



Get Ready

The essential files required for modding GTA V

SCRIPT HOOK V

Script Hook V is a library that allows the execution of custom scripts in Grand Theft Auto V (GTA) on PC. It provides access to the game's native functions and enables developers to create mods for the game. These mods can range from simple adjustments to gameplay mechanics to completely new features and content.

Script Hook V is an essential tool for modders in the GTA community who want to create and share their own custom content and enhance the game's experience for themselves and other players.

It is installed in the game folder, also called the root folder, where you will also find GTA5.exe. Along with **Script Hook V** (SH5) you install **dinput8.dll** (the asi loader).



*Script Hook V is the library that allows the use of GTA V script native functions in custom *.asi plugins. Note that it doesn't work in GTA Online, script hook closes GTA V when player goes in multiplayer. This distrib also includes the latest Asi Loader and Native Trainer.*

Alexander Blade, author of Script Hook V



open IV

OpenIV (Open 4) is a free tool used for modding and editing various aspects of Grand Theft Auto V, including the game's graphics, textures, sounds, and gameplay mechanics. It allows users to modify the game's files, create new content, customize the game's graphics, and add custom vehicles, weapons, and other elements to the game.

OpenIV is also used to load mods, which are custom modifications made by users to enhance or change the game in some way. These mods are called addons and are found in a folder containing a package called dlc.rpf.

Mods can range from simple graphical tweaks to complex gameplay overhauls and offer players a great degree of customization and control over their gaming experience.

OpenIV allows users to edit and modify the game's .rpf files including replacement and addon mods. These files contain a variety of game assets such as models, textures, and other game data. Without OpenIV, it would be difficult or impossible to access and edit these encrypted files, to customize mods, add custom content such as addons, and tweak game settings.

In summary, OpenIV is widely used in the GTA modding community and is considered an essential tool for creating and sharing user-generated content.



With the installed ASI loader and plugin, you will not be able to go into GTA Online. This will keep you from accidentally being banned and GTA Online will be protected from modifications."

Open IV Development Team



new user checklist

If you're new to GTA 5 modding, you have likely installed the absolute essentials: Script Hook V and OpenIV. Now let's take a closer look at what you've installed, where you installed, and the reason why.

In summary, these are the files you absolutely should have, almost all will be in your game installation folder, where you will find GTA5.exe:

1. dinput8.dll (packaged with Script Hook V)
2. HeapAdjuster.asi
3. NoBoundaryLimits.asi
4. OpenIV.asi
5. PackfileLimitAdjuster.asi
6. ScriptHookV.dll
7. ScriptHookVDotNet.asi (and associated xml & dlls)
8. Menyoo.asi, or TrainerV.asi (Simple Trainer).

Trainers are amazing, you could choose one of many, or install more than one. You don't need to install NativeTrainer.asi which comes with Script Hook V.

The last essential file is the **gameconfig.xml** and there are several options. Now let's review what files and mods should be in each folder.

Your Game Folder

Call it the game folder, the root folder, the installation folder, the GTA V folder - whatever you want - this is the folder that contains the file called GTA5.EXE and it's where the magic of modding begins.

Script Hook V

Once you extract/unpack the ScriptHookV zip you will see a folder called bin. Inside are three files. Ignore the one called NativeTrainer.asi and place dinput8.dll (aka asiloader) and ScriptHookV.dll in your game folder. These are the two files that make modding possible.

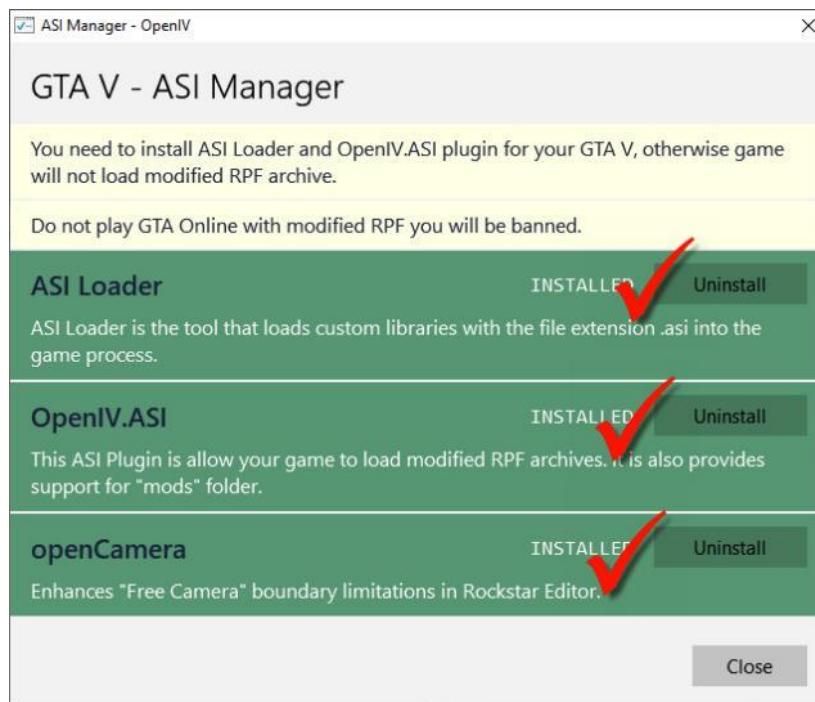
There is also a RAGE Plugin Hook (RPH) which is popular with some GTA5 communities but not important for new users unless required for a specific mod.

Never use the dinput8.dll from the windows system32 folder.

Open IV

When you install OpenIV you are presented with the GTA V - ASI Manager during the installation. It offers you 3 options.

1. **The ASI loader.** You can accept this, but if you installed Script Hook V first you already have it because the ASI loader is dinput8.dll. This file is essential because it loads all files with the asi extension including OpenIV.asi and your Trainer and many others.
2. **OpenIV.asi.** This is the plugin packaged and installed with Open IV (the editor/program) that will load the addons in your Mods folder (your dlcpacks). Again, this file is essential unless you mod the game files and folders directly. You will still need the program itself to make edits.
3. **openCamera.asi.** This file isn't mandatory to install but it can't hurt. It is only used in combination with the Rockstar Video Editor.



Heap and Pack Limit Adjusters

The Heap Limit Adjuster and the Packfile Limit Adjuster are essential if you are installing addon mods as they will help make the game stable.

Without them, always used in combination with a gameconfig.xml mod, your system is very likely to crash, even with only a single vehicle or map addon installed.

Trainers

These are by far the best mods you can install. Trainers allow you to enhance GTA5 in unimaginable ways. Everything from changing your player or NPC clothes and hairstyles, modifying the colour and characteristics of your vehicles, changing the weather and time, and much more. You also will benefit from a host of new functionalities such as teleporting to any location - even beyond the boundaries of San Andreas.

ScriptHookVDotNet

This mod is mandatory if you want to run installed script mods or scripts of your own. Not to be confused with Script Hook V which it depends on.

NoBoundaryLimits

A wonderful plugin that is almost mandatory if you want to install addon worlds and maps. As the name implies, it significantly extends the size of the GTA5 open world.

gameconfig.xml

One of the most important mods, for stability, is the gameconfig.xml file, which is available as a customized mod. Contrary to the other files mentioned above, this file requires OpenIV for installation. It is located here

[\mods\update\update.rpf\common\data.](#)

Note: the gameconfig.xml mod is actually a replacement for the game version.

DlcList.xml

Although not strictly a mod, this editable file is critical to modding. It contains the entries for all your addons, all the mods contained in dlc.rpf packages.

NativeUI.dll

This is the only file mentioned here that goes in the Scripts folder. It is no longer supported but is still required by many mods. It is slowly being replaced by LemonUI and is primarily used to create mod menus.

Weapon Limits Adjuster

This mod can prevent crashes if you install too many weapons, including those found on vehicles such as fighter planes. From the mod description page: The game has a hardcoded limit on the number of weapons.meta files that can be loaded and on the total number of weapon components that can be defined. Rockstar increases every time new weapons.meta or weapon components are added in DLCs.

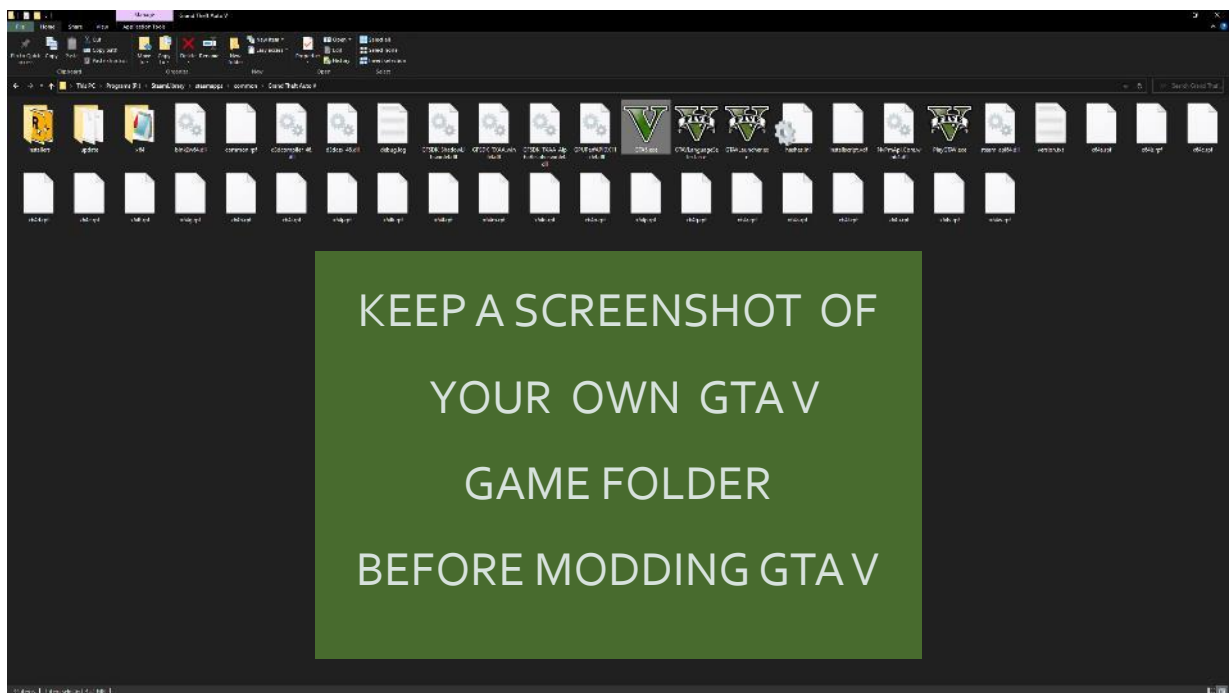
Reaching any of these limits when installing weapon mods makes the game crash while loading. This ASI mod allows you to increase these limits to prevent those crashes and infinite loads that are so annoying and frustrating.

INSTALL mods

step by step

Before we embark on this exciting modding journey, before we start installing any mods, let's take a quick overview of what your game folder looks after your first installation. This fresh version of the game is what we call vanilla. Whether you're on Steam, Epic Game Store, Rockstar, or using physical media like DVDs, this file and folder structure is the starting point., Let's get it right to avoid problems downstream.

RECOMMENDED: take a screenshot, like the one below, immediately after installing the game. This is to document your vanilla files to distinguish them from mods. You will have roughly 44 items (files and folders) in the main game folder. We will also refer to this folder, where GTA5.exe is located, as the root folder or installation folder.



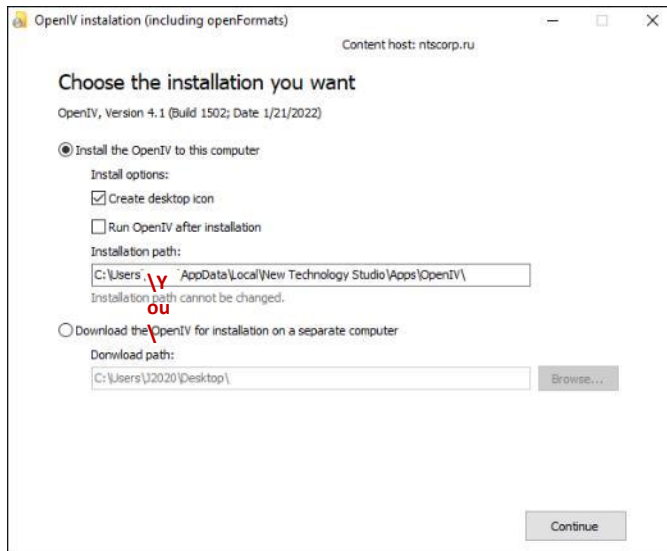
We will start by installing the free program called **Open IV** which was introduced earlier in our guide. It is likely pronounced Open Four because it was developed originally at the same time as GTA IV but many people call it Open Eye Vee - so call it what you wish, just make sure to install it. You can download Open IV at their Official Site. Just click the download now button at the top of the page and start the installation as you would any Windows software.

NOTE: If the Open IV site is not available, you will need to find an offline version from a reputable website. Always check for viruses or other malware when downloading mods, particularly executable files, the ones with .exe extensions. A good free site to use for scanning files is Virus Total but also use your own anti-virus software.

open IV

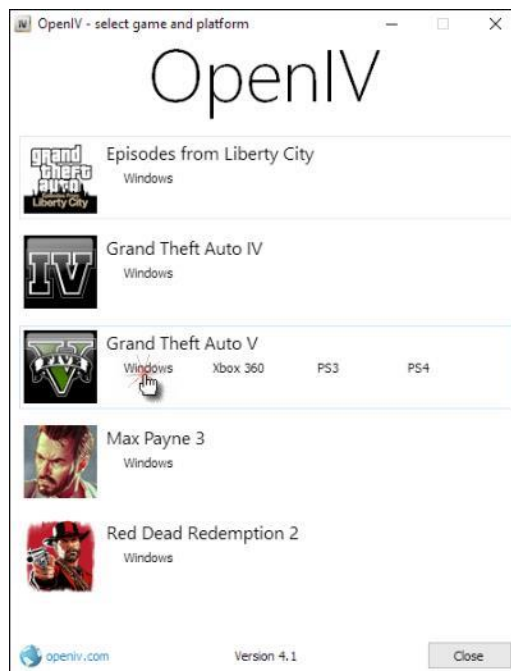
To easily install Open IV, follow the process like any other Windows software. Please note you can't change the installation path, just accept it.

1. Select your language.
2. Accept the EULA (End User License Agreement)
3. Select Install the Open IV to this computer and you will be presented with this dialog box.

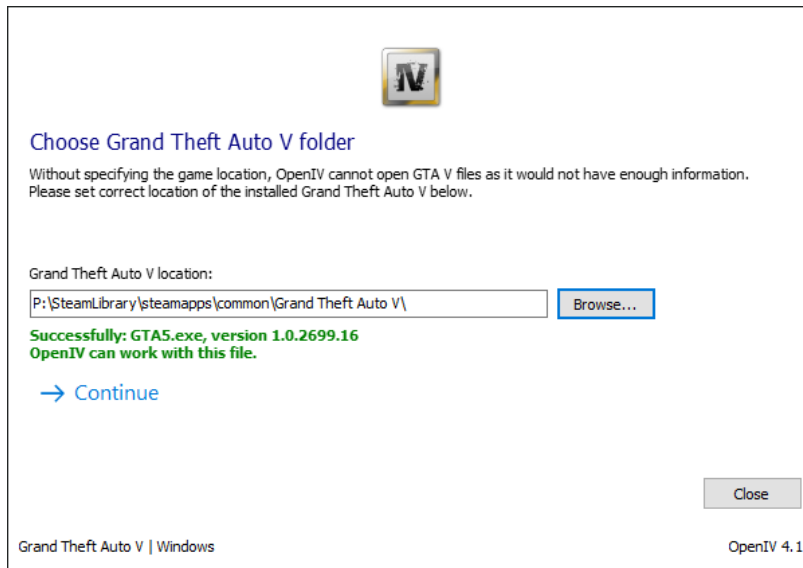


4. Hit Ok to continue and then launch OpenIV from the shortcut on your desktop. If you don't see a shortcut you can start OpenIV.exe from this location: <C:\Users\YourUserName\AppData\Local\New Technology Studio\Apps\OpenIV>

5. Once OpenIV has launched, select Grand Theft Auto V and Windows.



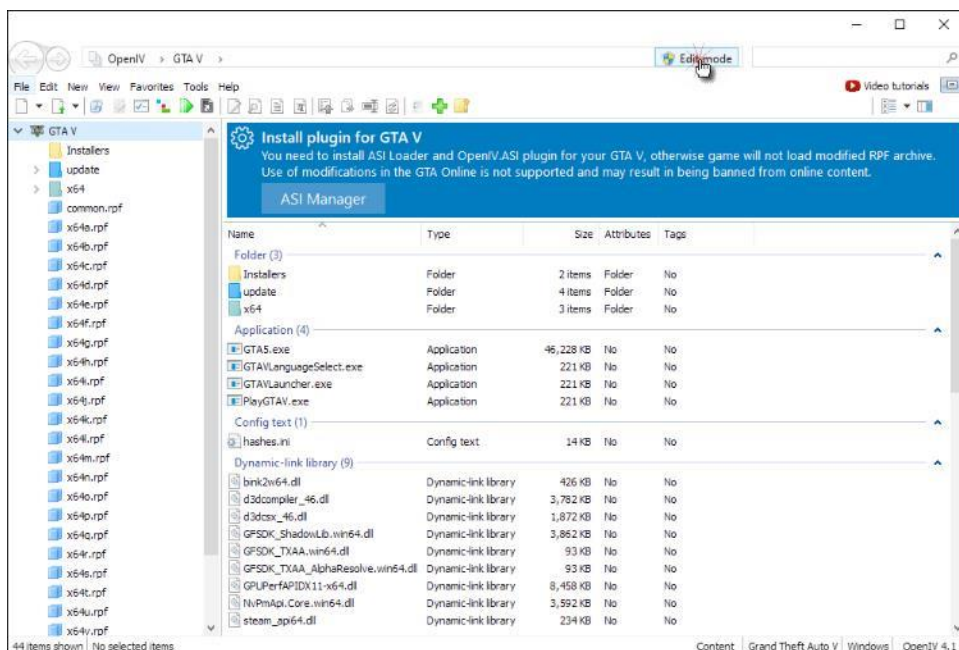
6. From the next dialog, select browse and navigate to your GTA 5 folder.
If you don't know where it is consult this article on our site: [How to find GTA5.exe](#).
7. Click Continue when prompted, twice, and that's it. You've successfully installed OpenIV.



CONFIGURING open iv

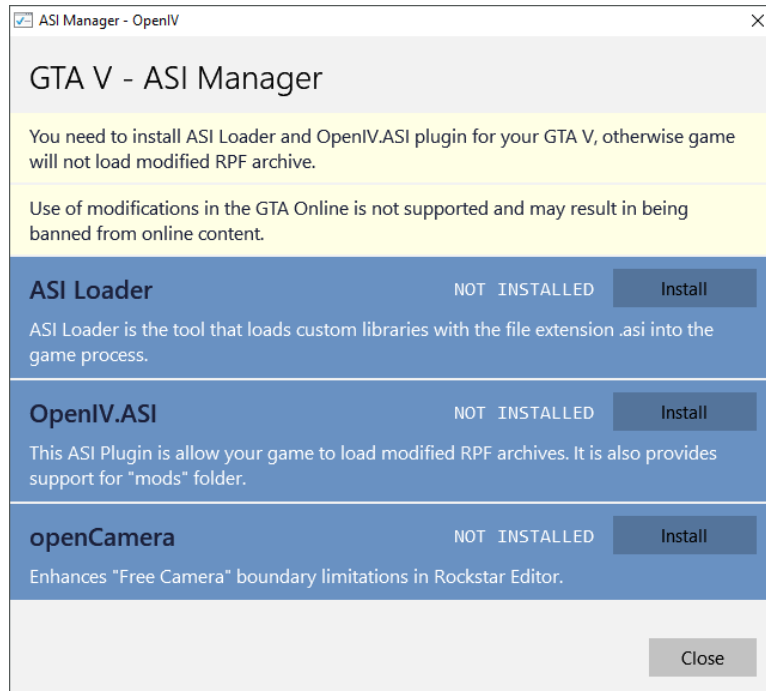
Now that you've installed OpenIV, let's do some basic setup and configuration.

1. Launch OpenIV and hit the Edit button at the top. Select Ok when you get the warning. Another message in blue will appear to install plugin for GTA V. Click on the ASI Manager button to continue.

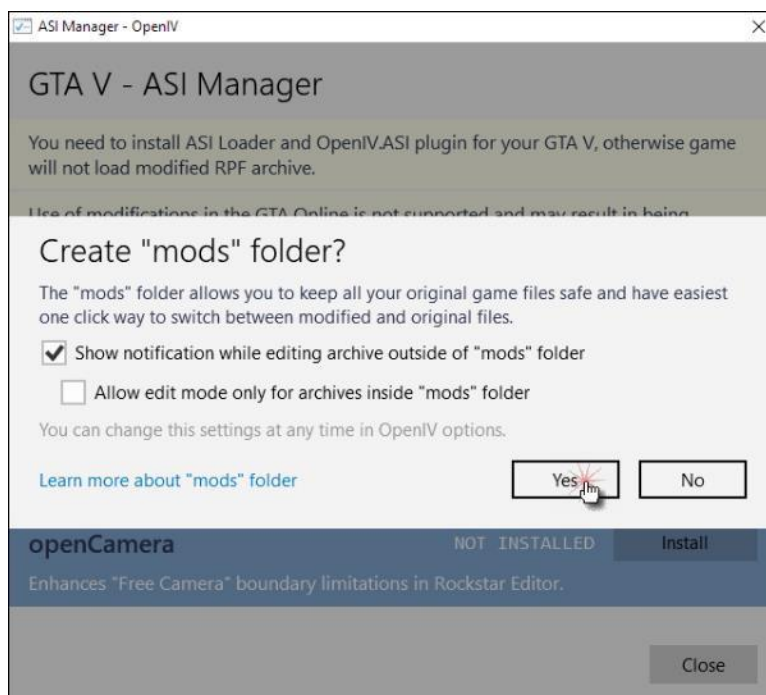


CONFIGURING open IV

2. When the GTA V - ASI Manager pops up, install all 3 selections: The ASI Loader, OpenIV.asi, and openCamera. Notice the warning about getting banned if you play GTA online with mods. There is very little danger of that happening.



3. You will get a message to create a Mods folder, select yes and accept the defaults. Note that the folder created by OpenIV will be empty, this is normal.



Essential mods

We will now install 3 absolutely essential mods - one that enables us to hook into the GTA 5 game engine known as RAGE and 2 for stability. All 3 of these mods are copied to your root folder where GTA 5.exe is found and where your game was installed.

Script Hook V

Download Script Hook V from [this link only](#). Once extracted you will see a folder called bin. Install 2 of the 3 files in the bin folder of the zip archive. The 2 files to install are: ScriptHookV.dll and dinput8.dll. You don't need to install NativeTrainer.asi. Copy these files to your root folder. Note if you installed OpenIV you will already have dinput8.dll installed. Two files below will be installed:

ScriptHookV.dll

dinput8.dll (also installed by OpenIV as ASI loader)

Heap Limit Adjuster

This mod which increases heap memory can be [downloaded here](#). It is packaged with 2 files and will generate a log file. Extract (unzip) and install in the root folder, same as the other files here. These are the files that will be installed:

HeapAdjuster.asi

HeapAdjuster.ini

HeapAdjuster.log (generated after first run)

Packfile Limit Adjuster

This mod increases stability for addons such as vehicles and all addons that are packaged as dlc.rpf which we will discuss later on. It includes one plugin asi file and a configurable ini file.

Download it from this link. Extract (unzip) and install in the root folder, same as the other files here. These are the two files that will be installed:

PackfileLimitAdjuster.asi

PackfileLimitAdjuster.ini



TRAINERS

Our next installation project will be installing a Trainer, probably the best mods ever. Unlike our essential mods, which don't really have any alternatives, there are dozens of excellent trainers you can choose from.

We will just discuss two of the most popular, Menyoo and Simple Trainer. They often are both installed and they seem to play and behave well together. You can read more [here](#).

Menyoo

Download Menyoo from this link only ([download latest release](#)). Once extracted you will see a folder called menyooStuff and a file called Menyoo.asi. Install both the file and the folder in the root folder. In passing, all files with the asi extension will be installed in the root folder. Files installed:

Menyoo.asi

menyooStuff (folder)

menyooLog.txt (log file generated after first run)

Note: Menyoo also has a configuration file, menyooConfig.ini, in the menyooStuff folder.

Simple Trainer

This trainer mod, which is very popular as well, can be [downloaded here](#). It is packaged with 2 files. Extract (unzip) and install in the root folder, same as the other files here. Files installed:

TrainerV.asi

trainerv.ini



mods folder

With most of the essential files out of the way, let's look at setting up and configuring the Mods Folder. In passing, you can name it mods or Mods, Windows doesn't care. Why are we creating a Mods folder rather than modding the game directly? We do it for three main reasons. First it prevents us from damaging, deleting, or corrupting game files. If we did damage the original game files we would need to do a verify integrity or a full reinstall to fix our game - both taking time.

Secondly, it allows us to keep all our mods intact after each Rockstar GTA 5 patch/update. It doesn't guarantee our game will work, but at least none of our mod files will be overwritten or replaced by the update. Finally, we can think of the game folder as a backup for our Mods folder. Now let's look at what goes into our Mods folder. We will take the minimalist approach for simplicity and to save disk space. Contrary to what many people advise, you only need a few folders and files for a successful Mods folder.

Here is a step by step installation guide, done manually to familiarize yourself with the file and folders.

Step 1. We create a sub folder called Update inside the Mods folder. It will look, depending on your own installation, something like this: `Grand Theft Auto V\Mods\update`

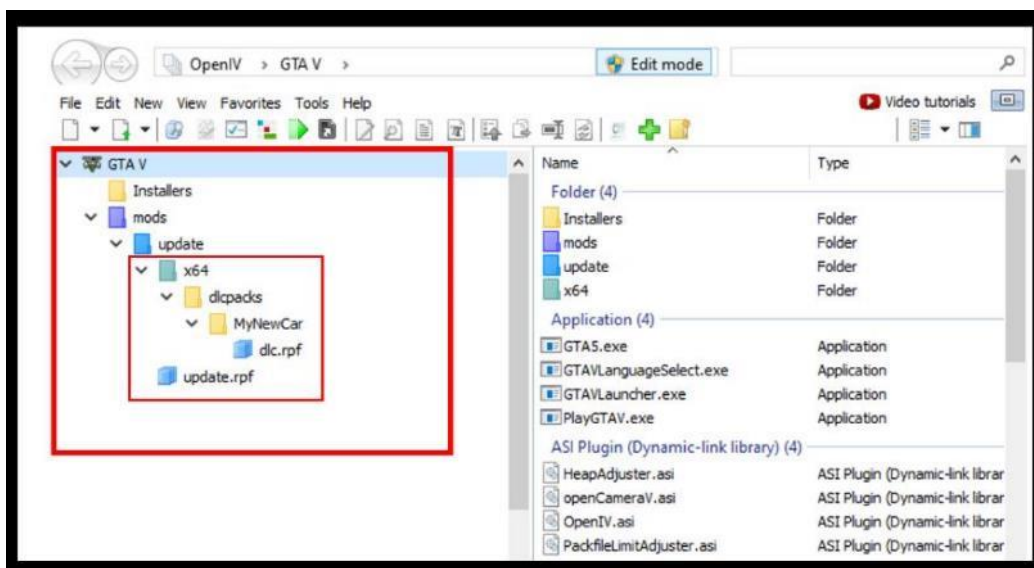
Step 2. We now create a sub folder called x64 inside the Update folder. It will look, depending on your own installation, something like this: `Grand Theft Auto V\Mods\update\x64\`

Step 3. We create a sub folder called dlcpacks inside the x64 folder. It will look, depending on your own installation, something like this: `Grand Theft Auto V\Mods\update\x64\dlcpacks`

Step 4. We go back to our folder called Update inside the Mods folder. There we copy update.rpf from the game to our Update sub folder. With the April 2022 update, a new folder called update2.rpf was added which should be copied as well. It will look, depending on your own installation, like this:

`Grand Theft Auto V\Mods\update.rpf` and `Grand Theft Auto V\Mods\update2.rpf`

The screenshot below, cropped from OpenIV, hopefully is worth a thousand words. The Mods folder contains an **Update** sub folder which itself contains the **x64** subfolder and a file called **update.rpf**. Inside **x64** we have a sub folder called **dlcpacks** where you will install your addon mods for example MyNewCar. Each of those addon mod folders will contain a file called **dlc.rpf**.



gameconfig

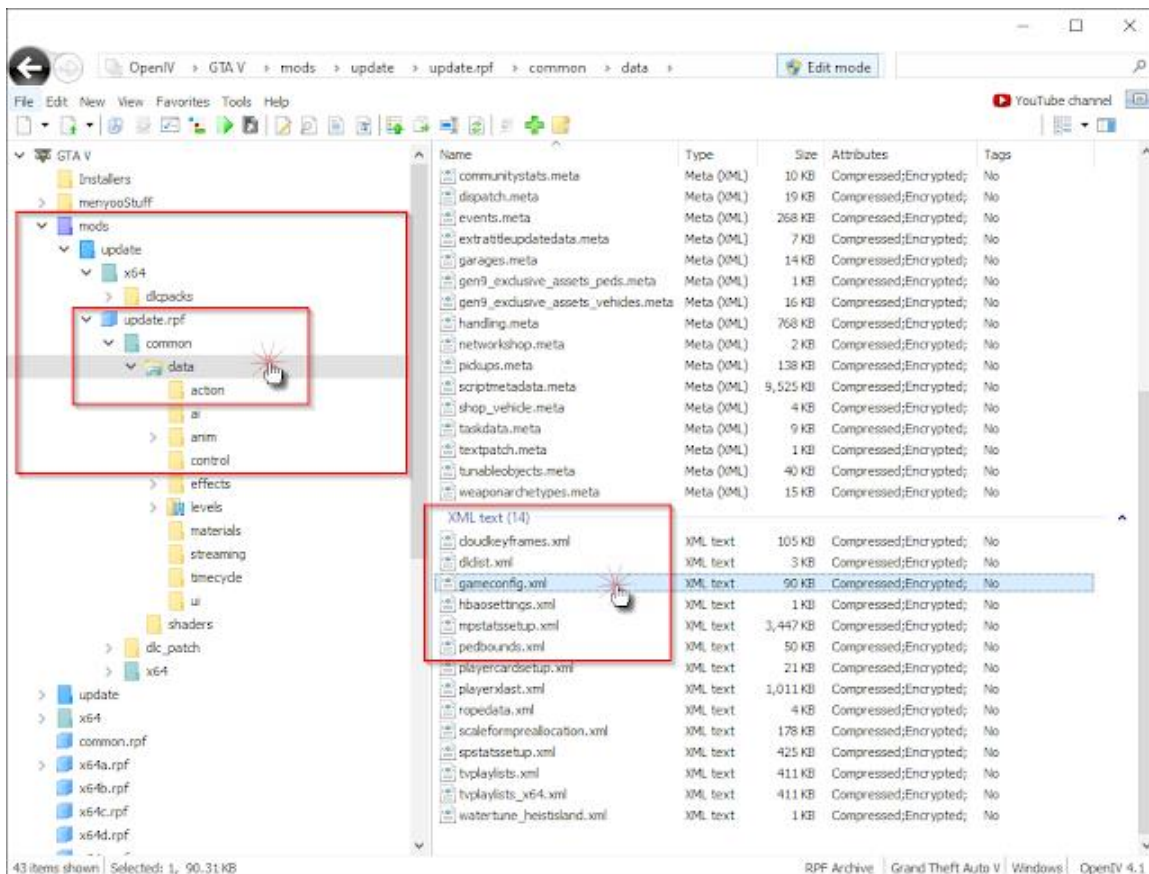
To ensure your GTA 5 game runs well, without crashing, without loading infinitely, you need to have what we call the **GTA 5 Stability Trinity**. This unholy alliance is comprised of 3 mods. The first two are the [Heap and Packfile limit adjusters](#) which we've already and installed. The third mod, to be discussed here, is [gameconfig.xml](#) and it is absolutely critical for a modded GTA 5.

There are several important difference between the gameconfig and all the other mods we've covered so far. First, unlike all the other mods discussed, the gameconfig can't be installed with Windows Explorer. It can only be installed with OpenIV (or another program called [CodeWalker RPF Explorer](#)) because it is located in the package called [update.rpf](#) which is encrypted.

Secondly, gameconfig.xml is actually a modified version of an existing game file. Finally, it is a text file whereas the asi and dll files we installed previously are all binary files. Being plain text, this file can be easily edited but with appropriate caution as it is best left to the experts. The game (vanilla) version of gameconfig.xml is located at: [Grand Theft Auto V\update\update.rpf\common\data](#)

There are many gameconfig.xml mods available. An excellent mod version of gameconfig.xml can be [downloaded here](#). It should then be installed, with OpenIV, just by dragging and dropping the file, at this location: [Grand Theft Auto V\mods\update\update.rpf\common\data](#)

When properly installed in the path above, this is the view from OpenIV. Note: when doing editing in OpenIV make sure the **Edit Mode** button at the top of the screen is toggled on.



dlclist

The **dlclist.xml** mod also has a few differences with the other mod files we've covered so far. First, unlike all the other mods discussed except the **gameconfig.xml**, the **dlclist.xml** can't be installed with Windows Explorer. It can only be installed with OpenIV (or CodeWalker RPF Explorer) because it is located in the package called **update.rpf** which is encrypted.

Secondly, like the **gameconfig.xml**, **dlclist.xml** is also just a modified version of an existing game file. Similarly, it is again a plain text file and it will certainly be the file you edit the most.

This is the first file we discuss that isn't downloaded because it's already part of your game and unlike **gameconfig.xml** which also exists as a game file, you'll be responsible for all the edits to **dlclist.xml**. These edits will be adding entries for mod addons such as vehicles and maps, informing the game to load these dlc addons.

You don't need to do anything at this point because the **dlclist.xml** creation was part of what we covered when we created our Mods folder. We will explore this critical file in more detail when we install our first addon. The game (vanilla) version of **dlclist.xml** is located along side of **gameconfig.xml** at:

Grand Theft Auto V\update\update.rpf\common\data

The mod version folder of **dlclist.xml** is also located in the same place as your **gameconfig.xml** at:

Grand Theft Auto V\mods\update\update.rpf\common\data

There is also a **dlclist.xml** which is inconsequential in a package called **common.rpf** at:

Grand Theft Auto V\common.rpf

Remember when editing in OpenIV make sure the **Edit Mode** button at the top of the screen is toggled on.



installation



01

Open IV

Install OpenIV accepting all defaults and include the 3 options from the ASI Manager Screen. Just follow the sequence as you would installing any other software

02

Script Hook V & Dinput8

Install these two essential mod files in your game installation folder, the root folder, where GTA5.exe is located. You can overwrite dinput8.dll if it has already been installed by OpenIV

03

Heap and Packfile Limit Adjusters

Install the Heap Limit Adjuster to better manage memory and the Packfile Limit Adjuster to increase the number of addons (packfiles). Both of these will be in your root folder. Keep the default values for the ini files for now

04

Mods Folder

Create a Mods folder, or mods, as a subfolder of the GTA 5 root folder and copy over Update.rpf from the game's Update folder into your Mods folder



05

Gameconfig

Install a gameconfig.xml mod, using OpenIV in edit mode, for your version of the game. Initially start with the Base Traffic and leave all values as default until you have more experience

06

Trainers

Install a trainer mod, Menyoo or Simple Trainer, or you can install both if you prefer. Follow the instructions but trainers go in the root folder as do all asi mods

07

Community Script Hook V .NET

Install the latest release of Script Hook V Dot Net (SHVDN) in your root folder. It will allow you to run scripts mods including those you write yourself if you're inclined to do so

08

Scripts Folder

Create a Scripts, or scripts, folder and install a simple script for testing purposes. When adding scripts, do them one by one until you're comfortable your game is stable