AFRIDYNE SYSTEMS · HOME IT & DIAGNOSTICS GUIDE

Laptop & Desktop Troubleshooting Guide

A safe, step-by-step triage routine for slow computers, startup failures, overheating, storage bloat, and browser/driver glitches—plus red flags that mean stop immediately.

Topic: Laptop and Desktop Troubleshooting | Covers: First-5-Minute Triage · Speed & Storage · Hardware Red Flags · Cheat Sheet

1. First-5-Minute Triage (Start With the Basics)

Before changing system settings or uninstalling software, work through these quick checks in order:

1. **Perform a True Restart (Not Shut Down):** On Windows 10/11, *Shut Down* uses Fast Startup, which saves a hibernated kernel state. Click **Start → Power → Restart** to clear hung drivers, pending update locks, and memory leaks.
2. **Check Free Drive Space:** Solid-state drives (SSDs) and operating systems slow down sharply when completely full. Keep at least **15–20% free space** (minimum 15–20 GB) for virtual memory and system updates.
3. **Inspect Task Manager / System Monitor:** Press `Ctrl + Shift + Esc` (Windows) or open *Activity Monitor* (Mac) / *System Monitor* (Linux). Sort by **CPU**, **Memory**, and **Disk** to spot a single runaway browser tab, cloud sync loop, or antivirus scan pinning resources at 100%.
4. **Unplug Non-Essential USB Accessories:** A failing external hard drive, USB hub, or SD card reader can stall boot-up or freeze File Explorer/Finder. Disconnect everything except keyboard, mouse, and power, then test again.

> **Stop Immediately & Back Up First If You Notice Hardware Failure Signs:** Clicking or grinding noises from a drive, sudden random shutdowns, severe overheating, or a laptop trackpad/keyboard bulging upward (a swollen lithium battery—unplug power immediately and do not pierce or compress).

2. Fixing Common Performance & Stability Issues

A. Slow Boot & Sluggish Desktop

- **Trim Startup Apps:** Open *Task Manager → Startup apps* (Windows) or *System Settings → General → Login Items* (Mac) and disable updaters, chat apps, and media helpers you don't need running the second you log in.
- **Check for Legacy Mechanical Hard Drives (HDD):** If Task Manager shows **Disk 100%** with tiny read/write speeds (1–5 MB/s) on a 5+ year old PC, the system is likely still booting from a spinning hard drive. Upgrading to an SSD transforms responsiveness far more than any software cleanup.
- **Avoid "PC Cleaner" & Registry Booster Utilities:** Third-party registry cleaners and driver-updater tools frequently break Windows stability or bundle adware. Stick to built-in tools (*Windows Storage Sense*, *Disk Cleanup*, and official vendor/OS updates).

B. Overheating & Loud Fan Noise

- **Clear Dust & Restore Airflow:** Dust mats inside laptop heatsink fins and desktop intake filters trap heat and force the CPU to throttle down. Use short bursts of compressed air while holding fan blades still so they don't over-spin.
- **Use Laptops on Hard, Flat Surfaces:** Beds, couches, and cushions block bottom intake vents.
- **Aged Thermal Paste (3–5+ Years Old):** If fans ramp up to maximum speed during light web browsing even after dust cleaning, dried factory thermal paste on the CPU/GPU likely needs replacement.

C. Browser Pop-Ups & Unwanted Adware

- **Audit Browser Extensions:** Remove unfamiliar toolbars or extensions in Chrome, Edge, or Firefox, and block notification permissions for unknown websites (*Settings → Privacy & security → Site settings → Notifications*).
- **Run Built-In Malware Scans:** On Windows, run a full scan (or *Microsoft Defender Offline scan*) via *Windows Security → Virus & threat protection*.

3. Laptop & Desktop Quick-Fix Cheat Sheet

Symptom	Likely Cause	Safe First Step
PC powers on, black screen	Display output switched, hung sleep state, or loose monitor/RAM contact.	Press `Win + Ctrl + Shift + B` (resets graphics driver). Hold power button 10 s for hard shutdown, wait 15 s, reboot.
Laptop won't charge or dies unplugged	Faulty charger/USB-C cable, worn battery capacity, or dirty charging port.	Test another known-good outlet/charger; run `powercfg /batteryreport` in Windows Terminal to check battery health.
Blue Screen (BSOD) / Kernel Panic	Corrupt driver update, failing RAM stick, or overheating under load.	Note the stop code on screen; roll back recent driver/OS updates and run *Windows Memory Diagnostic*.
Wi-Fi icon missing or drops only on 1 PC	Power-saving mode turning off the Wi-Fi card or corrupted network stack.	Run *Network Reset* (or `netsh winsock reset`) and uncheck *Allow computer to turn off this device to save power* in Device Manager.
No sound or microphone not working	Audio output switched to monitor/HDMI or app mic permissions blocked.	Click the taskbar speaker icon to select internal speakers/headset; check OS privacy settings for microphone access.

4. Pre-Repair & Preventative Maintenance Checklist

- ☐ **Back up important documents & photos first:** Copy irreplaceable files to an external USB drive or cloud storage before attempting OS resets or hardware repairs.
- ☐ **Keep OS & firmware updates current:** Install monthly security patches and official laptop BIOS/UEFI updates (always with the charger plugged in).
- ☐ **Protect against surge & load-shedding damage:** Use a surge-protected multiplug or UPS for desktop towers and monitors—sudden power cuts corrupt open system files and stress power supplies.
- ☐ **Record BitLocker / account recovery keys:** Ensure you know your Microsoft/Apple/Linux login password and recovery key before major hardware changes.

Computer running slow, refusing to boot, or overheating? Afridyne Systems provides plain-English diagnostics, data-safe troubleshooting, virus/adware cleanup, thermal servicing, and SSD upgrades across the Helderberg. Call/WhatsApp **062 509 8065** or visit **afridyne.co.za**.