

CMSC5743 Lab 0: Warmup

Bei Yu

CSE Department, CUHK

byu@cse.cuhk.edu.hk

Spring 2023

How to use Linux Server of CSE

Prestep: Connect to CSE VPN

- If you are out of CUHK campus,
 - Connect to CSE VPN first!
- Install **OpenVPN Connect Client**
- **Windows & MacOS:** use browser and download the client from <https://openvpn.cse.cuhk.edu.hk>
- **Android & IOS:** Install **OpenVPN Connect** client from App Store
 - Google Play Store
 - Apple App Store
- **Linux:** [Connecting to Access Server with Linux](#)

Connect to CSE VPN: Import Profiles

- Execute OpenVPN Connect Client
- Click **Import Profile**
- Enter URL:
<https://openvpn.cse.cuhk.edu.hk>
- Click Next
- Enter your CSE UNIX Account and Password
- Click Import



Download User-lock Profiles

OpenVPN Connect Recommended for your device:



OpenVPN Connect for all Platforms:

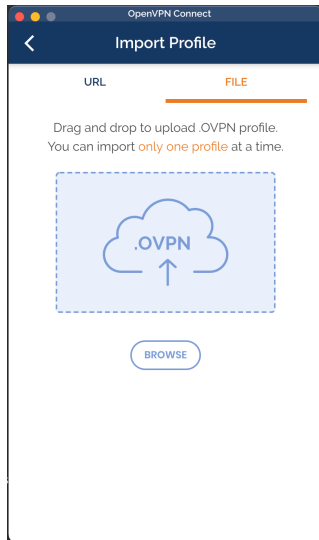


OpenVPN Connect v3:



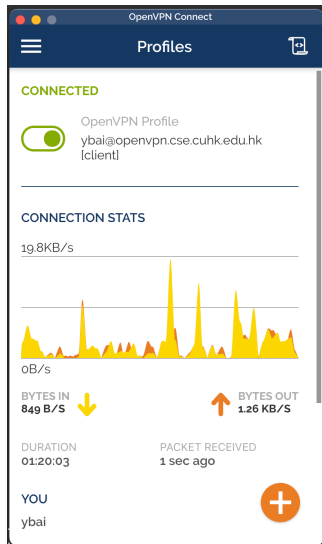
Available Connection Profiles:

[Yourself \(user-locked profile\)](#)



Connect to CSE VPN Server

- Execute OpenVPN Connect
- Select the profile to connect
- Enter your CSE Unix Account and Password
- Klik **OK**



Download Putty for SCP on Windows

- Firstly, we should download Putty, which is used as a tool for our connection.
[Download Link](#)

Download PuTTY: latest release (0.78)

[Home](#) | [FAQ](#) | [Feedback](#) | [Licence](#) | [Updates](#) | [Mirrors](#) | [Keys](#) | [Links](#) | [Team](#)
Download: [Stable](#) - [Snapshot](#) | [Docs](#) | [Changes](#) | [Wishlist](#)

This page contains download links for the latest released version of PuTTY. Currently this is 0.78, released on 2022-10-29.

When new releases come out, this page will update to contain the latest, so this is a good page to bookmark or link to. Alternatively, here is a [permanent link to the 0.78 release](#).

Some versions of PuTTY are versions we think are reasonably likely to work well. However, they are often not the most up-to-date version of the code available. If you have a problem with this release, then it might be worth trying out the [development builds](#), to see if the problem has already been fixed in those versions.

Package files

You probably want one of these. They include versions of all the PuTTY utilities (except the new and slightly experimental Windows pterm).

(Not sure whether you want the 32-bit or the 64-bit version? Read the [FAQ entry](#).)

We also publish the latest PuTTY installers for all Windows architectures as a free-of-charge download at the [Microsoft Store](#); they usually take a few days to appear there after we release them.

MSI ('Windows Installer')

64-bit x86: [putty-64bit-0.78-installer.msi](#) ([signature](#))

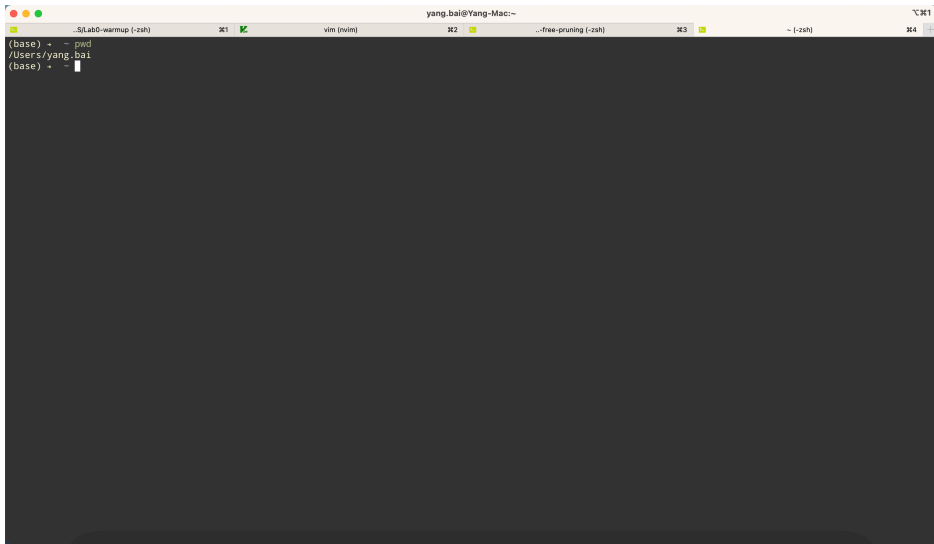
64-bit Arm: [putty-arm64-0.78-installer.msi](#) ([signature](#))

32-bit x86: [putty-0.78-installer.msi](#) ([signature](#))

Unix source archive

.tar.gz: [putty-0.78.tar.gz](#) ([signature](#))

Using Terminal for SCP on MAC OS

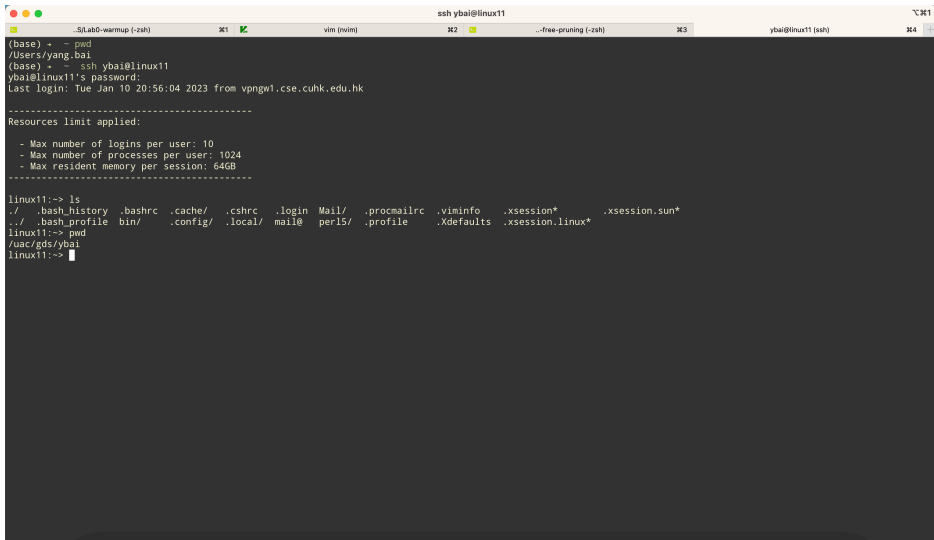


A screenshot of a macOS Terminal window. The title bar shows the user 'yang.bai@Yang-Mac' and the window name 'yang.bai@Yang-Mac:~'. The terminal content shows a shell prompt '(base) ~' followed by the command 'scp' and its output: 'pwld' and '/Users/yang.bai'. The prompt is followed by a cursor. The terminal window has a dark background and a light-colored title bar. There are four tabs open at the top: '..S/Lab0-warmup (-zsh)', 'vim (nvim)', '..free-pruning (-zsh)', and '- (-zsh)'. The window also has standard macOS window controls (red, yellow, green buttons) in the top-left corner.

```
yang.bai@Yang-Mac:~  
..S/Lab0-warmup (-zsh) #1 vim (nvim) #2 ..free-pruning (-zsh) #3 - (-zsh) #4  
(base) ~ - scp  
pwld  
/Users/yang.bai  
(base) ~ -
```


- Access Server URL: ssh `[Username]@linux11`
- `[Username]`: CSE UNIX username
- Password: CSE UNIX password

Using Username and Password to Login



```
(base) ~ - pwd
/Users/yang.bai
(base) ~ ssh ybai@linux11
ybai@linux11's password:
Last login: Tue Jan 10 20:56:04 2023 from vpngw1.cse.cuhk.edu.hk
-----
Resources limit applied:
- Max number of logins per user: 10
- Max number of processes per user: 1024
- Max resident memory per session: 64GB
-----

linux11:~> ls
./  .bash_history  .bashrc  .cache/  .cshrc  .login  Mail/  .procmailrc  .viminfo  .xsession*  .xsession.sun*
../  .bash_profile  bin/  .config/  .local/  mail@  perl5/  .profile  .Xdefaults  .xsession.linux*
linux11:~> pwd
/uac/gds/ybai
linux11:~>
```

Git command-line interface

- **git help <command>**: get help for a git command
- **git init**: creates a new git repo, with data stored in the .git directory
- **git status**: tells you what is going on
- **git add <filename>**: adds files to staging area
- **git commit**: creates a new commit
- **git log**: shows a flattened log of history
- **git log -all -graph -decorate**: visualizes history as a DAG
- **git diff <filename>**: show changes you made relative to the staging area
- **git diff <revision> <filename>**: shows differences in a file between snapshots
- **git checkout <revision>**: updates HEAD and current branch

THANK YOU!