WSL: Windows Subsystem for Linux. Motivation & installation

Intro: WSL, why?

If you have a Windows machine and you have installed the Anaconda Distribution, then you already have several command line interfaces (CLIs) on your machine: 1. Windows PowerShell (comes with Windows) 2. Command Prompt (comes with Windows) 3. Anaconda Prompt (came with the Anaconda distribution)

Until now, Windows users in this class have been directed to use the **Anaconda Prompt**. However, later during class, you will also learn how to use the **Unix shell** - another very commonly used CLI (and the one installed on macOS by default, called "Terminal").

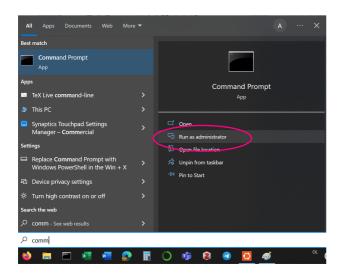
Therefore, as Windows user, you need to install WSL - Windows Subsystem for Linux (read more about WSL here). In short, installing WSL on your Windows machine will add a 4th CLI, the Unix shell, to your machine; this will allow you to **use a Unix shell** on your Windows machine.

Instructions: WSL, how?

Find the detailed official instructions here. TLDR: If all goes well, all you need to do is: 1. Open a CLI - either Windows PowerShell or Command Prompt (NOT Anaconda Prompt) - as administrator (search doe "Command" or "PowerShell" in Applications, then "open as administrator") 2. Run from the CLI: wsl --install - this will by default install the Ubuntu distribution of Linux (which is the one we

want) 3. Restart your computer; at restart, the Ubuntu application will open automatically 4. Set your username and password

Step 1: Open CLI as Administrator



Step 2: wsl --install

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Installing:\Windows-formats11

Installing:\Windows-formats11

Installing:\Windows-formats21

Installing:\Windows-fo
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Step 3 & 4: After restart, set username & password

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Installing, this may take a few minutes...

Please create a default LNIX user account. The username does not need to match your Windows username. For more information visit: https://aka.ms/wslusers
forten new LNIX username. kerktailu
New password:
Betype new password:
password updated successfully
To run a command as administrator (user "root"), use "sudo (commando".

See "man sudo-root" for details.

Welcome to Ubuntu 22.04.2 LTS (GNU/Linux 5.15.90.1-microsoft-standard-WSL2 x86_64)

* Documentation: https://halp.ubuntu.com

* Wanagement: https://halp.ubuntu.com

* Support: https://ubuntu.com/advantage

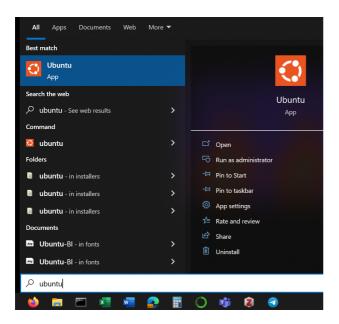
This message is shown once a day. To disable it please create the 
/home/krktallu/.hushlogin file.

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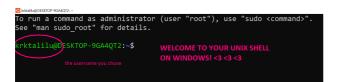
Note If running wsl --install doesn't look like in the screenshot of Step 2 above, but instead shows you a help text (as in the screenshot below), it means that you already have some distribution of WSL installed. <u>Click here</u> for instructions what to do next.

Accessing the Unix shell

Now, you should be able to open the application <code>Ubuntu</code> from your Windows machine. Click on the Windows symbol and type "Ubuntu" to search for the application, then open it.



Welcome to your Unix shell on Windows!



Outro: WSL, what's next?

After successfully installing WSL, you will have four shells on your machine: 1. Windows PowerShell (came with Windows) 2. Command Prompt (came with Windows) 3. Anaconda Prompt (came with the Anaconda distribution) 4. Unix shell (came with WSL)

You are welcome to continue using the Anaconda Prompt for all things python and conda. For the lecture & exercise on shell scripting, you will need to use the Unix shell.