Linux and Visual Paradigm Lab

CS 245

Sept. 18, 2006

1. Login to a Windows workstation and start an X Window session on phoenix using the `Cygwin@phoenix` link. Login to phoenix. X Window is a GUI interface, required for Visual Paradigm and Eclipse.

   Linux is case sensitive — be careful when entering username and password!

   You may install the Cygwin software on your own workstation. Check here (`http://phoenix.goucher.edu/~kelliher/cygwin/`). for details.

   (If you only need shell access, you could start the SSH Secure Shell Client software on a lab workstation. Click the *Quick Connect* button and enter the Host Name (`phoenix.goucher.edu`) and User Name information requested for the dialog box which pops up. Click the *Connect* button and then enter your password into the next dialog box.

   A brief bit of documentation on SSH Secure Shell is available here (`http://phoenix.goucher.edu/~kelliher/SSH/`). In particular, you can download a copy of the software for educational use.

   There is also a Java SSH client applet available on phoenix here (`http://phoenix.goucher.edu/ssh/`).)

2. You need to open a shell. Open the *Applications* menu, go down to *System Tools* and choose *Terminal*.

   A window will open and you will now have a command line prompt on phoenix similar to this:

   ```
   >
   ```

   You type a command and then press `Enter` to run it. You can edit a command before you run it by using the arrow keys to navigate the command line.

3. Using `gedit`, create a file named `name` containing your name. Print the file in HS 149:

   ```
   lpr -P hs149ps name
   ```

   The file should be printed on the printer in HS 149. The default printer is the printer in the X Lab, `hs123ps`.

   Remove the file you just created:

   ```
   rm name
   ```

   Unlike Windows, once you remove a file in Linux, it is gone for good. So be careful!

4. Change directories to `/etc`:

   ```
   cd /etc
   ```

   You can verify that you're where you think you are by running the print working directory command: `pwd`.

   Using the `ls` command, list the files in `/etc`. Too many to fit on a single screen? Pipe the output to the paging program:

   ```
   ls | less
   ```

   Repeat again using the `-l` option to `ls` What's the difference?

5. Change directories back to your home directory (run `cd` without an argument). List the files in your home directory. Try again using the `-a` option. What's the difference? Read the man page for `ls` to read about these two options and find what other options are available:

   ```
   man ls
   ```

6. Using the `mkdir` command, create a sub-directory within your home directory: `foo`. You can guarantee the the contents of the directory are private by using the `chmod` command:

   ```
   chmod go= foo
   ```

   Use `ls -l` to verify. Finally, remove the directory with `rmdir`:

   ```
   rmdir foo
   ```

   and use `ls` to verify its removal. As a safety precaution, `rmdir` only works on empty directories.

   It is a good idea to create a new directory each time you start a new assignment or project, so that you don't clutter up your home directory. Using sub-directories for your assignments also helps keep others out of your files.

7. It's time to start Visual Paradigm for UML. Run the command

   ```
   vpuml &
   ```

   (The `&` runs Visual Paradigm in the background, letting you continue to type shell commands.)

8. The first time you run Visual Paradigm, you'll need to install the license file. The license dialog box will open. Click the import license button, browse to

   ```
   /home/kelliher/pub/cs245
   ```

   and select the license file. Once you've imported the license, click the *Close* button.

9. Create a new project (look under the *File* menu).

10. Experiment with creating a couple of use case and class diagrams.

11. Export your diagrams as JPEG images (look under the *File* menu).

    If you now wanted to attach the exported diagrams to your project wiki, the easiest thing to do at this point would be to open a Web browser from your X session, browse to your project, and attach the diagrams.

12. Save your project.

13. When you're finished, exit from Visual Paradigm and use the `exit` command to close your shell. Open the *Actions* menu to logout from phoenix.