

File Transfer and Remote Login, Windows version

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Spring 2020

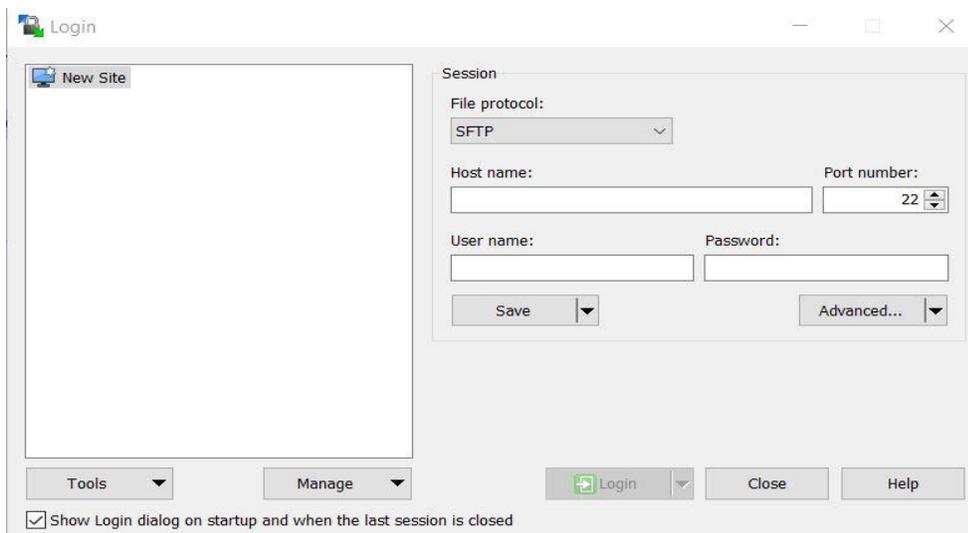
These notes recommend some basic applications that will allow you to move files between a laptop and occs, and also to remotely log into occs. The usual workflow for CS labs is

- 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.

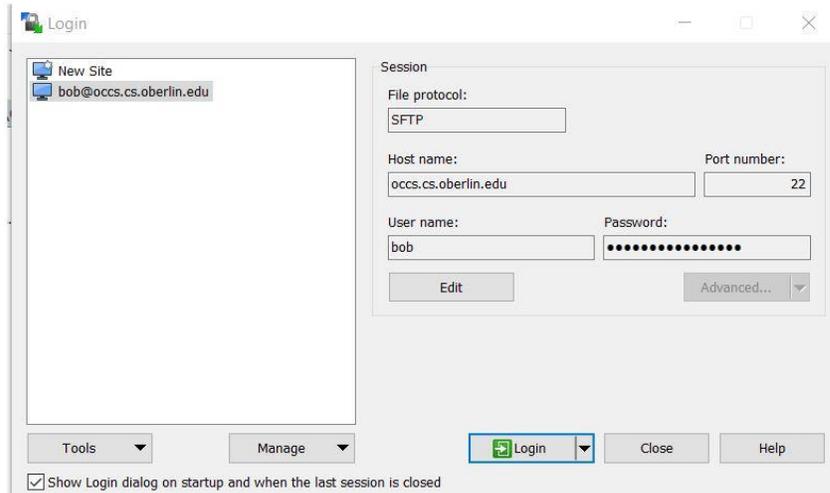
File transfer software: We can use WinSCP for this. To download and install it go to winscp.net/eng/index.php. Click the big green button that says DOWNLOAD NOW. The installer should appear at the bottom of your browser window; if you don't see it there it will also be in your Downloads folder. Click on it, give it permission to modify your system, accept its license agreement and let it install. You can accept all of the default settings. One of the questions it will ask concerns the User Interface style. I like the "Commander" style which has a panel with two windows: one on your computer and one on the remote system.

When you run WinSCP you will see a window like the following;

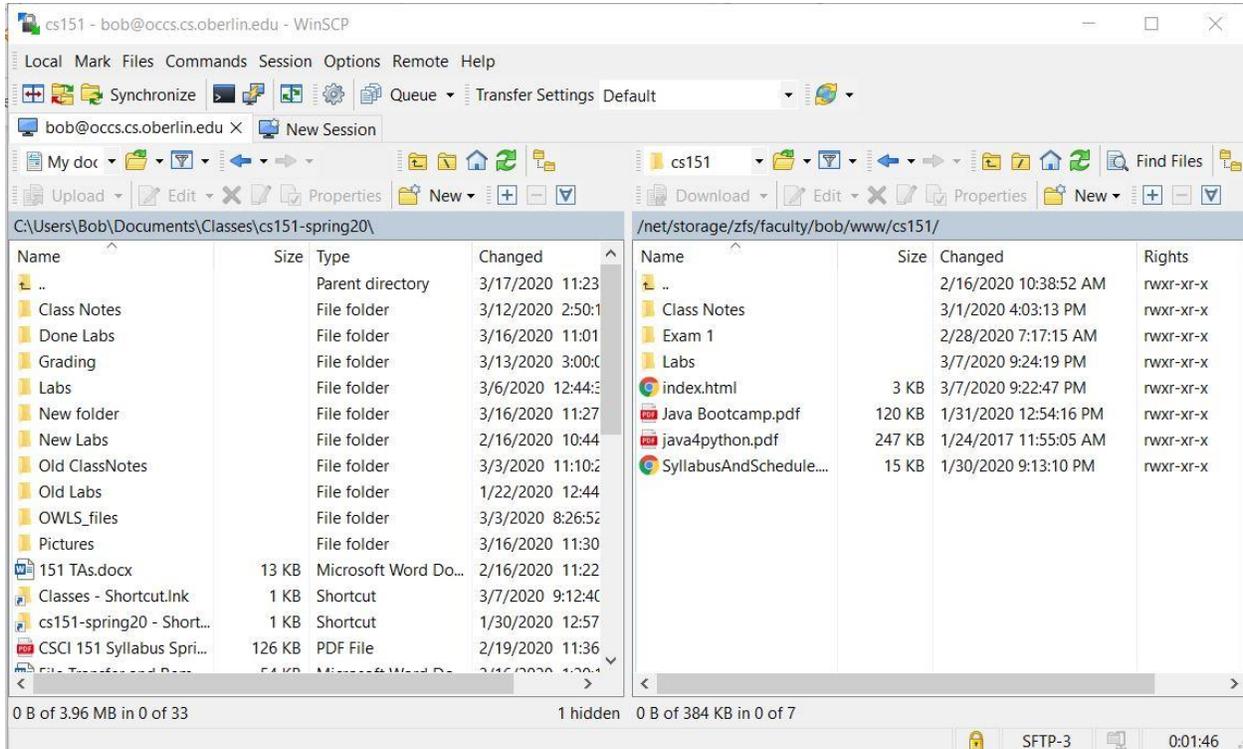


Be sure that the File protocol menu at the top of the right-hand panel is set to SFTP; that is the only protocol occs will accept. Change the Host Name to `occs.cs.oberlin.edu` and fill in your

username and password for occs. If you click the Save button it will give you the opportunity to save the connection, making it quicker to log in the next time. After clicking Save your login screen should look like this (naturally, you will have your username and password rather than mine:



Now click Login at the bottom of the window and you should get the file transfer window:

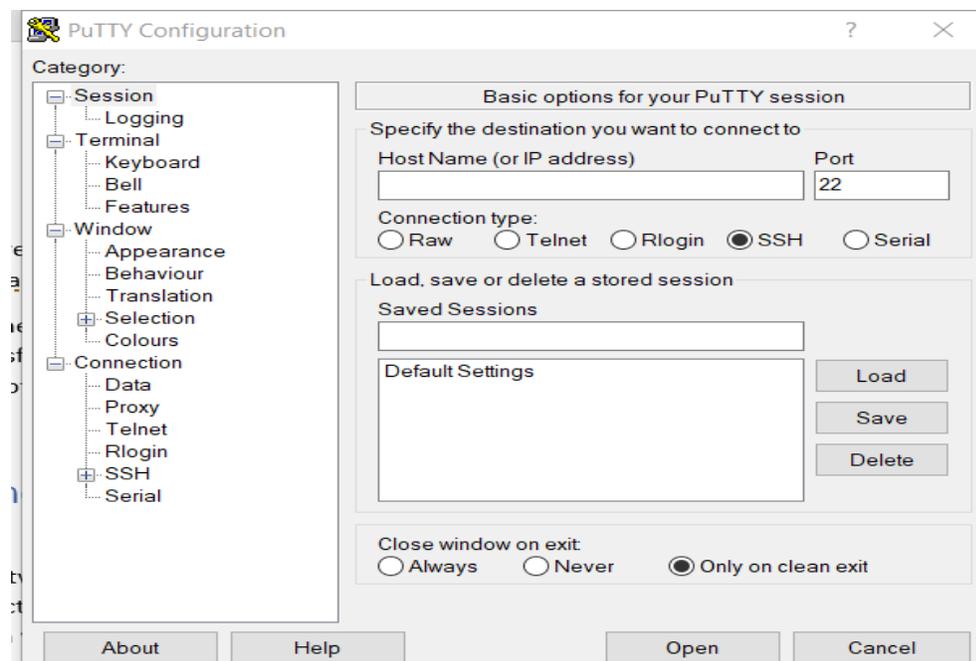


There are a lot of things going on in this window, but fortunately you only need a few of them. I never actually use the menus at the top. The left panel shows a folder on my laptop. You can open up folders by clicking on them. You can move up from a folder to the one containing it by

clicking on the up-arrow  icon (the one above the left panel). Similarly, the right panel shows a folder from my account on occs. You can move down through folders by clicking on them, up by clicking on the up-arrow icon above the right panel. You can transfer files or folders by dragging them from one panel to the other. That is all there is to it.

Remote login software: We can use PuTTY for this.. You can download and install PuTTY by going to www.putty.org, which will redirect you to a site in England. You can install a 32-bit version or a 64-bit version. If you aren't sure which you need, they say to install the 32-bit version, which works on both 32-bit systems and 64-bit systems. You should click on the link to download the installer. After that downloads, click on the installer itself. (it should appear at the bottom of your browser window; if it doesn't appear there it will be in your Downloads folder). The installer will ask for permissions, then it will do its thing. You can just accept the default values of all of the questions it asks. After the installation it will pop up a ReadMe file; you can just close that.

The first time you run PuTTY you will see a window like this:



In the narrow window at the top enter the following for the Host Name: **occs.cs.oberlin.edu**. Leave the Port as 22. If the Connection Type isn't already set to SSH click on the SSH button. In the Saved Sessions window type a name for your connection to occs, such as *occs*, then click

the Save button. That name should appear under the Default Settings. Henceforth when you use PuTTY highlight this name and click the Open button. You should get a terminal window that expects you to log in with your usual username and password for occs. This will work just as though you were at a terminal window on one of 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.