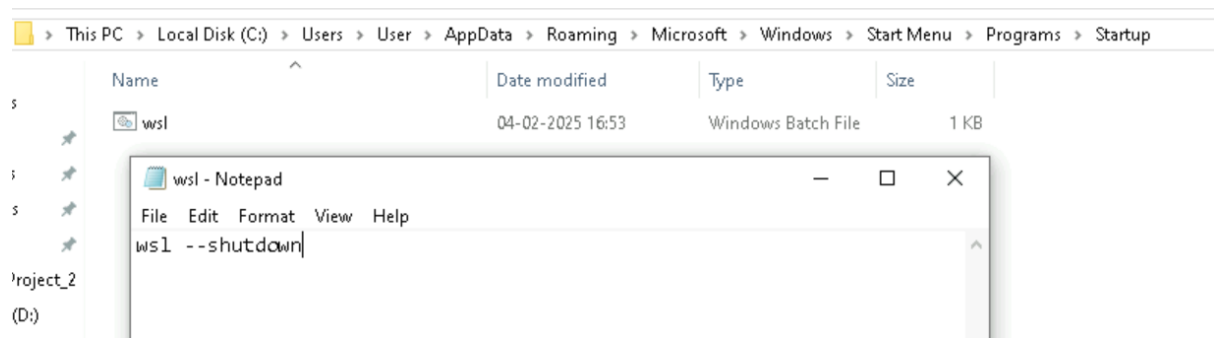


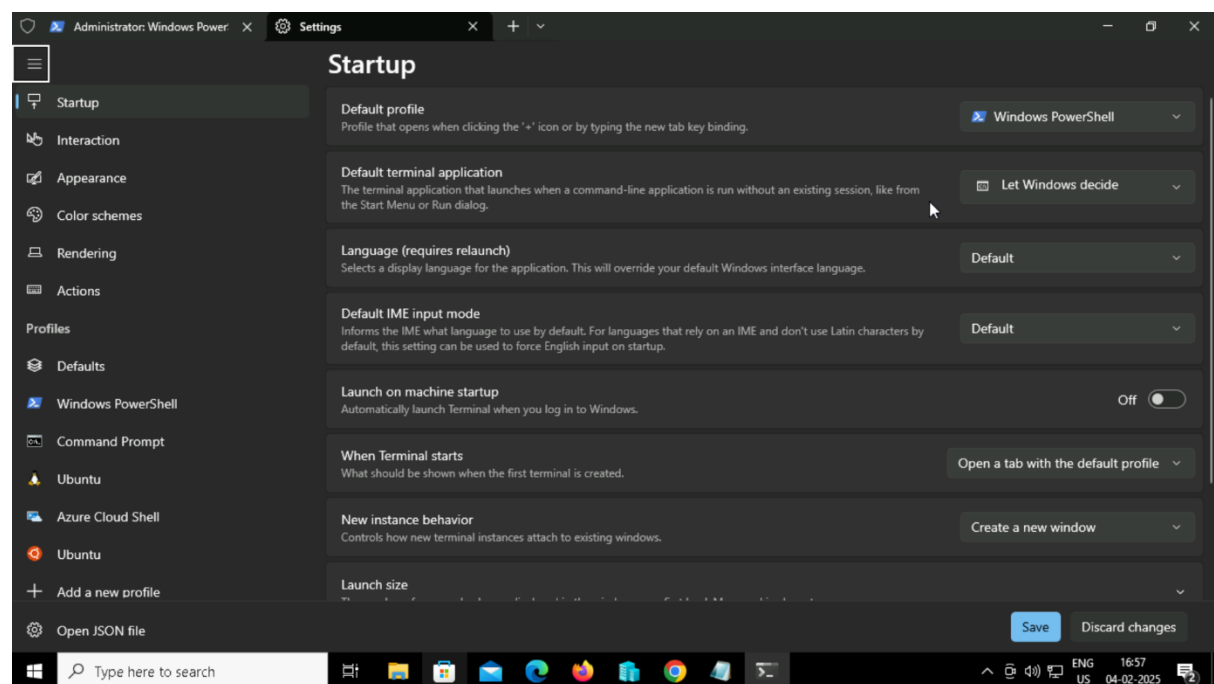
## Windows Subsystem for Linux 2 (WSL2): A Complete Guide for Windows 10 & 11

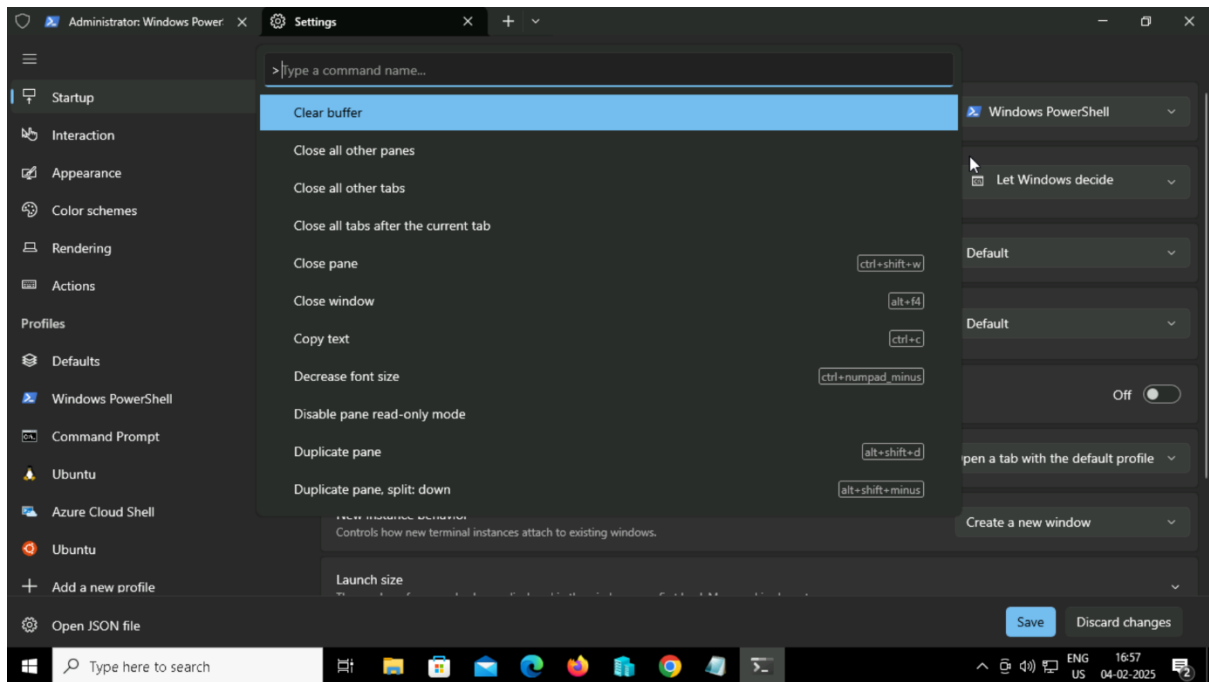
**Step 1:** Create a wsl.bat file in your Startup folder

(C:\Users\User\AppData\Roaming\Microsoft\Windows\Start Menu\Programs\Startup) with the content: wsl --shutdown

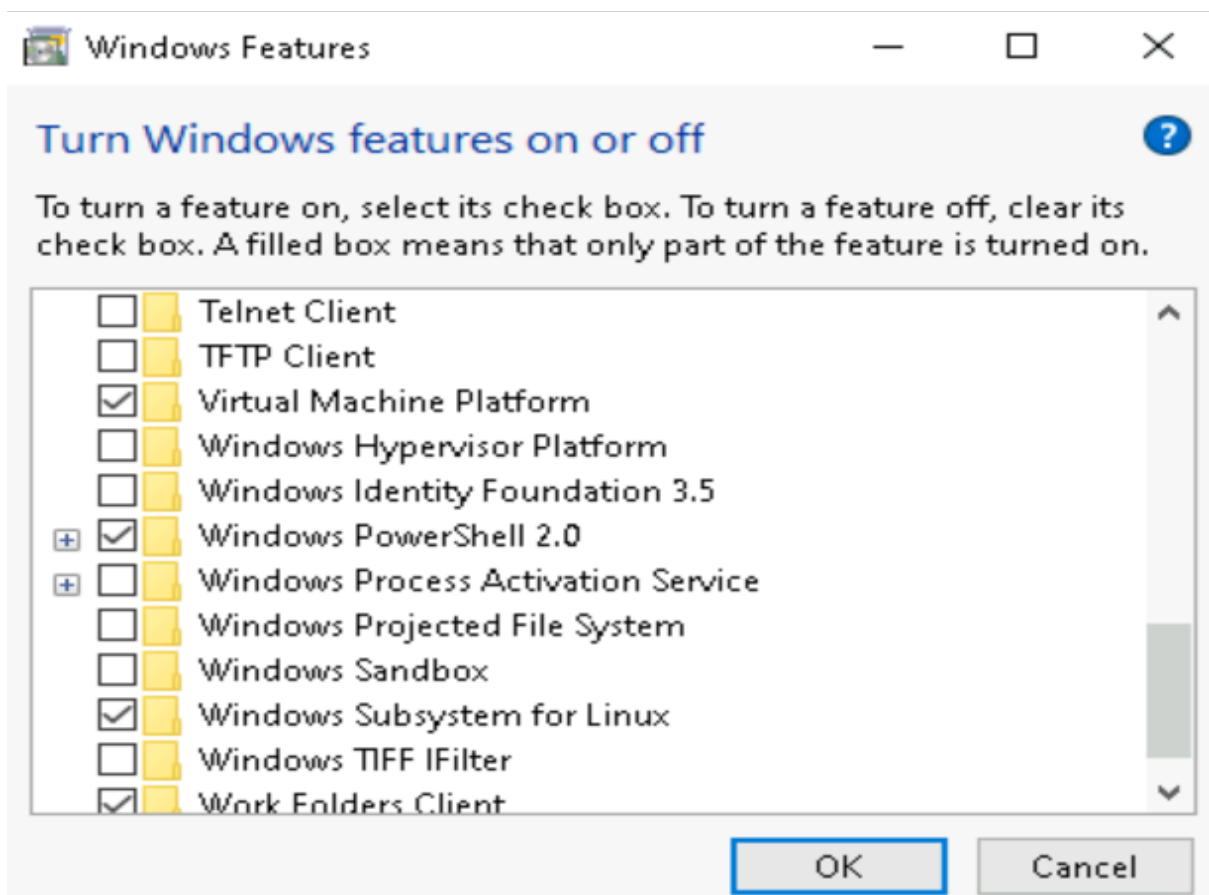


**Step 2:** Configuration is available from the Settings menu item (Ctrl + I), the Command Palette (Ctrl + Shift + P), or the settings.json accessed at the bottom of the Settings panel.

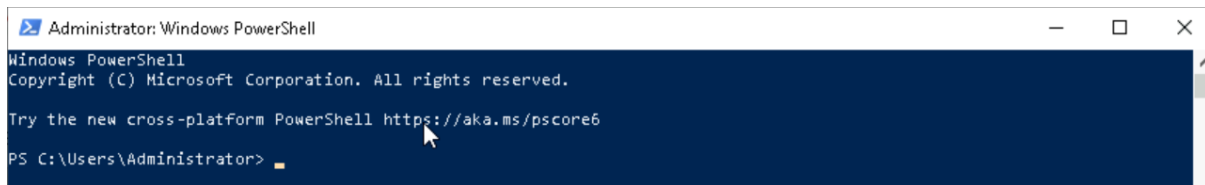




**Step 3:** The Virtual Machine Platform and Windows Subsystem for Linux features must be enabled in Turn Windows features on or off option. The panel is accessed by hitting Start and typing “features” or from the Programs and Features icon in the classic Control Panel.



**Step 4:** Open Windows Powershell as Open as Administrator.

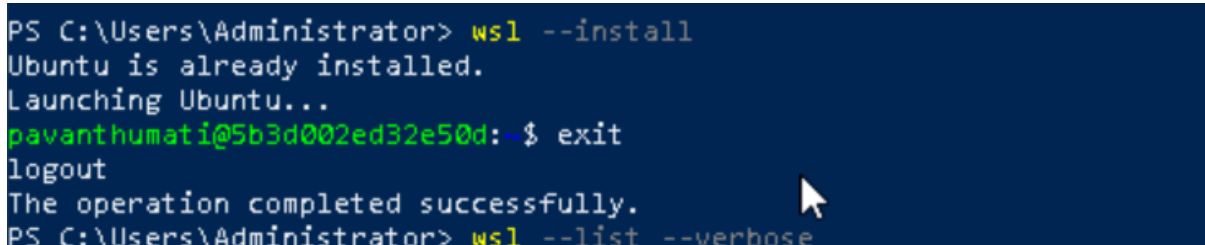


```
Administrator: Windows PowerShell
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

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

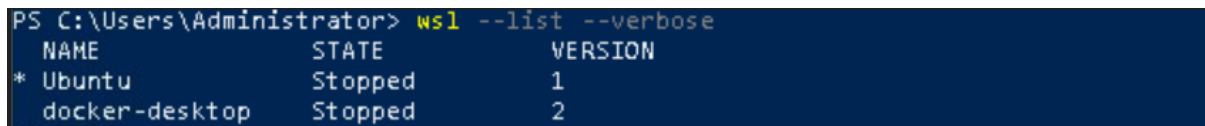
PS C:\Users\Administrator>
```

**Step 5:** Updating the windows subsystem using the below command.



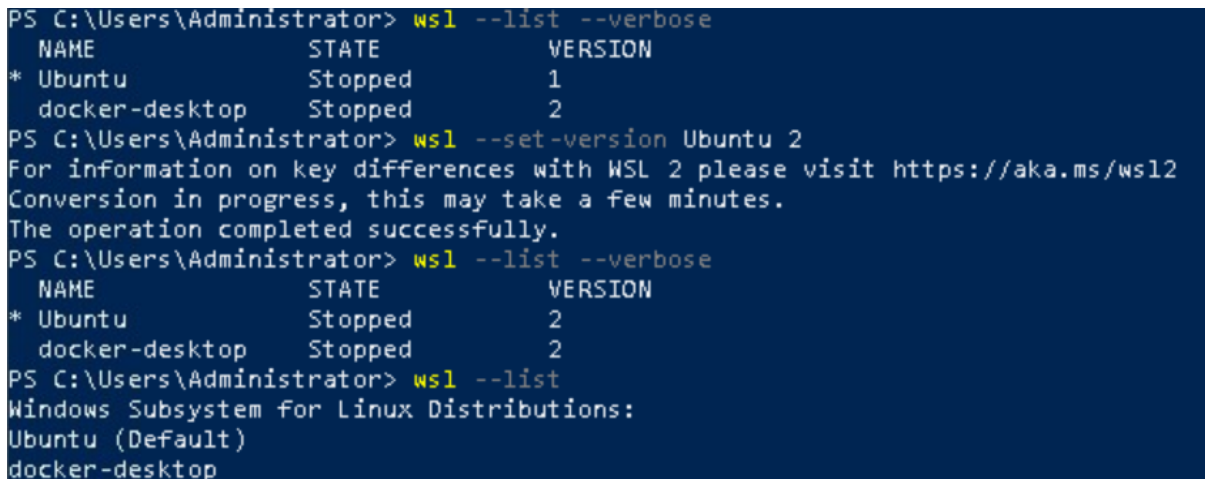
```
PS C:\Users\Administrator> wsl --install
Ubuntu is already installed.
Launching Ubuntu...
pavanthumati@5b3d002ed32e50d:~$ exit
logout
The operation completed successfully.
PS C:\Users\Administrator> wsl --list --verbose
```

**Step 6:** Switch Between WSL1 and WSL2 - Existing WSL1 distros can be converted to WSL2. For that, enter the following command in a Windows Powershell terminal to display the installed Linux distros and their WSL version:



```
PS C:\Users\Administrator> wsl --list --verbose
NAME                STATE      VERSION
* Ubuntu             Stopped    1
  docker-desktop     Stopped    2
```

**Step 7:** Try switching between wsl1 and wsl2.



```
PS C:\Users\Administrator> wsl --list --verbose
NAME                STATE      VERSION
* Ubuntu             Stopped    1
  docker-desktop     Stopped    2
PS C:\Users\Administrator> wsl --set-version Ubuntu 2
For information on key differences with WSL 2 please visit https://aka.ms/wsl2
Conversion in progress, this may take a few minutes.
The operation completed successfully.
PS C:\Users\Administrator> wsl --list --verbose
NAME                STATE      VERSION
* Ubuntu             Stopped    2
  docker-desktop     Stopped    2
PS C:\Users\Administrator> wsl --list
Windows Subsystem for Linux Distributions:
Ubuntu (Default)
docker-desktop
```

### Step 8: Clone Linux Disk Image.

```
PS C:\Users\Administrator> mkdir D:\backup

Directory: D:\

Mode                LastWriteTime         Length Name
----                -
d-----          04-02-2025     17:08             backup

PS C:\Users\Administrator> wsl --export Ubuntu D:\backup\ubuntu.tar
Export in progress, this may take a few minutes.
The operation completed successfully.
PS C:\Users\Administrator> wsl --unregister Ubuntu
Unregistering.
The operation completed successfully.
PS C:\Users\Administrator> wsl --list
Windows Subsystem for Linux Distributions:
docker-desktop (Default)
PS C:\Users\Administrator>
```

### Step 9: Import the backup into a new WSL2 distro at another location, such as D:\wsl

```
PS C:\Users\Administrator> mkdir D:\wsl

Directory: D:\

Mode                LastWriteTime         Length Name
----                -
d-----          04-02-2025     17:13             wsl

PS C:\Users\Administrator> wsl --import Ubuntu D:\wsl D:\backup\ubuntu.tar
Import in progress, this may take a few minutes.
The operation completed successfully.
PS C:\Users\Administrator> wsl --list
Windows Subsystem for Linux Distributions:
docker-desktop (Default)
Ubuntu
PS C:\Users\Administrator>
```

### Step 10: Accessing Linux Files from windows and mapping a network drive.

```
PS C:\Users\Administrator> ubuntu config --default-user pavanthumati
PS C:\Users\Administrator>
```

### Step 11: Accessing the windows files from Linux.

```
pavanthumati@5b3d002ed32e50d: ~  
pavanthumati@5b3d002ed32e50d:~$ ls -a  
.  .. .bash_history .bash_logout .bashrc .cache .local .motd_shown .profile .sudo_as_admin_successful  
pavanthumati@5b3d002ed32e50d:~$
```

### Step 12: Executing the linux commands from windows.

```
PS C:\Users\Administrator> wsl ls -a  
.  
..  
.bash_history  
.cache  
.docker  
.eclipse  
.erlang.cookie  
.git  
.gitconfig  
.lessht  
.p2  
.viminfo  
.vscode  
3D Objects  
AppData  
Application Data  
Contacts  
Cookies  
Desktop  
Documents  
Downloads  
Favorites  
Links  
Local Settings  
Music  
My Documents  
NTUSER.DAT  
NTUSER.DAT{53b39e88-18c4-11ea-a811-000d3aa4692b}.TM.blf
```

```
NTUSER.DAT{53b39e88-18c4-11ea-a811-000d3aa4692b}.TM.blf  
NTUSER.DAT{53b39e88-18c4-11ea-a811-000d3aa4692b}.TMContainer000000000000000001.regtrans-ms  
NTUSER.DAT{53b39e88-18c4-11ea-a811-000d3aa4692b}.TMContainer000000000000000002.regtrans-ms  
NetHood  
OneDrive  
Pictures  
Postman  
PrintHood  
README.md  
Recent  
Saved Games  
Searches  
SendTo  
Start Menu  
Templates  
Videos  
WPS Cloud Files  
eclipse  
eclipse-workspace  
ntuser.dat.LOG1  
ntuser.dat.LOG2  
ntuser.ini  
sample1.txt  
sample2.txt
```

### Step 13: Run Windows commands from Linux.

```
PS C:\Users\Administrator> explorer.exe
PS C:\Users\Administrator> notepad.exe /.bashrc
PS C:\Users\Administrator>
```

