

How to edit move properties in DmC using UE Explorer

This is the first part in a series about modding DmC.

Find out how to replace objects with others [here](#).

This tutorial will show you how to open a .upk in UE explorer, then edit a value you've found. Finding the value in the first place is often the hardest part of the process and is what takes the most time.

How to decompress a .upk file so we can open it in UE Explorer.

Download [DmC modding tools](#) and extract the files. This rar includes UPK Decompressor and UE Explorer. If you already have them, you can skip this.

Find the upk you wish to edit.

Most of them are in

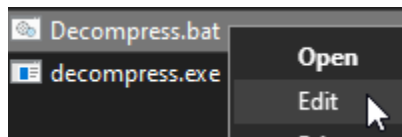
D:\Steam\steamapps\common\DmC Devil May Cry\DevilGame\CookedPCConsole

And the DLC ones are in

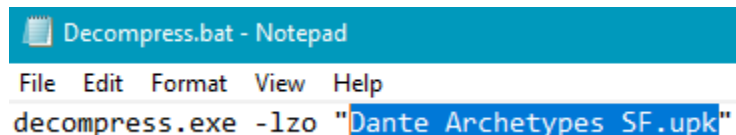
D:\Steam\steamapps\common\DmC Devil May Cry\DevilGame\Published\Content

Copy the file you wish to edit (I'm going to edit Dante_Archetypes_SF.upk as it seems to have most of Dante's move properties).

Paste the file in \DmC modding tools\UPK Decompressor (next to Decompress.bat and decompress.exe).



Right click Decompress.bat and open it with a text editor.



Replace the highlighted text with the filename of the .upk you want to decompress.

Save the file, close your text editor and double click decompress.exe.

A new folder titled unpacked will be placed next to decompress.exe. Within this folder lies your decompressed upk file. I suggest selecting it and hitting ctrl c, ctrl v to make a backup we can revert to that anything ends up breaking to save time decompressing a new file.

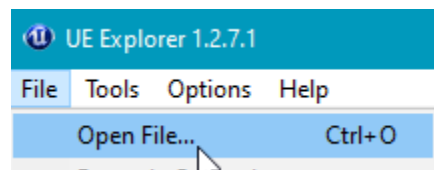
You now have a decompressed .upk that can be viewed with UE Explorer. We can edit this, then place it in the game directory to have our changes applied.

How to find and edit a value in UE Explorer

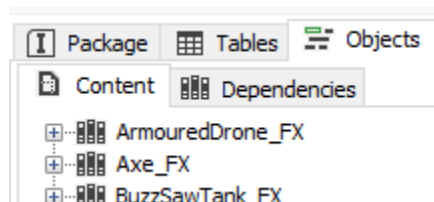


Welcome to the UE Explorer Setup Wizard

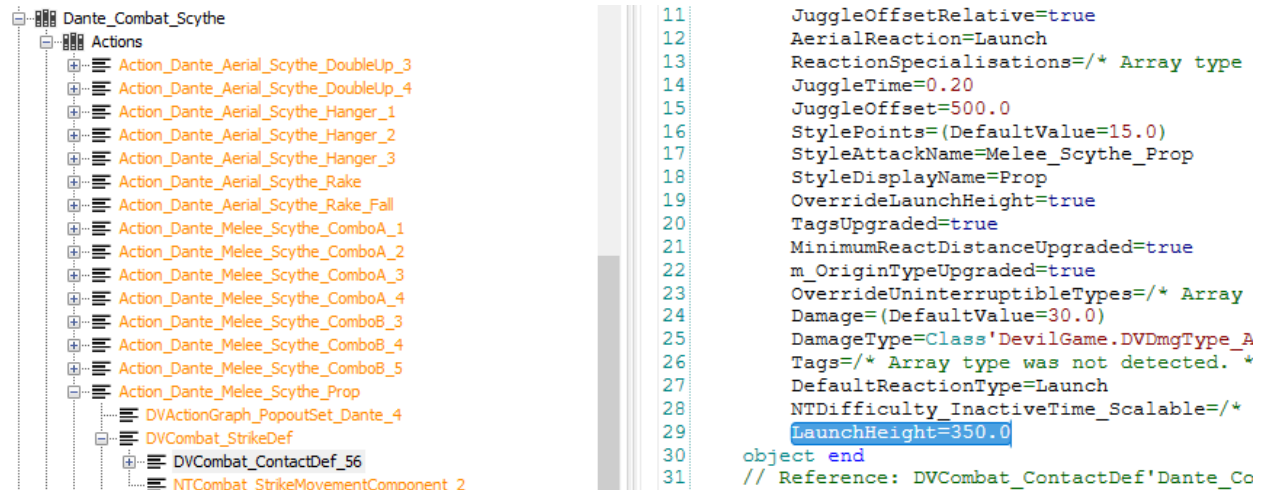
First, install UE Explorer. Run the exe found in \DmC modding tools\UE-Explorer-1.2.7.1.



Open UE Explorer through your Start Menu and click File>Open File then browse to your uncompressed .upk



Click the Objects tab, then the Content tab. Here you can search for whatever you want to change. In my example I'm going to change the launch height of Prop.



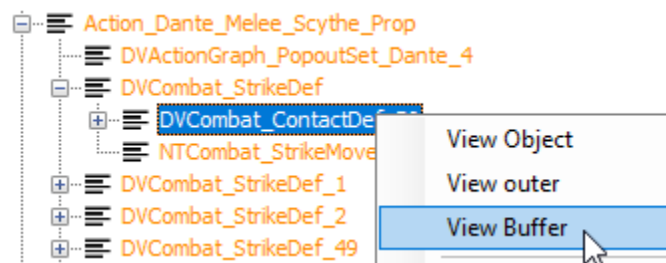
After some searching, I've found that

```

>Dante_Combat_Scythe
  >Actions
    >Action_Dante_Melee_Scythe_Prop
      >DVCCombat_StrikeDef
        >DVCCombat_ContactDef_56

```

Contains a variable named LaunchHeight with a value of 350.0. I'm going to set this to 1000.0 so I can tell I've definitely found the right thing.



To change the value you've found, right click the object and hit View Buffer.

```
begin object name=DVCombat_ContactDef_56 class=DVCombat_ContactDef
  ParryUpgraded=true
  OverrideJuggleTime=true
  OverrideJuggleOffset=true
```

ante_Archetypes_SF.Dante_Combat_Scythe.Actions.Action_Dante_Melee_Scythe_Prop.DVCombat_StrikeDef.

[View](#) [Help](#)

Offset	00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F	00	01	02
00000000	FF	FF	FF	FF	36	1B	00	00	00	00	00	00	B0	02	00	00	.	.	.
00000010	00	00	00	00	00	00	00	00	00	00	00	00	01	FF	1A	00	.	.	.
00000020	00	00	00	00	00	B0	02	00	00	00	00	00	00	00	00	00	.	.	.
00000030	00	00	00	00	00	01	FE	1A	00	00	00	00	00	00	B0	02	.	.	.
00000040	00	00	00	00	00	00	00	00	00	00	00	00	00	00	01	E7	.	.	.
00000050	10	00	00	00	00	00	00	B0	02	00	00	00	00	00	00	00	.	.	.

When hovering over bytes, you'll be shown what it is you're looking at. If the variable you want to edit is at the top of the text file, it'll be near the beginning of this too. There is a recurring trend that you can follow to find the data you want to edit.

FF	FF	FF	FF	36	1B	00	00	00	00	00	00	B0	02	00	00	.	
00	00	00	00	00	00	00	00	00	00	00	00	00	01	FF	1A	00	.
00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	.
00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	B0	02	.
00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	01	E7	.
10	00	00	00	00	00	00	00	B0	02	00	00	00	00	00	00	00	.

The name of the property always comes first.

FF	FF	FF	FF	36	1B	00	00	00	00	00	00	B0	02	00	00	.
00	00	00	00	00	00	00	00	00	00	00	00	00	FF	1A	00	.
00	00	00	00	00	00	B0	02	00	00	00	00	00	typeName			
00	00	00	00	00	00	01	FE	1A	00	00	00	00				
00	00	00	00	00	00	00	00	00	00	00	00	00				
10	00	00	00	00	00	00	00	B0	02	00	00	00	BoolProperty			

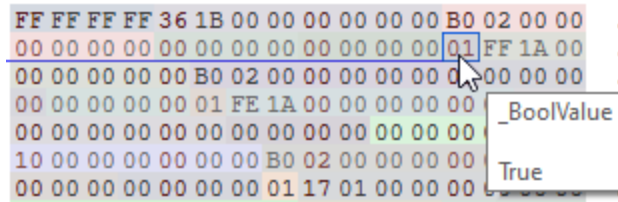
Followed by 8 bytes that contain which type of data the property will be (bool, int, float etc).

FF	FF	FF	FF	36	1B	00	00	00	00	00	00	B0	02	00	00	.	
00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	.
00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	.
00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	.
00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	.
10	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	.

Followed by 4 bytes that contain the size of the property (this is 0 for booleans).

FF	FF	FF	FF	36	1B	00	00	00	00	00	00	B0	02	00	00	.	
00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	.
00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	.
00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	.
00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	.
10	00	00	00	00	00	00	00	00	00	B0	02	00	00	00	00	00	.

Followed by 4 bytes that contain an array index.



Followed by however many bytes of data (defined in the “size” bytes) containing the actual editable data.

For example, this is the “true/false” for ParryUpgraded. Double clicking here and replacing the 01 with an 00, pressing Save, then reloading the object (done by clicking another object and then back on this object) will show that ParryUpgraded has been changed to false.

The variable I want to edit is right at the bottom of the object, so I started by looking there. I’ve found the name, so if I keep looking forward I’ll soon find the bytes that represent 350.0.

Data types:

Floats

Float	350
Object	N/A
Name	N/A
Index	1135542272
Struct	

00000440	27 1E 00 00 00 0
00000450	08 00 00 00 00 0
00000460	A4 0A 00 00 00 0
00000470	04 00 00 00 00 0
00000480	00 00 00 00 1A 0
00000490	00 00 00 00 00 0
000004A0	E1 0B 00 00 00 0
000004B0	00 00 00 00 00 0
000004C0	00 62 18 00 00 0
000004D0	00 4C 19 00 00 0
000004E0	00 1A 0F 00 00 0
000004F0	00 00 00 00 00 7
00000500	00 00 00 00 00 0
00000510	00 4C 19 00 00 0
00000520	00 1A 0F 00 00 0
00000530	00 00 00 AF 43 4

On the left side of this window you'll see different things that your bytes could represent. This tells me 00 00 AF 43 = float 350.0. Any time your value has a decimal point (a . after your number), you're looking for a float data type, similar to this.

☒ Show details ☒ Swap endianness ☒ Uppercase letters in hex

Hex value:

Float value:

[This website](#) with the settings shown in my screenshot (with everything ticked) will tell me what bytes I need to type in to get a launch height of 1000.0. I double click from the byte I want to edit from and simply type in what I'm given, which in my example is 0x00007A44 (00 00 7A 44).

Integers

From: To:

Enter decimal number

10

Hex number

16

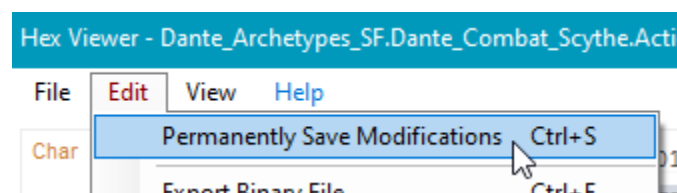
If your data type is not a float, the process is simple. If I want to change a 5 to a 6, I would replace 05 00 00 00 with 06 00 00 00. Watch out when you get to values larger than 9, as hex counts to 16 rather than 10. [This website](#) will tell you what value to type in if you need it (If I wanted Decimal 10 I would type in 0A, etc.).

Objects

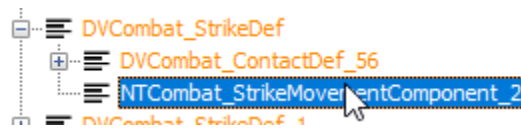
Name	Launch	00000230	4C 15 00 00 00 00 00 00 00 00 00 00 00 00 00 00	1
Index	4510	00000240	85 1A 00 00 00 00 00 00 00 00 00 00 00 00 00 00	.
Struct		00000250	1F FF FF FF 99 22 00 00 00 00 00 00 00 00 BD 01 00 00	.
		00000260	00 00 00 00 14 00 00 00 00 00 00 00 00 00 02 00 00 00	.
		00000270	32 1F 00 00 00 00 00 00 00 00 7C 17 00 00 00 00 00 00	2
		00000280	9D 0A 00 00 00 00 00 00 00 00 62 18 00 00 00 00 00 00	.
		00000290	08 00 00 00 00 00 00 00 00 00 9E 11 00 00 00 00 00 00	.
		000002A0	22 1A 00 00 00 00 00 00 00 00 01 00 00 00 00 00 00 00	"
		000002B0	61 02 00 00 00 00 00 00 00 00 05 00 00 00 E1 0B 00 00	a
		000002C0	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00	.

Objects work the same way. If I select the bytes after DefaultReactionType I can see Launch is represented by 9E 11. If I open another object I can see that Air Juggle = 20 01. If I wanted to, I could replace 9E 11 with 20 01 to make this move juggle instead of Launch.

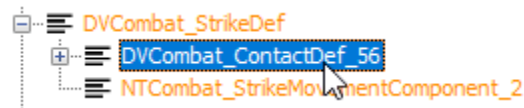
Saving our changes



Once you've typed in your changes, hit Ctrl+S or go to Edit>Permanently Save Modifications to save them. There is no undo button, so if you break something you're going to need to revert to your backup.



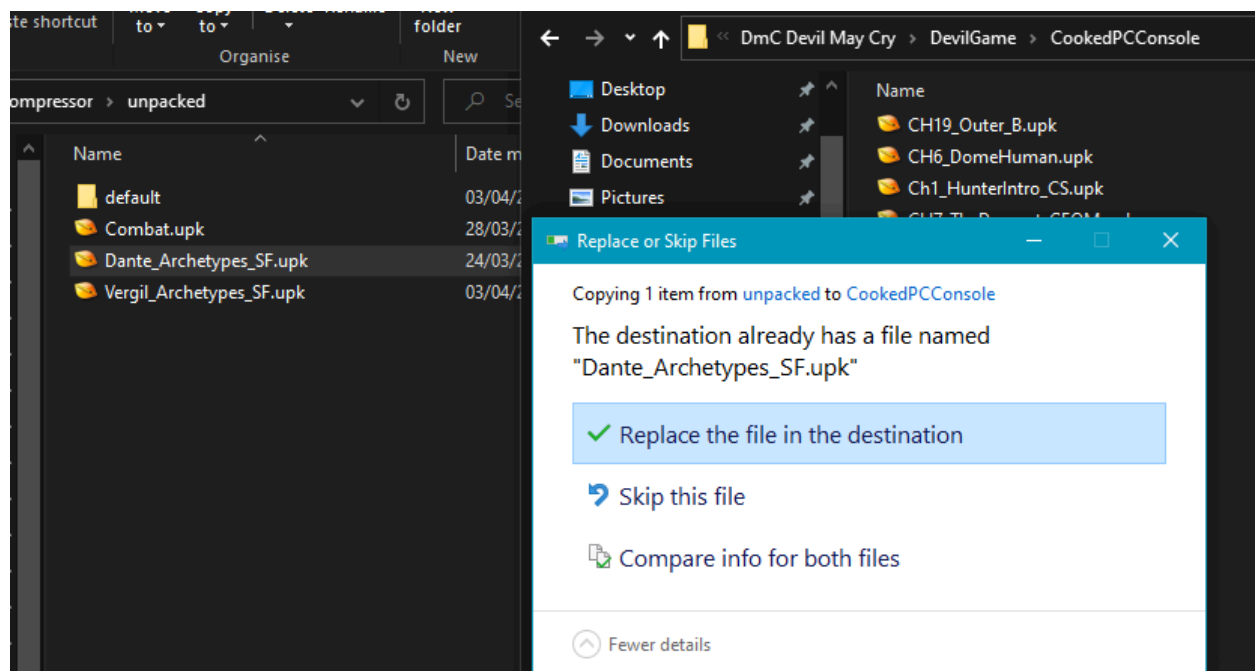
Once you've saved your file, close that window and click another object.



Then click back on your object.

```
20     Tags=/* Array type wa
21     DefaultReactionType=L
22     NTDifficulty_Inactive
23     LaunchHeight=1000.0
24 object end
```

Hopefully you'll see that the hex edit you made has updated the text in this window. It's a good idea to check to see if you edited the right thing by doing this before testing your change ingame.



Assuming everything went well, it's time to replace your ingame files with your edited files. Copy your edited file and paste it in the game directory you found it, as the game will accept unpacked files (this is lucky as we have no way to recompress).



Open the game and test out your change! This poor guy got launched further than I can see so I can safely say I'm editing the right thing. Now to find a value I like.