



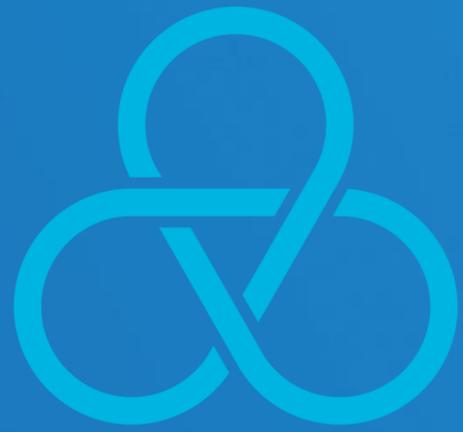
VIVE

htc

Sync^{XR} 3D Model Loader Manual

2Bears Studio

January 2020



SYNC^{XR}

Hello, thank you for being a part of the Sync^{XR} Beta program.

3D Model Loader Manual

1. Disclaimer
2. Supported Formats
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5. Using 3D Models in Sync^{XR}



1. Disclaimer

In our VR meeting application, Sync^{XR}, you can load your customized 3D model files.

Below, we will describe the steps on how to upload and use 3D models in our application.

In general, you can load any customized 3D models with our supported formats; however, we only ensure that those 3D models processed by our advised preprocesses will work well. Certainly, other 3D models may also work sufficiently, but we may not ensure that.

If you run into any issues or have further questions regarding how to load your 3D models into Sync^{XR}, you can send an email to sync_support@htc.com.

2. Supported Formats

3D Formats:

FBX
OBJ
(Unity's) ASSET BUNDLE

2D Formats (textures):

PNG
JPG (baseline & progressive – 12 bpc/arithmetic not supported)
BMP (Non-1 bpp, non-RLE)
TGA

Also, we do not suggest using high resolution textures, such as 4096 x 4096 pixels, as the model may not load, and it may cause insufficient memory issues. A resolution size of 2048 x 2048 pixels (or, lower) is advised for optimal performance.

3. 3D Model Preprocess

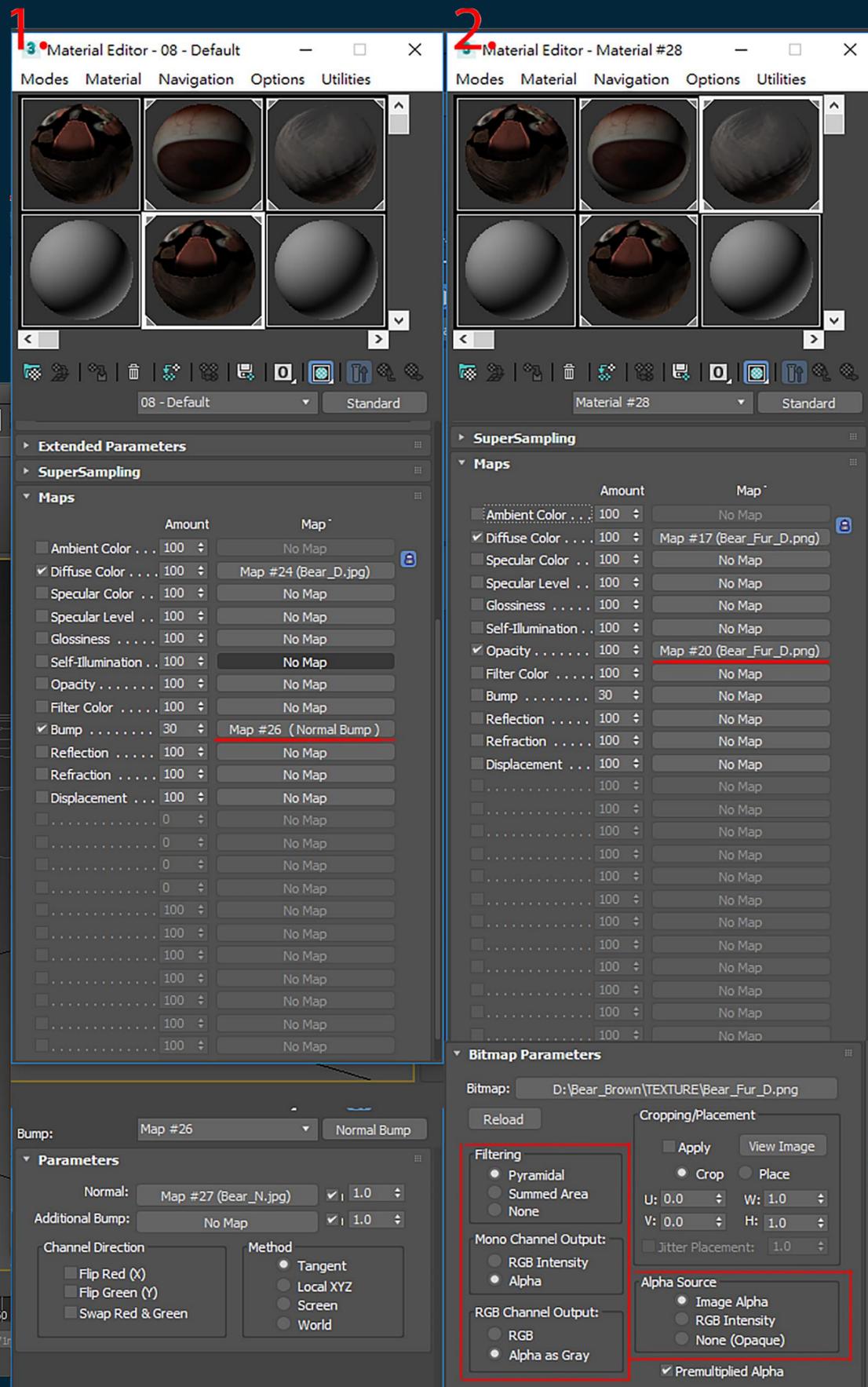
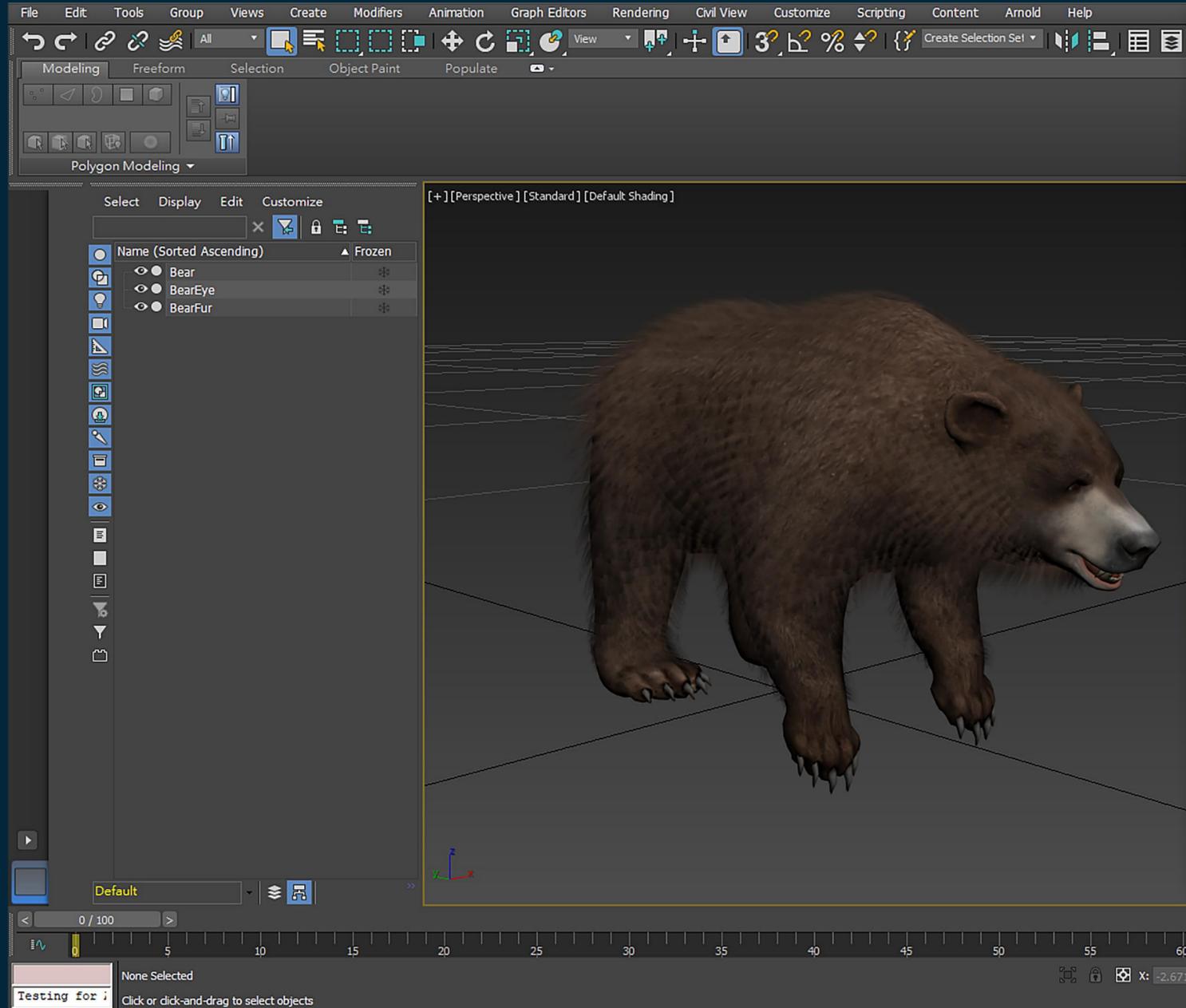
Because 3D model files are dependent on various 3D software exporters, we cannot ensure that all 3D models will work well in our application. Below we provide guidelines for some common 3D software applications that have been vetted by us. If you process your 3D models following the SOP, it will more commonly work as expected.

Please, note: Although we use PBS textures (such as, metallic maps and roughness maps) in the following examples, we do not have full PBS support as of yet.

3D Applications

3DSMAX:

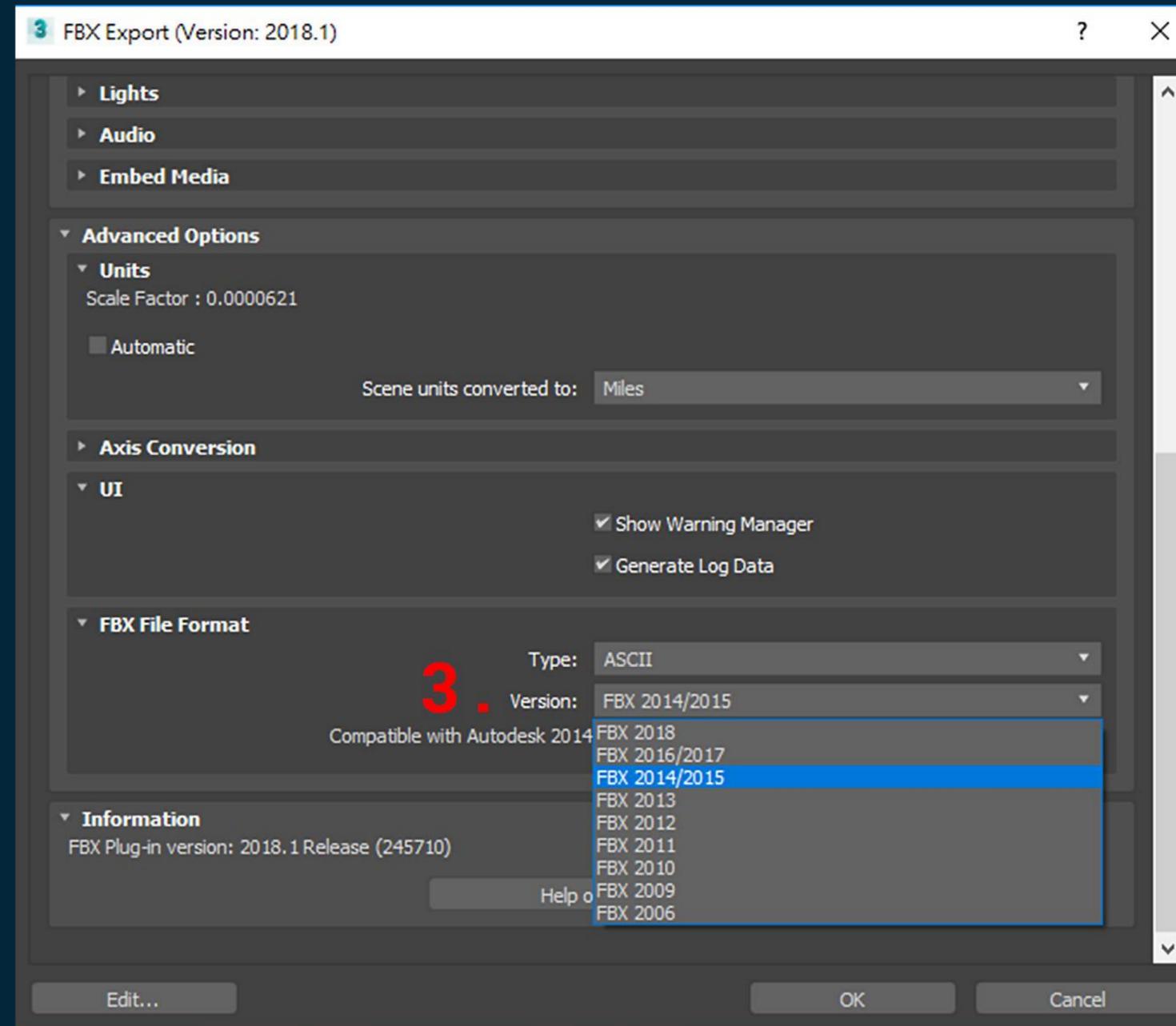
1. Import your 3D models.
2. Check all texture maps.



3D Applications

3DSMAX:

- Export your 3D models. (We suggest to use FBX plugins 2015; however, you're free to try and use any higher version.)



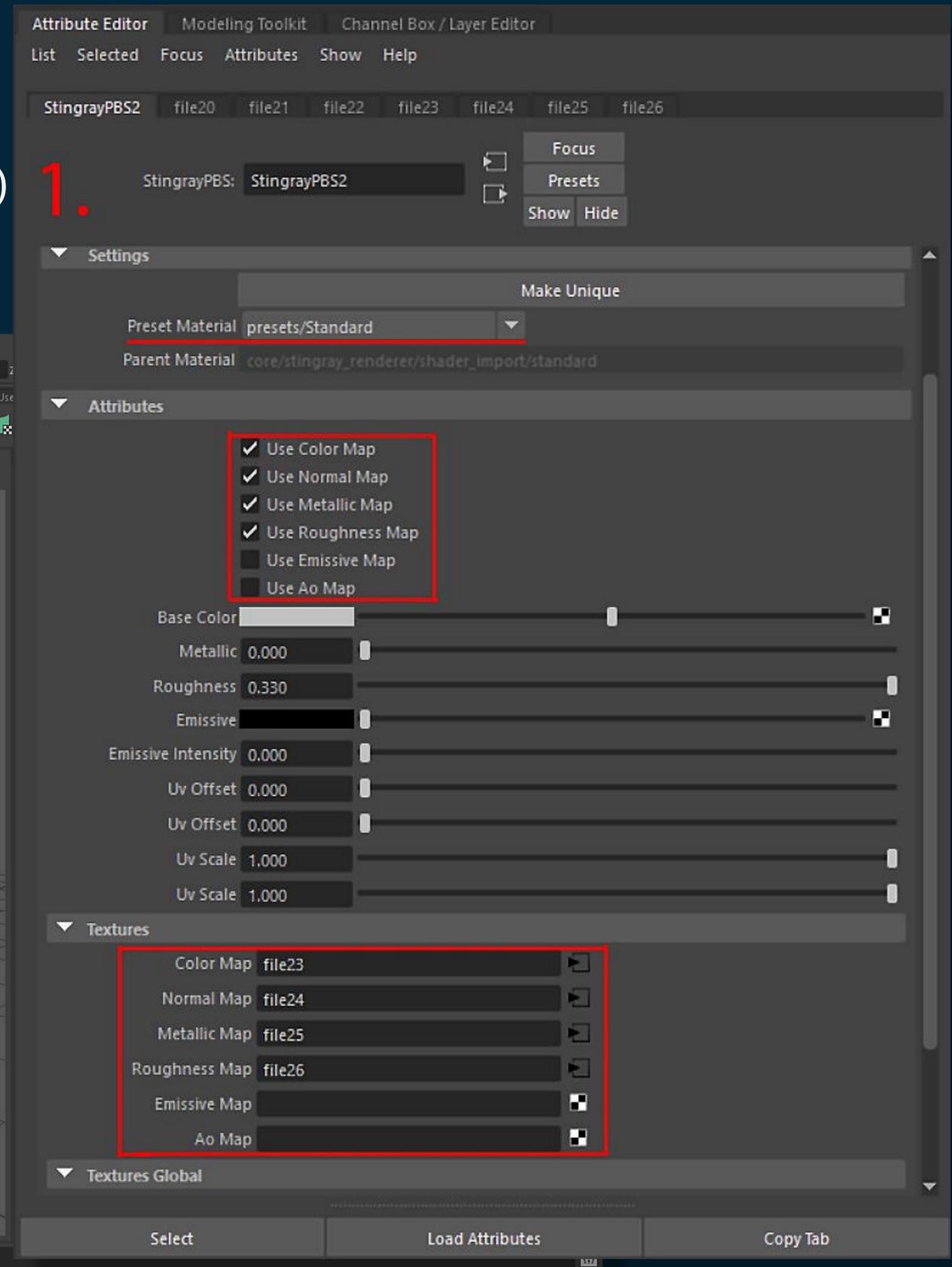
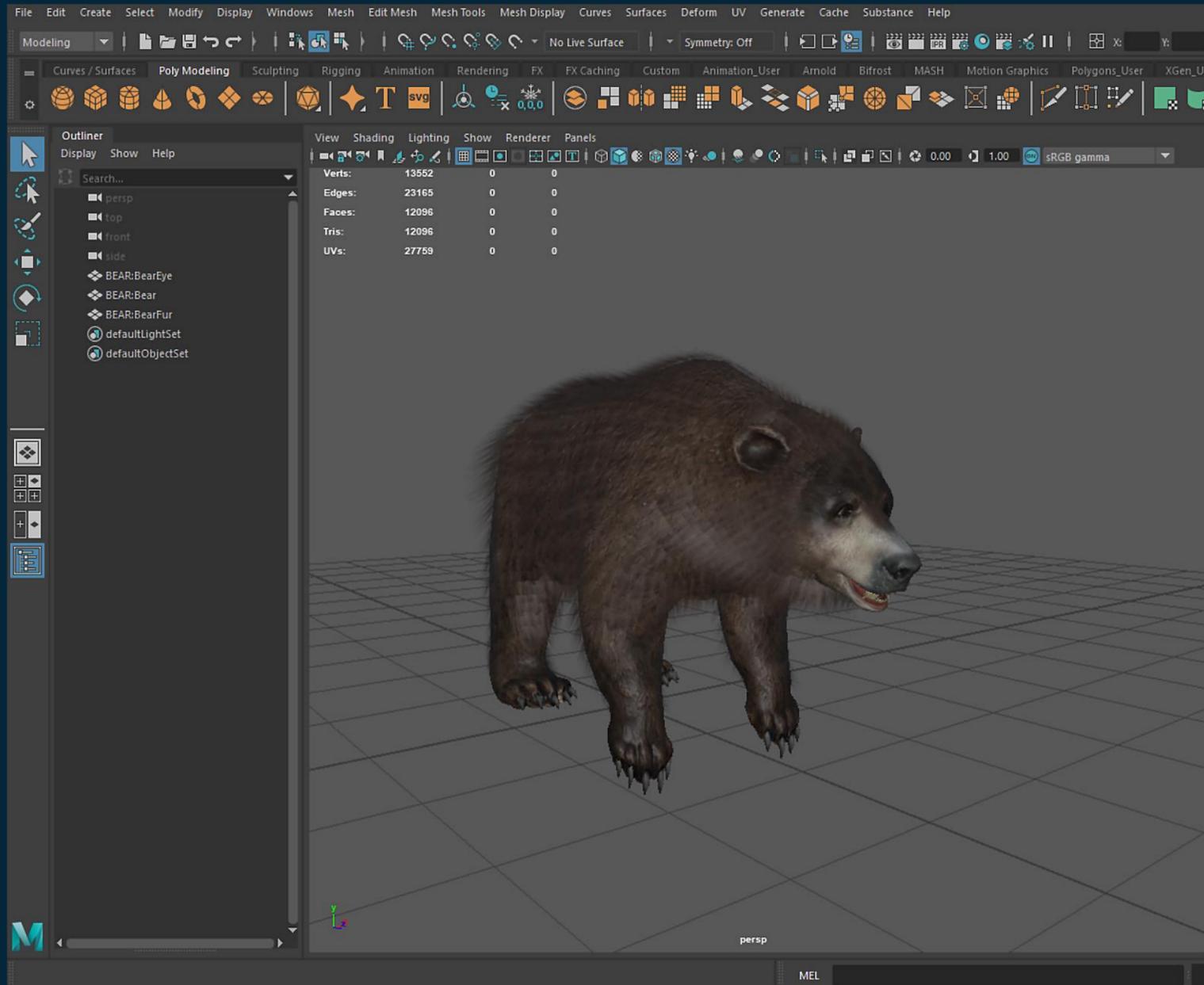
[Currently, 3D models exported from 3DSMAX do not support the normal map function.]

3D Applications

Maya:

1. Import your 3D models.
2. Check all texture maps.

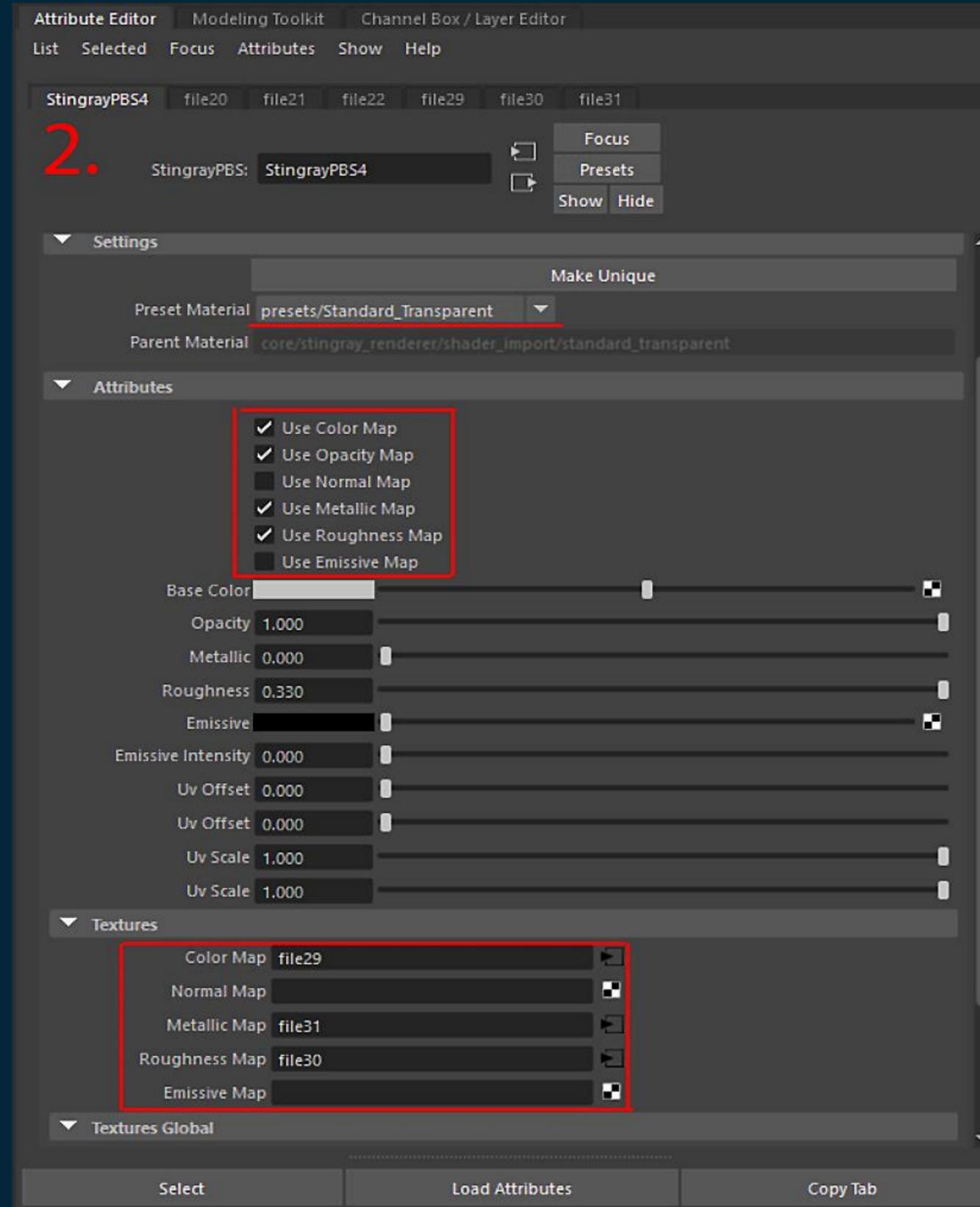
(Opaque Mode Settings.)



3D Applications

Maya:

(Transparent Mode Settings.)

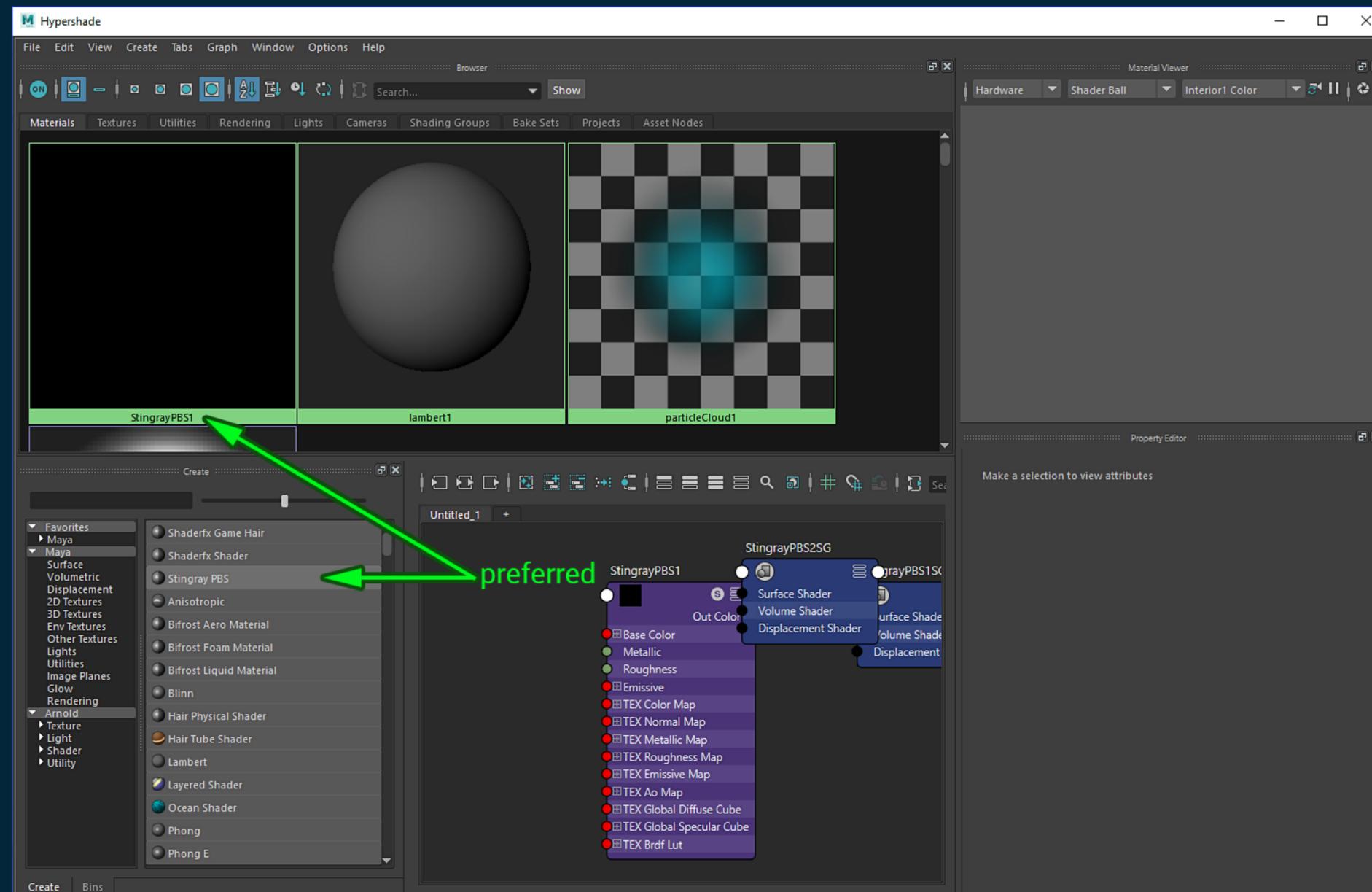


3D Applications

Maya:

3. Choose suggested build-in materials to be supported carefully. Currently, we suggest to use the StingrayPBS for correct PBS settings, you could use other materials such as Lambert, but it may get PBS settings wrong, such as the smooth value.

4. Export your 3D models.

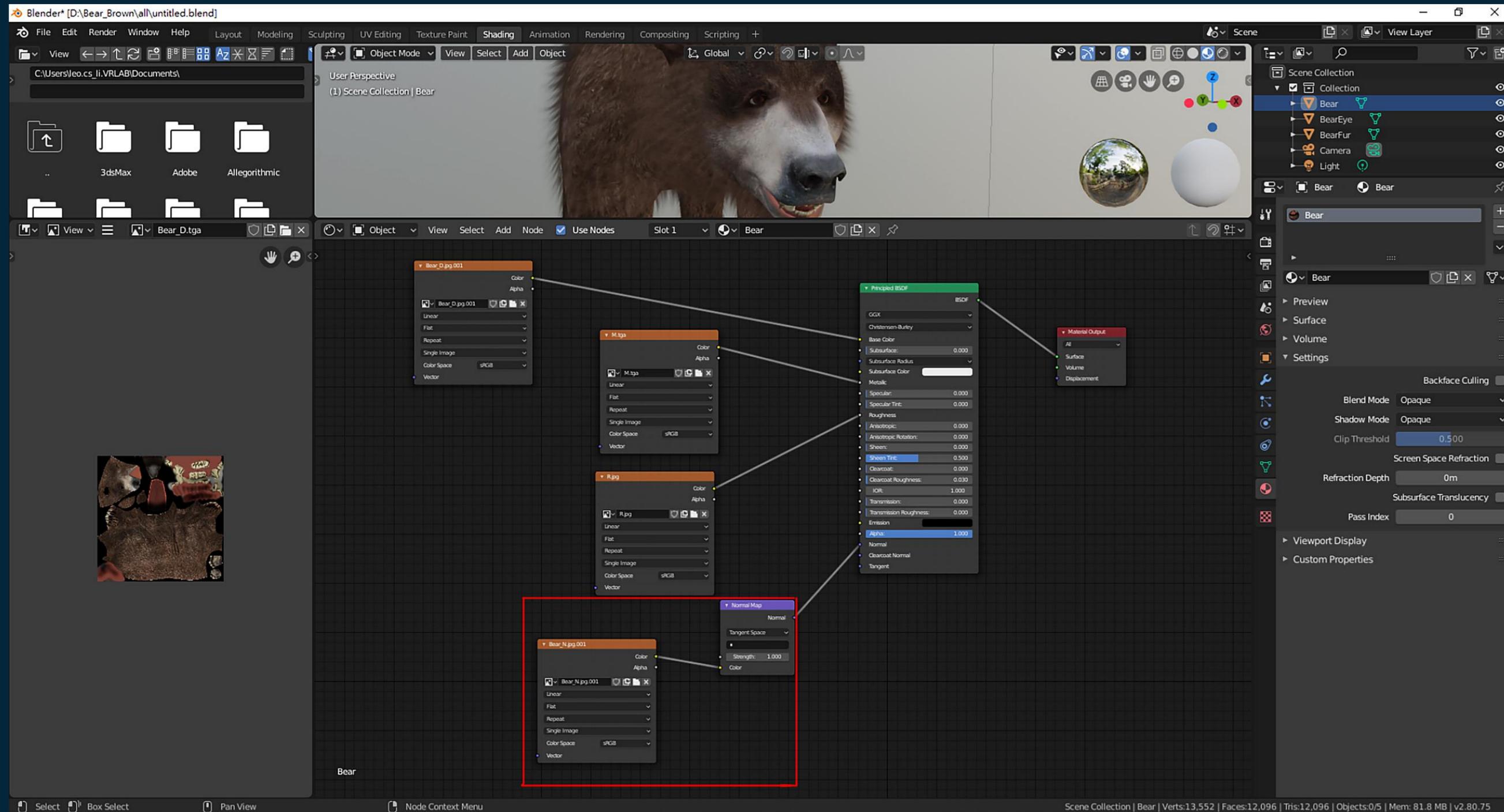


[Currently, 3D models exported from MAYA do not support the OBJ format.]

3D Applications

Blender:

1. Import your 3D models.
2. Check all texture maps.
3. Use correct normal map setting to allow the normal map function to be supported.



3D Applications

Blender:

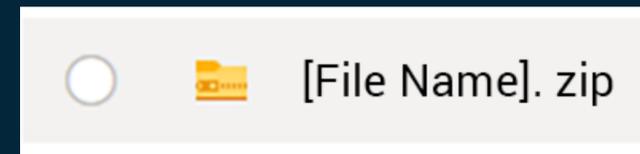
(Note: The blue normal map node is necessary, such as the setting in the red rectangle, or the normal map will be lost.)

4. Export your 3D models.

4. Uploading

You can follow these steps to upload your 3D models:

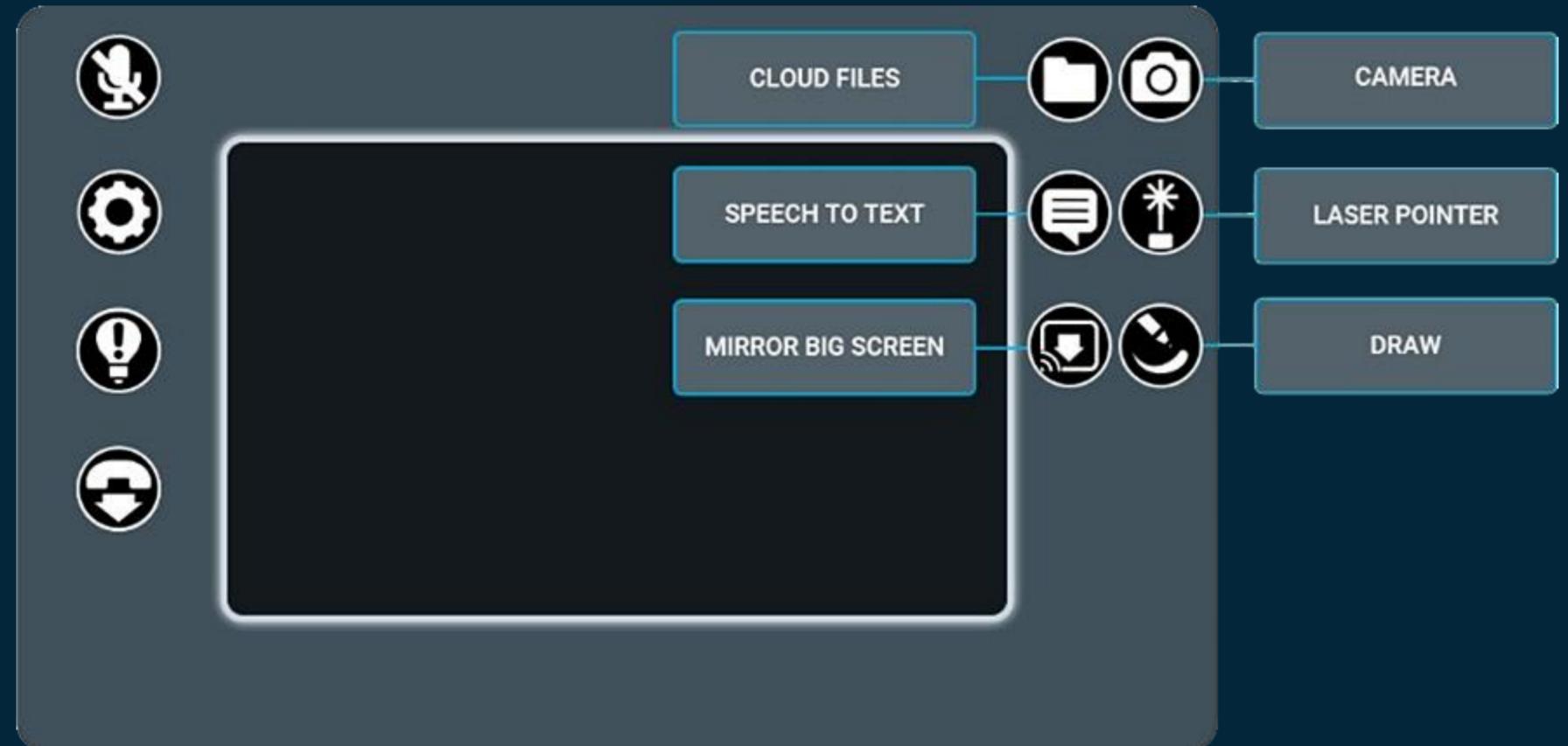
1. Keep all texture file names the same as they were used in the 3D software application.
2. Pack your 3D model and all textures to a zip file (Note: You can have some subfolders within your zip file, but we do not recommend it. In addition, we only ensure that one zip file contain one 3D model file).
3. Upload the zip file to your own OneDrive.
4. Go to the website sync.vive.com to key-in corresponding information for synchronization.



4. Uploading

In the application, you can follow these easy steps to load your 3D models in Sync^{XR}:

1. Open the VR Tablet.
2. Click the File Browser icon to access your **Cloud Files**.
3. Select the 3D model you want to load.





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