Remote Login to CSIL
Overview

- This presentation describes how to remotely access CSIL machines for CMPT 127 in Mac OS. Please note these instructions are only for a unix based system.

- We use **ssh** to remotely access the CSIL servers listed here: [https://www.sfu.ca/computing/about/support/csil/unix/how-to-use-csil-linux-cpu-server.html](https://www.sfu.ca/computing/about/support/csil/unix/how-to-use-csil-linux-cpu-server.html). At any point in time you may be able to access all or some of these servers.

- (OPTIONAL) Downloading xquartz([https://www.xquartz.org/](https://www.xquartz.org/)) for using a GUI, like the sublime, via terminal

- Why you cannot use the original terminal for a GUI: [https://support.apple.com/en-ca/HT201341](https://support.apple.com/en-ca/HT201341)
Step 1 & 2 & 3:

- **Step1 (optional):** Download xquartz for using GUI.
- **Step2:** Open a terminal (or xquartx terminal) window.
- **Step3:** Use your SFU userId or username (your username can be found by examining your SFU email address: username@sfu.ca) to ssh. Replace the username in the below command with your actual username.

For original MAC terminal:

-MacBook-Air:~ $ ssh -p24 username@csil-cpu1.csil.sfu.ca

For xquartx terminal:

-MacBook-Air:~ $ ssh -p24 username@csil-cpu1.csil.sfu.ca -X

If you are accessing it for the first time your terminal window should prompt you to add ECDSA key permanently. Type in ‘yes’ to the prompt. The same can be seen in the picture on next below.

-X helps you to use sublime.
Step 4

- Enter your SFU password in the password prompt.

First time remote access to **csil-cpu1.csil1.sfu.ca**

```
-MacBook-Air:-$ ssh -p24 riteshp@csil-cpu1.csil1.sfu.ca
The authenticity of host 'csil-cpu1.csil1.sfu.ca:24 (206.12.16.179:24)' can't be established.
ECDSA key fingerprint is
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added 'csil-cpu1.csil1.sfu.ca:24,206.12.16.179:24' (ECDSA) to the list of known hosts.
riteshp@csil-cpu1.csil1.sfu.ca's password:
Welcome to Ubuntu 18.04.3 LTS (GNU/Linux 4.15.0-72-generic x86_64)

CSIL Workstations FAQs  |  http://www.sfu.ca/computing/about/support/csil/unix.html/
Technical Support  |  helpdesk@cs.sfu.ca

*** System restart required ***
riteshp@csil-cpu1:-$```

Second or subsequent remote accesses to `csil-cpu1.csil1.sfu.ca` would look much cleaner as can be seen below.

```
$ ssh -p24 riteshp@csil-cpu1.csil1.sfu.ca
riteshp@csil-cpu1.csil1.sfu.ca's password:
Welcome to Ubuntu 18.04.3 LTS (GNU/Linux 4.15.0-72-generic x86_64)

CSIL Workstations FAQs | http://www.sfu.ca/computing/about/support/csil/unix.html/
             Technical Support | helpdesk@cs.sfu.ca

*** System restart required ***
Last login: Tue Mar 17 05:44:20 2020 from 75.155.171.59
riteshp@csil-cpu1:~$  
```
Failure Remote Access Cases

- **Case 1**: No password prompt/Operation timed out.

  ```
  Riteshs-MacBook-Air:~ ritesh$ ssh -p24 riteshp@csil-cpu5.csil.sfu.ca
  ssh: connect to host csil-cpu5.csil.sfu.ca port 24: Operation timed out
  Riteshs-MacBook-Air:~ ritesh$
  ```

- **Case 2**: No server name provided.

  ```
  Riteshs-MacBook-Air:~ ritesh$ ssh -p24 riteshp@csil-cpu6.csil.sfu.ca
  ssh: Could not resolve hostname csil-cpu6.csil.sfu.ca: nodename nor servname provided, or not known
  Riteshs-MacBook-Air:~ ritesh$
  ```
Troubleshoot

- In case of such failures, try a different CSIL server till you find one that works for you. Of the 10 CSIL servers: https://www.sfu.ca/computing/about/support/csil/unix/how-to-use-csil-linux-cpu-server.html.

- At the time when this presentation was written all servers were remotely accessible except: csil-cpu5.csil.sfu.ca, csil-cpu6.csil.sfu.ca and csil-cpu8.csil.sfu.ca. However, this list can change with time.
How to use GUI

- Using command `subl` to open the sublime.
- The terminal will open a new sublime windows for you.
- Coding.
- Ctrl + s to save the code on the CSIL machine.
- IMPORTANT: The sublime is running on the CSIL machine!