Running Linux using Windows 10 Linux subsystem

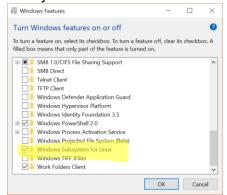
Microsoft have enabled a feature called "Windows 10 subsystem for Linux" into Windows 10. This is a massive development which means that developers can run BASH Linux shell within windows and access most of the binaries available within Linux (all the usual commands, eg grep, cp etc) and they interact directly with the windows underlying OS. This enables windows users to run Linux scripts and software without using the overhead of running a virtual machine or recompiled versions like Cygwin.

This makes installation and running software for Linux environments far more straightforward and quicker than before and should work for most needs. Enabling this within Windows 10 is very straightforward.

 Open control panel and choose "Programs and features", then "Turn Windows features on or off". Note you will need administrator permissions on the device to use these settings.



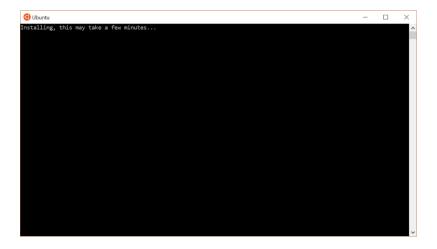
In the pop-up window scroll to the bottom and check the box next to "Windows Subsystem for Linux".



- 3. Restart the computer when prompted
- 4. Go to the Microsoft store and search for Ubuntu. Install the app.



5. Open the app and let it install the necessary software



- 6. Once this is done the Linux command prompt will appear and you can add a user. Please note if there is a "regular expression" type error you will probably need to use all lowercase characters.
- 7. Once the user has been added you're all set to go with Linux command line on Windows!

Accessing Windows files from the Bash terminal.

Once Windows Subsystem has been installed you'll have a home directory in the Bash Shell which you will default to. However, all your Windows files are directly available from within the BASH shell. The file structure is as drawn below, navigate up two levels to the root and there is a folder called "mnt" which is the drive mount - usually the computer's drives are shown as a letter (eg. "c") within the "mnt" folder. For example, the Windows documents folder path is usually something like:

/mnt/c/Users/yourwinusername/Documents

