# Windows Subsystem for Linux

The Windows Subsystem for Linux (WSL) gives you a comprehensive Linux environment running within Windows 10. The WSL is limited to a single window with a terminal interface, but it is virtually indistinguishable from a 'true' Linux install and runs just like any other program on your computer. For example this allows you to SSH into the MACS computers as well as run `rlwrap poly` and other CLI programs locally on your own computer (assuming they're installed). Programs for WSL are installed just the same as on Linux, usually using a package manger from the linux terminal.

Those running an up-to-date version of Windows 10 should use the official instructions to install (https://docs.microsoft.com/en-us/windows/wsl/install-win10) and to initialise (https://docs.microsoft.com/en-us/windows/wsl/initialize-distro) the WSL with their choice of Linux distribution.

**Things to note**

- WSL is 64-bit only. This means that 32-bit Linux programs won't run, and WSL cannot be enabled on 32-bit systems.

- Since WSL is limited to a single window, programs that try to open in a new window (for example, gimp) won't run.

- The Windows file system can be found under `/mnt`; so for example to get to your documents folder, in the WSL terminal you might say `cd /mnt/c/users/WINDOWS_USERNAME/Documents`, where `WINDOWS_USERNAME` is your username on your computer.

- Save all of the documents you work on in the Windows filesystem somewhere - this will allow you use them with Windows programs as normal, just beware of different line endings. Any half-decent IDE/text editor will be able to work with both windows and unix line endings.