Windows Subsystem for Linux Documentation

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Windows Subsystem for Linux (WSL) lets developers run a GNU/Linux environment -- including most command-line tools, utilities, and applications -- directly on Windows, unmodified, without the overhead of a traditional virtual machine or dual-boot setup.

Install WSL

Learn more

- What is the Windows Subsystem for Linux (WSL)?
- What's new with WSL 2?
- Comparing WSL 1 and WSL 2
- Frequently Asked Questions

Get started

- Install WSL
- Install Linux on Windows Server
- Manual install steps
- Best practices for setting up a WSL development environment

Try WSL preview features by joining the Windows Insiders Program

To try the most recent features or updates to WSL, join the Windows Insiders Program 2. Once you have joined Windows Insiders, you can choose the channel you would like to receive preview builds from inside the Windows settings menu. You can choose from:

- Dev channel: Most recent updates, but low stability.
- Beta channel: Ideal for early adopters, more reliable builds than the Dev channel.
- Release Preview channel: Preview fixes and key features on the next version of Windows just before its available to the general public.

Team blogs

- Command-Line blog

 (Active)

• Windows Subsystem for Linux Blog (Historical)

Provide feedback

- GitHub issue tracker: WSL ☑
- GitHub issue tracker: WSL documentation ☑

Related videos

WSL BASICS

- 1. What is the Windows Subsystem for Linux (WSL)? □ | One Dev Question (0:40)
- 2. I'm a Windows developer. Why should I use WSL? | ☑ One Dev Question (0:58)
- 3. I'm a Linux developer. Why should I use WSL? ☑ | One Dev Question (1:04)
- 4. What is Linux? ☑ | One Dev Question (1:31)
- 5. What is a Linux distro? ☑ | One Dev Question (1:04)
- 6. How is WSL different than a virtual machine or dual booting? ☑ | One Dev Question
- 7. Why was the Windows Subsystem for Linux created? □ One Dev Question (1:14)
- 8. How do I access files on my computer in WSL? ☑ | One Dev Question (1:41)
- 9. How is WSL integrated with Windows? ☑ | One Dev Question (1:34)
- 10. How do I configure a WSL distro to launch in the home directory in Terminal? ☑ | One Dev Question (0:47)
- 11. Can I use WSL for scripting? ☑ | One Dev Question (1:04)
- 12. Why would I want to use Linux tools on Windows? ✓ One Dev Question (1:20)
- 13. In WSL, can I use distros other than the ones in the Microsoft Store? ☑ | One Dev Question (1:03)

WSL DEMOS

- 1. WSL2: Code faster on the Windows Subsystem for Linux! ☑ | Tabs vs Spaces (13:42)
- 2. WSL: Run Linux GUI Apps ☑ | Tabs vs Spaces (17:16)
- 3. WSL 2: Connect USB devices ☑ | Tabs vs Spaces (10:08)
- 4. GPU Accelerated Machine Learning with WSL 2 2 | Tabs vs Spaces (16:28)
- 5. Visual Studio Code: Remote Dev with SSH, VMs, and WSL 2 | Tabs vs Spaces (29:33)
- 6. Windows Dev Tool Updates: WSL, Terminal, Package Manager, and more ☑ | Tabs vs Spaces (20:46)
- 7. Build Node.JS apps with WSL □ | Highlight (3:15)
- 8. New memory reclaim feature in WSL 2 | Demo (6:01)
- 9. Web development on Windows (in 2019) ☑ | Demo (10:39)

WSL DEEP DIVES

1. WSL on Windows 11 - Demos with Craig Loewen and Scott Hanselman ☑ | Windows Wednesday (35:48)

- 2. WSL and Linux Distributions Hayden Barnes and Kayla Cinnamon ☑ | Windows Wednesday (37:00)
- 3. Customize your terminal with Oh My Posh and WSL Linux distros ☑ | Windows Wednesday (33:14)
- 4. Web dev Sarah Tamsin and Craig Loewen chat about web development, content creation, and WSL ☑ | Dev Perspectives (12:22)
- 5. How WSL accesses Linux files from Windows ☑ | Deep dive (24:59)
- 6. Windows subsystem for Linux architecture: a deep dive ☑ | Build 2019 (58:10)