

Setting Up WSL: A Step-by-Step Guide

1. Enable WSL

- Open PowerShell as Administrator.
- Run the following command to enable WSL:

```
powershell
```

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```
wsl --install
```

- This command enables the required components and installs the default Linux distribution (usually Ubuntu). If you want to install a specific distribution, skip the installation of the default distribution by running:

```
powershell
```

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```
wsl --install -d <DistributionName>
```

For example, to install Debian, you would use:

```
powershell
```

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```
wsl --install -d Debian
```

2. Restart Your Computer

- After the installation, you may be prompted to restart your computer to complete the setup.

3. Set Up the Linux Distribution

- After the restart, your selected Linux distribution will be installed. It may launch automatically, prompting you to create a new user account and password.

4. Update the Linux Distribution

- Once your Linux distribution is installed, it's a good idea to update it. Open the WSL terminal (you can find it by searching for the distribution name in the Start menu) and run the following commands:

```
bash
```

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```
sudo apt update  
sudo apt upgrade
```

5. Set WSL Version (Optional)

- By default, WSL 2 is installed, which provides better performance. You can check the version with:

```
powershell
```

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```
wsl -l -v
```

- If you want to set your distribution to WSL 2 (if it's not already), use:

```
powershell
```

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```
wsl --set-version <DistributionName> 2
```

6. Access Files and Start Using Linux

- You can access your Windows files from the Linux terminal at `/mnt/c/` (for the C: drive).
- You can start using the Linux environment for development, running scripts, and more.

7. Install Additional Software

- You can install additional software using the Linux package manager, like `apt` for Ubuntu/Debian:

```
bash
```

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```
sudo apt install <package_name>
```