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.

 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.
 - 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":

SFTP (SSH File Transfer	SFTP (SSH File Transfer Protocol)			
Nickname:	Upload rogers161 (workspace)			
Labels:				
URL: sftp://csciarch-ssh.milome/grader/rogers161				
Server:	csciarch-ssh.millersville.edu Port: 22			
Username:	rogers161			
	Anonymous Login			
Password:	•••••			
SSH Private Key:	None			
Client Certificate:	None			

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:

	11:43 III 🕈 🗩
?	Accounts (3) Add (+ M Millersville University Millersville University
Provide additional login credentials.	МЛ
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).	 Are you logging in to UNIX Application? © Unknown © 11:43 AM ^ thomas.rogers@millersville.edu Server IP: 10.110.0.131
Cancel Continue	Deny Approve

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:

● ● ● E III ● Vpload r rogers1610	ogers161 (w 🐑 @csciarch-ssh.m Open Connect	ion Action	Unregistered
/home/grader/rogers161			
Filename	^ Size	Modified	1
acceptSubmit	10	7.6 KB 9/3/19,	9:03 AM
> 🚞 bin		5/29/20), 1:54 PM
> 🚞 Desktop		12/8/16	, 9:06 AM
> 🚞 Documents		4/18/17	2:50 PM
> 🚞 Downloads		12/8/16	, 9:06 AM
> 🚞 eclipse-workspace		1/31/19,	8:56 AM

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:

	👔 Tom			S rogers161	Unregistered
$\langle \rangle$		₩ ~ ≫			
Favorites	Name ^	Date Modified	Open Connection Quick Connect	Action Refresh Edit	Disconnect
🗱 Dropbox	Applications	Sep 10, 2018 (home/grr/rogers161 🗘	▲ Q Search
	ClipperDigital	Nov 7, 2018 at	Filename		^ Size Modified
(initial and a second s	Desktop	Today at 8:54	bin		1/18/19, 11:53 A
Recents	Documents	Nov 30, 2018	dead.letter		196 B 5/7/18, 6:41 PM
Applications	Downloads	Yesterday at 1	Desktop		12/8/16, 9:06 A
Deskten	🕨 🛅 Dropbox 🥥	Sep 27, 2018 a	Documents		4/18/17, 2:50 P
Desktop	eclipse-workspace	Jan 24, 2019 a	Downloads		12/8/16, 9:06 A
Documents	Exam2Quest	Nov 13, 2018 a	eclipse-workspace		11/27/15:34 P
Downloads	FinalPrep2	Dec 6, 2018 a	HelloWorld		2/1/18, 2:40 PM
	Flip	Nov 25, 2018	▶ E Lecture3		2/1/18, 2:40 PM
iCloud	FlipRR	Dec 6, 2013 a	MyProject		2/1/18, 2:40 PM
iCloud Drive	▶ I JHiner	Oct 24, 2018 ;	Parse		11/27/15:34 P
	▶ ■ JHiner2	Oct 30, 2018	🕨 🚞 TicTac		2/1/18, 2:40 PM
Locations	Lab6	Nov 20, 2018	examples		1/3/17, 2:50 PN
Remote Disc	Sequence	Jan 7, 2019 at	F Grade		1/3/17, 11:32 AM
🕼 Network	SortedList	Jan 29, 2019 a	▶ 🚞 graded		9/11/18, 9:51 A
	Statistician	Jan 24, 2019 a	▶ 📩 Music		12/8/16, 9:06 A
Tags		Jan 22, 2019 a	Pictures		11/20/14:20 P
Ded		NOV 30. 2018	Public		11/30/15:34 P
			Replies		1/3/17, 11:32 AM
			submissions		12/12/15:50 A
			24 Files		1/26/10 2:52 0

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:



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:

🕵 PuTTY Configuration		? <mark>×</mark>	
Category:			
- Session	Basic options for your PuTTY session		
⊡ · Terminal ⊡ · Terminal · · · Keyboard	Specify the destination you want to conne	ct to	
	Host Name (or IP address)	Port	
Bell	rogers to tecsciarch-ssrt.minersvine.edu	22	
Features Window Appearance Behaviour Translation Selection Colours Connection Proxy Telnet Rlogin SSH Serial	Connection type:	H ⊚ Se <u>r</u> ial	
	Load, save or delete a stored session Sav <u>e</u> d Sessions Default Settings	Load Sa <u>v</u> e Delete	
	Close window on e <u>xi</u> t: ⊘ Always ⊘ Never	lean exit	
About <u>H</u> elp	<u>O</u> pen	<u>C</u> ancel	

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.iava
```