EXPLORING
WINDOWS
SUBSYSTEM
FOR LINUX 1
AND 2



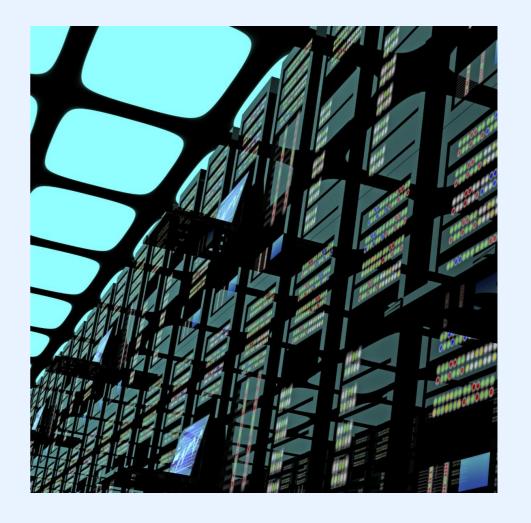
# WSL 1



- WSL 1 is a compatibility layer built on top of Windows' NT kernel
- It translates Linux system calls into Windows system calls
- It provides limited access to the Windows file system

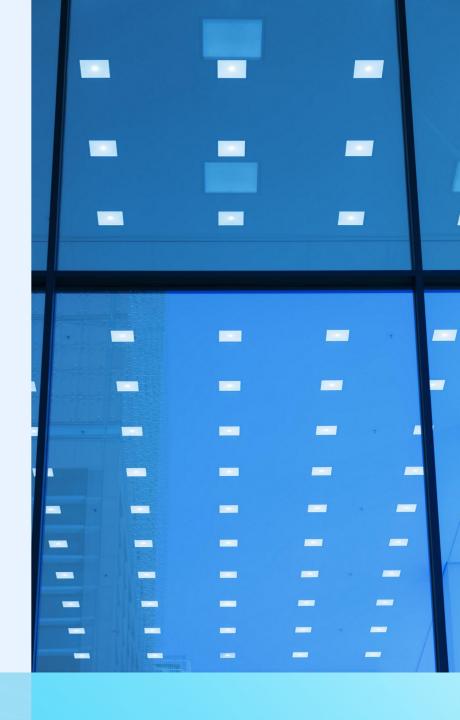
# WSL 2

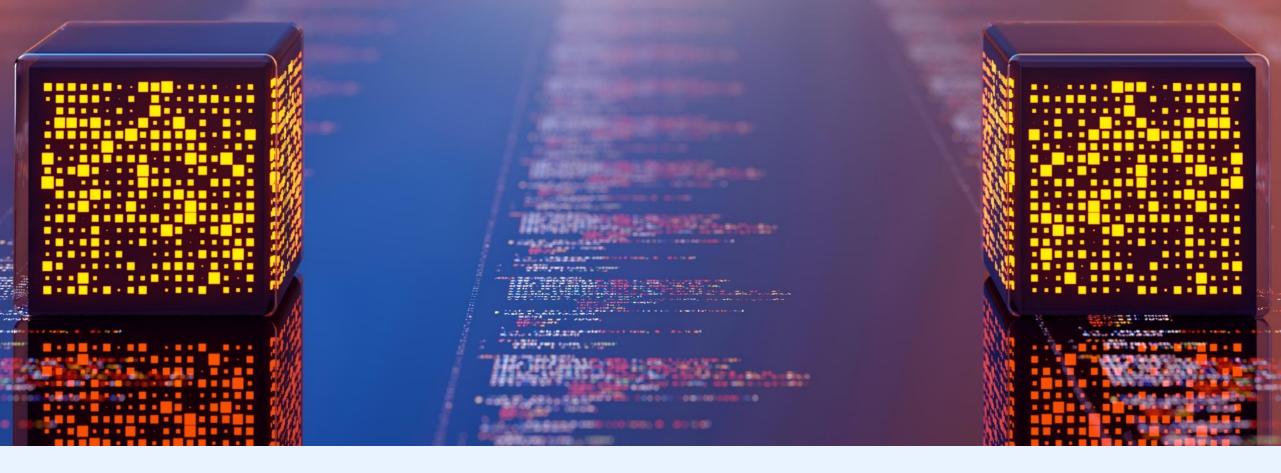
- WSL 2 is a lightweight full Linux kernel built on a virtual machine
- It provides better compatibility with Linux system calls
- It allows you to run Docker containers natively on Windows



# WSL 2+WINDOWS TERMINAL

- Windows Terminal is a new command-line interface for interacting with Windows and WSL
- It provides support for multiple tabs and customization options
- It enables developers to use different shells like PowerShell, cmd, and even third-party ones





#### WSL 2+VISUAL STUDIO CODE

- Visual Studio Code is a popular open-source code editor from Microsoft
- It provides native support for WSL and integrates with the Windows Terminal
- Developers can use the same Visual Studio Code instance to edit code in both Windows and WSL environments

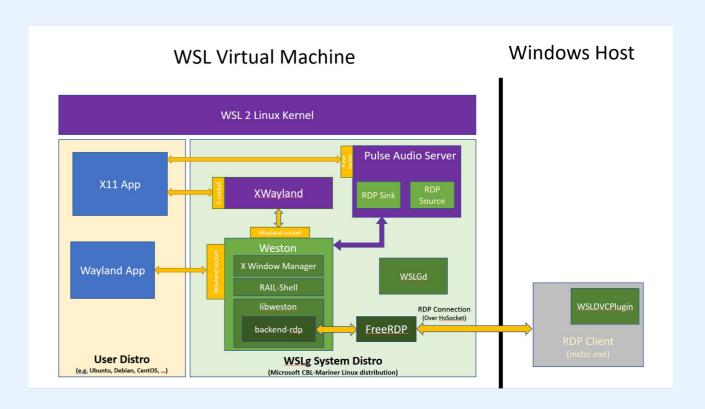
### WSL 2+REMOTE DEVELOPMENT

- Remote Development is an extension for Visual Studio Code
- It enables developers to work on a remote machine or in WSL
- Developers can edit, debug, and run code from a local instance of Visual Studio Code



# WSLG (PREVIEW)

GitHub - microsoft/wslg: Enabling th e Windows Subsystem for Linux to in clude support for Wayland and X ser ver related scenarios



#### RESOURCES

- <u>Set up a WSL development environ</u> <u>ment | Microsoft Learn</u>
- GPU accelerated ML training in WSL
   Microsoft Learn
- Manual installation steps for older v ersions of WSL | Microsoft Learn