

Using Linux on USF CS Machines

Goal

Learn basic Linux commands and set up your system for the semester.

Overview

With Linux, you can use either a graphical user interface (GUI) or enter textual commands (command-line computing). When you login to a USF computer science computer, you'll see the Linux GUI. You can get to the command-line by clicking on the red hat in the left lower corner, then choosing System Tools and Terminal. The terminal window that appears will allow you to enter commands

Referring to Directories

Where as Windows File Manager has a root named 'C:', Linux has a root directory named '/'. All other directories are in a hierarchy below that.

With your CS account, your home directory is: /home/yourUserName

Professor Wolber's is /home/wolber

You also have a web directory: /home/web/yourUserName.

Linux Commands

Login to Linux, open a terminal window, and try the following commands.

ls

lists the files in your current directory.

pwd

tells you where you currently are in the file system.

mkdir programs

creates a new subdirectory called 'programs'

cd programs

changes you from the current directory to the subdirectory 'programs' (if it exists). After running this command, try `pwd` again.

cd

changes you from wherever you are to your home directory. Try `pwd` again to verify you are back in your home directory.

cd ..

takes you up in the directory hierarchy, e.g., if you're in `/home/wolber/programs`, it will take you to `/home/wolber`.

passwd

changes your password. Do this.

Here's some more commands. You'll need them for the tasks set out below, but don't try them right now.

cp src dest

copies a file named `src` to a file named `dest`.

mv src dest

moves a file from `src` to `dest`

rm file

removes a file (be careful)

rmdir directory

removes a directory

Task: Modify your programs directory

Use commands above so that you have the following sub-directories:

```
java
python
```

Under each, create a subdirectory for 1) samples, and 2) projects. 'samples' is where you'll put programs you do in class that perform specific operations. 'projects' is where you'll put the larger projects you complete.

After creating these sub-directories, perform an 'ls' to list them.

You can also view your directory hierarchy using the Linux graphical user interface.

Before proceeding, show your professor or TA that you have created the directories and can view them with the command-line and GUI.

Task: Text Editing

Select Applications in the upper left corner and choose Accessories | Text Editor. This is a simple wysiwyg text editor. Create a file named me.txt. Put your name as the only line in it and save it in your home directory.

Task: Moving and Copying Files

1. open a terminal window and perform an 'ls'. It should show "me.txt"
2. Try copying the file into the java subdirectory. From your home directory, enter:

```
cp me.txt java/.
```

3. Navigate to the java directory and ls to make sure the file is there.
4. Try moving the file to the python directory using the mv command. After this command it should appear in the python directory but not the java directory.
5. Delete the file using del.

Setting up Firefox Browser

Open up Firefox by clicking on the globe in the bottom toolbar. Go to the urls below, then left-click on the page's icon in the browser address bar and drag the link into your browser shortcut bar.

Links

<http://cs.usfca.edu/~wolber/courses/110/Syllabus.html>
CS Department Home page-- <http://cs.usfca.edu>