PREFACE: This was made for Linux Mint, but may work on other Debian-based distros.

(Includes: Debian, Mint, Ubuntu, Kali, Deepin, Pop!, Zorin, Plasma, MX, Puppy, Pure, Raspbian, Parsix, Tails, Twister, and many many others)

🔑 Key:

Sectioning:

Red Titles = Important Issue Solvers
Dark Red Titles = Other Issue Solvers
Black Titles = Tricks and Fun Things

Distro Specific:

Green Text = Linux Mint ONLY
Orange Text = Ubuntu ONLY

Other:

Underlined + Italic = Link
Pink Text = Only applicable for games downloaded via _SteamUnlocked_
Blue Text = Online games only
Cyan Text = Optional step
Small Grey text: More information on topic
REALLY REALLY REALLY tiny text = Command to perform task via terminal (5 spaces)
- **Bulleted Item = Step related to section**
⚠️ **= Work in progress**

Definitions:

DE = Desktop Environment The interface that allows you to open up applications and set desktop wallpapers. (Native, Software, Wayland, Plasma, Gnome, etc.)
OS / Distro = Distribution of Linux Installed version of Linux (Linux Mint, Ubuntu, Arch Linux, Manjaro, Pop!OS, etc.)
Kernel = The Bridge Between your PC and your OS The thing that makes "Linux", Linux. More information: _What is the Linux Kernel exactly?_
Bash = Almost Synonymous With Gnome Terminal _Programming language used in gnome terminal_

System is Unresponsive

Fixes: Black screen after boot / Mouse movement only without response

- Hold: "Alt" + "Print Screen"

- While holding Alt + PrtScn, type: "R","E","I","S","U","B"
  DO NOT touch shift or caps lock, and try to do this somewhat quickly
  More info about REISUB: *What should I do when Ubuntu freezes?*
  Note: May require an external USB keyboard, or preemptive setup with Key Remapper

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Stuck on Terminal only

Fixes: Black Screen with Blinking Underscore / Missing DE

- Press Alt + F2, type "r" and hit Enter
- Try previous tip ("System is Unresponsive")
- Try launching different DEs if installed (wayland / xorg / plasma / xfce)

If launching different DEs work, run scripts in terminal:
- sudo apt purge redshift-gtk -y
- sudo apt-get purge redshift -y
- sudo apt-get autoremove
- dpkg --configure -a

If all else fails, consider installing a new DE:
- sudo apt-get update -y ; sudo apt-get upgrade -y ; sudo apt-get install mint-meta-cinnamon -y
- sudo apt-get update -y ; sudo apt-get upgrade -y ; sudo apt-get install ubuntu-desktop -y

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Steam Game not Working

Fixes: Random Crashing / Failure to Launch without warning / C++ redistributables missing / Controls not working

Proton Tricks:
- Open Proton Tricks app   /usr/bin/flatpak run --branch=stable --arch=x86_64 --command=protontricks com.github.Matoking.protontricks --no-term --gui
- Copy "Redist_" folder to downloads   nemo
- Make sure there are zero emoji's in the file path
- (This symbol might also not be allowed: " | ")
- Select "Default wine prefix"
- Open explorer
- Go to Z:home\username\downloads
- Install all redistributables
- Go (back) to game prefix
- Select "Install a Windows DLL or component"
- Install "vcrun2022   Visual C++ 2015-2022 libraries"
- Disregard all warnings, install for each pop-up (may take several installs to work)
- Once the winetricks menu comes back up, it worked

Fixes Inside Steam:

- Make sure there are zero emoji's in the file path (This symbol might also not be allowed: |)
- Change compatibility to "GE-Proton9-10" and try again
- Change compatibility to "Proton Experimental" and try again
- Set game launch options: "-dx11" and try again
- Clear game launch options
- Change compatibility to "Proton 5.0-10" and try again
- Set game launch options: "-force-glcore" and try again
- Search "Runtime" under "Tools" tab and verify 1.0, 2.0, and 3.0
- Open Steam Settings
- Disable broadcasting
- Disable game recording
- Under "Interface" change startup location to library
- Change beta participation to "no beta chosen"
- Under "Library" change:
    - Low bandwidth enabled
    - Low performance enabled
    - Disable community content enabled
- Under "Notifications", change "show notification toasts" to "when I'm not in game"
- Under "downloads" disable "allow downloads during gameplay"
    - Scroll down and enable "enable shader precaching"
- Optional: Under "in game" disable steam overlay and "fps counter"
- ^ Optional: disable steam overlay
- Optional (**but not recommended**): disable steam cloud (no effect for SteamUnlocked games)
    Disabling steam cloud is generally not a good idea 90% of the time, but it will save processing power in-game

General Advice:
- Restart your PC   reboot
- Make sure you are not using wayland DE
- Open "Driver Manager" app   driver-manager
    - Make sure you are using "nvidia-driver-535"
- Update all software and OS / Kernel   mintupdate
- Install ProtonUp-Qt: The GEProton Installer   flatpak install flathub net.davidotek.pupgui2
    - Launch ProtonUp-Qt   /usr/bin/flatpak run --branch=stable --arch=x86_64 --command=net.davidotek.pupgui2 net.davidotek.pupgui2
    - Install GE-Proton9-10
- Complete everything under "Very High RAM Usage on Idle"
- Make sure you're running the game in low quality
- Make sure to use Fullscreen mode on the game (Not Fullscreen Borderless)
- Check rating on *ProtonDB* to see other people's fixes, or if its completely "borked" (broken beyond repair)
- Optional: Set in-game max FPS to 60Hz and turn off v-sync

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Microphone / Audio systems not working

- In terminal, run: pactl info
- Look for " Server Name: "

Server Name: pulseaudio
- Run command to switch to Pipewire (recommend):
  sudo apt install pipewire-audio-client-libraries libspa-0.2-bluetooth libspa-0.2-jack; sudo apt install wireplumber pipewire-media-session-; sudo cp /usr/share/doc/pipewire/examples/alsa.conf.d/99-pipewire-default.conf /etc/alsa/conf.d/; sudo cp /usr/share/doc/pipewire/examples/ld.so.conf.d/pipewire-jack-*.conf /etc/ld.so.conf.d/; sudo apt remove pulseaudio-module-bluetooth; systemctl --user --now enable wireplumber.service; flatpak install flathub org.pipewire.Helvum -y; sudo apt install pavucontrol -y; reboot

Server Name: pulseaudio (on PipeWire X.X.X)
- Run command to switch to Pipewire (recommend):
  sudo apt-get install pulseaudio; sudo apt purge pipewire; flatpak uninstall flathub org.pipewire.Helvum -y; sudo apt purge pavucontrol -y; reboot

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External Monitor Not Working:

- Open "NVIDIA X Server Settings"   /usr/bin/nvidia-settings
- Under "PRIME Profiles", select "NVIDIA On-Demand"
- Restart your PC   reboot
  Note: This PRIME Profile may cause poor performance in games

Wallpaper messed up after change:
- Right click desktop
- Select "Change Desktop Background"
- Select "Settings"
- Set "Picture aspect" to "Centered" or "Zoomed"

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No Mouse Movement on Wayland DE

- Unplug the USB and plug it back in
- REISUB PC (See "System Is Unresponsive")
- Test if mouse works on a non-Wayland DE
- Try Wayland Again

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Vesktop Causing Black Screen on Wayland DE

- REISUB PC (See "System Is Unresponsive")
- Use any other DE
- Open Chrome
- Go to *Discord Web Client*
- Download and Install *Vencord Web*
- On **Vesktop**, click on the gear, then "Backup & Restore"
- Click on "Export Settings" and download the .json file to a memorable folder (downloads, perhaps?)
- On **Vesktop**, click on "Themes"
- Click on "Open Themes Folder" and copy the preferred theme to the same memorable folder as before
- On **Discord Web**, click on the gear, then "Backup & Restore"
- Click on "Import Settings" and click on your downloaded .json file
- On **Discord Web**, click on "Themes"
- Click on "Upload Theme" then click on your copied theme
- Log out, go back on wayland and use the web version instead
  (I'd also recommend favouriting it)

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Application Fullscreened on Wrong Monitor

- Right click application on taskbar on monitor of interest
- Click on "Move to other monitor"

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Linux Kernel isn't Updating (mintupdate)

- Log out
- Switch to a different DE (Anything but Wayland)
- Try again

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No Audio on Vencord Screenshare

To test for audio server: pactl info

For Pipewire Audio Server:
- Share Screen
- Set Audio Source to "Google Chrome"
- Open Helvum /usr/bin/flatpak run --branch=stable --arch=x86_64 --command=helvum org.pipewire.Helvum
- Remove all wires from "Chromium input"

- Connect wires from the back-end of "Vencord-screen-share" to (now empty) "Chromium input"
- Close Helvum

  Final connection: Google Chrome -> vencord-screen-share -> Chromium input
  Also: Make sure "Google Chrome" is connected to your output aux
  Also: If this fails, try using the other Chromium input if available

  More information: *Discord Screenshare Audio | Linux Mint*

For Pulseaudio Audio Server:
- Use Discord on Web, or Switch to Pipewire

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⚠️Very High RAM Usage on Idle

Removing Unused Packages
- Open terminal   gnome-terminal
- In terminal type: "top -id 999"
- Press "Shift + F"
- Press space on everything that has an * by it to disable it all
- Press space on "%MEM" and "COMMAND" to activate only them
- Press "Q"
- Wait about a minute
  (Long you wait the better your results will be)
- Press up to refresh
  (Under "%mem" is the percentages of ram used compared to maximum possible ram)
- Launch Synaptic Package Manager   synaptic-pkexec
- Search for packages that you want to delete
  (**DO NOT DELETE:** "cinnamon", "gnome-terminal", "xorg", "top"/"atop", "depmod", "dpkg", "NetworkManager", "systemd", "polkitd", "irqbalance", "goa-daemon", "avahi")
  (**RECOMMEND TO DELETE**: "openrazer-daemon", "kde-connect", ADD MORE PACKAGES)
- Right click package, "Mark for complete removal"
  Note: only packages with a green box: "🟩" are currently installed.
- If requested: "mark additional packages"
- Top left, click "Apply", then "Apply" on the popup menu
- Restart PC   reboot

Why shouldn't I delete these?

cinnamon	your entire DE
gnome-terminal	your terminal
xorg	the window protocol to allow Linux to display multiple windows (this is X11)
top / atop	the table of processes program that you're probably using right now
depmod	searches for module dependencies when installing/uninstalling packages
synaptic	package manager, you can delete this if you want but it's not recommended
dpkg	package installer, you cannot install packages without this
NetworkManager	simplified network connection tool
thermald	prevents PC overheating, you can delete this if you want, but it's not recommended
systemd	your kernel, aka the core components to make Linux run
polkitd	user privilege manager
fwupd	firmware update installer

irqbalance	system performance improver
goa-daemon	dependency that a lot of things rely on, apparently
avahi	allows connection to device name instead of device ip / MAC address

Changing System Settings
- Open settings cinnamon-settings
- Open Effects
    - Disable "Desktop and Window effects"
- Open General
    - Enable "Disable compositing for full-screen windows"
- Optional: Open Display
    - Change refresh rate to 60Hz

Minecraft Version 1.6.4 Prism Launcher Failure

Fixes: 1.6.4 error: Unable to launch java.util.ConcurrentModificationException

- Download Mod: *www.curseforge.com/minecraft/mc-mods/legacy-java-fixer/download*
- Type into big square on bottom: -Dfml.ignoreInvalidMinecraftCertificates=true

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.AppImage Not Opening

- Right click app image file
- Select "Properties"
- Select "Permissions"
- Check box beside "Allow executing as program"

Application Install Script For People Who Don't Want To Just "Figure It Out"

- *Download script and run in terminal*

Note: Should require very little user input, but can use high resources while downloading. Reading the script can be useful to learn what you're downloading, but is not necessary.

Quick Access Command-Only Terminal (This is the ALT + F2 menu btw)

- ALT + F2
  (DO <u>NOT</u> PRESS CTRL)

If you accidentally press CTRL+ALT+F2, press ALT + PrtScn a few times
If that doesn't work: press CTRL+ALT+F7

(FYI: If your screen goes black and you see a login screen, you pressed CTRL+ALT+F2. Don't login, just press ALT+PrtScn)
(PS: If you used ALT+PrtScn to leave and it didn't work, you likely didn't press F2 in the key combo, try CTRL+ALT+F7)

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Taskbar Appearing During Minecraft Gameplay

Option 1:
- Press F11 (Full screen)
  (Limits access to ALT + F2 menu, can prevent system from closing minecraft when freezing)

Option 2: (preferred)
- Right click taskbar
- Press "Panel settings"
- Under "Auto-hide panel", select "Always show panel"

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Monitor Microphone Audio

Test for Pulseaudio / Pipewire using: pactl info

Pulseaudio:
- To **start** monitor, run command:
  pactl load-module module-loopback
- To **stop** monitor, run command:
  pactl unload-module module-loopback

Pipewire:
- Open Helvum flatpak run org.pipewire.Helvum
- Connect Microphone to audio output

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No Trackpad History Navigation For Chrome

- Press windows key
- Search for Chrome
- Right click Chrome and press "properties"
- Paste at the end of "Command:" paste string:
  --enable-features=TouchpadOverscrollHistoryNavigation
- Press "OK"

Custom grub commands for dual-booted systems

- Type into terminal: sudo vi /etc/grub.d/40_custom
- Type below block of text:
    menuentry "Restart" {reboot}
    menuentry "Shut Down" {halt}
- Ctrl + S to save
- Type into terminal: update-grub
- Type into terminal: reboot

More information: https://daulton.ca/2018/08/reboot-and-shutdown-options-grub/
If you accidentally delete too much, _here is a backup of the text_.

Custom names for commands in terminal

Aliases on Friendly Interactive Shell (FISH)
- Type "open ~/.config/fish/config.fish" and hit enter
- Look for "# Commands to run in interactive sessions can go here"
- Underneath, write your custom name:
    "alias [custom name]='[command]'
- Press Ctrl + S to save

Aliases on Gnome Terminal
- Type "open ~/.bashrc" and hit enter
- Scroll to the bottom
- Look for "# Alias definitions."
- Underneath, write your custom name:
    "alias [custom name]='[command]'
- Press Ctrl+S to save

Tip: view all aliases by typing "alias" in terminal
Note: if you accidentally delete everything, here are backups with recommended aliases included:
Gnome Terminal   (Located at ~) **NOTE: REPLACE "sapphire" WITH YOUR USERNAME**
Friendly Interactive Shell   (Located at ~/.config/fish)

Recommended aliases:

alias logout='gnome-session-quit'	#Logs you out
alias ram="free -h"	#Checks Ram
alias q="exit"	#Exits terminal
alias terminal='gnome-terminal'	#Opens terminal

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alias settings='cinnamon-settings'                                              #Opens settings
alias drivers='driver-manager'                                                  #Opens driver settings
alias taskman='gnome-system-monitor'                                            #Opens task manager
alias ttaskman='top -id 999'                                                    #Opens terminal task manager
alias discanal='ncdu'                                                           #Opens disc analyzer
alias dex="scrcpy --keyboard=uhid --mouse=aoa --gamepad=aoa --fullscreen"       #Opens DEX
alias custom-gnome='open ~/.bashrc'                                             #Opens path for more gnome aliases
alias custom-fish='open ~/.config/fish/config.fish'                             #Opens path for more fish aliases
```

Useful aliases not included in backups:
```
alias steam="sh -c 'STEAM_FRAME_FORCE_CLOSE=1 steam %U' --console"
alias chrome='/usr/bin/google-chrome-stable %U --enable-features=TouchpadOverscrollHistoryNavigation'
alias google='/usr/bin/google-chrome-stable %U --enable-features=TouchpadOverscrollHistoryNavigation'
alias discord='/usr/bin/flatpak run --branch=stable --arch=x86_64 --command=startvesktop dev.vencord.Vesktop'
alias roblox='waydroid show-full-ui'
alias patchbay="/usr/bin/flatpak run --branch=stable --arch=x86_64 --command=helvum org.pipewire.Helvum"
alias obs="/usr/bin/flatpak run --branch=stable --arch=x86_64 --command=obs com.obsproject.Studio"
```

Super Leet "Hacker" Terminal

This does not put you at any risk, and is just something fun to look at. Nothing bad is happening, I promise.

- sudo apt install hollywood
- hollywood

This can use high amounts of system resources even when not running, so make sure to use ttaskman (top -id 999) to kill it, or "sudo apt purge hollywood" to uninstall it when done.

Check out PC specs

- Type in terminal: neofetch

If it doesn't show your distro icon, OS, and PC specs, install using:
- sudo apt install neofetch

⚠️Useful Terminal Commands / Command Definitions

Note: [text] is info you replace with
Ex: [PID] can be: 149281 , 722718 , 379192 , etc.
[command] can be: top , free , kill , etc.

The most useful command:
- "man [command]"   Shows manual for proceeding command

Other useful commands:

- "reboot"   Restarts PC
- "power off" / "shutdown now" Shuts down PC
- "gnome-session-quit"   Opens Logout prompt
- "clear"   Clears terminal
- "exit"   Closes terminal (you sometimes have to do this twice)
- "free -h"   Shows RAM usage (-h tag makes it human readable)
- "ps -e"   Print all active processes (-e tag shows all processes; use "ps -ef f" for less
                                        simplified view; *more info*)
- "kill [PID]"   Kill process by Process ID (use lowest number if multiple are given; PIDs can be
                                        found via "ps -e", or "top -id 999" commands, and in a properly set up system
                                        monitor)
- "fish"   Converts terminal to Friendly Interactive Shell (terminal only)
- "ncdu"   Converts terminal to Disc Analyzer (terminal only)
- "top -id 999"   Converts terminal to Table of Processes (-i tag shows only active
                                        tasks; -d tag changes update frequency; 999 tag changes update frequency to be
                                        every 999 seconds; terminal only; *more info*)
- "neofetch"   Shows system info (OS, Kernel, Pkgs, Shell, Res, DE, Theme, Icons, Terminal, CPU,
                                        GPU, RAM)

ALT + F2 Menu exclusive commands:
- "xkill"   Kill process by clicking on it
- "r"   Restart Cinnamon
- "~"   Opens File Manager

Commands to open external applications:
- "gnome-terminal"   Opens Terminal (most useful in ALT+F2 menu)
- "gnome-system-monitor"   Opens Task Manager
- "nemo" / "open ~"   Opens File Manager
- "cinnamon-settings"   Opens System Settings
- "mintupdate"   Opens Update Manager
- "xed"   Opens Text Editor
- "driver-manager"   Opens Driver Manager
- "scrcpy"   Opens DEX (Android screen mirroring tool, *more info*)

Command definitions:
- "sudo …"   "run command with administrator permissions" (Aka:
                                        SuperUser, DO this:)
- "... -y"   "bypass y/N confirmation, assuming yes"
- "apt-get …" / "apt …"   "install package using Advanced Package Tool"
- "curl …"   "download from remote client-URL"
- "sudo bash"   "create a subterminal where every command is ran as
  admin"
- "echo …"   "repeat following command" (Similar to print:(...) in python)
- " '…' "   "words are enclosed, not a command" (useful when paired with
  "echo")

- "#..." "disregard proceeding words"
- "grep …" "find a phrase in a document" (basically just CTRL+F; *more info*)
- "cd …" "change directory to specified location"
- "open …" "open directory in file manager"

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File Extension Definitions

- ".sh" Shell script
  (A text document that you can run as a program to allow the execution of one or several
  terminal commands at once. *Example of a shell script*)
- ".deb" Debian software package
  (A program that can be installed on Debian-based distros)
- ".flatpakref" Flatpak remote reference file
  (Basically a shell script just for installing flatpak software)
- ".AppImage" Application Image
  (A non-updatable, portable, "picture" of an app that can run without installation)

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⚠️Games That Require Special Fixes

- **Fortnite**
  Fix: Run on Android device, and connect it to PC via scrcpy   [UNTESTED]
        NOTE: Save The World gamemode not available on Android

- **Roblox**
  Fix 1: *Run and install Sober*
  Must type in terminal to run: flatpak run org.vinegarhq.Sober
        NOTE: making a custom .sh to run is highly recommended
  Fix 2: (Not recommend): Install on Waydroid
  > See Instal script for more information)[link]

- **Rec Room**
  Fix 1: Run natively on Oculus Quest (Meta Quest)
  Fix 2: Run on Android device, and connect it to PC via scrcpy
        NOTE: Fix 2 only works with a controller and *Mantis Gamepad Pro* (paid)

- **Wallpaper Engine**
  No known fixes for Linux Mint
  Possible fix for Plasma KDE   [UNTESTED]
  (Downloads can still be accessed via ~/.local/share/Steam/steamapps/workshop/content/431960)

- **Osu!**
  Fix: *Install using special script*

- **Content Warning**

Fix: Works on Proton Experimental only, which is broken on systems with integrated GPUs