

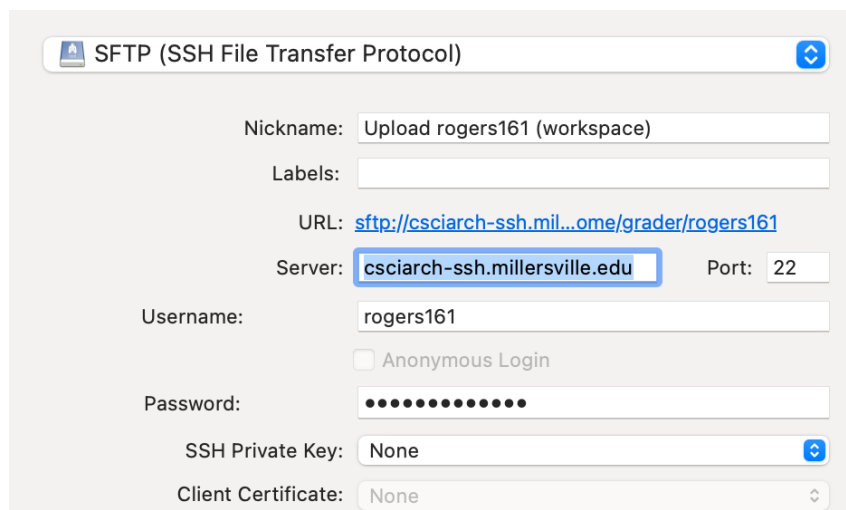
Millersville University Remote Access and Lab Submissions

This document gives a brief overview of the software you will need and the steps to take to upload a project from your local computer to the Linux Lab system and then connect to the Linux system and submit your lab. This information is intended for students taking CSCI 161 and CSCI 162, etc.

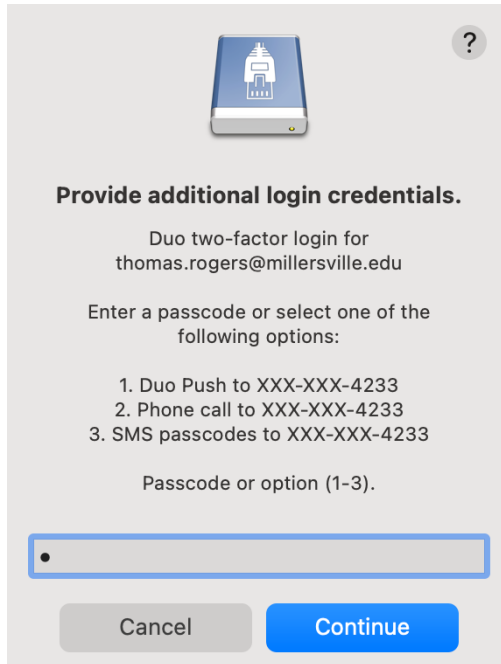
1. **Install Required Software** (one time only): Install the needed software on your laptop or home computer. If running a Windows operating system, you will need both **Cyberduck** and **PuTTY**, and if running Mac OS then you only need **Cyberduck**. The instructions for installing **Cyberduck** and **PuTTY** were included in the first lecture of your course in the instructor's notes.

The remaining steps you will perform each time you need to upload and submit a new lab.

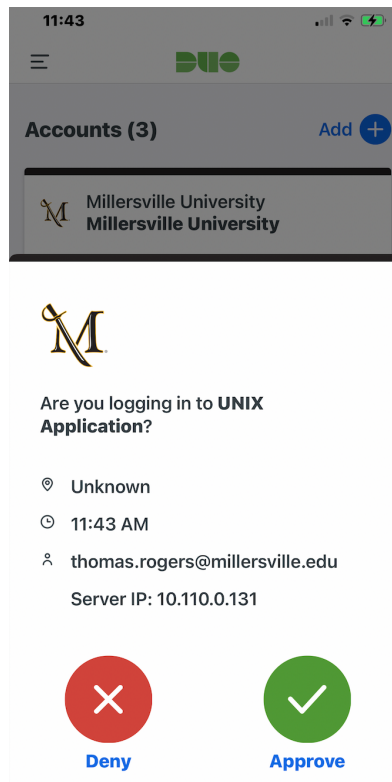
2. **Upload a lab:** To upload a lab, you should do the following, in order:
 1. Using a Finder (Mac) or File Explorer (Windows) window find the Eclipse project folder you wish to upload to or update on the Linux system. Keep that window open or remember the location of the project folder on your computer.
 2. Launch **Cyberduck** and connect to the Linux lab system of choice (Google "Millersville University Linux Lab" for information), connecting via SFTP and supplying your Linux system username and password, then pressing "Connect":



- c. You will be presented with a Two-Factor Authentication challenge in Cyberduck, respond accordingly (e.g. enter "1") and then look for the authentication step on your mobile device and respond:

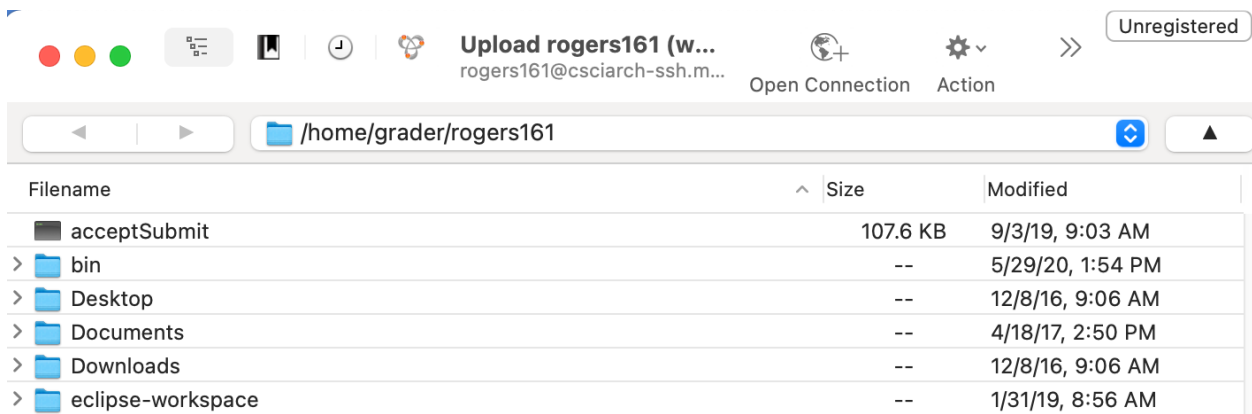


Step 1: Within Cyberduck



Step 2: On your Mobile Device

d. Once connected you should see the file system of your account on the Linux lab as so:



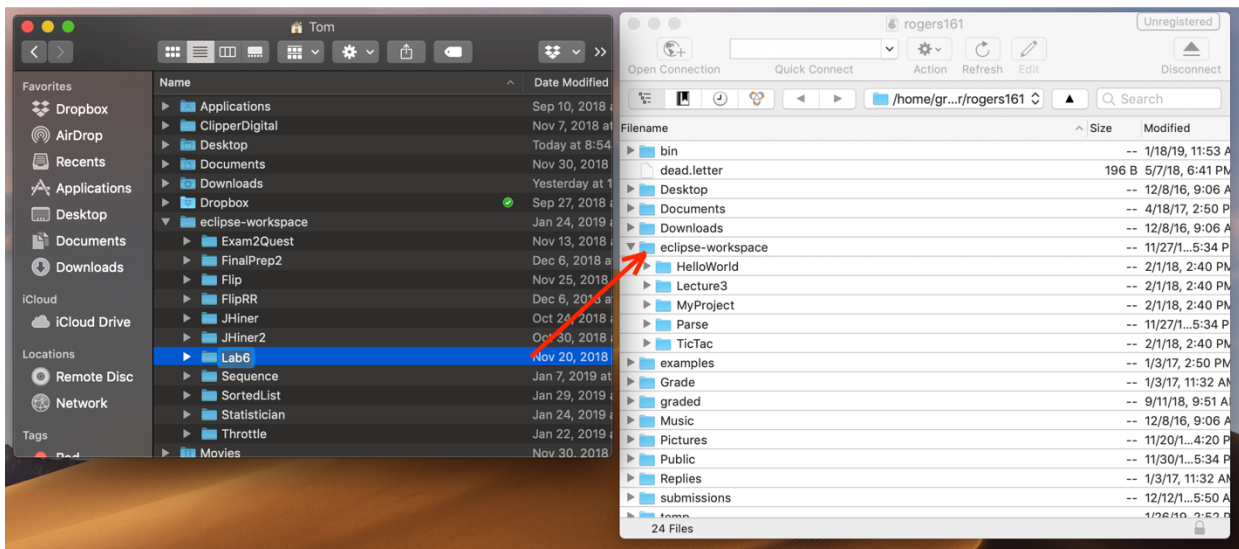
Hint: Use the Bookmark feature (select “Bookmark” then “New Bookmark” from the Cyberduck menu) in order to save the currently open connection as a bookmark for quicker, easier connecting in the future.

e. Upload your project directory at this point. There are two ways you can do this, and both are relatively easy:

- a. Right-mouse click on the folder in **Cyberduck** that you wish to upload to, then select "Upload..." and then find the project folder on your computer to upload in the dialog that is presented...

OR

- b. Position the Finder/File Explorer window from a previous step on your desktop next to the **Cyberduck** window and drag-n-drop the folder from your computer to the appropriate folder in **Cyberduck** as shown below:



3. Connect to the Linux system to submit: Connecting to the Linux lab in order to submit your program is slightly different depending if using a Mac or a Windows computer:

- a. **Mac:** If using a Mac, you can connect easily by opening a **Terminal** window and then running the **ssh** command as shown below. Note the format of the hostname is: <username>@<linux-server>. Your password will not display as entered, so just type it in and hit the return key:

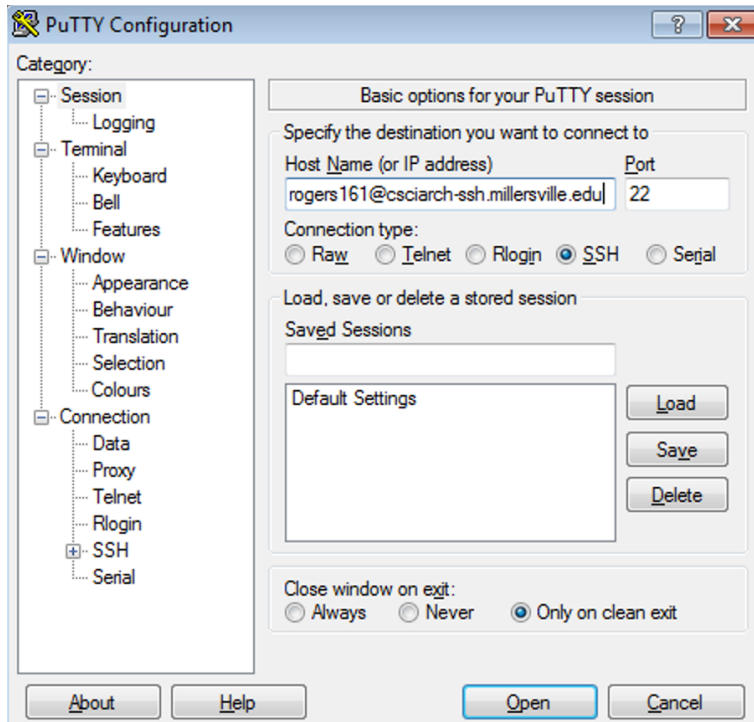
```
Last login: Thu Jan 20 11:04:29 on ttys000
[thomasrogers@Toms-MacBook-Pro ~ % ssh rogers161@csciarh-ssh.millersville.edu
[Password:
Duo two-factor login for thomas.rogers@millersville.edu

Enter a passcode or select one of the following options:

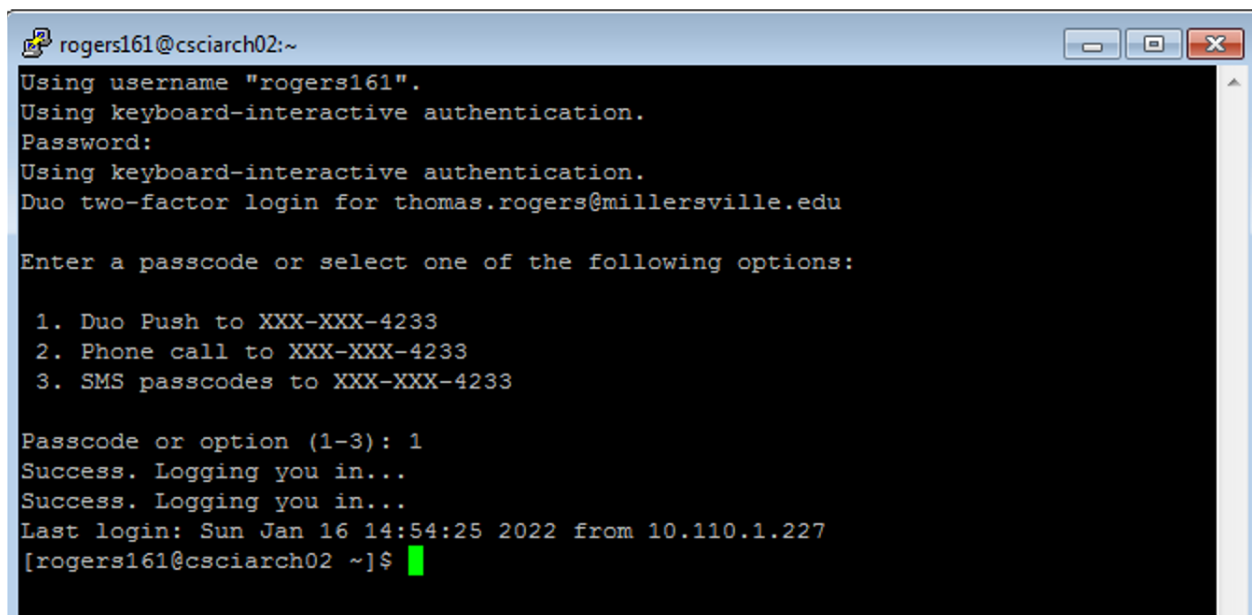
 1. Duo Push to XXX-XXX-4233
 2. Phone call to XXX-XXX-4233
 3. SMS passcodes to XXX-XXX-4233

Passcode or option (1-3): 1
Success. Logging you in...
Success. Logging you in...
Last login: Fri Jan 14 13:54:55 2022 from 10.110.1.227
[rogers161@csciarh03 ~]$
```

b. **Windows:** On a Windows computer, you must launch the **PuTTY** program and enter your username and lab server name (format is: <username>@<linux- server>) in the “Host Name” field, then click “Open” to connect, as shown:



You will then be prompted to enter your password as shown below along with interacting with Two-Factor authentication. Note, your password WILL NOT appear as typed and you will get no indication that you have typed anything, so just input your password and hit the return key on your computer keyboard:



Once connected, logged in and at the command prompt the last step is the same regardless whether connecting via **ssh** or **PuTTY**.

4. **Submit the Lab:** Once remoted into the Linux lab (in the Mac Terminal window via **ssh** or on Windows via **PuTTY**), simply *navigate to the lab project directory*, make sure the lab program file(s) are present (use the **ls** command), then run the **submit** command and follow its prompts as shown below (an example):

```
Last login: Thu Jan 31 08:56:57 2019 from 208.76.76.3
[rogers161@cook ~]$ cd eclipse-workspace
[rogers161@cook eclipse-workspace]$ cd Lab6
[rogers161@cook Lab6]$ ls
Lab6.class  Lab6.java
[rogers161@cook Lab6]$ submit

The grader account choices are:
hardy161  rogers162  zoppetti362  zoppetti476
Please select a grader: rogers162
The lab choices are
Maze rogers161.dir  Sequence  Statistician
Enter lab name: Maze

These files will be submitted to grader rogers162 as lab Maze:
Lab6.java

Is this OK (y,n)? y

These files have been submitted to rogers162.
Lab6.java
```