This Tutorial is about how to update a DLC Vehicle.

NOTE: It seems as if something has changed in the Games Code, that allows it now, to update DLC Cars in a different Way as before.

But because there is no official Information, I don't know if it is only temporary or will work forever.

As an Example, i will use the S397 FormulaPro\_2021 and i will explain, how it can be updated with an additional Upgrade Option, with that you can remove the vertical Halo Bar, that is directly in Front of the Driver.

The current Version of the Mod is 0.98 and 0.99.

That there are 2 Version Numbers, is caused by the Structure of the DLC Cars, where the Folder with the lower Version Number contains an encrypted MAS File, that contains Physics, Sound, 3D Model and Texture Files.

And the Folder with the higher Version Number, contains an unencrypted MAS File, that contains the veh Files and all Files that are related to the veh Files and also an Upgrade.ini File.

For that, what we want to do, we have to edit the Upgrade.ini File.

**Note**: When you modify the Content of an original MAS File, the Component, that uses that MAS File, gets corrupted for the Multiplayer.

So I would always recommend to create an own Update, to be able to keep the original Mod. In that Way, you just have to remove the Folder with your Update from the ..\Installed... Folder, to be able to join a Multiplayer Server with the original Mod.

And you can easily move it back, when you want to use it in Single Player again.

**Note 2**: You always should avoid white Spaces in File Names, to avoid Problems.

So let's start.

At first, we extract the Upgrades.ini of the MAS File, that is in the

....\rFactor 2\Installed\Vehicles\FormulaPro 2021\0.99

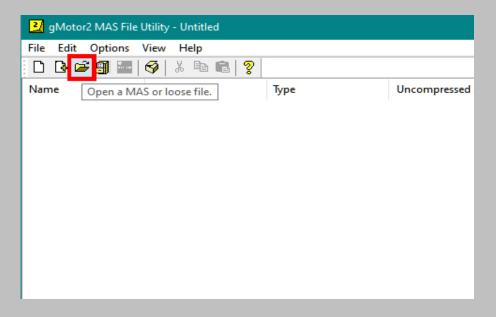
into a new Folder, that can be created on your HDD or SSD, wherever you want.

To extract an unencrypted MAS File, you can use the MAS Tool, that can be found in the Folder ....\rFactor 2\Support\Tools

There currently are 2 MAS Tools, where one is for 32 bit.

You can use both of them, when your System is 64 bit.

So open the MAS2\_x64.exe, click on the open Folder Symbol on the Top left (3<sup>rd</sup> Icon) and in the opening Window, navigate to the Folder ....\rFactor 2\Installed\Vehicles\FormulaPro\_2021\**0.99**. Then doubleclick on the **car-upgrade.mas** File, to open it.



Search for the Upgrades.ini in the listed Files, rightclick on it and select Extract..., to extract the File into the new created Folder.

Now open the **FORMULAPRO\_UPGRADES.INI** File with a Text Editor. (I recommend to use **Notepad++** to edit all kind of rFactor 2 Text Files).

In the opened File, we find the Upgrade for the transparent Halo, as the first Upgrade. It looks like this:

```
UpgradeType="Halo Transparency"
{
   Instance="Halo"

   UpgradeLevel="Halo ON"
   {
     GEN=<Halo>=FPRO_HALO_ON.gmt
   }
   UpgradeLevel="Halo Transparency"
   {
     GEN=<Halo>=FPRO_HALO_10.gmt
   }
}
```

We now copy the last Option and paste it below of it. It should look like this now:

```
UpgradeType="Halo Transparency"
{
    Instance="Halo"

    UpgradeLevel="Halo ON"
    {
        GEN=<Halo>=FPRO_HALO_ON.gmt
    }
    UpgradeLevel="Halo Transparency"
    {
        GEN=<Halo>=FPRO_HALO_10.gmt
    }
    UpgradeLevel="Halo Transparency"
    {
        GEN=<Halo>=FPRO_HALO_10.gmt
    }
}
```

Because we want to get rid of the vertical Bar, we will use the Render=False Tag for the gmt and we also give the Upgrade Level another Name, like "no vertical Halo Bar". So the complete new Upgrade will look like this:

```
UpgradeType="Halo Transparency"
{
    Instance="Halo"

    UpgradeLevel="Halo ON"
    {
        GEN=<Halo>=FPRO_HALO_ON.gmt
    }
    UpgradeLevel="Halo Transparency" {
        GEN=<Halo>=FPRO_HALO_10.gmt
    }
    UpgradeLevel="no vertical Halo Bar"
    {
        GEN=<Halo>=FPRO_HALO_10.gmt Render=False
    }
}
```

Now save the edited FORMULAPRO\_UPGRADES.INI.

**Note**: In this Way, you can add all kinds of Upgrades, that can be used in an Upgrade.ini File. You just have to use the proper Syntax, like HDV= for Physics Upgrades, SFX= for Sound Upgrades or CPIT= for Cockpitinfo.ini Upgrades.

And there are some more Things you need to be aware of, but they will be explained in another Tutorial.

Now we will create the MAS File, that will be packaged into our new Update rfcmp File. Click on the 1st Icon (Create a new MAS File) in the Icon Bar of the MAS Tool and then on the 2<sup>nd</sup> Icon (Add Files to MAS Archiv).

In the opening Window, navigate to the Folder, that contains the edited **FORMULAPRO\_UPGRADES.INI**, select it and click "open".

The File is shown in the MAS Tool Window now.

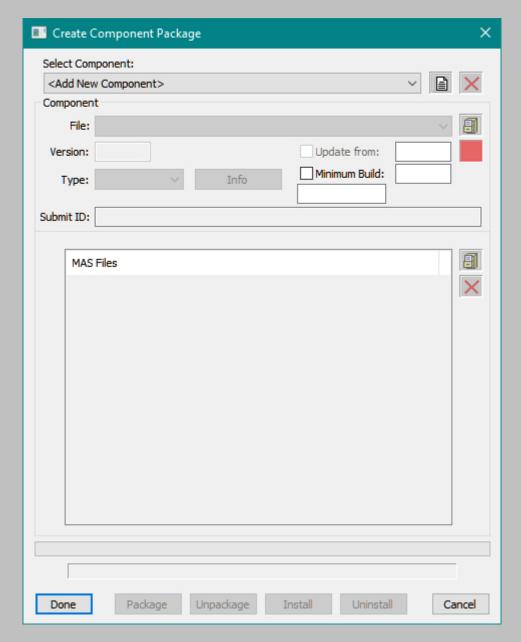
To create the new MAS File, click on the 5<sup>th</sup> Icon (Create the MAS File), give it a Name, like **noHaloOption.mas** for Example and save it.

Now we have to create a new rfcmp File, that can be installed as an Update for the existing Component.

To start with that, you click the 6<sup>th</sup> Icon (Create the Package File) of the MAS Tool, that looks like an open Box.

A new Window opens, where you click on the Button that is labeled with "Create Single Cmp Package".

A new Window gets opened, that is labeled as "Create Component Package":



Now we need to get the Name of the Component, for that we create the Update File. To get it, we again navigate to the Folder where it is installed. In the Folder ....\rFactor 2\Installed\Vehicles\FormulaPro\_2021\0.99, we find a File that is called FormulaPro\_2021.mft, that we also open with the Text Editor. In the opened File, we have the Entry Name=FormulaPro\_2021 Here you have to copy the Name of the Mod: FormulaPro\_2021

Now go to the Window "Create Component Package", open the Dropdown at the Top of the Window and select **<Add New Component>**. In the opening Window, paste the Name of the Mod into the Text Field and click OK.

The 2<sup>nd</sup> Step is to click on the yellow "File Cabinet" Icon, that is on the right, beside of the Dropdown, that is labeled with **File:** and navigate to the rFactor 2 Packages Folder, that normally is ....\rFactor 2\Packages

Enter a Name for the rfcmp File into the Field **File Name:** and click Open. I would suggest to use a Name like **FormulaPro\_2021\_V0.99noHalo.rfcmp**, that it can be identified easily.

The next Field, that we have to edit, is

## Version:

Here I would suggest to enter the same Number, that the current Update has (0.99), with an Addon like **noHalo** 

So it would be

Version: 0.99noHalo

## (Never use only a Number, that already exists as Version Number!!)

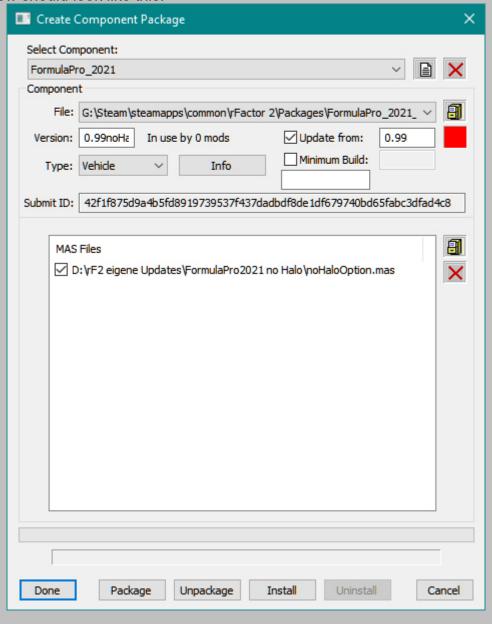
On the right of it, there is a Checkbox, that is in Front of **Update from:**, that has to be checked. When it's checked, you can also enter a Version Number into the Field that is on the right of **Update from:** 

Here you enter the higher Number of the 2 Version Numbers, that is 0.99 in this Case.

In the Dropdown **Type**, you can set **Vehicle** and when you click **Info**, you can add some more Information.

The last Thing to do, is to link the new MAS File, that you have created. On the right of the Field, that is labeled with **Mas Files**, click on the yellow File Cabinet Icon, navigate to the Location where the new MAS File is stored and select it.

Now the Window should look like this:



Now click the Button "Package" on the Bottom of the Window, to finish the Process.

If the rfcmp Files was created, you get the Message

Component packaging complete with no errors displayed.

You can also click the Button "**Install**" now, to install the Update directly, or you install the Update in Game, on the Content Tab, or with the ModMgr.

Your Update can be handled like every other Update.

If you have done everything, click the Button "Done", to close the Window.

If you have Problems, feel free to send me a Mail to <a href="mailto:chris\_rf2onl@gmx.de">chris\_rf2onl@gmx.de</a>

**One last Hint**: You can use this Method for all Updates that you want to create, also Skin Updates for Leagues, for Example.