x2go Installation and Configuration at Home Computer

If you want to run an application, such as Eclipse, ARM DS etc., with **Graphical User Interface** on a **Lab Machine** from your **Home Computer**, you will need to remote login into the lab machine using **x2go**. x2go is **free** to download and available for both **Windows** and **Mac** machines. x2go uses **VcXsrv** on **Windows** machines and it will be automatically installed when you install x2go. x2go uses **XQuratz** on **Mac** machines and you will need to install **XQuartz** separately. Both **VcXsrv** and **XQuratz** are required to get X based application displays from the remote linux/unix machines. X2go remote login establishes an **ssh** session with **X forwarding** with the remote machine.

This document has information on how to **download**, **install**, **run**, and **configure** x2go on both Windows and Mac machines. It also tells how to download, install, and test **XQuartz** on Mac machines**.**

Download and Install

Windows Users

Download and Install x2go and VcXsrv

- Download **Windows version** of **x2go setup software** from **x2go** download page (https://wiki.x2go.org/doku.php/download:start)
- Double click on the setup exe to start the installation.
- Follow the prompt and finish the installation.

Mac Users

Download and Install XQuartz

- Browse to **https://www.xquartz.org/** and download the version 2.7.11 dmg file.
- In Finder, double-click on the downloaded dmg file.
- In the XQuartz window double-click on the XQuartz.pkg package to launch the installer
- In the "Install XQuartz" window
- Click "Continue"
- Read the Important Information, click "Continue"
- Click Agree to agree to the software license agreement
- Click "Install"
- If required, enter credentials to allow the install to proceed and click "Install Software"
- [Software will install]
- A permissions window may prompt to allow the installer to access the System Events. Click "OK"
- Click "OK" for the message "You will need to log out and log back in..."
- Click "Close" when the installation completes

- If prompted about moving the installer to Trash, click "Move to Trash"
- Log out and log back in so that XQuartz will be picked up as the default X server and so the shell display variable will be set correctly.

Test XQuartz

- Launch the Terminal application
- Use Spotlight Search to locate "terminal" app and launch it
- Connect to csci.viu.ca using X forwarding and ssh
- $ **ssh -X user@csci.viu.ca**
- Using the -X (X forwarding) switch will cause the XQuartz app to launch on the local Mac upon successful login
- Accept the server's host key by type "y"
- Enter a valid CSCI password to login
- Once logged into otter test the ability to launch graphical applications on otter and display on the local computer
- At the shell prompt type "xeyes" and hit enter
- The xeyes application will open on the local Mac. This application displays a set of eyes that appear to follow the mouse movements.
- Click on the red circle in the top left corner to shutdown xeyes and return to the shell prompt

Download and Install x2go

- Download the latest release from [X2Go releases](https://code.x2go.org/releases/binary-macosx/x2goclient/releases/)
- Open the x2goclient-* dmg file
- Drag X2Go Client to the Applications folder
- Close the window
- Launch the X2Go Client from the applications folder
- If OS X refuses to launch the application due to not being able to verify it, manually adjust the security settings
- Open the System Preferences
- Select Security & Privacy
- Click on the General tab
- Beside the '"x2goclient" was blocked…' message, click Open Anyway.
- Click Open on the dialogue window
- If prompted to allow/deny "pulseaudio" to accept incoming network connections, click Allow

Both Windows and Mac Users

Configuring a X2go Remote Session

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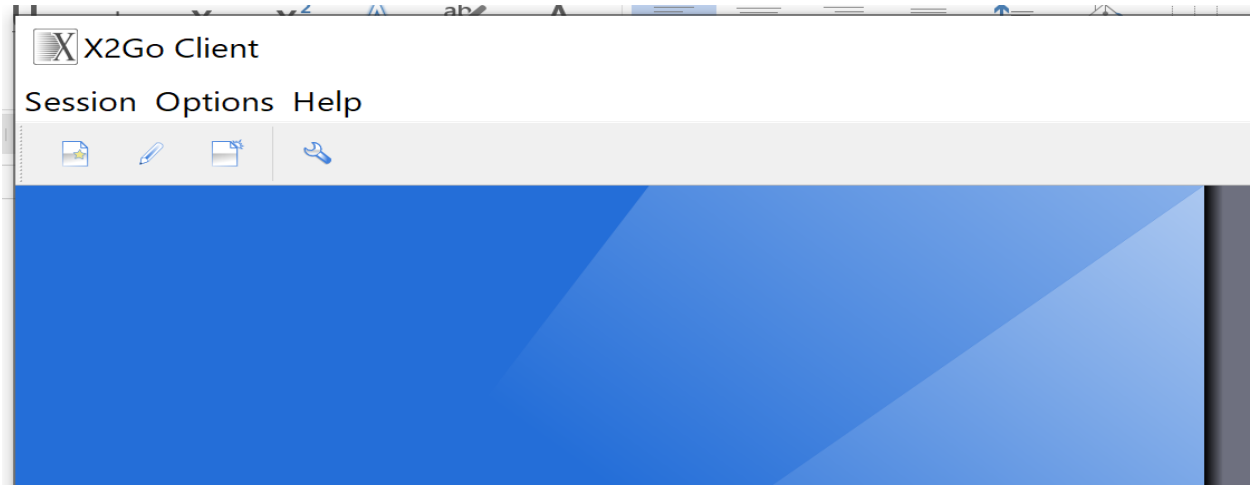
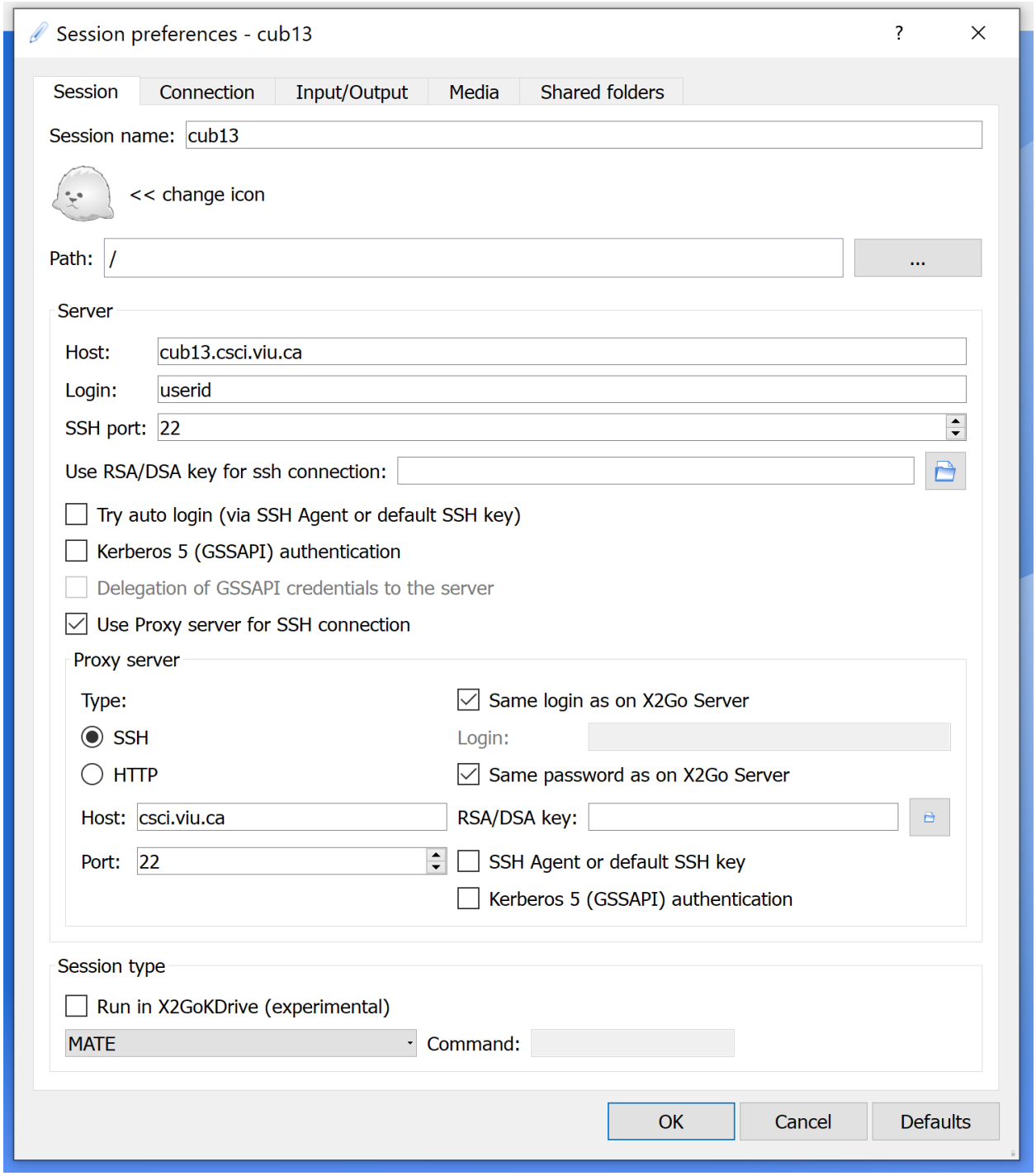
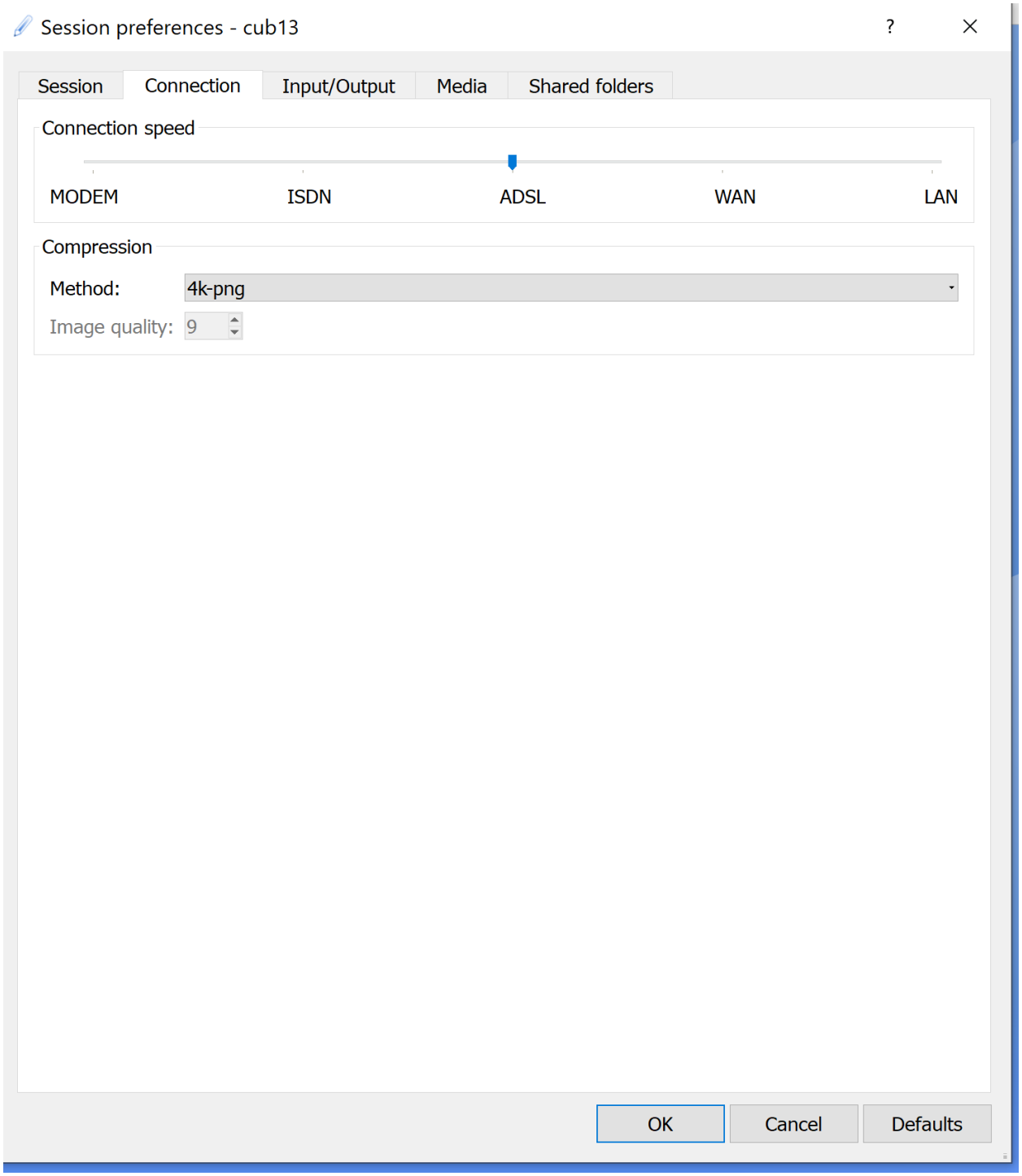
- Once installed, run the x2go.

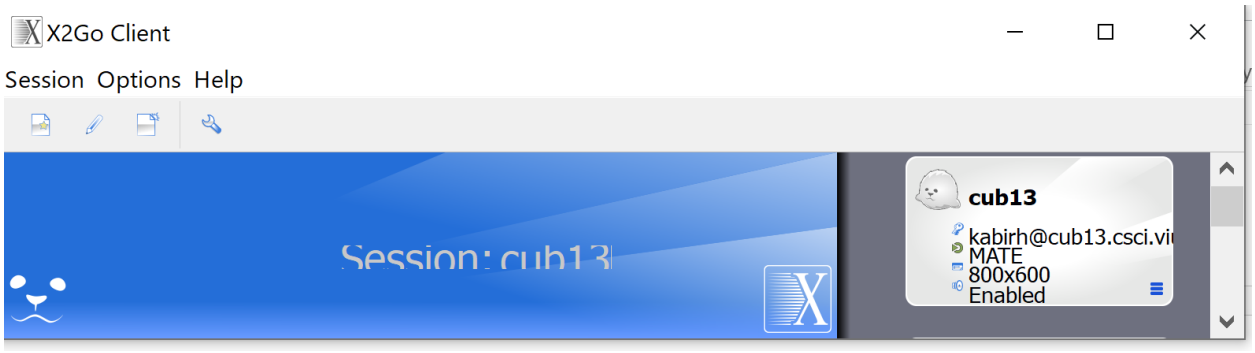


- Click on **Session** and **New Session**.
- Type a **session name**, for example, *cub13* to have a session with cub13.csci.viu.ca machine in the lab.
- Type **host name** in **Host** box, for example *cub13.csci.viu.ca* for cub13. Hosts available for you (second year and up) in CSCI Labs are **cub1** - **cub17**, **kit1** - **kit4**; hosts available for the first year students are **pup1**-**pup18**. For getting better performance from the lab machines it is advised that each student picks a different lab machine and sticks with that machine unless there is an issue.
- Type **your lab** *userid* in **Login** box.
- Leave SSH port 22
- **Check** on **Use Proxy server for SSH connection**.
- Leave Proxy server Type SSH.
- Check on **Same login as on X2GO Server**
- Check on **Same password as on X2GO Server**
- Type **Proxy Server Host** *csci.viu.ca*. Please, remember this Proxy Server Host is fixed for CSCI labs.
- Leave Proxy Server Port 22.
- Choose **Session type** *MATE* from the **drop down** but leave Run in X2GKDrive **unchecked**.
- In the **Connection** Tab, choose a lower quality such as "**4k-png**"for **Compression**
- Click OK to save the session configuration.

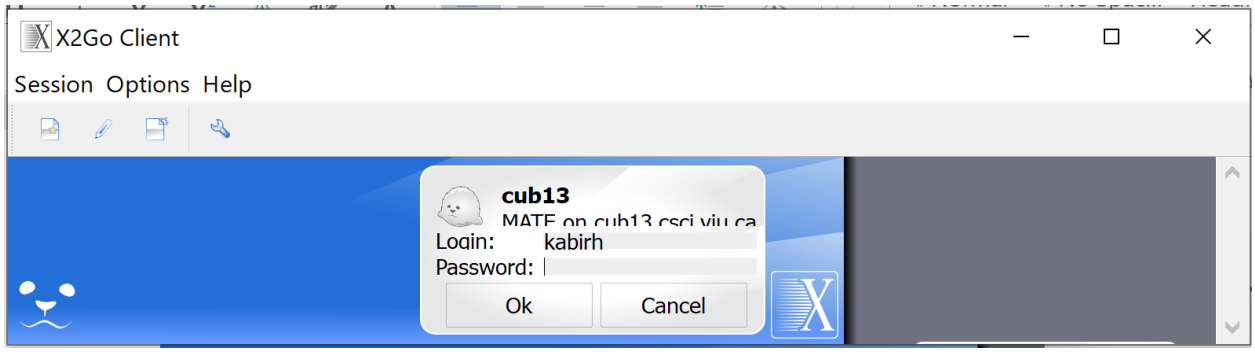

Session preferences - cub13
Session
Connection
Input/Output
Media
Shared folders
Session name: cub13
<< change icon
Path: /
...
Server
Host: cub13.csci.viu.ca
Login: userid
SSH port: 22
Use RSA/DSA key for ssh connection:
Try auto login (via SSH Agent or default SSH key)
Kerberos 5 (GSSAPI) authentication
Delegation of GSSAPI credentials to the server
Use Proxy server for SSH connection
Proxy server
Type:
SSH
HTTP
Host: csci.viu.ca
Port: 22
Same login as on X2Go Server
Login:
Same password as on X2Go Server
RSA/DSA key:
SSH Agent or default SSH key
Kerberos 5 (GSSAPI) authentication
Session type
Run in X2GoKDrive (experimental)
MATE
Command:
OK
Cancel
Defaults


Session preferences - cub13
?
Session
Connection
Input/Output
Media
Shared folders
Connection speed
MODEM
ISDN
ADSL
WAN
LAN
Compression
Method:
4k-png
Image quality:
9
OK
Cancel
Defaults

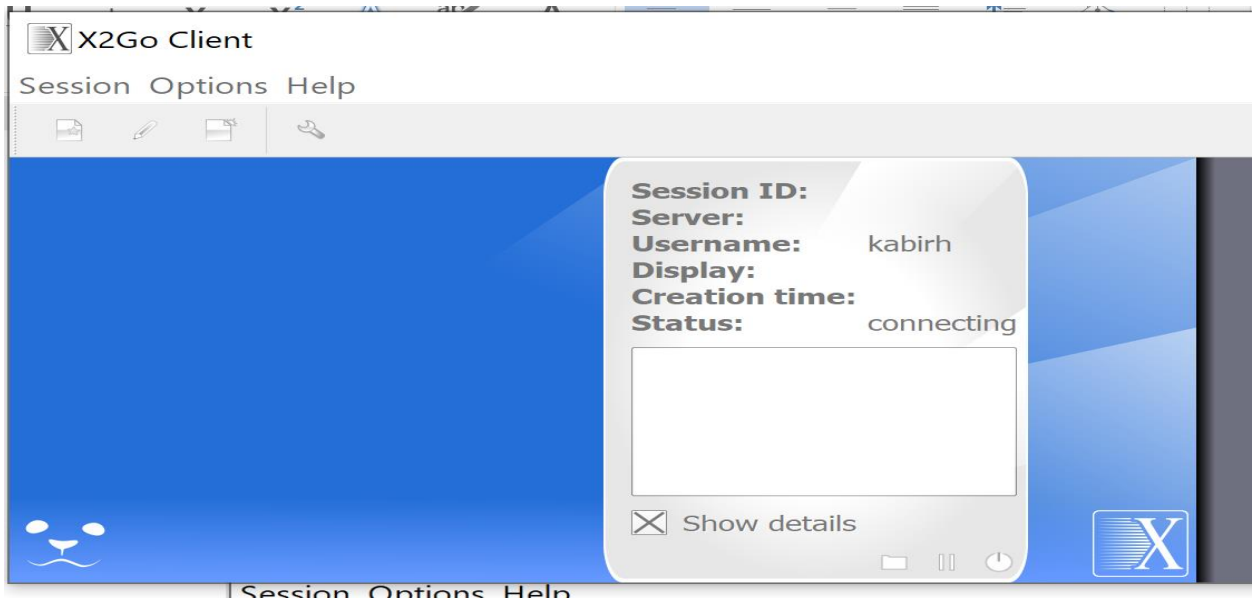
Start a X2go Remote Session



- Click on the saved configuration to start a remote session with the remote host.



- Type your **password** and click **OK** to start.
- Launching may be slow. Please, wait until the session starts. **VcXrv** or **XQuarts** will **start automatically** with **x2go**.
- If prompted with "Host key verification failed" window asking "... Do you trust the host key? ...", click Yes



- You will see the remote desktop when the session starts.

- You are now ready to browse and run the installed applications in the lab machine through your remote desktop.

Terminate a X2go Remote Session

To terminate a remote session

- Save work and exit any applications running within the session.
- Select "System" -> "Log out..." from the MATE menu within the session.

Do not simply close the X2Go client window, as this will not log the user off and will leave the session running on the lab machine.