

GPU Server User Documentation

Version 0.1 **DRAFT**

Server login credentials

Please contact <admin's name> <admin's UNSW email> for server login credentials.

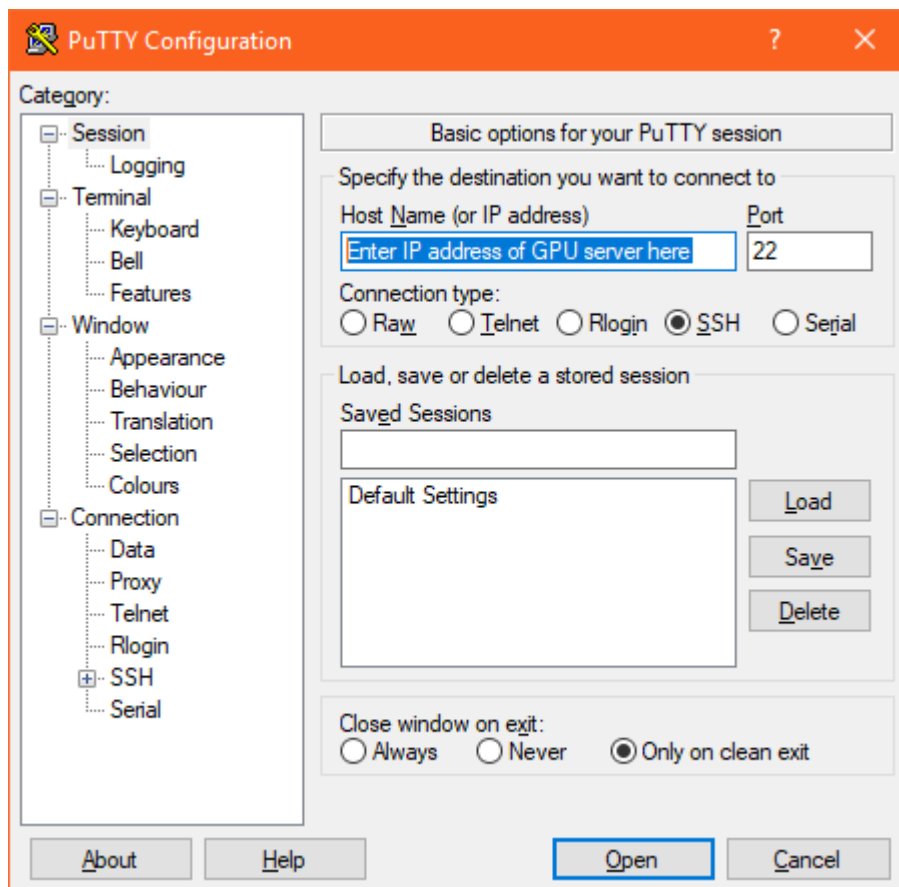
GUI and SSH Setup

Follow the instructions for your OS: <https://uisapp2.iu.edu/confluence-prd/pages/viewpage.action?pageId=280461906>

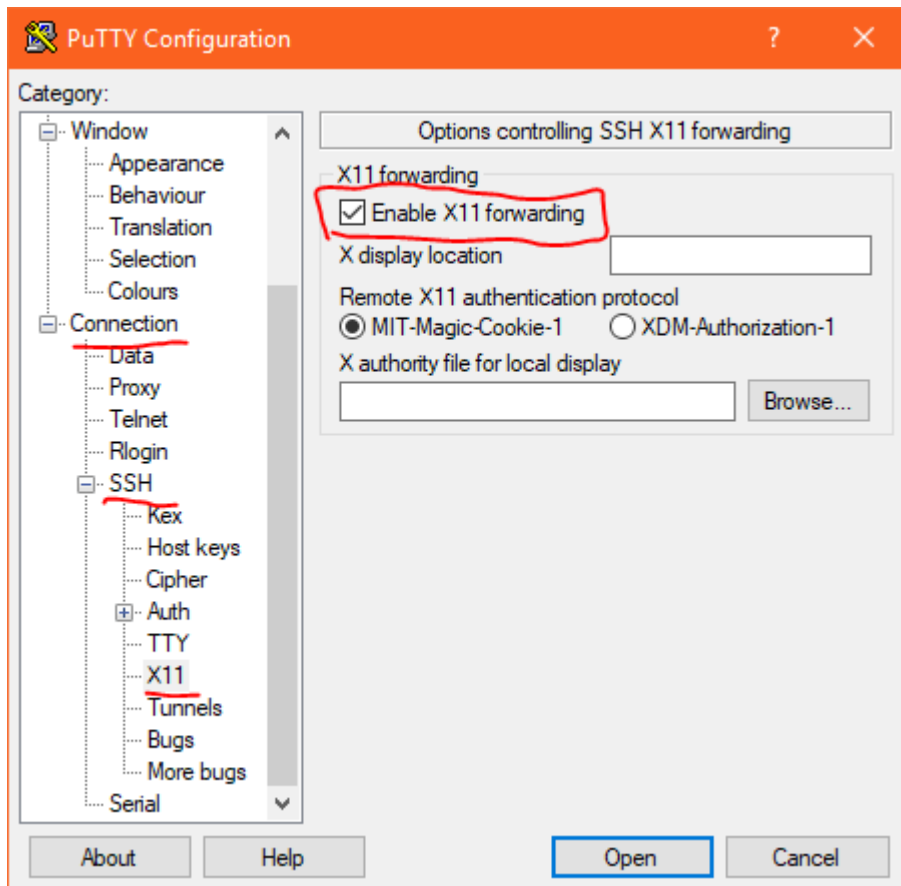
If you're using PuTTY on Windows, the settings are:

Host name: The IP address of the server

Port: 22



On the left-hand sidebar, navigate to *Connection > SSH > X11*, then check that “Enable X11 forwarding” is enabled. This will allow GUI applications to be run on SSH.



Enter the username and password to the server when prompted.

Running RELION

You can run RELION by simply typing ``relion`` into the command line.

Additional executables for use alongside RELION can be found in `/opt/relion`

If there's an executable that you'd like to run that's currently not available, contact <admin's name> at <admin's UNSW email>

Troubleshooting

Typing in ``relion`` doesn't work

Check that `/usr/local/bin` is added to the PATH environment variable. You can check this by typing in this command: ``echo $PATH | grep "/usr/local/bin"``. If you are unfamiliar with appending to the PATH environment variable, contact <admin's name> at <admin's UNSW email>.

User is getting the error along the lines of "cannot open shared object file"

You may face an issue where the user will get a "cannot open shared object file" error. This can usually be resolved by adding `/usr/local/lib` to `$LD_LIBRARY_PATH`

If you are unfamiliar with doing this, please contact <admin's name> at <admin's UNSW email>.

Additional programs

We were requested to install the following programs that will be used alongside Relion.

- Motioncor2 (<http://msg.ucsf.edu/em/software/motioncor2.html>)

- Unblur & Summovie (<http://grigoriefflab.janelia.org/unblur>)
- CTFFIND 4.1 (<http://grigoriefflab.janelia.org/ctf>)
- Gctf (<https://www.mrc-lmb.cam.ac.uk/kzhang/>)

These programs have been stored in /opt/re1ion/programs

If there's a program that you'd like to run that's currently not available, contact <admin's name> at <admin's UNSW email>