

## SSH Setup Procedure

### In the Sunlab...

- Login to a Linux box with your provided (or past) login/password pair.
- Open a shell and type the following: *setup-account*.
- Press enter. You've just run a cs125 script which creates an SSH folder for storing configuration info that allows you to login to these machines from the MSLab. The script also created a course directory with cs125 in it and a folder for your first assignment, 2d.tut.
- If you have a new account, follow the instructions provided in your letter to change your password to something more memorable (Type *passwd* in a shell). With any luck, you're now done with the Sunlab for the semester!

### In the MSLab...

- Log into a Windows machine with your login/password pair. Windows and Linux passwords aren't synched up by default, so if you have a new account you will need to use the password in your letter.
- Once logged in, press **CTRL+ALT+DEL** once, and click *change password*. Keep things easy for yourself and change this to the same one you used in the Sunlab.
- Now, open the program called **Cygwin** on your desktop. **Cygwin** is a application that attempts to emulate UNIX like behavior on Windows systems. You can consider it a shell, and we are going to set it up to run commands on a Linux box from the MSLab.
- Type *ssh-keygen -t dsa* and press enter. You will see a prompt asking you to enter file in which to save the key. Press enter here. You will then have to enter a password of your choice twice - do so (don't use your Linux/Windows password here).
- Type *cat ~/.ssh/id\_dsa.pub >> ~/.ssh/authorized\_keys* and press enter.
- You're done. Now you can login to a Linux box from any Windows machine in the lab. Let's try it out - close Cygwin now.

## Testing SSH in Cygwin

- We're going to make a folder for a test assignment now and hand it in from the MSLab. First click the start menu and goto My Computer. Here, double click the drive marked `< login > on \win.cs.brown.edu\dfs\u (Z:)`. This allows you to browse your home directory on the CS file system from a Windows machine.
- Double click the folder labeled *course*, then the folder labeled *cs125*. This is where all your assignment folders should be. You should already see a folder for *2d\_tut*, which is where all your After Effects tutorial handin files should go. In general, you will create a folder here with the proper name for each assignment.
- Right click in the window and goto New > Folder. Rename the folder *helpses*, a test name for this help session assignment.
- Go into this new folder, right click, create a text file and rename it *REPORT*. You must have a text file named *REPORT* in all handin directories explaining some specifics of your handin.
- Now we're going to handin the assignment *helpses*. Open Cygwin from the desktop again and type *ssh incoming*. If the shell asks you anything regarding authenticity, type *yes* and press enter. Otherwise, enter your SSH password when prompted. Soon, you should see `/u/login %`. This is a command prompt where you can start typing a few simple Linux commands.
- Now we need to go to the folder with the assignment files. Type *ls* to view all the folders in your home directory. You will see the folder *course* listed. Type *cd course* (change directory) to enter the *course* directory. Type *ls* again to see what is available in here.
- You should see *cs125*. Type *cd cs1* and try pressing tab. This is a Linux trick called **tab completion**. The shell will fill in the rest for you when you press tab if a unique directory or file matches what you've already typed. If your shell now says *cd cs125*, press enter. (If the shell gave you an option other than *cs125*, that other hundred level CS course probably required you to understand tab completion.)

- Type *ls* one more time. You should see *helpses*, the folder you created, and *2d\_tut* the folder for your first assignment. *cd* into *helpses*.
- Now, let's handin - type *cs125\_handin* and press enter to see a list of assignments we can handin.
- You want to handin *helpses*, so type *cs125\_handin helpses* and press enter. Type *y* to confirm that you want to handin and press enter.
- You're done! This exact procedure for getting around folders on Linux, handing in, and creating folders for assignments on Windows will serve you well the whole semester. Remember, we were just using Cygwin and Windows to get around the same directory structure. You can drag and drop files into, and save files into an assignment folder via the mapped network (Z:) drive on Windows. You only need Cygwin when you want to run the handin script after you're done with the assignment.