

How to run Tauri Desktop App

commands I ran to take this Windows host from "no Rust" to "running Tauri desktop app":

1. Detect prerequisites

```
# Existing C++ toolchain?
```

```
$vsw = "${env:ProgramFiles(x86)}\Microsoft Visual Studio\Installer\vswhere.exe"  
& $vsw -products * -requires Microsoft.VisualStudio.Component.VC.Tools.x86.x64 -property  
installationPath
```

Rust/cargo/linker present?

```
Get-Command rustup -ErrorAction SilentlyContinue  
Test-Path "$env:USERPROFILE\.cargo\bin\cargo.exe"  
Get-Command link.exe, cl.exe -ErrorAction SilentlyContinue
```

2. Install Rust

```
winget install --id Rustlang.Rustup -e `  
--accept-package-agreements --accept-source-agreements --silent
```

3. Activate MSVC toolchain

```
$env:PATH = "$env:USERPROFILE\.cargo\bin;$env:PATH"  
& "$env:USERPROFILE\.cargo\bin\rustup.exe" default stable-msvc  
& "$env:USERPROFILE\.cargo\bin\rustc.exe" --version # verify  
& "$env:USERPROFILE\.cargo\bin\cargo.exe" --version # verify
```

4. Copy project off WSL share to local disk

```
New-Item -ItemType Directory -Path C:\dev # only if missing  
robocopy "\\wsl.localhost\Ubuntu-22.04\home\son\r3nk\workbrain" `  
"C:\dev\workbrain" /E `  
/XD node_modules target .next out .turbo `  
/XF "*.log" /NFL /NDL /NP /R:1 /W:1
```

5. Check port collision

```
Get-NetTCPConnection -LocalPort 3000 -State Listen  
Get-NetTCPConnection -LocalPort 3001 -State Listen  
# Found WSL relay holding port 3000 → had to move our Next dev to 3010
```

6. Rewire Tauri devUrl to port 3010

Edited src-tauri/tauri.conf.json:

```
- "beforeDevCommand": "pnpm dev",  
- "devUrl": "http://localhost:3000",  
+ "beforeDevCommand": "pnpm dev -p 3010",  
+ "devUrl": "http://localhost:3010",
```

7. Install JS deps

```
Set-Location C:\dev\workbrain  
pnpm install
```

8. Launch the app (background, with logs)

```
New-Item -ItemType Directory C:\dev\workbrain\logs # if missing
$env:PATH = "$env:USERPROFILE\.cargo\bin;$env:PATH"
Start-Process -FilePath "pnpm.cmd" -ArgumentList "tauri","dev" `
  -WorkingDirectory "C:\dev\workbrain" `
  -RedirectStandardOutput "C:\dev\workbrain\logs\tauri-dev.out.log" `
  -RedirectStandardError "C:\dev\workbrain\logs\tauri-dev.err.log" `
  -PassThru
```

9. Monitor the build / confirm window opened

Tail build progress

```
Get-Content C:\dev\workbrain\logs\tauri-dev.err.log -Tail 30
```

Confirm the desktop window process

```
Get-Process WorkBrain | Select-Object Id, ProcessName, StartTime, MainWindowTitle
```

To stop later

```
Get-Process workbrain, pnpm, node, cargo, rustc -ErrorAction SilentlyContinue | Stop-Process
```

To restart (cargo cache is warm — fast)

```
cd C:\dev\workbrain
```

```
pnpm tauri:dev
```

stay in the current window and prepend cargo for just this session:

```
set PATH=%USERPROFILE%.cargo\bin;%PATH%
```

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