Remote Login to CSE Labs Machines

When you are not physically in the lab, you can work on labs and programming assignments by logging in to one of the CSE Labs computers remotely. Instructions are provided for Mac OS and Windows below. CSE Labs also provides their own instructions: here (http://help.cselabs.umn.edu/offsite).

Mac OS:

1. Ensure that you have X11 on your Mac. To do this, click on the magnifying glass (search) and type "X11".

2. If an X11 icon does not pop up when you select the option from the magnifying glass, you will be sent this webpage (http://xquartz.macosforge.org/landing/). Download and install the latest version of XQuartz (currently XQuartz-2.7.8.dmg at time of writing this) from the "Quick Download" link.

3. Start a terminal by clicking on the Terminal icon or typing "Terminal" in the search if you can't find it.

4. When the terminal is open type:
   ssh -X [CSE Labs account name]@[CSE Labs machine name]

   A list of CSE Labs machine names is here (http://cselabs.umn.edu/labs/unix_machines) For example, to log in to computer 07 in Keller Hall 1-200, I could type the following:

   ssh -X jsartori@csel-kh1200-07.cselabs.umn.edu

   You may be prompted to verify the MAC address of the machine. Just enter yes (or 'y'). Then you should be able to login with your CSE Labs account name and password. Once you are logged in, it will be just as if you had opened a terminal window on one of the lab machines.

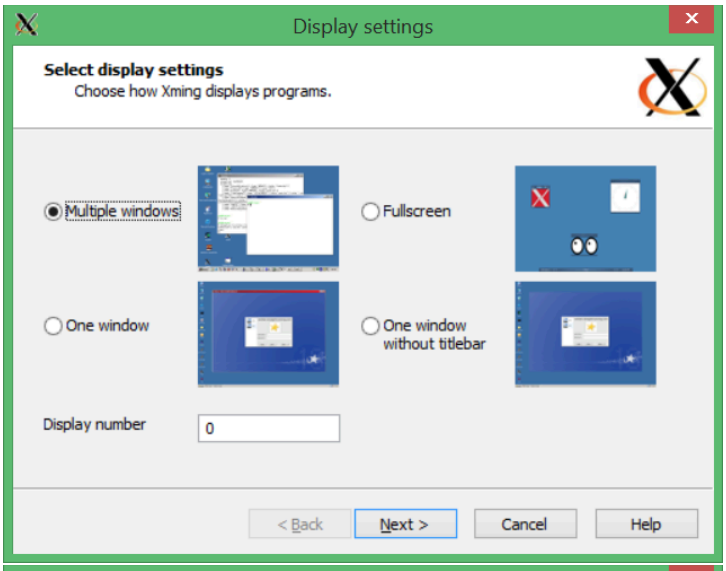
Windows:

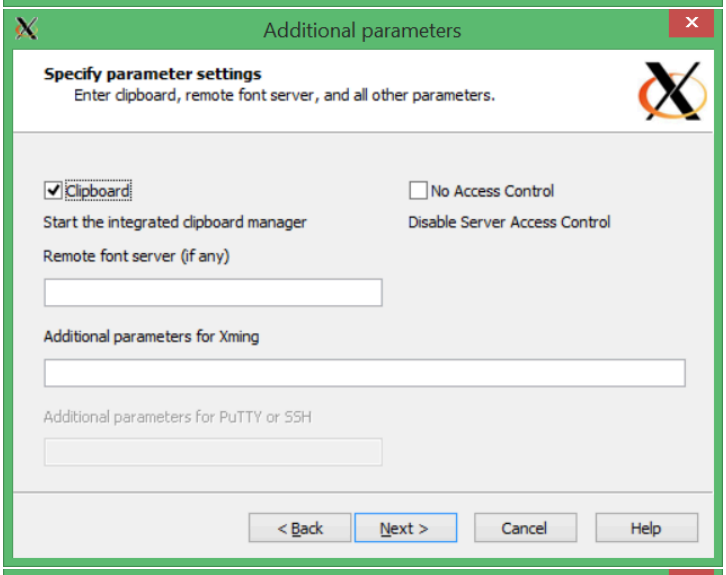
1. Download PuTTY (http://the.earth.li/~sgtatham/putty/latest/x86/putty.exe) and Xming (http://sourceforge.net/projects/xming/files/latest/download).
   (PuTTY is an SSH client, and Xming does X-forwarding.)

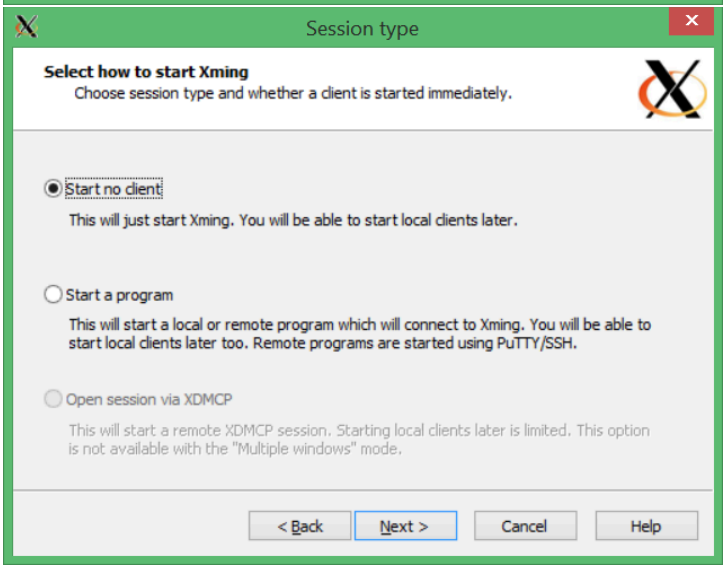
2. Install Xming.

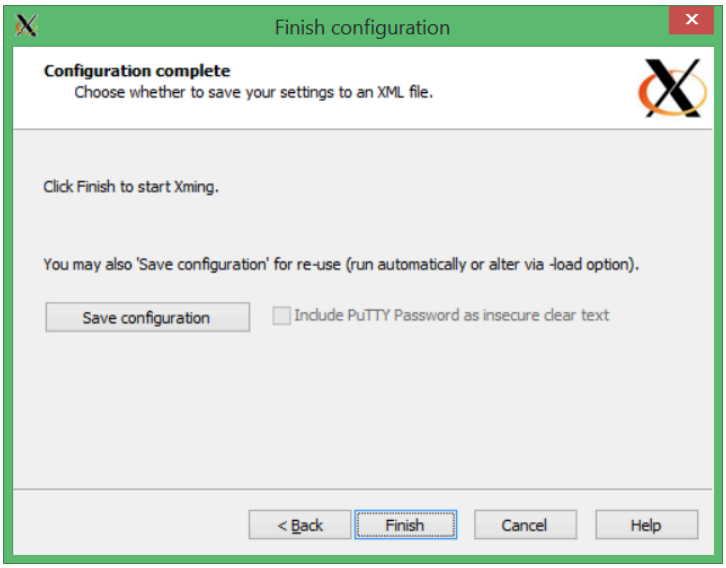
3. Run Xming (Launch.exe).

4. Click next, next, next, finish. The default settings should be fine, but you can reference the pictures below if you want.

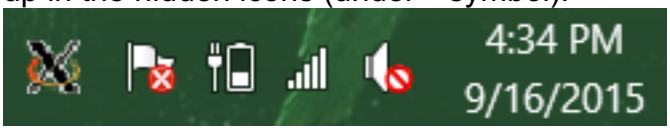

Display settings
Select display settings
Choose how Xming displays programs.
Multiple windows
Fullscreen
One window
One window without titlebar
Display number
0
< Back
Next >
Cancel
Help


Additional parameters
Specify parameter settings
Enter clipboard, remote font server, and all other parameters.
Clipboard
Start the integrated clipboard manager
No Access Control
Disable Server Access Control
Remote font server (if any)
Additional parameters for Xming
Additional parameters for PuTTY or SSH
< Back
Next >
Cancel
Help

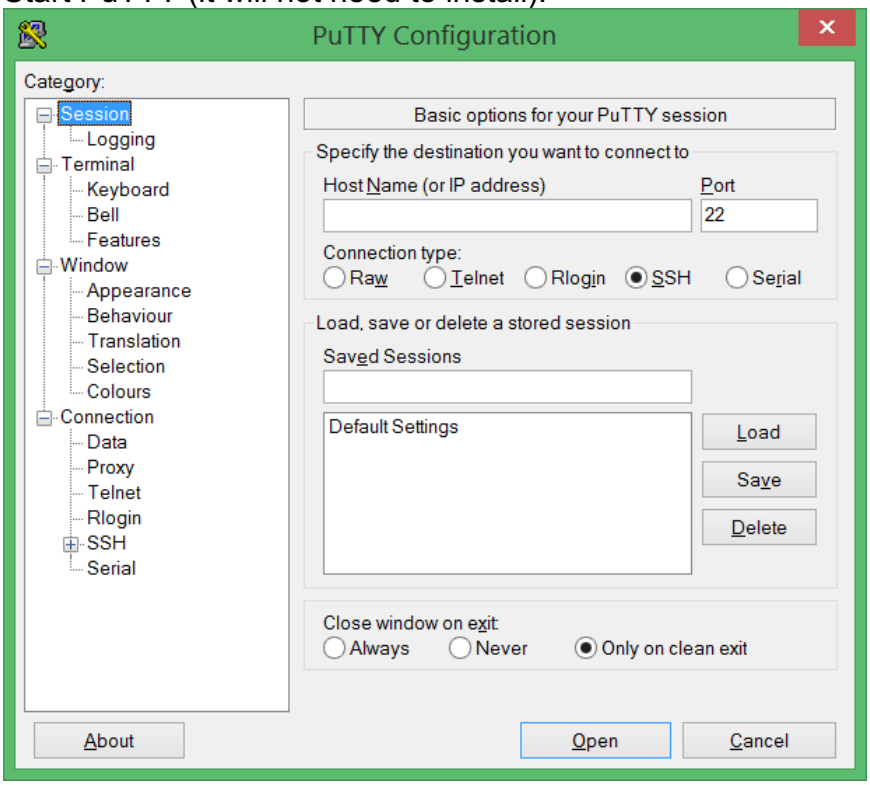

Session type
Select how to start Xming
Choose session type and whether a client is started immediately.
Start no client
This will just start Xming. You will be able to start local clients later.
Start a program
This will start a local or remote program which will connect to Xming. You will be able to start local clients later too. Remote programs are started using PuTTY/SSH.
Open session via XDMCP
This will start a remote XDMCP session. Starting local clients later is limited. This option is not available with the "Multiple windows" mode.
< Back
Next >
Cancel
Help



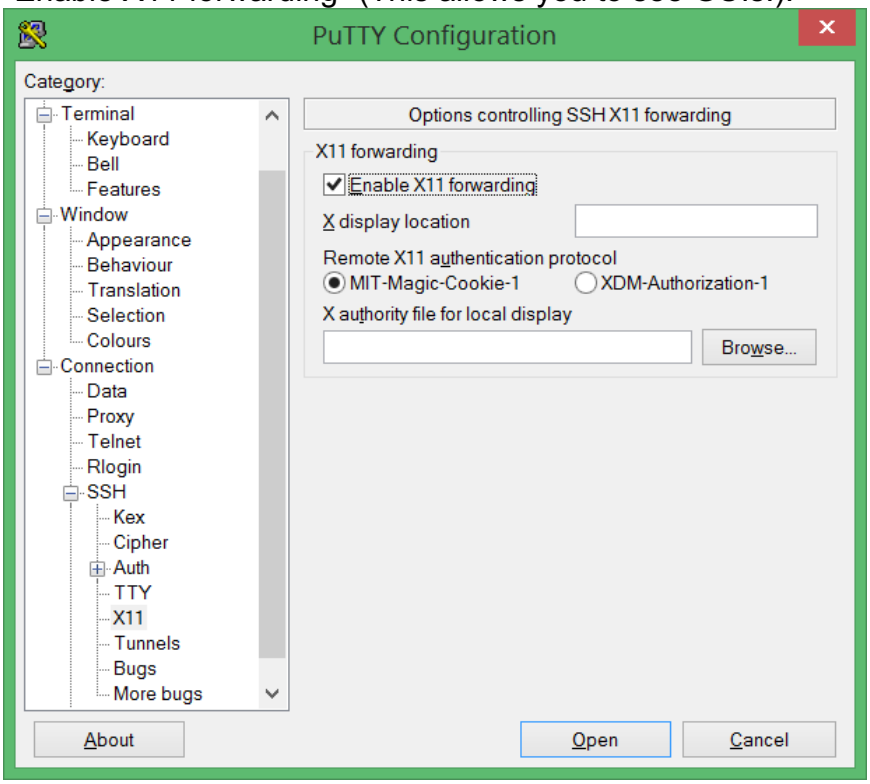
5. An Xming icon should now show up on your taskbar (see picture). It may show up in the hidden icons (under ^ symbol).



6. Start PuTTY (it will not need to install).



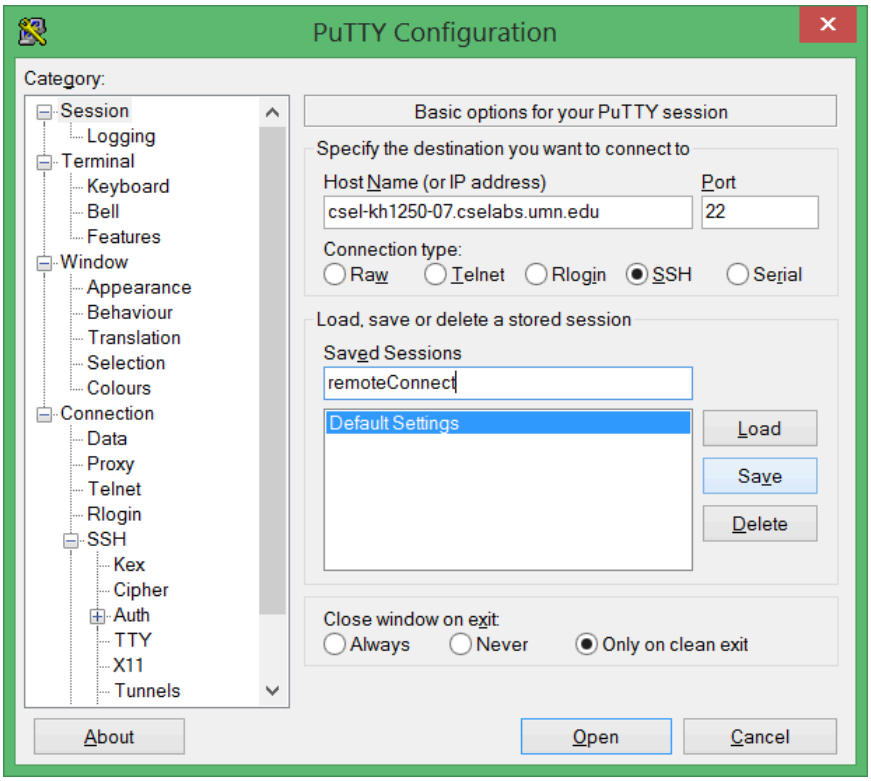
7. In the left "Category" frame, expand "SSH" and click on "X11". Here, check mark "Enable X11 forwarding" (This allows you to see GUIs.).



8. Click back on "Session" at the very top of the "Category" frame (on the left). Find a host CSE Labs machine that you want to connect to from this list (http://cselabs.umn.edu/labs/unix_machines). For example, computer 14 in Keller Hall 1-200 has the following address:

   csel-kh1200-14.cselabs.umn.edu

   Type the machine address into the "Host name" space. Then type a name into "Saved Sessions" and click "Save". When you run PuTTY the next time, you can just select the saved session (in the picture I called it remoteConnect), then click "Load" and then "Open". It might ask you to verify the MAC address. Just enter yes (or 'y'). Then you should be prompted for your login and password. Once you are logged in, it will be just as if you had opened a terminal window on one of the lab machines.



Logging into CSE Labs Machines through your browser

CSE Labs provides a service called FastX that allows you to log in remotely to a Linux machine through your web browser. Follow the instructions at the following link to access CSE Labs machines using FastX.

http://help.cselabs.umn.edu/offsite/fastx

Local Development on your own Machine

If you prefer to do programming on your own computer, the following options are available. However, since labs will be done on CSE computers, please still make sure that any code you need to demo in the lab still works on the CSE Linux machines.

Windows:
Go to https://wwws.cs.umn.edu/dreamspark/ and download Visual Studio and compiler

Mac OS:
Get Xcode from the App store