## File Transfer and Remote Login, MAC version Bob Geitz Spring 2020

These notes recommend some basic applications that will allow you to move files between a laptop and occs, and also to remotely log into occs. The usual workflow for CS labs is

- a) +Do the lab on your own laptop or workstation.
- b) Transfer the files to your account on occs.
- c) Remotely log in to occs and run handin.

I have tried to write these notes at a very basic level, for students who have never installed software before. If you are experienced you will probably find that these installations go very quickly.

**File transfer software:** We can use Cyberduck for this. To download and install it, go to cyberduck.io. Under the yellow duck is a white Download button. If you click on this it will take you to a page that gives you the option to choose between Cyberduck for Windows or Cyberduck for a Mac. Click on the Mac button and it will download an installer. When I did this it put the installer directly in the Downloads folder. Find the installer and click on it; you can accept all of the default settings. This should handle the rest of the installation.

When you start up Cyberduck you get a rather blank window:



Press the Open Connection button on the top left. You will see the following window:

🛄 FTP (File Tran	isfer Protocol)		
Server:	1	Port:	21 🜻
URL:	<u>ftp://</u>		
Username:			
Password:			
	Anonymous Login		
SSH Private Key:	None	~	Choose
	Save Password		
		Connect	Cancel

The first step is to change the protocol from FTP to SFTP. The Server you want is occs.cs.oberlin.edu. Leave the Port at the default 22 for SFTP. The Username and Password it asks for are those for your CS account. You can ignore the SSH Private Key. When you have completed this window it should look like this, only with your account information instead of mine:

SFTP (SSH File	e Transfer Protocol)			
Server:	occs.cs.oberlin.edu	Port:	22	
URL:	sftp://bob@occs.cs.oberlin.edu		4	
Username:	bob			
Password:	•••••			
	Anonymous Login			
SSH Private Key:	None	~	Choose	
	Save Password			

When you click Connect (bottom right) Cyberduck opens a window on your occs account:

👶 bob@occs.cs.oberlin.edu – SFTP				×
File Edit View Go Bookmark Window Help Open Connection Quick Connect	Edit -	Upload	Transfers	د
Image:	× .	▲ Se	arch	Q
Class Notes Exam 1 index.html Java Bootcamp.pdf ijava4python.pdf Labs SyllabusAndSchedule.html	 2.9 KiB 120.0 KiB 246.9 KiB  14.9 KiB	3/1/202 2/28/20 3/7/202 1/31/20 1/24/20 3/7/202 1/30/20	20 4:03:13 P 220 7:17:15 20 9:22:47 P 320 12:54:16 321 12:55:05 20 9:24:19 P 320 9:13:10	M AM 5 PM 5 AM M PM
7 Files				<b>A</b> .

You can move around by clicking on folders to open them, using the up-arrow icon to move from a folder to its enclosing folder. You can transfer files and folders by dragging them between the Cyberduck window and the Finder on your Mac.

**Remote login software**: You don't need any special software on a Mac to remotely log in to occs. Just open the Terminal (you may need to do a search in the Finder for a utility called *Terminal*). At the prompt in the Terminal type ssh <username>@occs.cs.oberlin.edu. For example, since my username on occs is bob, I would type ssh bob@occs.cs.oberlin.edu.

The system will ask for your occs password. Once you are logged on this looks just like the terminal windows on the lab machines. You can move around and run commands such as handin. Note that you can only run text-based programs with a connection like this. Graphical interfaces, like Eclipse, Idle (Python), and Racket (Scheme) will not run over this connection. For most CS assignments and labs you need to do the work on your own computer and transfer the files to occs to hand them in.