

SLM for Windows

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1 Step1

Enable the Windows Subsystem for Linux feature.

User should have the Windows SubSystem for Linux(Beta) activated.

After the option is activated the PC/LAPTOP should be restarted

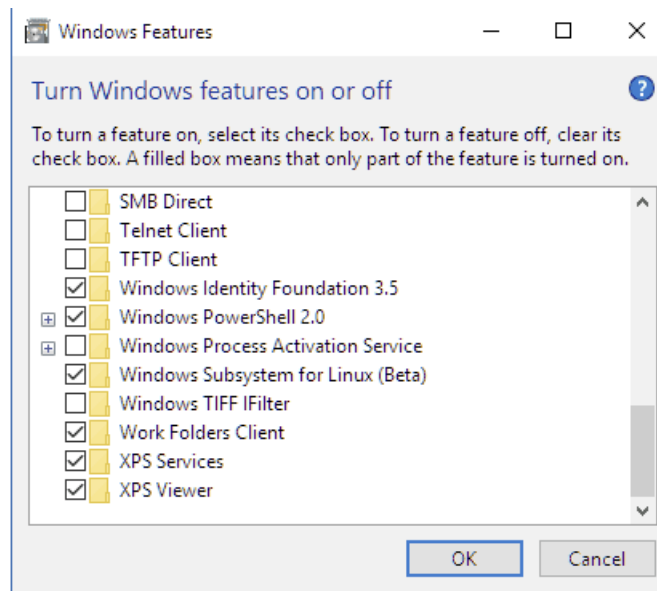


Figure 1: Windows GUI

Alternative command for powershell(Admin mode mandatory): Enable-WindowsOptionalFeature -Online -FeatureName Microsoft-Windows-Subsystem-Linux

2 Step2

User should get a Linux distribution from the Microsoft store

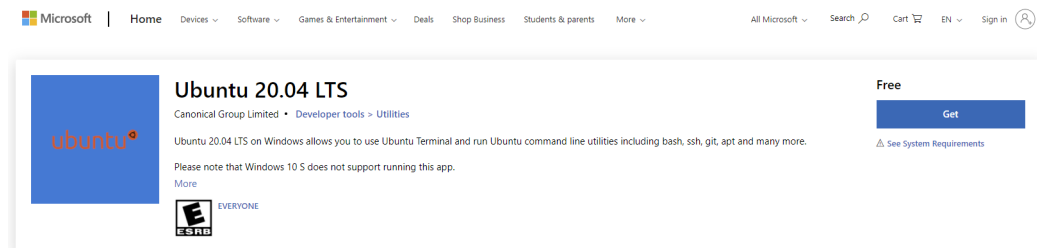


Figure 2: Ubuntu 20

3 Step3

After the distribution is launched, a Unix user should be selected

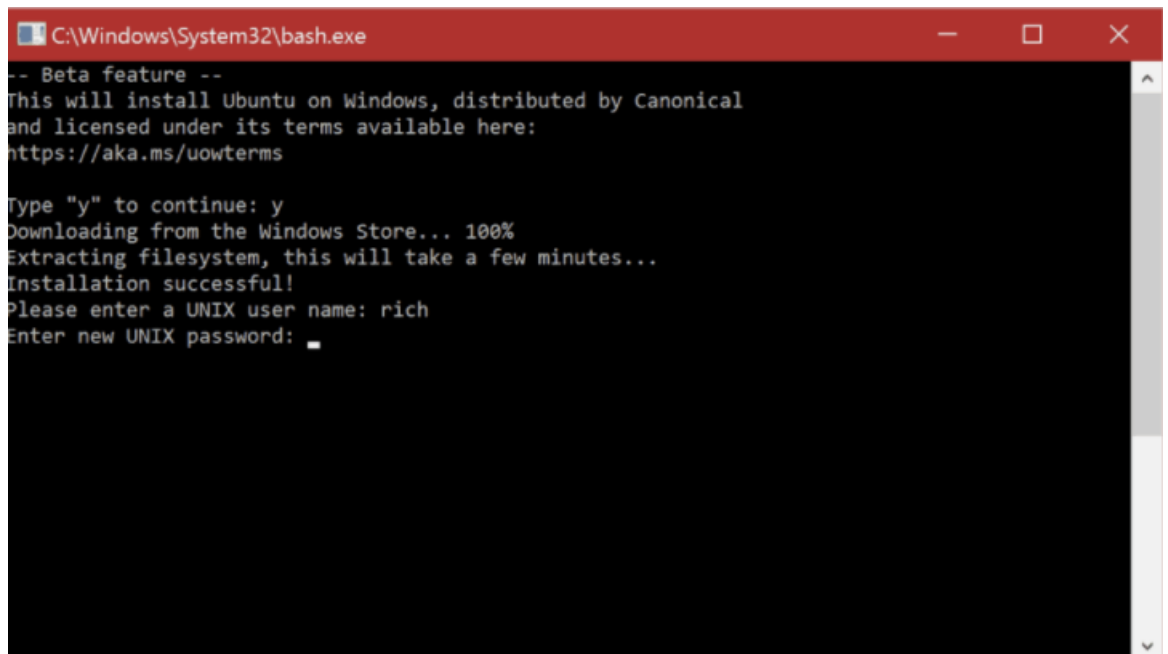


Figure 3: Unix User

4 Step4

Update the OS

Command: `sudo apt-get update && sudo apt-get upgrade -y&& sudo apt-get upgrade -y && apt-get dist-upgrade -y && sudo apt-get autoremove -y`

5 Step5

Mounting the "C" of the Windows: `ln -s /mnt/c/Users/Personal $_{Username}$ / /winhome`

6 Step6

Installing python

Command1: `sudo apt update`

Command2: `sudo apt install software-properties-common`

Command3: `sudo add-apt-repository ppa:deadsnakes/ppa`

Command4: `sudo apt update`

Command5: `sudo apt install python3.8`

Command6: `python --version`

7 Step7

Installing anaconda

Command1: `sudo apt-get update`

Command2: `sudo apt-get install curl`

Command3: `cd /tmp`

Command4: `curl -O https://repo.anaconda.com/archive/Anaconda3-2020.02-`

`Linux-x86_64.sh`

Command5: `sha256sum Anaconda3-2020.02-Linux-x86_64.sh`

Command6: `bash Anaconda3-2020.02-Linux-x86_64.sh`

Command7: `source /.bashrc`

Command8: `conda info`

8 Step8

To work properly with the SLM is recommended to use it as root.

Command1: `sudo su`

Basic SLM installation as shown in documentation.

Command2: `git clone https://github.com/kengz/SLM-Lab.git`

Command3: `cd SLM-Lab/`

Command4: `./bin/setup`

Command5: `conda activate lab`

As I saw also in the issues part the roboschool package does not have all the dependencies installed(the following commands should fix it)

Command6: `sudo apt-get install libgl1-mesa-dev`

Command7: `sudo apt-get install libpcss16-3`

9 Step 9

In order to run Linux GUI applications using WSL:

Install <https://sourceforge.net/projects/vcxsrv/> for the simulation of the GUI

After the installation the following commands should be introduced in the Windows powershell(as Admin):

Command1: `Set-ExecutionPolicy Bypass -Scope Process -Force; [System.Net.ServicePointManager]::SecurityProtocol = [System.Net.ServicePointManager]::SecurityProtocol -bor 3072; iex ((New-Object System.Net.WebClient).DownloadString('https://chocolatey.org/install.ps1'))`

Command2: `choco install vcxsrv wsl -y`

Command3: `echo "export DISPLAY=localhost:0.0" >> ~/.bashrc`

Command4: `. ~/.bashrc`

After the installation is finished and the commands are introduced the next commands should be introduced in the Linux terminal

Command1: `sudo apt update && sudo apt upgrade -y`

Command2: `sudo apt install x11-apps -y`

Command3:

`echo "export DISPLAY=localhost:0.0" >> ~/.bashrc`

10 Step10

`python run_lab.py slm_lab/spec/demo.json dqn.cartpole dev`