

# FMID Builder Tutorial and User Guide

Welcome to the **FMID Builder** tutorial and users guide you brave human. This is the guide for those who want to create their own fence sets that works with **Fence Me In**, either to sell, or for their own use. If you do not intend to create, model and texture your own fence prop packs, you can stop reading now, unless you have an urge for arcane knowledge.

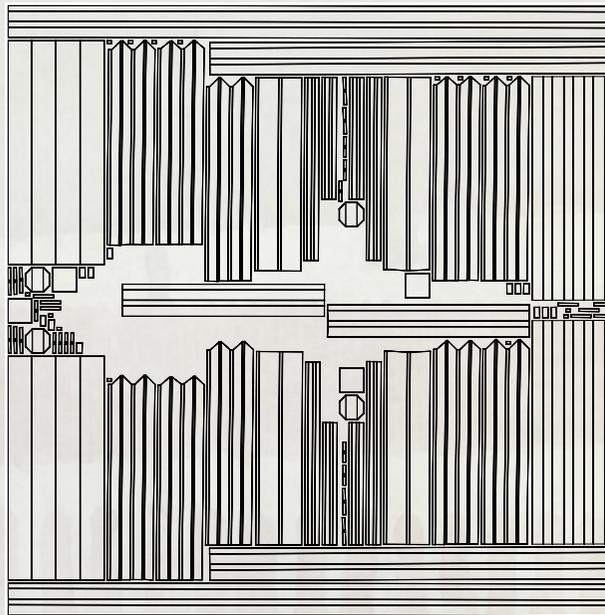
Oh right, great to see that you are still here. So, first some basics about how Fence Me In fancies it's prop sets to be organized. The reason for this organization is to be able to keep a low memory footprint in the graphics card and still provide a reasonable amount of variation for textures and props, to hopefully avoid too much visible repetitive looks.

All the props, except gates, should be on the same UV chart, all part of the same texture set. Props can exist multiple times for good variation. This way there will only be one texture map set loaded if a fence only uses one colour.

To the left is an UV map from the Fence Me In props, the Simple Wood Fence set,

The gates are a different beast as they are often complex, have several different materials and material zones, so they should be one item, one map. One of the reasons for this is that all props in one set will use the same material settings file, one per material option, but all props of the same colour will get the material set from the same file. Gates are special and that is handled within this program, how you link multiple gates.

Another important thing to remember is that gates and props should have the exact same material options. They do not need to be the same actual material, but they will be grouped together under a common name.



For example, we have a material group called Grungy Materials. In that group we have Fence Prop Grungy.duf, Grungy gate small.duf & Grungy gate large.duf.

Fence Me In will pick the correct material depending on what item that needs to get the materials set. Materials should be in subdirectories to the props. If you have them in different directories, with Iray or 3DL in the name, **FMID Builder** will automatically categorize the materials, otherwise you need to do that manually. OK, are you ready? This is what the script looks like when you start it.



To get started, click the **Choose Directory** button, to open the standard choose Directory panel.

Navigate to the directory you want to create a FMID file for and select it. Now, FMID Builder will collect information about all props and materials in that directory.

Prop	Type	Group	Size
FMI Tall Flat Picket 160cm 01.duf	Picket	0	(12,2,150)
FMI Tall Flat Picket 160cm 02.duf	Picket	0	(12,2,150)
FMI Tall Flat Picket 160cm 03.duf	Picket	0	(12,2,150)
FMI Tall Flat Picket 160cm 04.duf	Picket	0	(12,2,150)
FMI Tall Gate 2m.duf	Gate	0	(200,12,150)
FMI Tall Pointy Picket 165cm 01.duf	Picket	0	(12,2,160)
FMI Tall Pointy Picket 165cm 02.duf	Picket	0	(12,2,160)
FMI Tall Pointy Picket 165cm 03.duf	Picket	0	(12,2,160)
FMI Tall Pointy Picket 165cm 04.duf	Picket	0	(12,2,160)
FMI Tall Post 140cm 01.duf	Post	0	(20,20,130)
FMI Tall Post 140cm 02.duf	Post	0	(20,20,130)
FMI Tall Rail 1m 01.duf	Rail	0	(100,4,10)
FMI Tall Rail 1m 02.duf	Rail	0	(100,4,10)
FMI Tall Rail 2m 01.duf	Rail	0	(200,4,10)
FMI Tall Rail 2m 02.duf	Rail	0	(200,4,10)
FMI Tall Thin Picket 160cm 01.duf	Picket	0	(4,2,150)
FMI Tall Thin Picket 160cm 02.duf	Picket	0	(4,2,150)
FMI Tall Thin Picket 160cm 03.duf	Picket	0	(4,2,150)
FMI Tall Thin Picket 160cm 04.duf	Picket	0	(4,2,150)

In this example we use the **Tall Wood** set that comes with Fence Me In. The first view is the Props tab, where all available props are listed. FMID Builder tries to figure out what kind of prop it is, but sometimes it guesses wrong. The base types are Post, Rail, Picket, Top rail, Post head and Gate. When you select an item in the list, a control bar is shown below the list from where you can change the data. The change is instant and there is no undo on that, but you can just change it again to something else.

Group is important, as that is what groups multiple props that basically represent the same thing together. Looking at the list, we see that Pointy Pickets is one group, Flat Pickets one and Thin Pickets another. Objects of different type can have the same Group as they are already different from each other by type.

The Flat Pickets can keep Group 0, so we select the first Pointy Picket and set the Group to 1.

Prop	Type	Group	Size
FMI Tall Flat Picket 160cm 02.duf	Picket	0	(12,2,150)
FMI Tall Flat Picket 160cm 03.duf	Picket	0	(12,2,150)
FMI Tall Flat Picket 160cm 04.duf	Picket	0	(12,2,150)
FMI Tall Pointy Picket 165cm 01.duf	Picket	0	(12,2,160)
FMI Tall Pointy Picket 165cm 02.duf	Picket	0	(12,2,160)

Type:  Group:

Just do that for all the props until you have it correct. You can also change the Type here if FMID Builder failed to guess what kind of prop it is.

When the Props configuration is done, the list in this case looks like this:

Prop	Type	Group	Size
FMI Tall Gate 2m.duf	Gate	0	(200,12,150)
FMI Tall Flat Picket 160cm 01.duf	Picket	0	(12,2,150)
FMI Tall Flat Picket 160cm 02.duf	Picket	0	(12,2,150)
FMI Tall Flat Picket 160cm 03.duf	Picket	0	(12,2,150)
FMI Tall Flat Picket 160cm 04.duf	Picket	0	(12,2,150)
FMI Tall Pointy Picket 165cm 01.duf	Picket	1	(12,2,160)
FMI Tall Pointy Picket 165cm 02.duf	Picket	1	(12,2,160)
FMI Tall Pointy Picket 165cm 03.duf	Picket	1	(12,2,160)
FMI Tall Pointy Picket 165cm 04.duf	Picket	1	(12,2,160)
FMI Tall Thin Picket 160cm 01.duf	Picket	2	(4,2,150)
FMI Tall Thin Picket 160cm 02.duf	Picket	2	(4,2,150)
FMI Tall Thin Picket 160cm 03.duf	Picket	2	(4,2,150)
FMI Tall Thin Picket 160cm 04.duf	Picket	2	(4,2,150)
FMI Tall Post 140cm 01.duf	Post	0	(20,20,130)
FMI Tall Post 140cm 02.duf	Post	0	(20,20,130)
FMI Tall Rail 1m 01.duf	Rail	0	(100,4,10)
FMI Tall Rail 1m 02.duf	Rail	0	(100,4,10)
FMI Tall Rail 2m 01.duf	Rail	0	(200,4,10)
FMI Tall Rail 2m 02.duf	Rail	0	(200,4,10)

Now it's time to move to the next tab, **Prop groups**. Prop groups are, as the name implies, prop of the same type grouped together using the Group ID. So, all pickets of type Pointy Picket are now in Group 1, that is a prop group.

Prop Type	Group ID	Group name	Group icon
Gate	0	Gate 2m	tall_gate_2m
Picket	0		
Picket	1		
Picket	2		
Post	0		
Rail	0		

Group name:

Group icon:

Here you define a name for the Prop group and also the thumbnail image that will be shown in the list in Fence Me In. The thumbnails must be of type .png but you can enter them with or without extension.

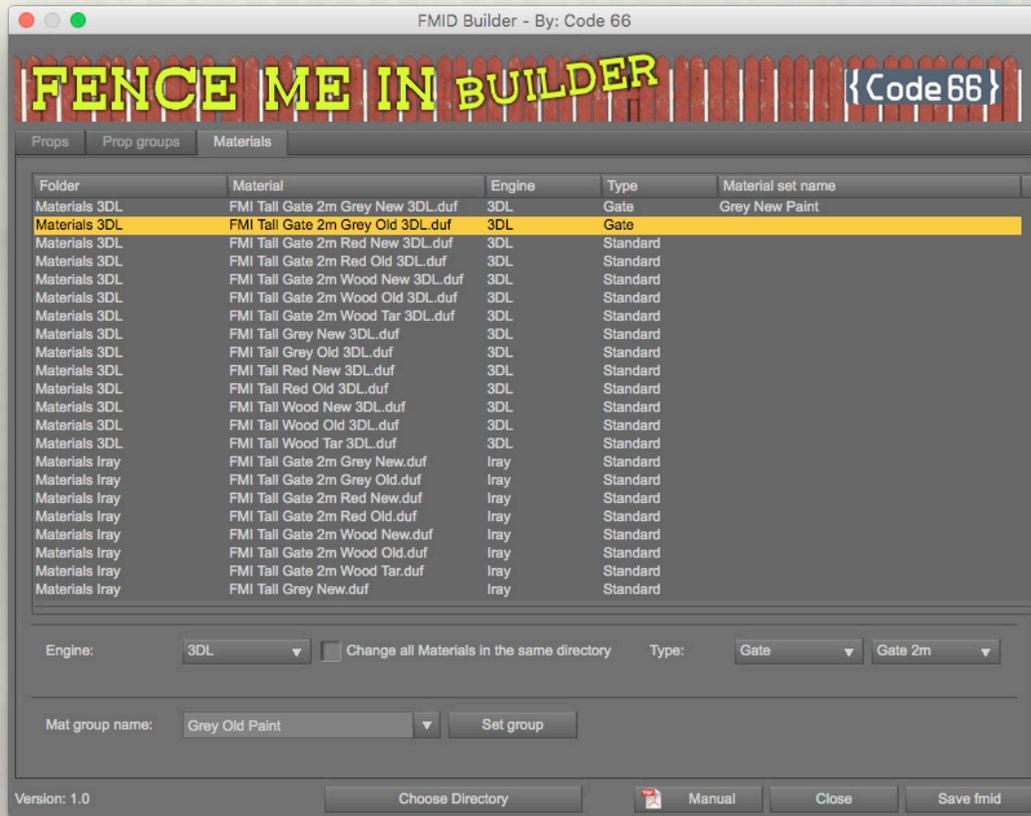
The thumbnails, or icons, are stored in the FMIResources/sets/icons directory, and just keep the names reasonable sensible without weird characters and such things.

Prop Type	Group ID	Group name	Group icon
Gate	0	Gate 2m	tall_gate_2m
Picket	0	Flat Picket 160cm	tl_picket_flat
Picket	1	Pointy Picket 165cm	tl_picket_pointy
Picket	2	Picket Thin 160cm	tl_thin_160cm
Post	0	Post 140cm	tl_post
Rail	0	Rails 1 & 2m	tl_rails

This is how the list looks in this case when done. Now we have one final step to go through before we can save out fmid file, materials.

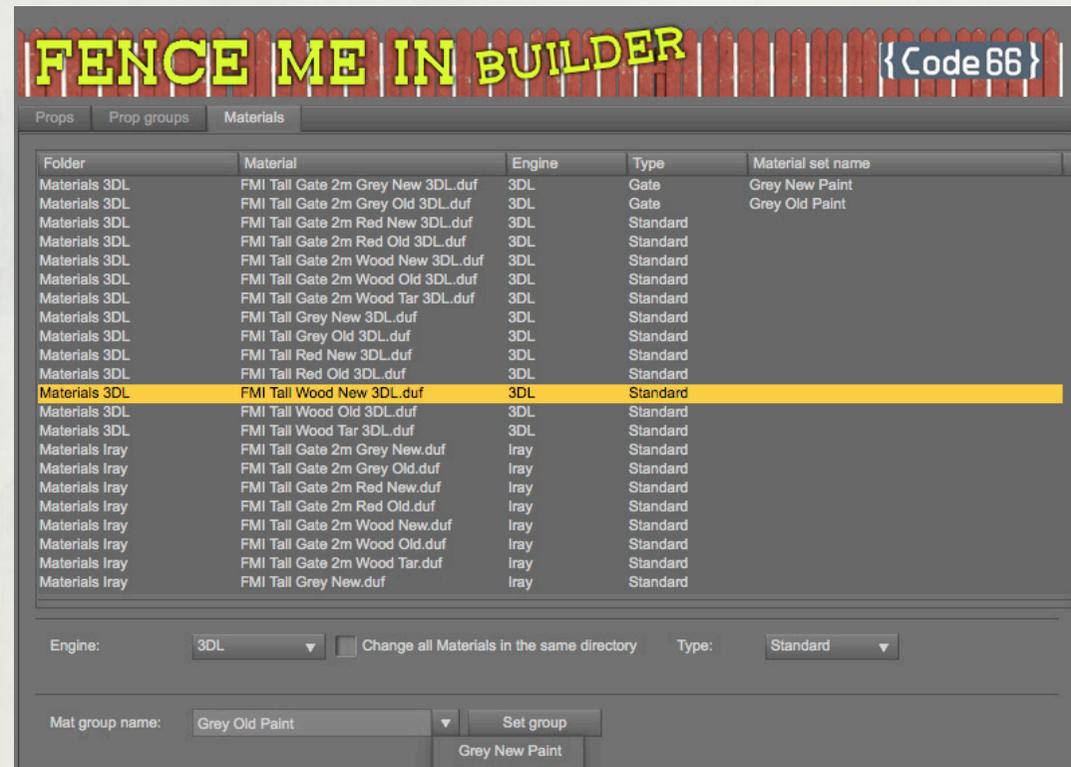
The Materials tab will show all material files found, the folder they are located in, the render engine (Iray or 3DL), the type of material (Standard or Gate) and the name of the material set, which is what is shown to the user in Fence Me In.

FMID Builder tries to identify the render engine by both name of material folder and if that fails, the name of the actual material file.



When a material entry is selected in the list, two sets of data controls are shown below the list. The first can be used to set Engine and type, and the second to set the material set name.

If you have materials for example for 3DL but called the folder Materials 3Delight, you can check the **Change all materials in the same directory** checkbox before changing the **Engine** to 3DL, and all material files in that directory will be set to 3DL. If type is changed from Standard to Gate, a second popup showing the different gates will show up, and you can select which gate this material is for.



When you have entered a Mat group name in the Combo Box, you can then select that name again from the menu, to avoid having to type the same thing again, and also avoiding typos, which would cause the name group to fail.

So, when we're done, we click Save fmid and give it a clever name, as the name is what shows up in the set popup in Fence Me In.

So, what's more on FMID Builder? One thing, the fmid file is a standard JSON file, which means you can edit it with a text editor, but beware, stay away from anything that decides to change your double quotes into fancy typographic quotes, as that will break the JSON file.

I hope you know are ready to try it out for real, and build awesome sets for Fence Me In.