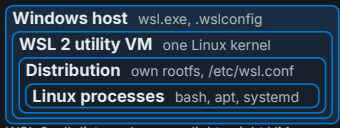
WSL Linux on Windows

CONCEPTS

Commands are shown for PowerShell or CMD. From inside Linux, call the same tool as wsl.exe.



WSL 2: all distros share one lightweight VM

INSTALL AND UPDATE

wsl --install
Install WSL and Ubuntu

wsl --list --online
Distros available to install

wsl --install -d *<distro>*
Install a specific distro

wsl --update
Update WSL to the latest release

DISTRIBUTIONS

wsl --list --verbose
List distros with state and version

wsl --set-default *<distro>*
Make a distro the default

wsl --terminate *<distro>*
Stop one distro

wsl --shutdown
Stop all distros and the VM

wsl --unregister *<distro>*
Remove a distro and ALL its data

RUN LINUX FROM WINDOWS

wsl
Shell in the default distro

wsl ~
Shell in your Linux home

wsl -d *<distro>*
Shell in a specific distro

wsl -u root
Shell as root

wsl *<command>*
Run one Linux command

RUN WINDOWS FROM LINUX

explorer.exe .
Open this folder in Explorer

notepad.exe *<file>*
Run any Windows program

FILES AND PATHS

/mnt/c
C: drive seen from Linux

\\wsl.localhost*
Distro's files seen from Windows

wslpath -w *<path>*
Linux path to Windows path

wslpath -u '*<C:\path>***'**
Windows path to Linux path

Speed
Keep projects in the Linux filesystem (~/project) when you work from Linux: /mnt/c is much slower under WSL 2.

BACKUP AND DISKS

wsl --export *<distro> <file.tar>*
Back up a distro to a tar file

wsl --import *<name> <dir> <file.tar>*
Restore or clone as a new distro

CONFIGURATION

Two config files

	.wslconfig	/etc/wsl.conf
Where	%UserProfile%	inside each distro
Scope	global, WSL 2 VM	one distro
Sets	memory, CPUs, network	systemd, mounts, user

[boot] systemd=true
Run systemd in a distro (wsl.conf)

[wsl2] memory=*<size>*
Cap VM memory (.wslconfig)

Changes apply only after the VM stops: run wsl --shutdown, or wait about 8 seconds after closing every shell.

NETWORKING

localhost:*<port>*
Reach a Linux server from Windows