

Updated October 4, 2018

## How to Import 3D Character - SMILE GAME BUILDER Help

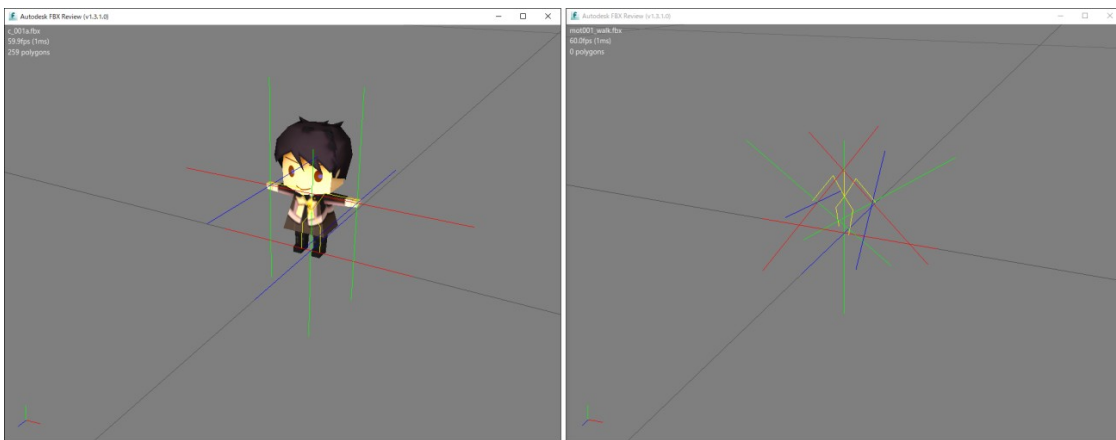
This is a help page of how to import your original 3D character into SMILE GAME BUILDER. There are two methods depending on its model motion data.

### --- Having Separate FBX Files :: a model file and motion files ---

You'll add separated files of a model file which contains polygons and a skeleton structure, and motion files which contains the skeleton structure and motion data.

The strong point of this method is if the models have the same skeleton structure, they can use the default motions even their polygons are different. (\*The human form characters of SGB use this method.)

\*In order to import it, you need a model file (.fbx), a texture file (.png) and motion files (.fbx). The model, the skeleton structure and their names are the same.

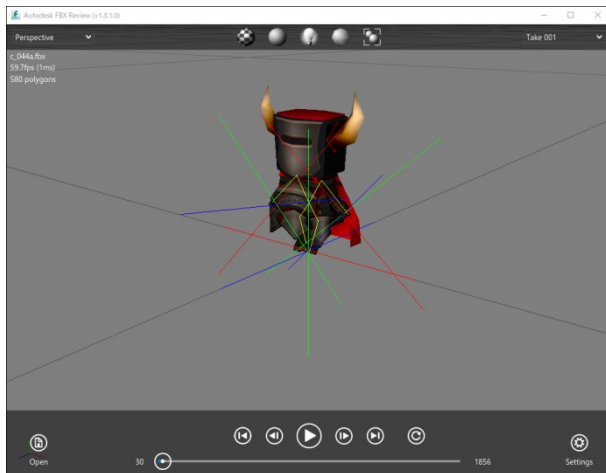


### --- Having a Bundled FBX File :: model data and motion data

This method is importing the polygons, the skeleton structure and motion data all in one as one FBX file.

If a model has several motions, you need to list all the motion names with frame numbers in a motion setting file, and then import it together. (\*More details are written below. Some monsters in SGB use this method.)

\*In order to import it, you need a model with motions (.fbx), a texture file (.png) and a motion setting file (.def).



You can find more instructions about its format, specifications and the importing process on next page.

### --- Important File Format ---

You need a model, a texture and motion data to import 3D characters. It's necessary to have some knowledge and skills to create 3D models.

As we mentioned before, if you'd like to import one bundled file, motion data and a model data, you need to prepare a motion setting file.

The following is about the format and the specifications of each file.

#### 1. Model File (.fbx)

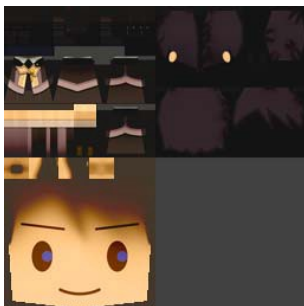
- File Format: FBX Format
- We recommend FBX7.4 (FBX2014) version.  
\*The human form characters were created by Autodesk Maya2016.
- The FBX format could be either ASCII or Binary.
- When you use older version of FBX, you could import it with the optimize option on. (\*It might not display properly.) For more details, read How to Import below the page.
- **Only triangulated polygon models will be displayed correctly.** Polygon models need to be triangulated in the output process or put a check mark on the optimize option when you import it into SGB. (\*The optimize option will automatically make the polygons triangulated.)
- 1grid in Maya = 1block in the SGB Editor. A character's size would be approximately X: 0.8 and Y: 1.5.
- We recommend only using one material per model. If you use multiple materials on one model, it might cause some display errors.
- Be sure to name the file with half-width alphanumeric characters.
- If you create motion data separately, you must export FBX file with the polygon model and the bone structure without any motions.
- If you include motion data in the file, you can add motions directly to the model and bake the motions, then you export it as one FBX file.
- The number of bones in the skeleton structure should be maximum 50. Moreover, the influence (or the number of weight on a vertex) should be maximum 4. Otherwise, the model won't be displayed properly.
- The frame rate should be 60fps.

## 2. Texture File (.png)

- File Format: PNG (Full Color)
- A texture image size is 64 x 64, 128 x 128, 256 x 256, 512 x 512 and other values which should be to the power of 2. 256 x 128 would also work. It might cause some errors if you use other sizes rather than the power of 2.
- Transparent images are possible if you create a transparent area in the PNG file.
- We recommend using one texture per model. This method helps the display process smoother. Moreover, if you use many materials on one model, it might cause some display errors.
- Be sure to name the file with half-width alphanumeric characters.

**If you see unexpected results on the texture, please change the name of the texture and re-export FBX. Then try importing them into SGB.**

Examples of Texture Files: 256 x 256 pixels (Left), 512 x 256 pixels (Right)



### 3. Motion Files (.fbx)

**If you create motion files separately from the model file, you need to prepare files which contain only motions.**

The specifications are the same with the list of Model Files above.

- File Format: FBX Format
- Delete mesh.
- The skeleton structure and the file name should be the same as the model file.
- The frame rate should be 60fps.
- One file will be one motion.
- Assign the first frame and the last frame which you want to export, and execute the bake process to export it.
- Name it as mot\_MOTIONNAME(half-width alphanumeric).fbx.

Ex: mot\_walk.fbx mot\_wait.fbx mot\_run.fbx

These motions will be listed on the motion window of SGB in alphabetical order.

The default setting of these motion files are looped. If you wish not to be looped, name the file

mot\_o\_MOTIONNAME(half width alphanumeric).fbx.

Ex: mot\_o\_attack.fbx mot\_o\_damage.fbx

If you wish to display these motion files as the original order, put numbers after mot.

Ex: mot001\_walk.fbx, mot002\_wait.fbx, mot003\_run.fbx, mot004\_o\_attack.fbx

They will be displayed in the motion window of SGB in the ascending order.

#### 4. Motion Setting File (.def)

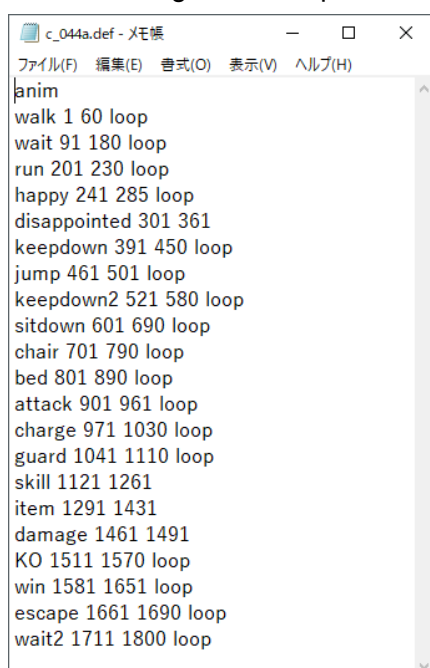
**If you create one bundled FBX file, a model and motions, you need to have a motion setting file.**

The motion setting file is to assign/name each motion from a sequenced motion and import it to SGB.

- File Format: Text Format, the extension should be .def.
- The file name should be the same name with the extension .def.  
Ex: The model name: c\_044a.fbx >>> Motion Setting File: c\_044a.def
- Please use half width alphanumeric. If you use other fonts/characters, you may get an error.
- You need to list the motion name, the first frame, the last frame and loop or blank for not looping. Only the list of motions will be imported into SGB.
- These motions will be displayed as you listed in the text file.
- The following is the example of the motion setting file. The left word will be assigned as its motion name and will be displayed in SGB.

```
anim //the definition as the motion setting file
walk 1 60 loop //MotionName FirstFrame LastFrame Loop/NotLoop
wait 91 180 loop
run 201 230 loop
```

#### Motion Setting File Example



The screenshot shows a text editor window titled 'c\_044a.def - メモ帳'. The window contains the following text:

```
anim
walk 1 60 loop
wait 91 180 loop
run 201 230 loop
happy 241 285 loop
disappointed 301 361
keepdown 391 450 loop
jump 461 501 loop
keepdown2 521 580 loop
sitdown 601 690 loop
chair 701 790 loop
bed 801 890 loop
attack 901 961 loop
charge 971 1030 loop
guard 1041 1110 loop
skill 1121 1261
item 1291 1431
damage 1461 1491
KO 1511 1570 loop
win 1581 1651 loop
escape 1661 1690 loop
wait2 1711 1800 loop
```

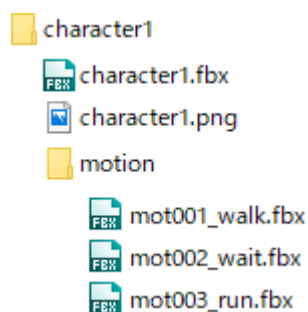
### <Before You Import Files>

Separated motion file method and one bundled file method - there is a slight difference in how you prepare files before you import them into SGB.

#### Preparation of Separated Motion File Method

1. Create a folder for putting all the files in. This folder will only be for temporary use for importing purposes, so the name can be anything.
2. Put the model file (.fbx) and texture file (.png) in the folder.
3. Create a new folder in the same location as the model and name it “motion”.
4. Put motion files (.fbx) in the “motion” folder.

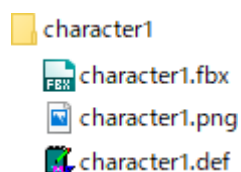
Ex: When you put the material you want to import (character1) into [character1]



#### Preparation of One Bundled File

1. Put the model file (.fbx), texture file (.png) and motion setting file(s) (.def) into a single folder.

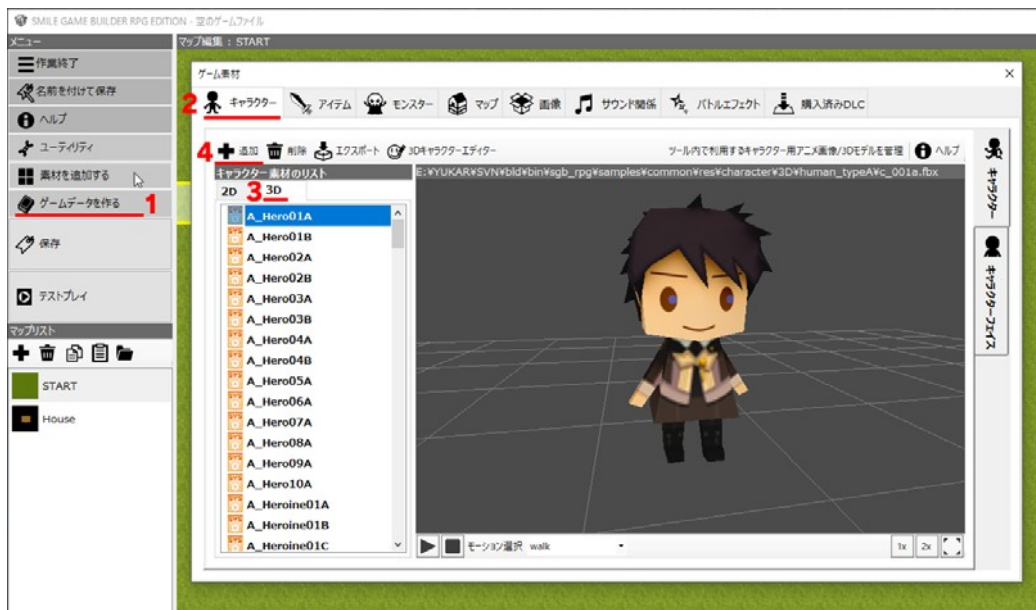
Ex: When you put the material you want to import (character1) into [character1]



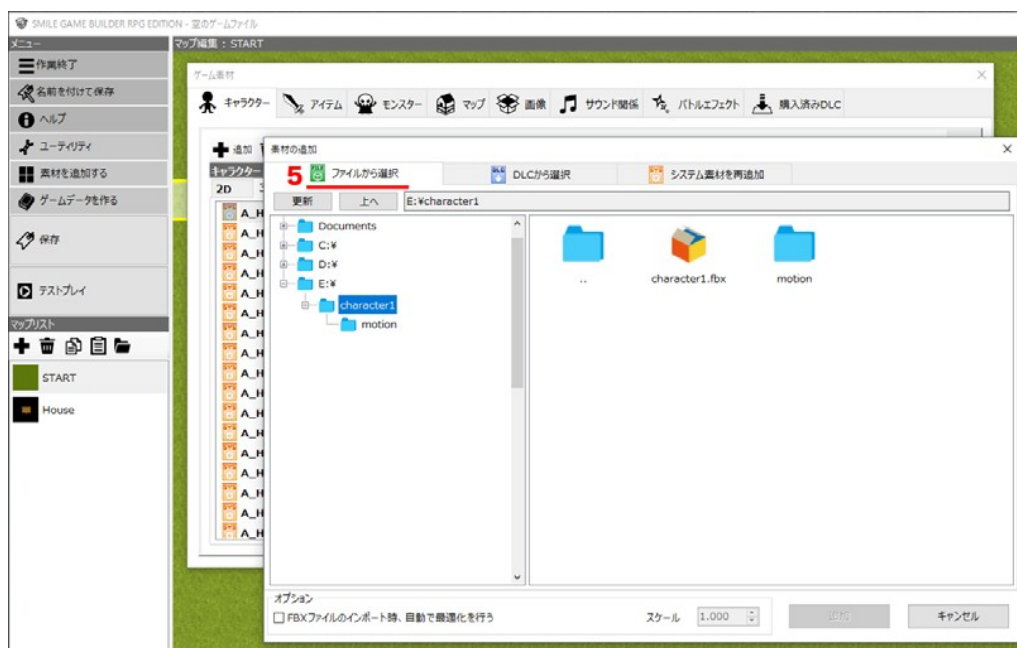
## <How to Import>

Importing method is the same with the separated version or the bundled version.

1. “Menu” > “Add Assets” The Resource Archive window will appear.
2. Choose “Characters”.
3. Choose “3D” tab.
4. Click “+Add” button which is above the tabs and the “Select Resource” window will appear.



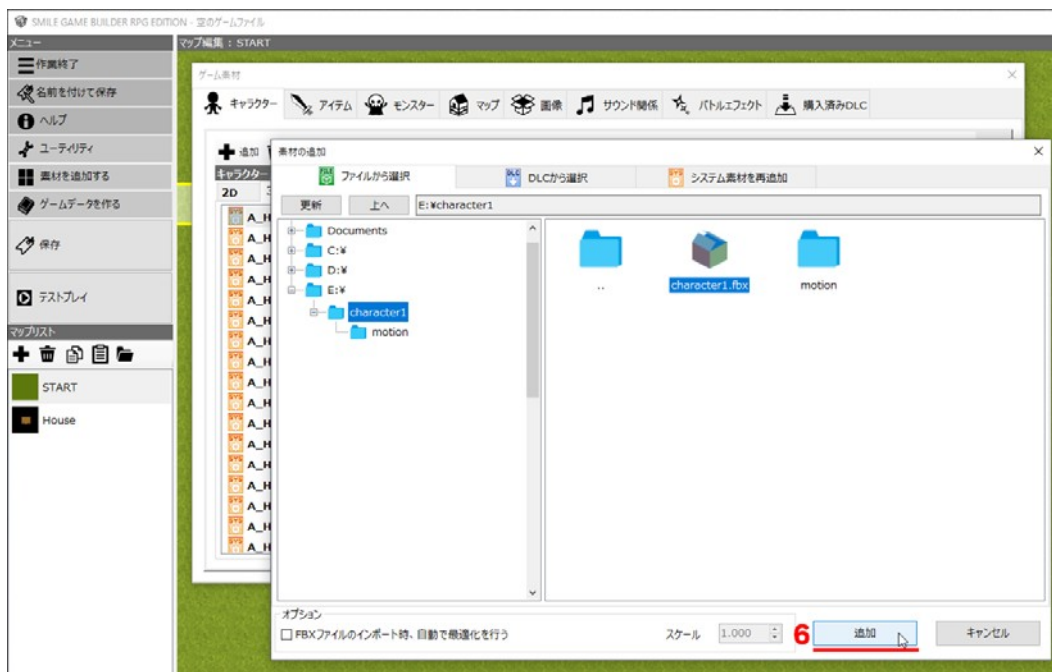
5. Choose “Choose from Local Files”.



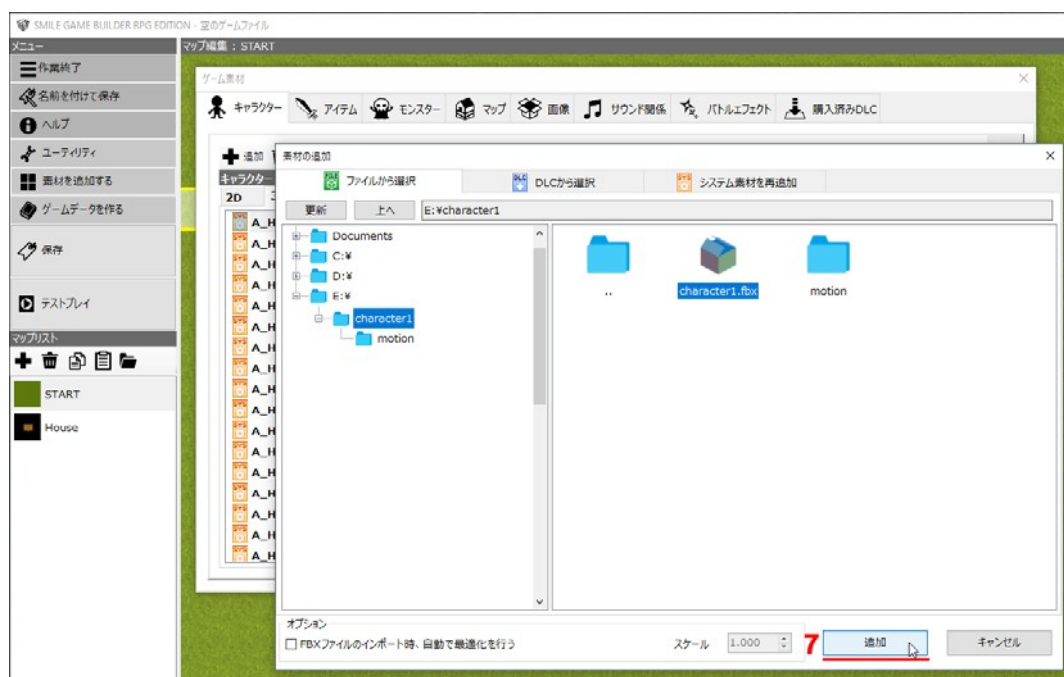


6. Select the file(s) you wish to import from the right window.

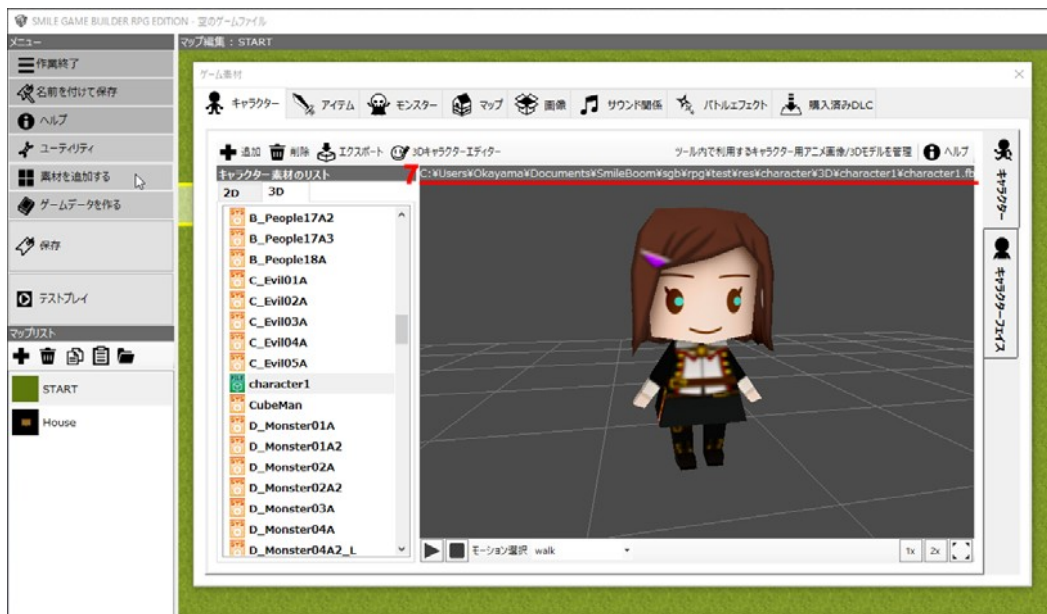
If you use other versions of FBX rather than FBX7.4 (FBX2014), you could put a check mark on the optimize option to import it into SGB. (However, it might not display it property depending on the versions.)



7. Select the model you wish to import and click whether the optimize option on/off, then click “Add” button. (\*The optimize option in the image below is off.)



8. The imported character will be listed on the left of the window, “Character Asset List.” Its stored area will be displayed the above of the preview window. Moreover, the texture files will be put it into generated “texture” folder automatically.



User files are distinguished from the default files with green color icons. User imported materials will automatically be saved in the game file when you save your game data, but the original files will not be moved.