Use the forum to ask for assistance or post any valuable tips and hints once you have finished. Forum is at: http://simms-teach.com/forum/viewforum.php?f=10

Procedure

1) Locate or create your own Fedora-8 VM.
   - You may use the pre-existing Duke VM (use **Revert to Snapshot**)
   - **Or** create your own VM using http://simms-teach.com/howtos/120-duel-dos-fedora-8-install.pdf to further practice your Linux installation skills.
   - Login as root

2) Install the latest FileZilla from http://filezilla-project.org/download.php
   - Create a bin and depot folder in root's home directory.
   - Create a software directory inside depot.
   - Download the compressed FileZilla tarball (FileZilla_3.1.3.1_i586-linux-gnu.tar.bz2) to the desktop.
   - Move the tarball from the desktop to the /root/depot/software/ directory.
   - Change (cd) to the /root/depot/software directory.

- Decompress the tarball (hint: Lesson 6 PowerPoint's)
- Extract the tarball contents to software directory (hint: Lesson 6 PowerPoint's)
- Browse the new FileZilla3 directory and locate the filezilla executable in the bin directory.
- Create a symbolic link named filezilla in your /root/bin directory to the filezilla executable.
- Is /root/bin in your path? (hint: use echo $PATH)
- Run **filezilla** (use & to run in background)
- Connect to opus.cabrillo.edu, with your username and password (with SFTP)

3) Install the chess program on the Fedora-8, Fedora-9 or Red Hat 9 installation DVD.
   - Configure your VM's CD to connect to the Fedora-8-i386-DVD.iso.
   - Fedora does an automatic mount. Right click on the desktop icon and choose eject. We want to do our own mount for practice.
   - **mount /dev/cdrom /mnt**
   - Browse the DVD and locate the RPMS (Red Hat 9) or Packages (Fedora) directory.
   - Is the gnuchess program there? (hint: use **ls | grep chess**)
   - Copy the chess rpm to your software directory.
   - Change to your software directory and check for new file.
   - Install it with **rpm –hiv gnuchess***
   - Is it installed now (hint: use rpm –qa | grep chess)
   - run **gnuchess**. type f2f3 to move your right bishop's pawn forward one space. Use quit when finished.
   - Un-mount the DVD.

4) Install the compilers and kernel development packages using yum.
   - Check that gcc and kernel-devel are not alredy installed (Hint: **rpm –qa | grep xxxxx**, where xxxxx is the package name)
   - Install gcc and kernel-devel packages using yum (hint: Lesson 6 PowerPoints)
   - Check installation with **rpm –qa | grep xxxxx**

5) Install wireshark using Package Manager GUI
   - Add/Remove programs under Applications menu
   - Search for Wireshark and install it.
   - Run it with **wireshark** (use & to run in background)

To turn in

Make a screen shot by doing the following:

- **xwd –root –out lab4**

Note: To review your screen shot use: **xwud -in lab4**

Review you lab4 file for completeness using the grading rubric below. Save a copy for your records.

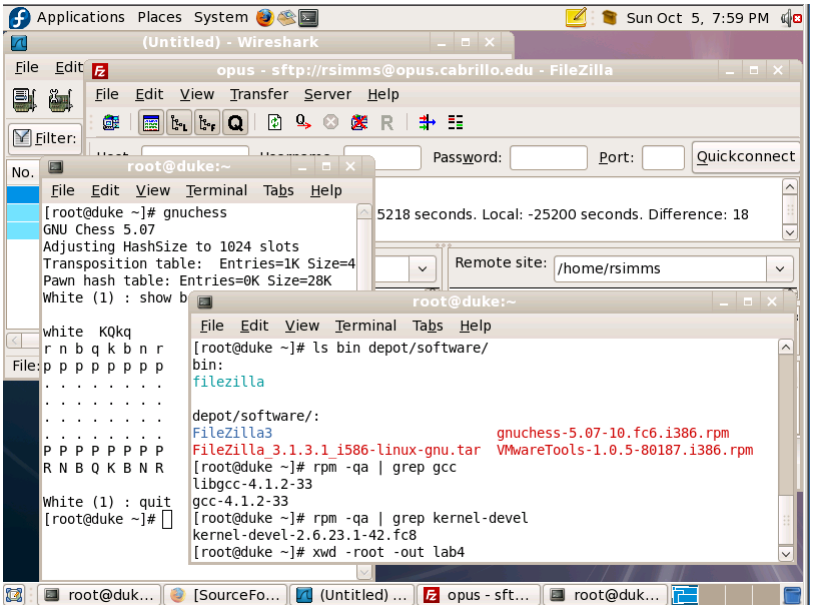
- Compress the file using: **gzip lab4**
- **scp lab4.gz cis191@opus.cabrillo.edu:lab4.logname**

Grading Rubric (30 points)

5 points – Screenshot shows Filezilla running.
5 points – Screenshot shows Filezilla connected to your Opus account.
3 points – Screenshot shows filezilla symbolic link in /root/bin.
2 points – Screenshot shows Filezilla tarball and gnuchess rpm in /root/depot/software.
5 points – Screenshot show gcc and kernel-devel rpms installed.
5 points – Screenshot shows Wireshark running.
5 points – Correct submittal according to instructions.

Note: The screen shot **must show your name** and must be turned in by the due date to get credit.

Example screenshot:



Extra Credit (5 points)

Remove all the software installed (hint: review lesson 6 PowerPoint's)

- Save output from the **`rpm –qa | grep xxxxx`** command for gnuchess, wireshark, gcc, kernel-devel, kernel-headers, glibc-headers and glibc-devel to show these rpms are un-installed.
- Save error output from running filezilla that it has been uninstalled.
- Place all the output into a file named lab4xc and submit with:

  `scp lab4xc cis191@opus.cabrillo.edu:lab4xc.logname`