Deploying Windows Subsystem for Linux (WSL)

In this post, I am going to use Windows 10 workstation to deploy WSL. I created a VM – Installed Windows 10 and patched it fully. Now will start WSL install. Here are the steps.

The Windows Subsystem for Linux or Windows WSL is a great solution for developers to natively work within Linux right on their Windows 10 version desktop.

WSL or C:\Windows\System32\wsl.exe is a Windows tool that allows you to install a Linux distribution as an app from the Windows store.

Since WSL is a simple Windows executable, you can call it from a command prompt or PowerShell terminal. We'll go deeper into that topic later. For now, it's important to understand a little more about what WSL is doing under the hood.

How to Enable WSL

To set up and enable WSL involves installing a Linux distribution alongside Windows 10. But in a way that allows the two different operating systems to interact with each other.

Prerequisites

To install WSL on Windows, you have one requirement to meet; you must have a Windows 10 64-bit computer Build 18917 or later.

I am running 21H2 Version which is ready for WSL install.

About Windows

Windows 10

Microsoft Windows
Version 21H2 (OS Build 19044.1682)
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Run this command to enable ESL – Open PowerShell as Administrtor

Enable-WindowsOptionalFeature -Online -FeatureName Microsoft-Windows-Subsystem-Linux

After the install restart the system.

Downloading a Linux Distribution for WSL

WSL does not install any Linux distribution on its own. You'll need to install one. Once Windows 10 comes back up, start setting up your chosen Linux distribution.

First, open up the **Microsoft Store** and **search for 'WSL'**. You should soon see a list of Linux distributions show up.

I am going to try Ubuntu 20.04. Will install using PowerShell Command instead of Microsoft Store
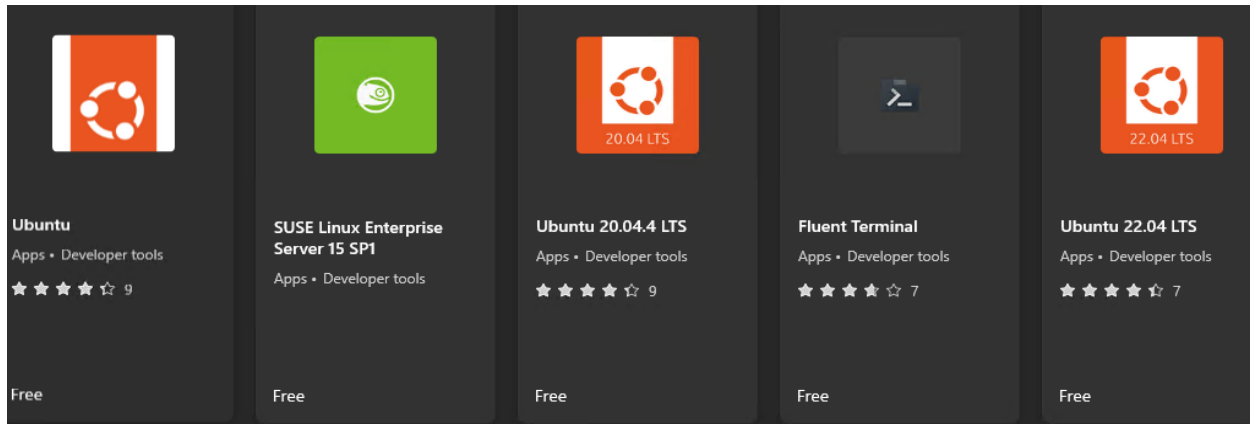
Wsl --install -d ubuntu


```
Administrator: Windows PowerShell

Windows PowerShell
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Try the new cross-platform PowerShell https://aka.ms/pscore6

PS C:\Windows\system32> wsl --install -d ubuntu
Downloading: Ubuntu
[=========================61.4%====              ]
```

```
Ubuntu
Installing, this may take a few minutes...
_
```

```
ram@WS-W10: ~
Installing, this may take a few minutes...
Please create a default UNIX user account. The username does not need to match your Windows username.
For more information visit: https://aka.ms/wslusers
Enter new UNIX username: root
adduser: The user `root' already exists.
Enter new UNIX username: ▆▆▆▆
New password:
Retype new password:
passwd: password updated successfully
Installation successful!
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

Welcome to Ubuntu 20.04 LTS (GNU/Linux 4.4.0-19041-Microsoft x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:     https://landscape.canonical.com
 * Support:        https://ubuntu.com/advantage

  System information as of Tue May 10 13:37:28 PDT 2022

  System load:         0.52
  Usage of /home:      unknown
  Memory usage:        52%
  Swap usage:          0%
  Processes:           7
  Users logged in:     0
  IPv4 address for eth0: ▆▆▆▆▆▆▆▆▆▆▆
  IPv6 address for eth1: ▆▆▆▆▆▆▆▆▆▆▆

0 updates can be installed immediately.
0 of these updates are security updates.


The list of available updates is more than a week old.
To check for new updates run: sudo apt update
```

Finally, it's always good practice to install the latest updates with the following commands, entering your password when prompted.

```
sudo apt update
```

Then

```
sudo apt upgrade
```

Press Y when prompted.

```
ram@WS-W10:~$ sudo apt update
[sudo] password for ram:
```
```
ram@WS-W10:~$ sudo apt upgrade
Reading package lists... Done
```

If you want to install a package then try this command. This will install Python.

sudo apt install bpython

```
ram@WS-W10:~$ sudo apt install bpython
[sudo] password for ram:
Reading package lists... Done
```

This concludes about WSL.

Thanks

Ram
10th May 2022