Audion DevOps Tools

Русский · User Guide

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A portable shell for precise operations on Windows: the Linux subsystem, virtualisation, drivers and hardware, disks, networking, file associations, keys and certificates.

Why It Exists

There is a class of tasks with no good tool for them. Not "speed up Windows" and not "strip out the bloat" — but do one precise thing and know exactly what you did: install a Linux distribution from a file, switch the machine between Hyper-V and a third-party hypervisor, stop Windows Update from replacing a graphics driver, snapshot file associations before and after installing something, export a certificate together with its private key.

Each of those is done by different means: `wsl.exe` here, `bcdedit` there, a registry policy somewhere else, PowerShell commands elsewhere again. They are all documented, but scattered — and half of them require remembering what to roll back if it goes wrong.

This program gathers them in one place, with explicit parameters, risk labels, a backup before every change, and a live log.

It is not a debloater and not a collection of tweaks. Associations are not forged by defeating Windows protections, and the registry is not edited directly where a documented mechanism exists. The program wraps the standard administration tools rather than fighting the system.

Principles

Wrap what is documented. The Linux subsystem goes through `wsl.exe`. Wi-Fi profiles through `netsh wlan`. Associations through the deployment mechanism and machine-wide policy. Certificates through PowerShell over the system stores. User choice hashes and the protection around them are never bypassed by hand.

A copy before the change. The boot configuration, associations, the `hosts` file, network state, the driver store — anything that changes is snapshotted into `backup\` first.

A risk label on every command. Muted button tones separate the gentle, the ordinary, and the forceful; dangerous actions require confirmation. Paired workflows — backup and restore, export and import, block and unblock — are framed together so the way back is always in view.

The interface is deliberately technical. Buttons are short, captions compact, and the full context — what exactly will happen, what you risk, how to undo it — lives in the tooltip. Space is saved on the caption, not on the explanation.

An unsupported edition is not a target. Home editions of Windows do not guarantee that group policies apply; the program shows the edition and by default refuses to apply where it would not work.

Nothing is pulled from neighbouring folders. Every tool lives inside the project. Historical folders are read only for comparison or recovery, and only when explicitly asked.

What Is Inside

section	about
Linux subsystem	features and updates, install from the network or a file, status, backup, clone, move, delete, register disks
Virtualisation	read-only status and diagnostics, Hyper-V or third-party mode, coexistence, toggles with a boot-config backup and reboot warnings

section	about
Networking	diagnostics, backup and restore of network state, proxy, adapters, sign-in to shared folders, Wi-Fi profiles, quick modes
Hosts and Bitrix	redirecting an address to a local endpoint, endpoint detection, DNS and port status, byte-exact restoration of `hosts` from backup
Associations	snapshot and comparison of defaults, policy protection, Microsoft built-in apps — remove, restore, keep removed — reinstall blocking, change tracking
Hardware and drivers	blocking drivers from updates, graphics driver restrictions, driver store backup, HDMI and DisplayPort audio, disk inventory, recovery environment, SSD wizard
Keys	export and import of SSH keys and certificates, gathering every credential into one folder with an inventory, moving to a new machine
Maintenance	backup of command-assistant memory, cache cleanup, shortcuts, bundled file search

Next

- User Guide — working through the sections, and the order of operations for the dangerous subsystems.

Technical Reference

Running

```
Start.exe
```

`Start.exe` asks for administrator rights once — deployment, the `hosts` file, network adapters, disk work and Linux subsystem setup need them. Answering "no" opens the window without them: the rights badge in the machine row shows it, a click on it restarts the window with the rights, and an operation that needs them asks Windows for them itself.

Without the question about the rights:

```
set AUDION_GUI_NO_ELEVATE=1
Start.exe
```

Every button of the window is an operation of the console command, and it can be run from the command line:

```
devops_cli.cmd describe                          sections, operations and fields
(JSON)
devops_cli.cmd run --operation dns_status        an operation, output to the console
devops_cli.cmd check --operation <operation>     whether it may run, and what to ask
first
devops_cli.cmd options --operation <operation> --field <field>
devops_cli.cmd version
```

Individual entry points for one section:

```
cli\launcher_wsl.cmd
cli\launcher_bitrix.cmd
cli\launcher_default_apps.cmd
cli\launcher_association_defense.cmd
cli\launcher_hardware.cmd
```

They go through the same manifest and service layer as the window, so behaviour matches.

Maintenance

```
init_folders.cmd                 create missing working folders
cleanup_project.cmd              careful cleanup
cleanup_project.cmd /DRYRUN /Y   show the plan, delete nothing
```

Cleanup keeps scripts, configuration, documentation, licences, the built window, and the folders themselves. It removes what was generated or downloaded: the runtime, the wheel store, builds, downloads, logs, reports, working-folder contents, and caches.

Verification

```
install\verify_portable_env.cmd              environment, console command, built
window
runtime\python.exe -m pytest -q              tests
runtime\python.exe system_core\doctor.py     the environment alone
```

The window is built from `Source\` by `install\Build-App.cmd`; it needs the .NET 10 SDK.

Structure

```
Start.exe                      starts the window
App\                           the window and the PowerShell of the program
(AudionPs.exe)
Source\                        the sources of the window
devops_cli.cmd                 the console command
config\tool_manifest.yaml      operation tree, fields, risk metadata
config\window_layout.yaml      sections and pages of the window
system_core\cli.py             the console command: operations of the manifest
system_core\core\jobs.py       operation runner, output decoding
system_core\services\          system actions
system_core\cli_operation.py   operations for the cli\ menus
tools\                         project-local utilities
backup\                        snapshots and rollback data
logs\                          operation logs
```

The service boundary. The window holds no system logic: it collects parameters, shows risk and confirmation, and starts the operation through the console command. System actions live in services, project modules, and project scripts; operation definitions live in `tool_manifest.yaml`.

Working Folders

Two rows sit above the terminal. **SOURCE** is where imports read from: keys, certificates, Wi-Fi profiles, copies; until another is chosen it is the `input` folder. **TARGET** is where exports, backups and reports go; until another is chosen it is the `output` folder. Both rows remember earlier and pinned folders.

Microsoft Documentation Behind It

- Application defaults policy
- Associations through deployment servicing
- Wi-Fi profiles

- Linux subsystem commands

Exports of SSH keys, certificates with private parts, and Wi-Fi passwords are sensitive: the resulting archives are stored as secrets.