

# HOW TO: USE MY RANDOMIZER

For:

Pokemon XD: Gale of Darkness (USA)

Works For:

Dolphin v5.0

BY: RECLAIMER SHAWN

# PREREQUISITE 1

- This tool only works for the stable release of Dolphin 5.0  
You may download the correct version of Dolphin here:

<https://dolphin-emu.org/download/>

- Demonstration of this step on the next slide/page.

Dolphin Emulator - Down X

Secure | https://dolphin-emu.org/download/ Q 2

5.0-6955 22 hours ago CMakeLists: Don't dump libpng's includes into the top-level directory (PR #6630 from lioncash)

[Windows x64](#) [macOS](#) [Android](#)

[View older versions »](#)

## Stable versions

Stable versions are released after a lot of testing to ensure emulation performance and stability. However, since they are released less often, they might be outdated and lacking some new features.

**Dolphin 5.0** 1 year, 9 months ago  [Windows x64](#) [Mac OS X](#)

**Dolphin 4.0.2** 4 years, 4 months ago [Windows x64](#) [Windows x86](#)

**Dolphin 4.0.1** 4 years, 5 months ago [Windows x64](#) [Windows x86](#)

**Dolphin 4.0** 4 years, 6 months ago [Windows x64](#) [Windows x86](#) [Ubuntu 13.04](#) [Mac OS X](#)

**Dolphin 3.5** 5 years, 3 months ago

**Download via Windows x64 button here**

# PREREQUISITE 2

- Before using the tool, consider if you'll want to have the ability to make pokemon shiny. If you want to do this, follow the next few steps. Otherwise, skip all Prerequisite slides and go to "Step 1."
- In order to get this tool properly working, you'll need to enter a Gecko Code specific to your game. Game specific Gecko Codes will be on the next slide.

# PREREQUISITE 2 Step 1: Game Specific Gecko Codes

Pokemon XD Gale of Darkness (GXXE01):

48000000 804EB6F8

DE000000 80008180

1200016C 00000000

1200016E 00000000

E2000001 80008000

Pokemon Colosseum (GC6E01):

48000000 8047ADB8

DE000000 80008180

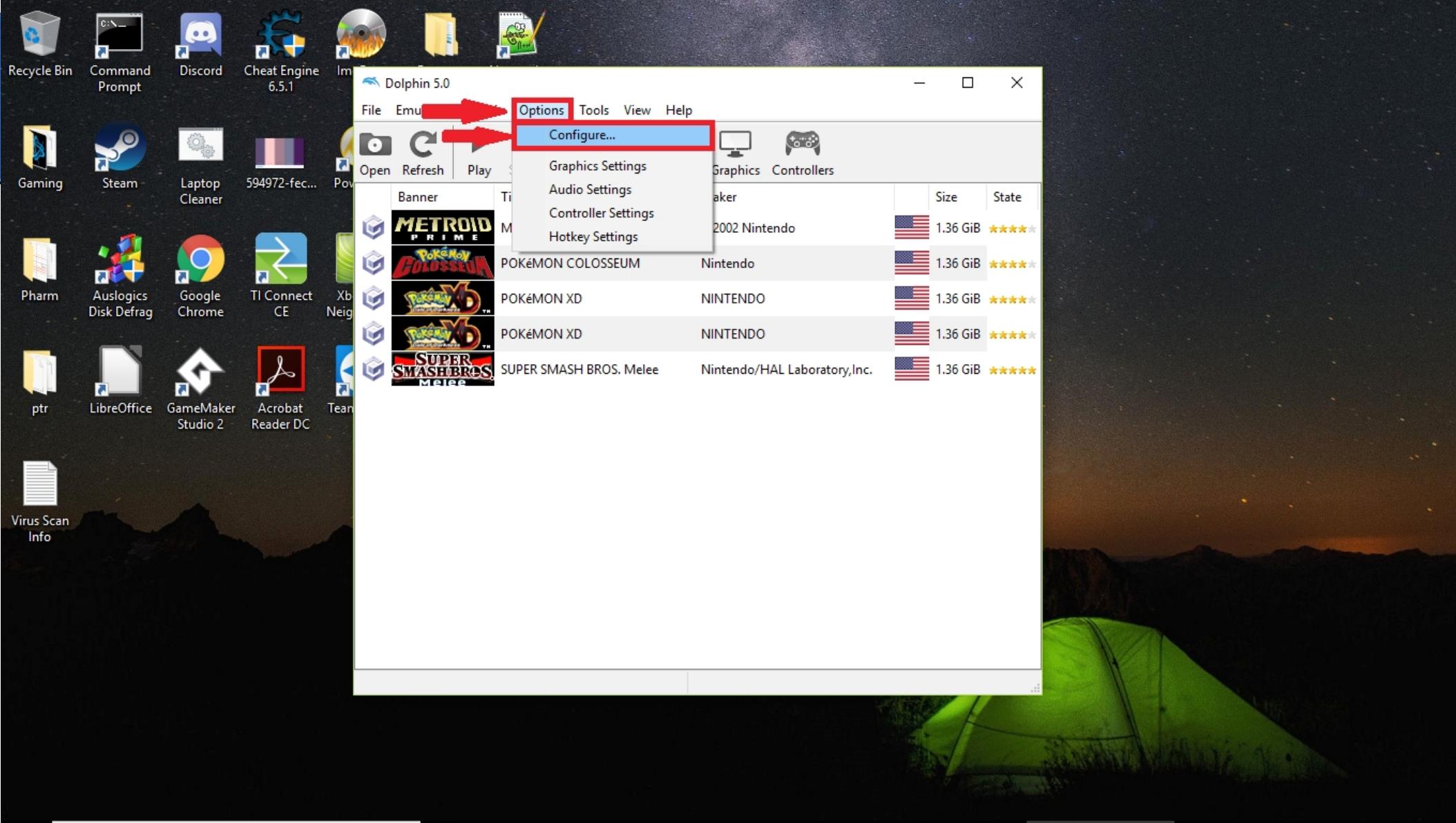
1200009C 00000000

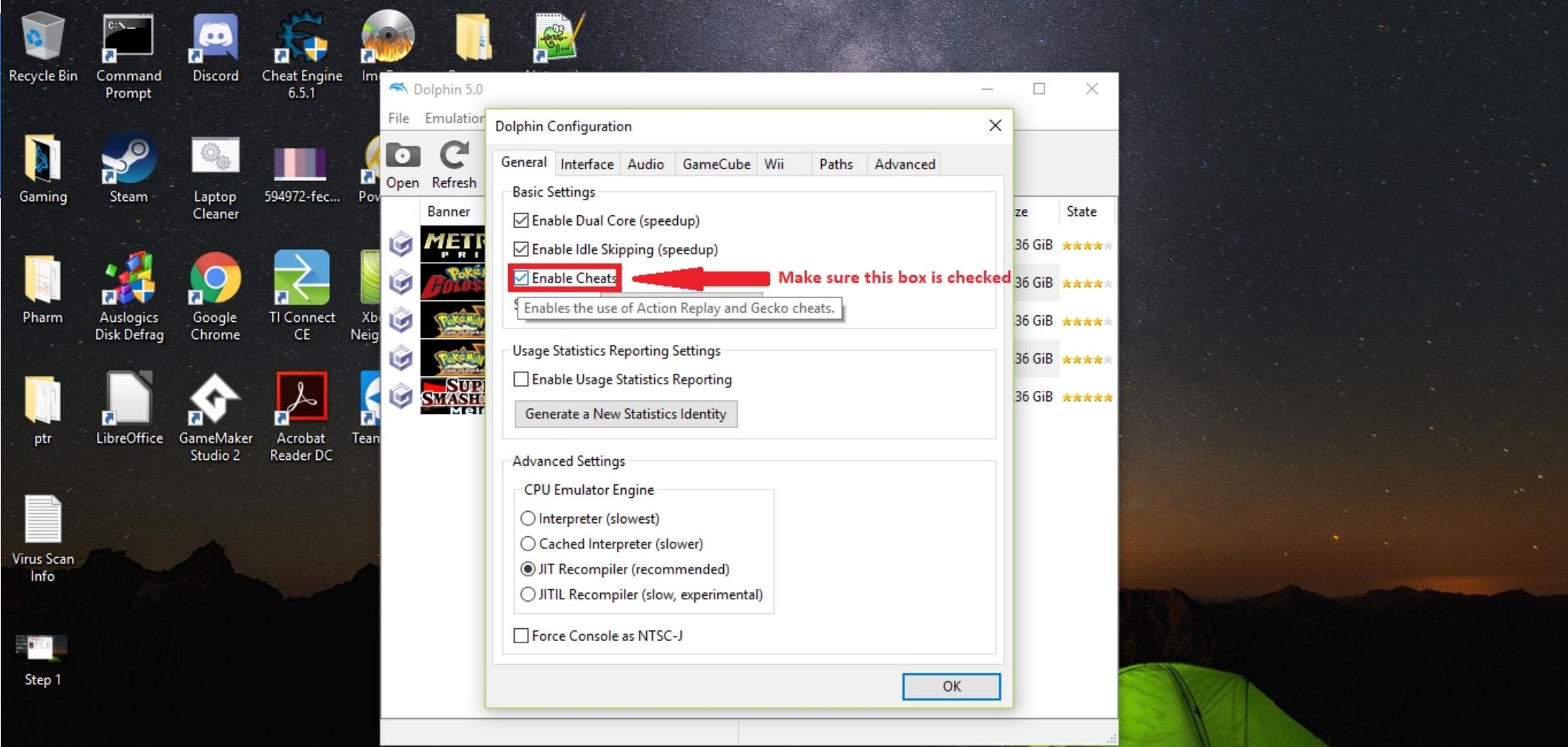
1200009E 00000000

E2000001 80008000

## PREREQUISITE 2 Step 2: Enabling Cheat Codes

- Open Dolphin.
- Go to “Options.” Select “Configure...”
- In the area called “Basic Settings”, there should be a checkbox that says “Enable Cheats.” Check that box.
- Demonstration of this on the next two slides/pages.





## PREREQUISITE 2 Step 3: Designate An ISO Directory

- Click the text that says “Dolphin could not find any Gamecube/Wii ISOs or WADs. Double-click here to set a games directory...”
- Navigate to the folder that contains all your Dolphin game files.
- Demonstration of this will be on the next two slides/pages.



Recycle Bin



Command Prompt



Discord

Cheat Engine  
6.5.1

ImgBurn



Program Tools



Notepad++



Gaming



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PowerISO

AVG Internet  
Security

Pharm

Auslogics  
Disk DefragGoogle  
ChromeTI Connect  
CEXbox 360  
Neighborh...

CCleaner



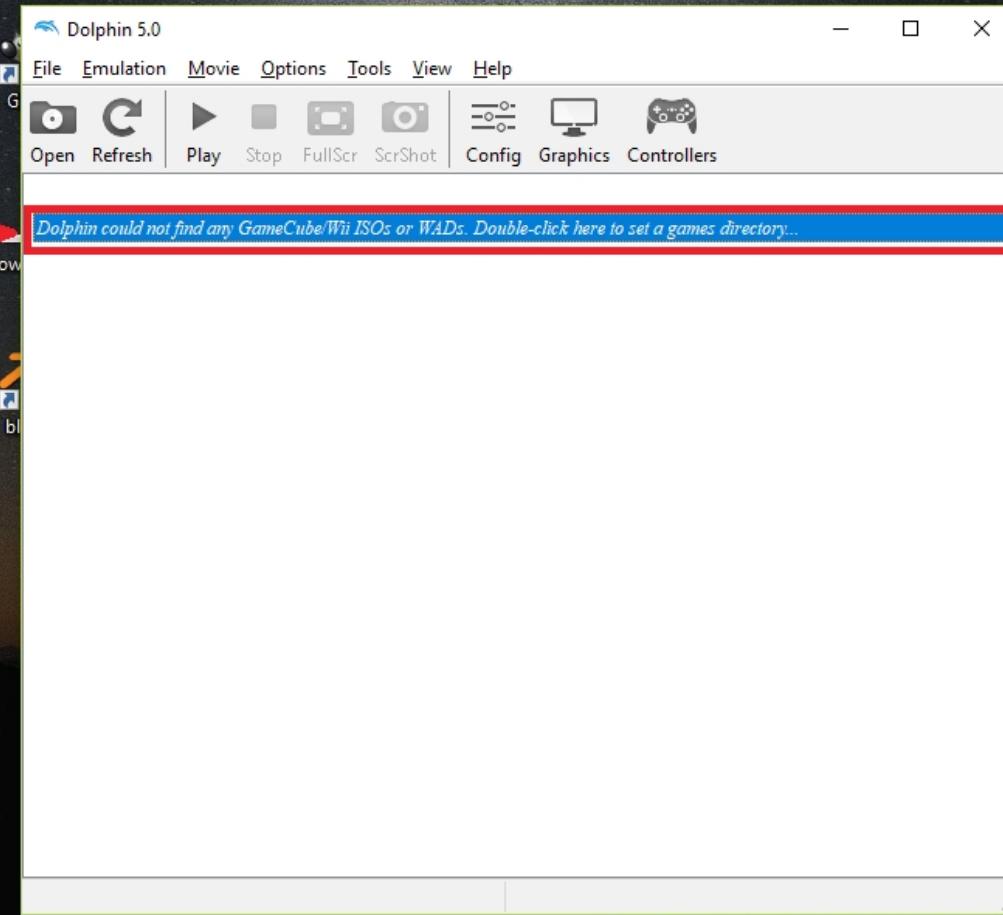
ptr

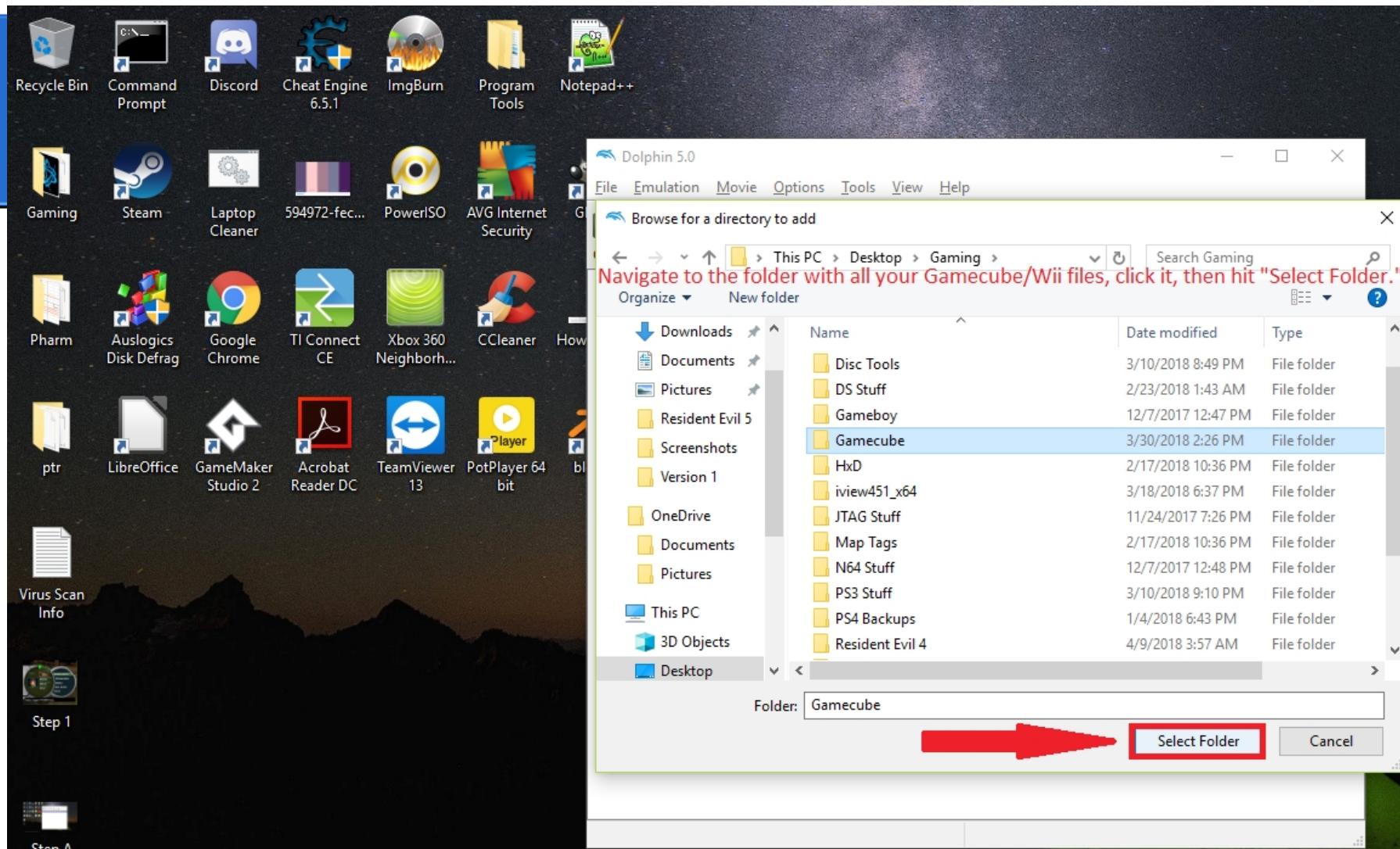


LibreOffice

GameMaker  
Studio 2Acrobat  
Reader DCTeamViewer  
13PotPlayer 64  
bitVirus Scan  
Info

Step 1





# PREREQUISITE 2 Step 4: Adding The Codes To Its Game

- In the games menu that should've popped up after setting your “Games Directory”, click the game you want to apply the code to.
- Right-click the game and select “Properties.”
- Navigate to “Gecko Codes” and then press the “Edit Config” button.
- For Pokemon XD, copy this into the .ini file opened in notepad:

```
[Gecko]
$Trainer SID TID Modifier Code
48000000 804EB6F8
DE000000 80008180
1200016C 00000000
1200016E 00000000
E2000001 80008000
```

For Pokemon Colosseum, copy this into the .ini file opened in notepad:

```
[Gecko]
$Trainer SID TID Modifier Code
48000000 8047ADB8
DE000000 80008180
1200009C 00000000
1200009E 00000000
E2000001 80008000
```

# PREREQUISITE 2 Step 4 (Continued):

- Go up to the top of the .ini file in Notepad, click “File”, and then click “Save.”
- Check the checkbox in “Gecko Codes” that says “Trainer SID TID Modifier Code.”
- Get into the actual game from the title screen, and then go to “P★DA.” If the code worked properly, your ID No. should say “00000.” If it does say “00000”, then save your game.
- Go back into the “Gecko Codes” area of your game properties, then uncheck the checkbox that says “Trainer SID TID Modifier Code.” As long as you don’t delete/restart your current save, you’ll never need to use these codes again.
- Demonstration of this on the next few slides/pages.



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Dolphin 5.0

File Emulation Movie Options Tools View Help

Open Refresh Play Stop FullScr ScrShot Config Graphics Controllers

Banner	Title	Maker	Size	State
	Metroid Prime	©2002 Nintendo	1.36 GiB	★★★★★
	POKÉMON COLOSSEUM	Nintendo	1.36 GiB	★★★★★
	POKÉMON XD	NINTENDO		
	POKÉMON XD	NINTENDO		
	SUPER SMASH BROS. Melee	Nintendo/HAL Lab		

Properties

- Wiki
- Open containing folder
- Set as default ISO
- Delete File...
- Compress ISO...
- Change Disc



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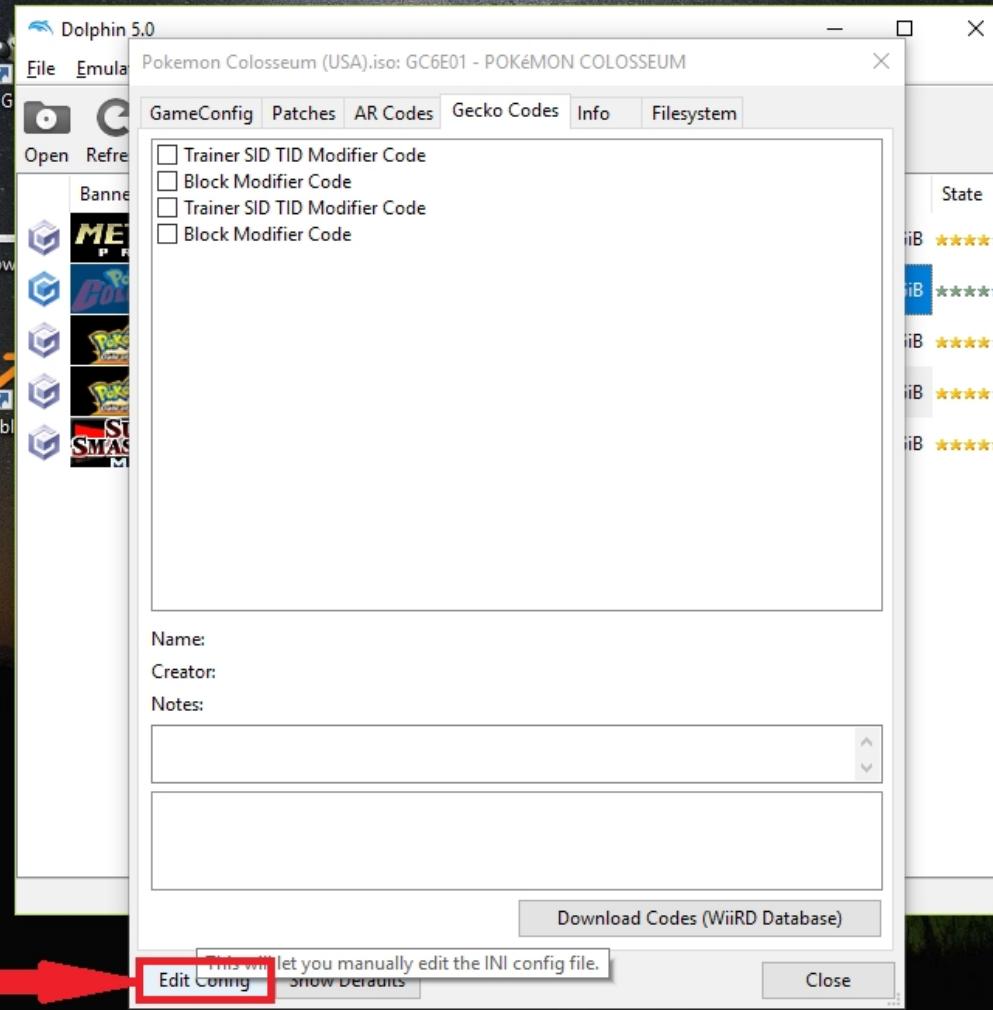
ptr

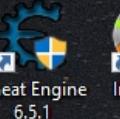


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13PotPlayer 64  
bitVirus Scan  
Info

Step 1





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Command Prompt

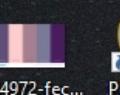
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GC6E01 Notepad



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GameMa  
Studio

Virus Scan

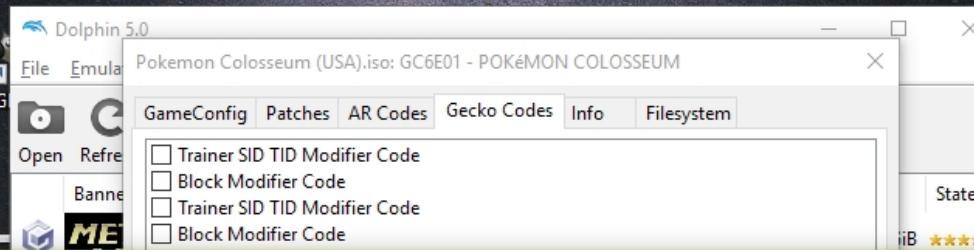
Info



Step 1



Step 2



Make sure you have the correct version of this copy and pasted into this .ini notepad file. This code (and the Randomizer) will only work for US copies of the game. If the game is a US Version, you'll see GC6E01 for Pokemon Colosseum and GXXE01 for Pokemon XD. Anything else and you don't have the US Version of the game(s).



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Step 3



Step 1



Step 2

Dolphin 5.0

Pokemon Colosseum (USA).iso: GC6E01 - POKÉMON COLOSSEUM

GameConfig Patches AR Codes Gecko Codes Info Filesystem

Trainer SID TID Modifier Code

Block Modifier Code

Trainer SID TID Modifier Code

Block Modifier Code

Check the Outlined box!

Name: Block Modifier Code

Creator:

Notes:

0446F348 0016000C  
0046F34C 000000FF

Download Codes (WiiRD Database)

Edit Config Show Defaults Close

P★DA

B Cancel

(C) Snag List ◀

Shawn's e-mail ◀

Cancel ◀



Shawn  
ID No. 00000

Pokémon Dollars

¥77,841

Poké Coupon

0 pts

Play Time

18:05

Display Snagged POKÉMON data.

Save

Overwrite current save file?



Name Shawn  
Play Time 18:06  
Snagged POKÉMON

Saving to the Memory Card in Slot A...

Please don't touch the Memory Card or  
the POWER Button!



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Step 3



Step 6



Step 1



Step 4



Step 2



Step 5

Dolphin 5.0

Pokemon Colosseum (USA).iso: GC6E01 - POKÉMON COLOSSEUM

GameConfig Patches AR Codes Gecko Codes Info Filesystem

Trainer SID TID Modifier Code

Block Modifier Code

Trainer SID TID Modifier Code

Block Modifier Code

Uncheck the Outlined box!

Name: Block Modifier Code

Creator:

Notes:

0446F348 0016000C  
0046F34C 000000FF

Download Codes (WiiRD Database)

Edit Config Show Defaults Close

# Step 1: Determine Program Version

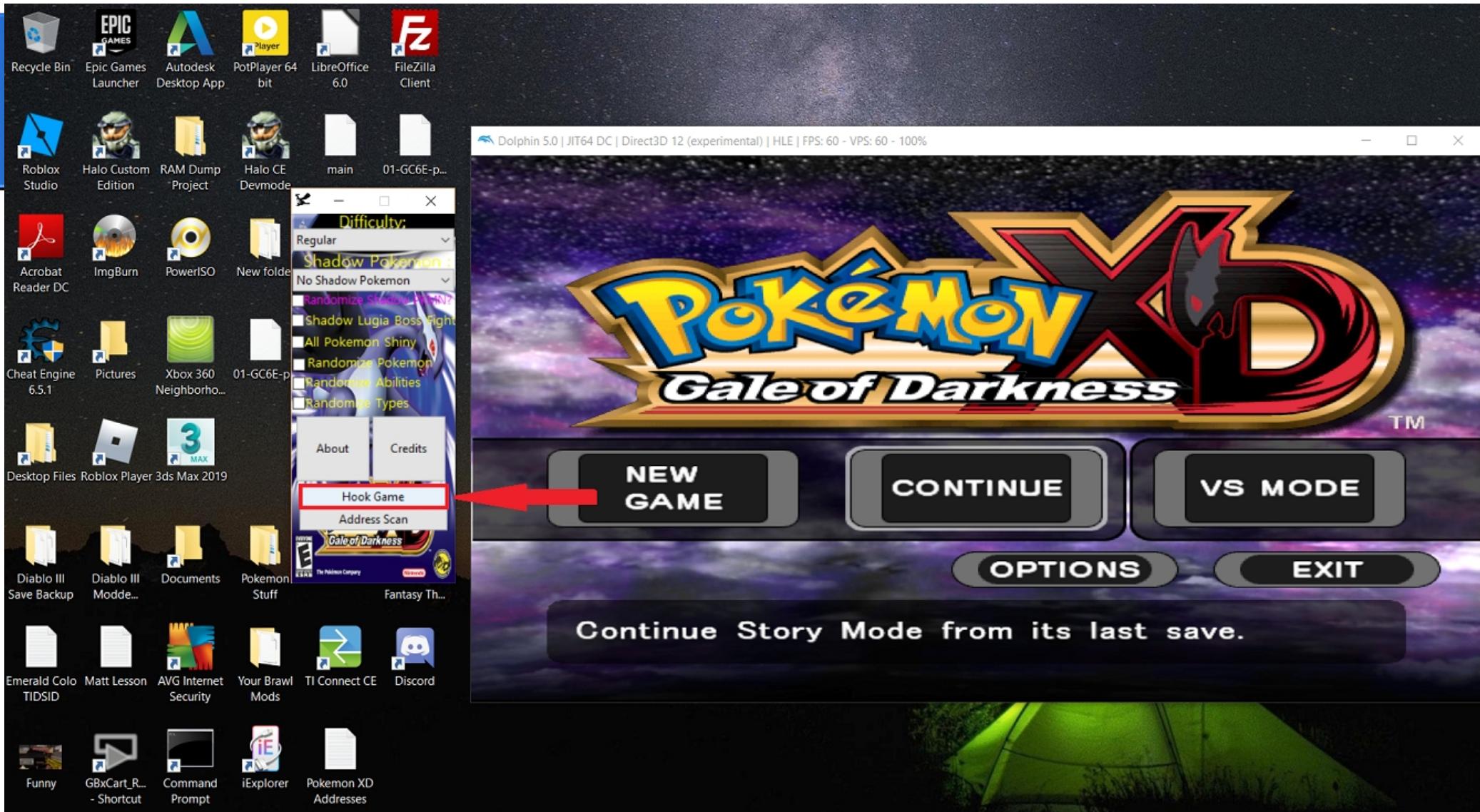
- In the release of this tool, a folder called “x64” and “x86” was included. Try this tutorial out at first with the program in the “x64” folder and if that doesn’t work try the tutorial out with the program in the “x86” folder.

## Step 2: Startup

- Run the Dolphin Emulator
- Run the appropriate version of my Randomizer tool for the appropriate game (Run this tool as an Administrator)

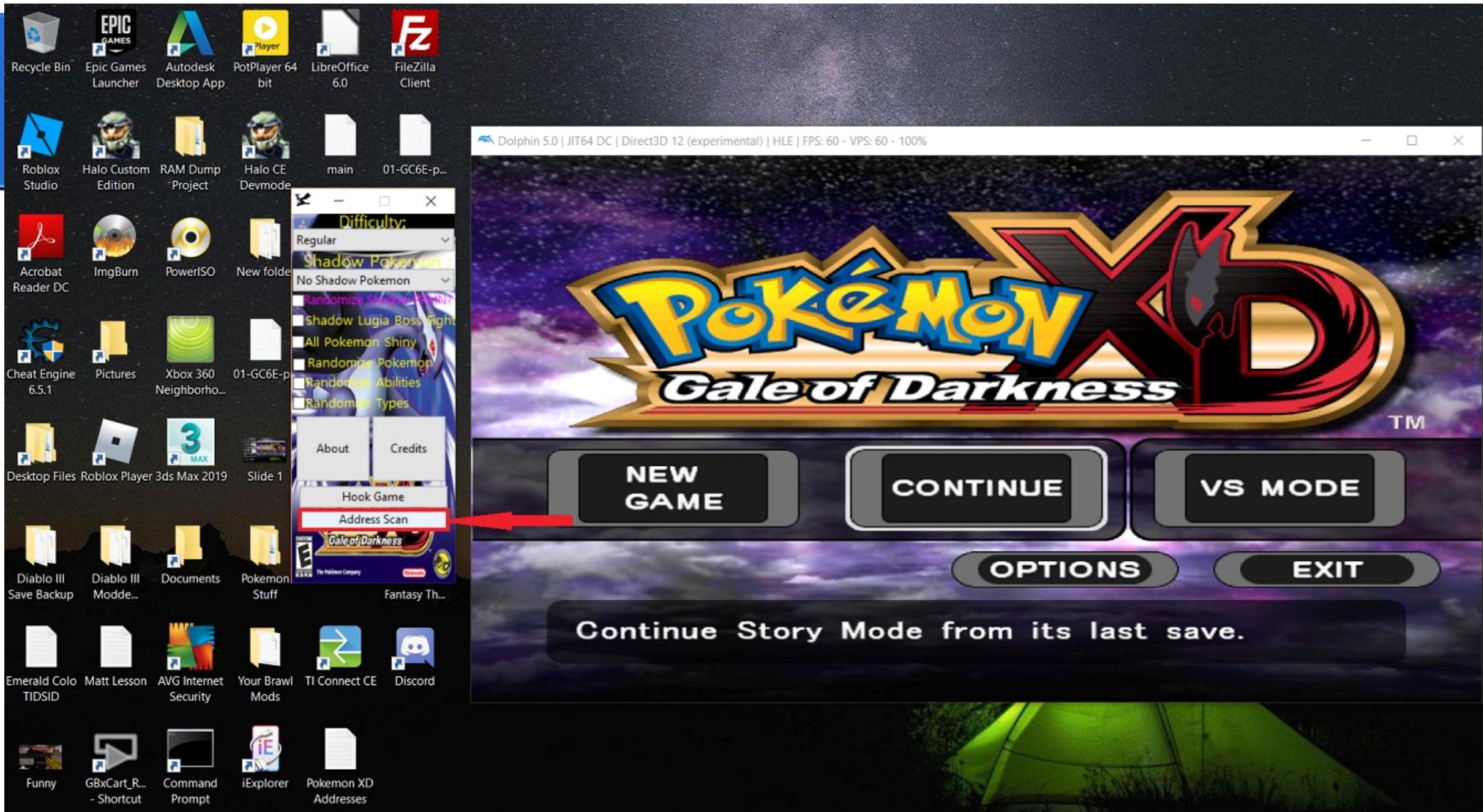
# Step 3: Hooking

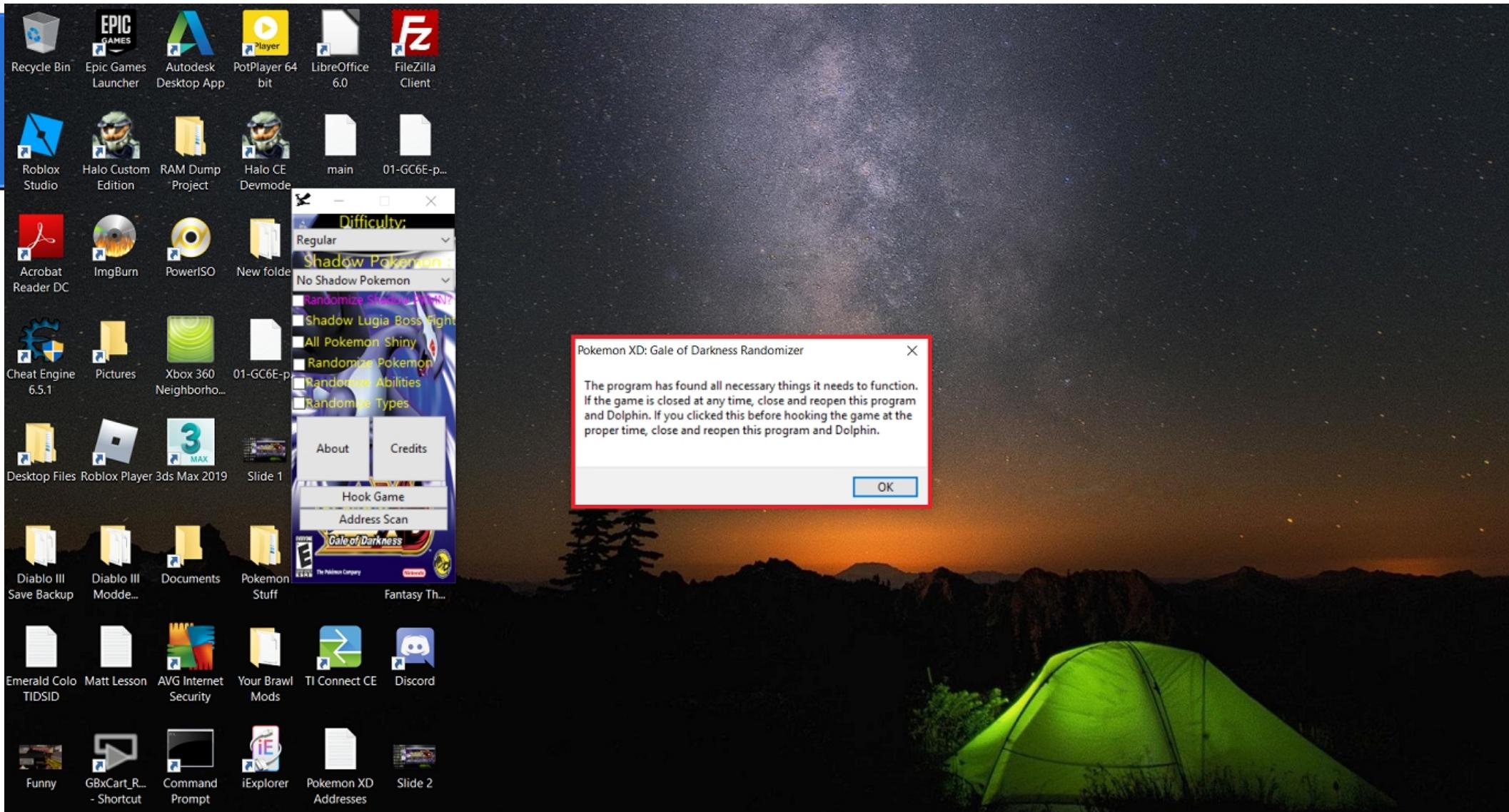
- Launch Pokemon XD to Randomize
- Get to the title screen of Pokemon XD
- Press start to proceed
- Press “Hook Game” on the Randomizer
- Demonstration of this on next slide/page



## Step 4: Address Search

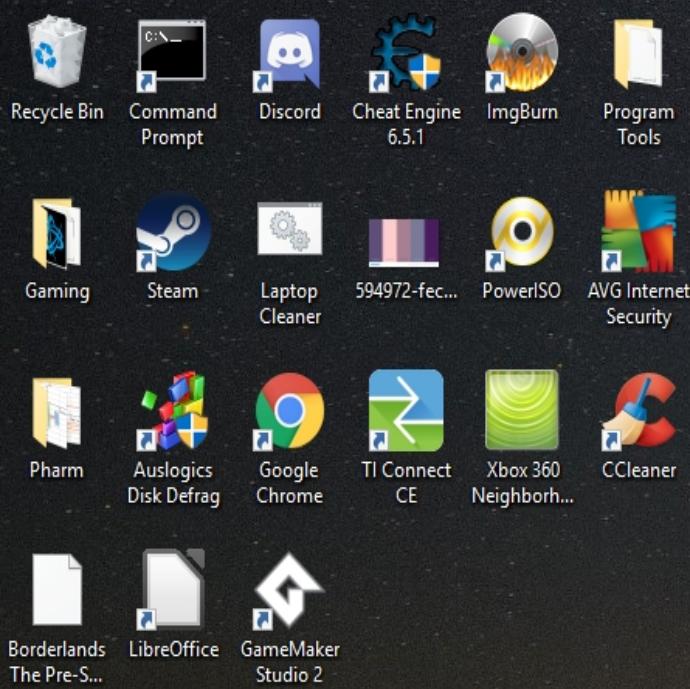
- Click on the Address Scan button.
- The program will freeze for a while. It is finding the necessary addresses so that the program can function.
- A box will pop up telling you the program has found all it needs to function. After you click OK on the message box, proceed to the next step.
- Demonstration on next slides/pages

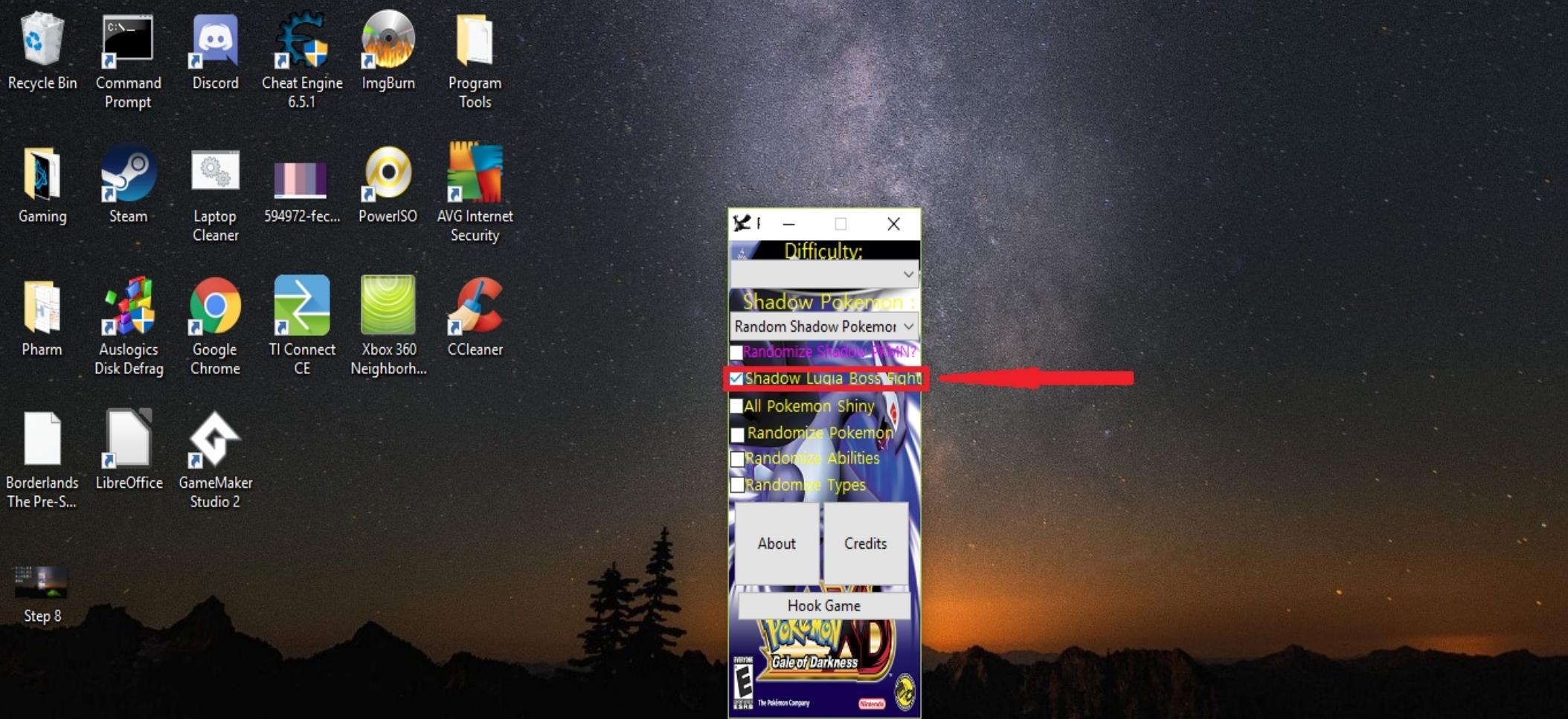




# Step 5: Customization (Pokemon XD)

- Almost exactly the same as Pokemon Colosseum
- The only things different are the “Shadow Pokemon” randomization options, the lack of the ability to Randomize Hyper Mode, and an option to initiate a Shadow Lugia Boss Fight.
- Shadow Pokemon are randomized based on index and whenever this is randomized at first, almost everything you encounter will be shadow. Chances of encountering Shadow Pokemon are  $(82 - \text{total shadow pokemon purified})/83$
- Chances of Shadow Pokemon decrease as you purify more Shadow Pokemon
- Checking the Shadow Lugia Boss Fight checkbox spawns a Shadow Lugia with the same stats it would have on “Impossible Mode.” Bring a Master Ball.
- Demonstration of this on next two slides/pages





# FAQ – How does this tool work?

- This tool does SEVERAL things to accomplish its purpose. First off, it generates a random number based on what time of the day it is in milliseconds.
- Then, based on said random number, the tool generates a number within the parameters I set to a variable.
- This variable is then written to data areas in Dolphin's RAM. On Windows 10 and an Intel 64-bit processor, data values in Cheat Engine view are generally 0x10000 or 0x20000 from their Dolphin equivalent in the Cheat Search. This is because Cheat Engine looks at every bit of program code while Dolphin's Cheat Search only searches within game code. I don't know the data structure of each possible combination of OS/Processor, so I imbedded a search script in the program so it'd be able to find these necessary values automatically.
- Several different variables are used and values are changed in and out of them and written every millisecond. Health syncing was a bit difficult to do as it could only be done on a millisecond-by-millisecond basis, so I had to find an area in the memory that marked the crucial moment when health couldn't be synced properly (directly after the Pokemon comes out of its Pokeball). The tool checks to see if the Pokeball animation is playing, and then writes the appropriate health until it stops playing that animation.
- Further links for research and other purposes will be on the last slide

# FAQ – What is DBK64?

- DBK64 (and DBK32) are both system driver files (.dlls) that are packed with the software. These files load something called Dark Byte Virtual Machine (DBVM). A window should flash up saying “DBK64 Loaded” whenever my tools are started. Dolphin has memory protection, and by allowing the tool to have Kernel Level Access via DBVM, my tool can bypass Dolphin’s Memory Protection. DBK64 flashes up to alert the user such bypassing is occurring. I use this module to do nothing Malicious, but some users DEFINITELY could. Dark Byte (Eric), the creator of Cheat Engine, made DBVM.

## FAQ – Is it a Virus?

No, my tools are not packed with Malware, Viruses, Bloatware, Trojans, Worms, Rootkits, or anything negative of any kind. These tools are used to hack into the Dolphin Process and employ the same strategies some Trojans do to alter code, but only for the purposes of what we want.

Antivirus software uses something called heuristics, that is, if something looks or acts somewhat like a virus, the Antivirus software identifies the program as a virus. I can assure you the software is safe.

# Warnings and Misc. Info

- DO NOT CHANGE RANDOMIZER SETTINGS DURING A BATTLE! If you really want to change Randomizer settings, do it after a battle ends.
- These programs only work whenever Dolphin is first launched and whenever the first game has been loaded. Dolphin reallocates its memory after every game launch, so if you launched something like Metroid and then launched Pokemon XD, the tool wouldn't work. You'd need to close and restart Dolphin to get it to work. Also, if you load Pokemon XD/Colosseum, close out, and then load Pokemon XD/Colosseum again, you'll also need a restart.
- With the Shadow Lugia Boss Fight, uncheck the checkbox after Shadow Lugia is thrown out. Otherwise, Lugia will have infinite health and respawn infinitely.
- I don't know what OSs/Processors this tool will work on. We're pretty much flying blind here. Don't be surprised if Dolphin crashes or your save is corrupted.
- If you wouldn't mind telling me which OSs/Processors these programs work with, or wouldn't mind me remote controlling your laptop to build a 32-Bit version of these tools, you may contact me on my YouTube Channel (<http://www.youtube.com/c/ReclaimerShawn>) or my email address ([EpicZombie7@gmail.com](mailto:EpicZombie7@gmail.com)) I check my YouTube channel a lot more than I do my email, but you don't want to be giving TeamViewer information out to random people on YouTube as that can be VERY dangerous.

# Credits

- First and foremost, I'd like to thank both God and his son Jesus Christ for giving me the knowledge and patience to make this trainer.
- Reclaimer Shawn = Programming, Form Designing, Address Finding
- Dark Byte = Bypassing Memory Protection
- Codejunkies and Ralf = For their AR Codes that allowed me to dissect these games
- Zanzer = RNG & Programming
- StarsMmd = For Disabling the Colosseum Shiny Pokemon Glitch & Address Finding
- Nintendo = For Creating the Pokemon Franchise
- Dolphin = For Creating the Emulator this game was played on
- Ryan Robinson = For letting me TeamView his laptop in order to make the program compatible with AMD Processors

# Further Links and Resources

- Research Links:

[http://bulbapedia.bulbagarden.net/wiki/Personality\\_value](http://bulbapedia.bulbagarden.net/wiki/Personality_value)

<http://bulbapedia.bulbagarden.net/wiki/Statistic>

[http://www.smogon.com/ingame/rng/pid\\_iv\\_creation](http://www.smogon.com/ingame/rng/pid_iv_creation)

[http://bulbapedia.bulbagarden.net/wiki/Pok%C3%A9mon\\_data\\_structure\\_in\\_Generation\\_III](http://bulbapedia.bulbagarden.net/wiki/Pok%C3%A9mon_data_structure_in_Generation_III)

<http://bulbapedia.bulbagarden.net/wiki/Experience>