CS 31: Remotely Using the SEASnet Linux Machines

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1 Transferring files to a SEASnet machine

1.1 Locally

If you are physically in the lab, you can use a flash drive or the download from an email attachment/Google Drive to transfer files to your Documents. Then you can follow the g++ with Linux guide (https://ccle.ucla.edu/mod/page/view.php?id=950129).

1.2 Remotely

You never have to step foot into the SEASnet lab if you don't want to. If you are working from home (and your home isn't on campus), you will need login to the UCLA VPN before attempting the following steps. You can find a guide on how to setup the VPN at https://www.bol.ucla.edu/services/vpn/.

1.2.1 Configuring the file transfer

You can use a whatever File Transfer Protocol (FTP) program you want, but this guide will use FileZilla. The steps for another program are basically the same. Below you can see the connection settings needed for connecting to the SEASnet Linux machines. The host box address is lnxsrv07.seas.ucla.edu (it is slightly trimmed). Zoom in on the PDF to see the exact settings. Your username and password will be your SEASnet account. Hit Quick Connect to start the connection.

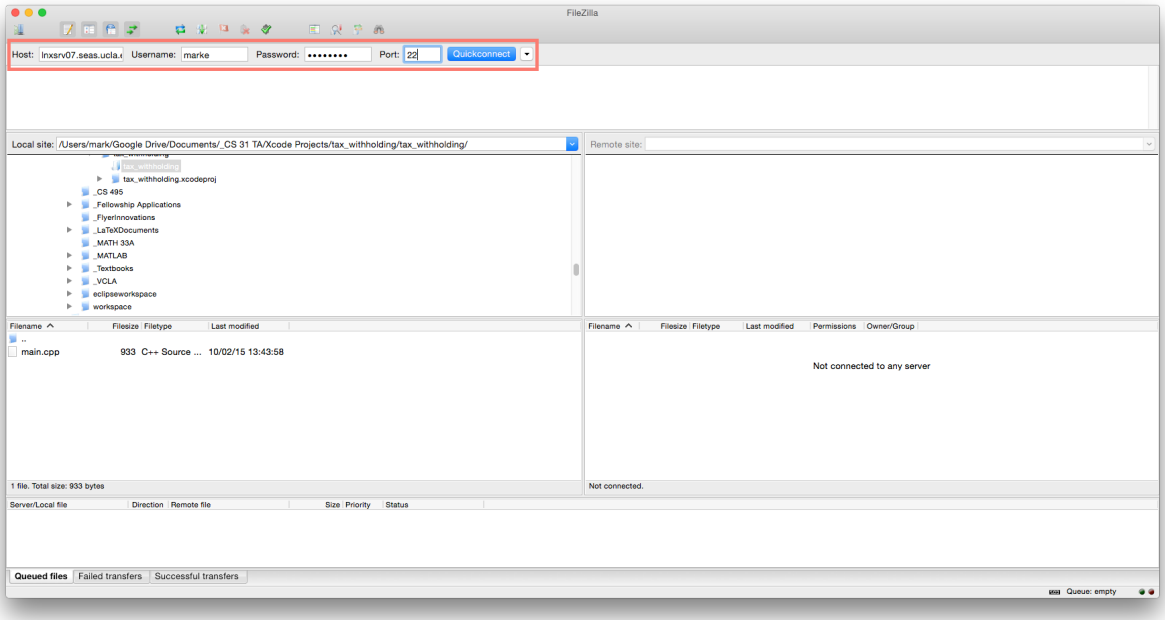

Figure 1: Connection Settings for SEASnet

Next, you'll be greeted with the following message. Check the box and hit OK.

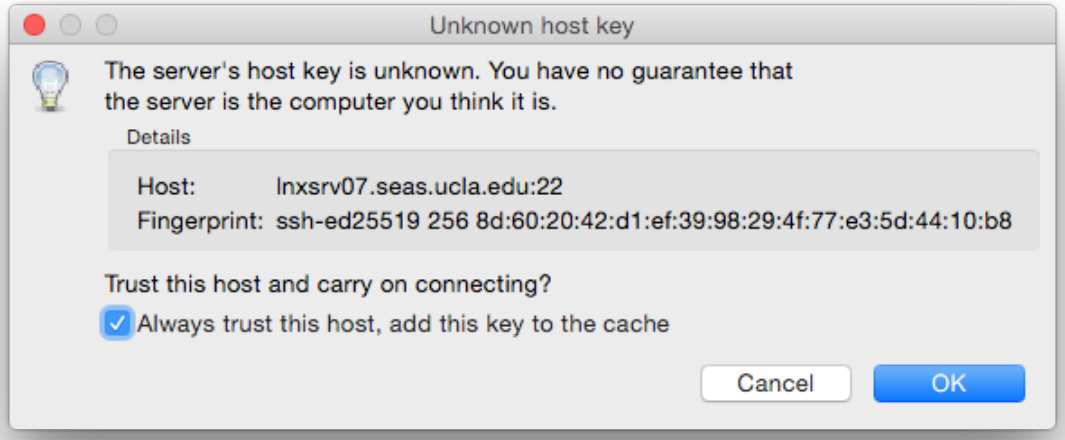

Figure 2: Accept the SEASnet machine's fingerprint

Now, you should see your SEASnet file system on the right side of the panel. You can simply navigate your local filesystem on the left, and drag your source files to SEASnet machine on the right. I recommend putting your source files somewhere inside of /Documents (remember that ~ refers to your user's home directory, "marke" for me on the Linux

machine. You can see what mine looks like below (remember what we did in class, it should look familiar).

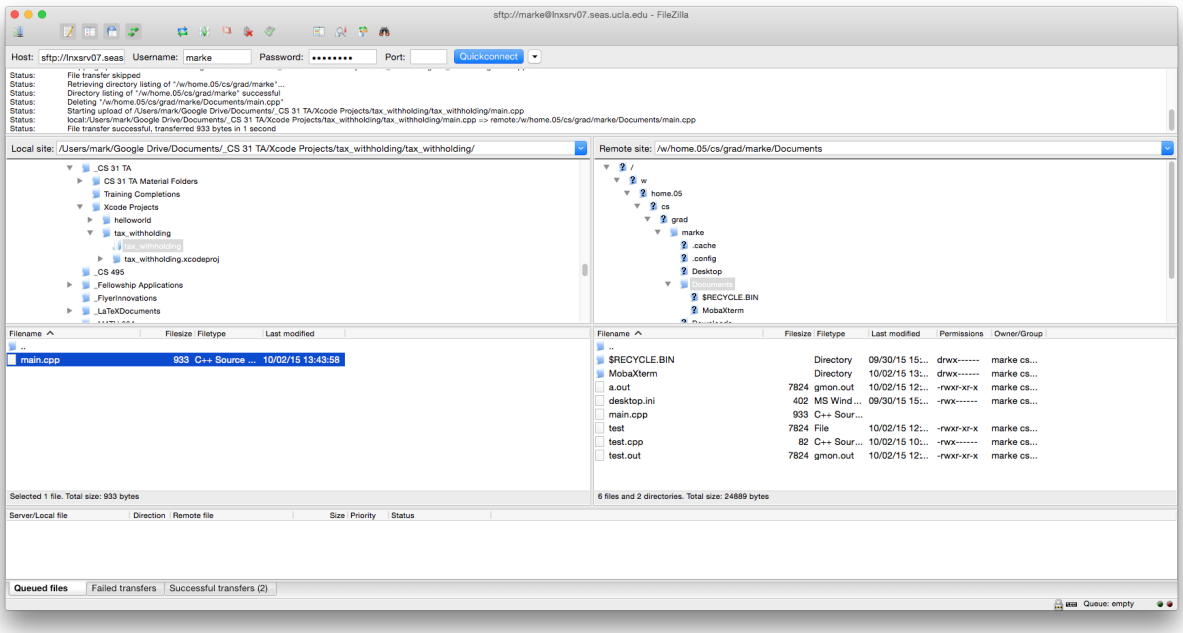

Figure 3: Completed transfer of main.cpp from local machine to SEASnet

2 Remote login to SEASnet machine

Now that you remotely transferred your files on the SEASnet machine, you still need a way use g++. FileZilla is simply a way to transfer files; it is not a way to compile your program on the SEASnet computer.

2.1 Remote Desktop

You can use Microsoft Remote Desktop from Windows or OS X to login into a Windows SEASnet machine, and then use the PuTTY connection to use g++. For a guide on how to setup your remote desktop, see http://www.seasnet.ucla.edu/terminal-server/. For a guide on how to use the PuTTY, see https://ccle.ucla.edu/mod/page/view.php?id=950129.

2.2 From Windows using PuTTY

You don't have to use remote desktop to use the Linux machine. You can simply following the same steps at https://ccle.ucla.edu/mod/page/view.php?id=950129, except you are running a local PuTTY instance from your own Windows computer, instead of the PuTTY on the SEASnet computers.

2.3 From OS X using Terminal

You can also SSH into the SEASnet Linux machines using Terminal from OS X (yours will look slightly different). The commands are the same. To ssh, type:

ssh lnxsrv07.seas.ucla.edu -l username

Where username is your SEASnet login username. Next, you'll have to type in your password (NOTE: the character will NOT move as your are typing your password; it is accepting input, just type your password normally and hit enter). Once logged in, you should see this:

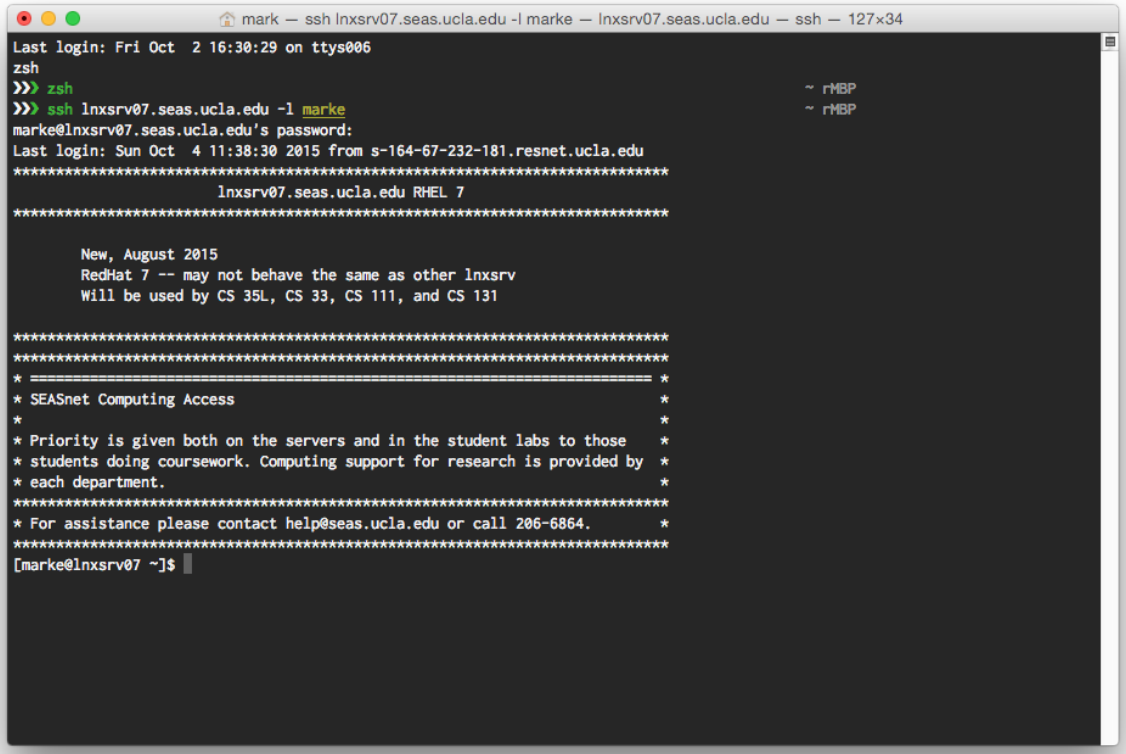

Figure 4: Initial login to SEASnet through SSH

Now you can use Linux commands to navigate and compile your program. The guide at https://ccle.ucla.edu/mod/page/view.php?id=950129 explains some basic commands. Now, we can see we have the same files we just transferred with the following screenshot:

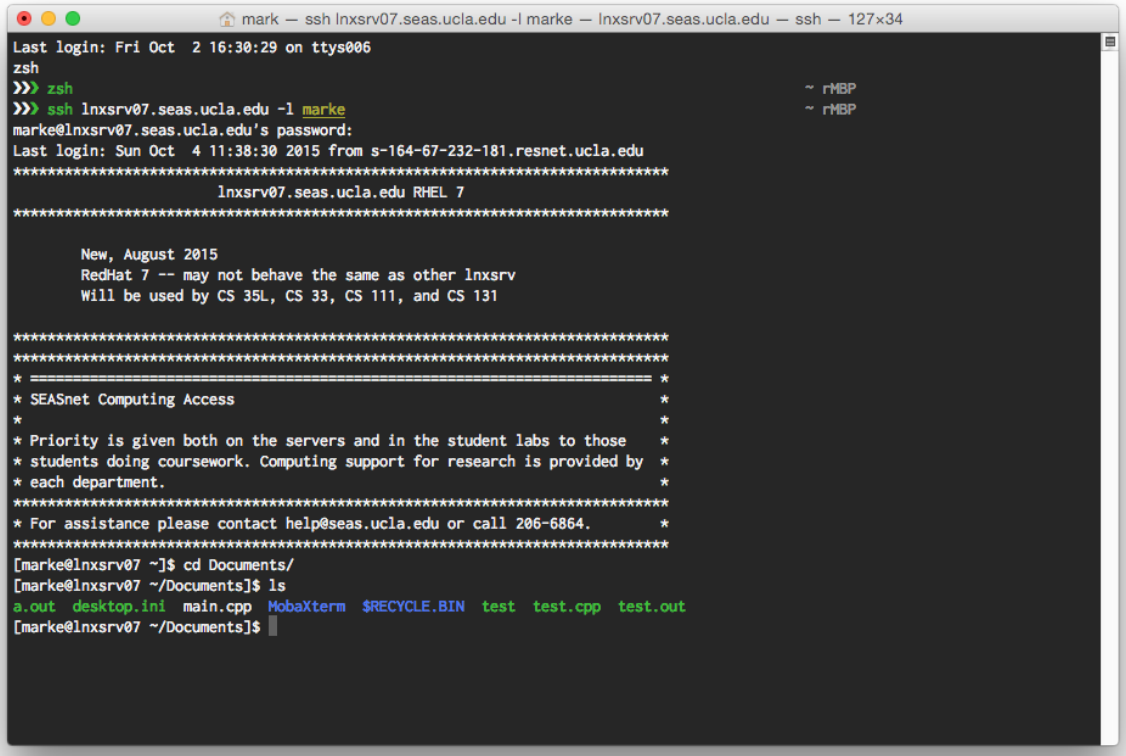

Figure 5: Documents folder over SSH

Now you can follow the same steps in https://ccle.ucla.edu/mod/page/view.php?id=950129 to complete compiling on the SEASnet computers.