

OBJECT VIEWER

FOR MERGE CUBE

OVERVIEW

Object Viewer for MERGE Cube allows users to view uploaded 3D objects on MERGE Cube and share those objects with others. Users who upload 3D objects on MINIVERSE.io can manipulate the objects' default viewing properties inside the Object Viewer App.

This guide will cover the 2 essential processes required to get started, Uploading Objects on MINIVERSE.io, and Editing/Viewing Objects on the Object Viewer App.

We also include a few guides for Exporting Objects from other 3D Programs.

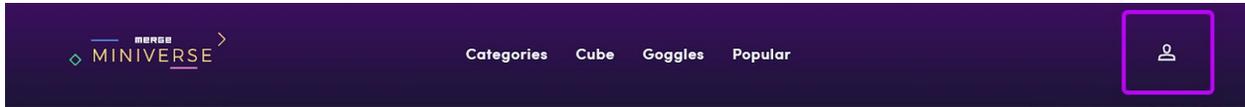
Object Viewer for MERGE Cube can be found on the App Store and Google Play Store:



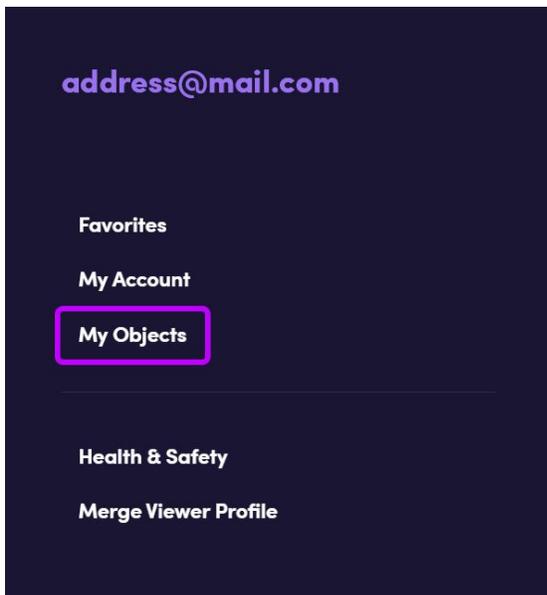
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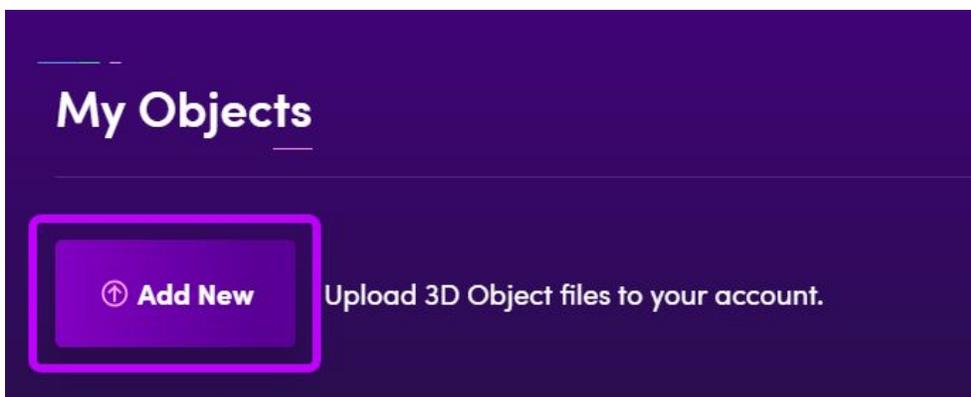
Uploading Objects to MINIVERSE.io



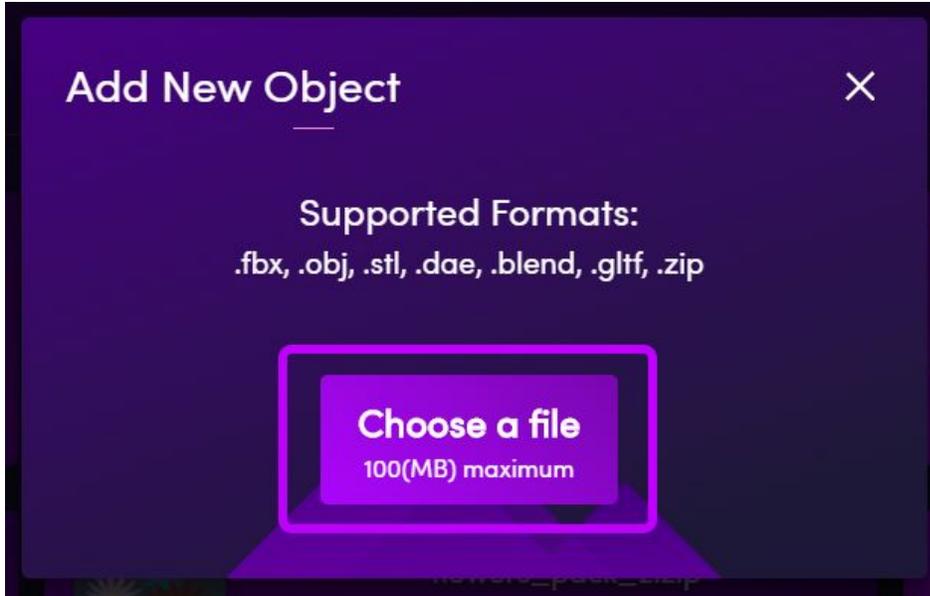
Login to **MINIVERSE.io**. Click the **User Icon** in the top right.



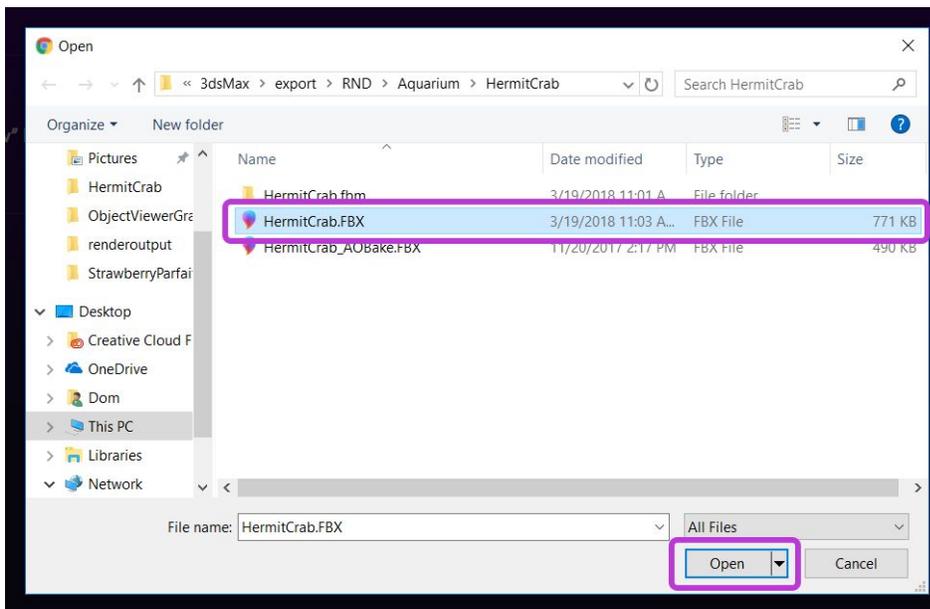
Select **My Objects** from the menu.



Click the **"Add New"** button.



Select **“Choose a file”**



Browse to the file* you want to upload, then select **“Open.”**

Maximum File Size 100MB

Model format supported .fbx, .obj, .stl, .dae, .blend, and .gLTF

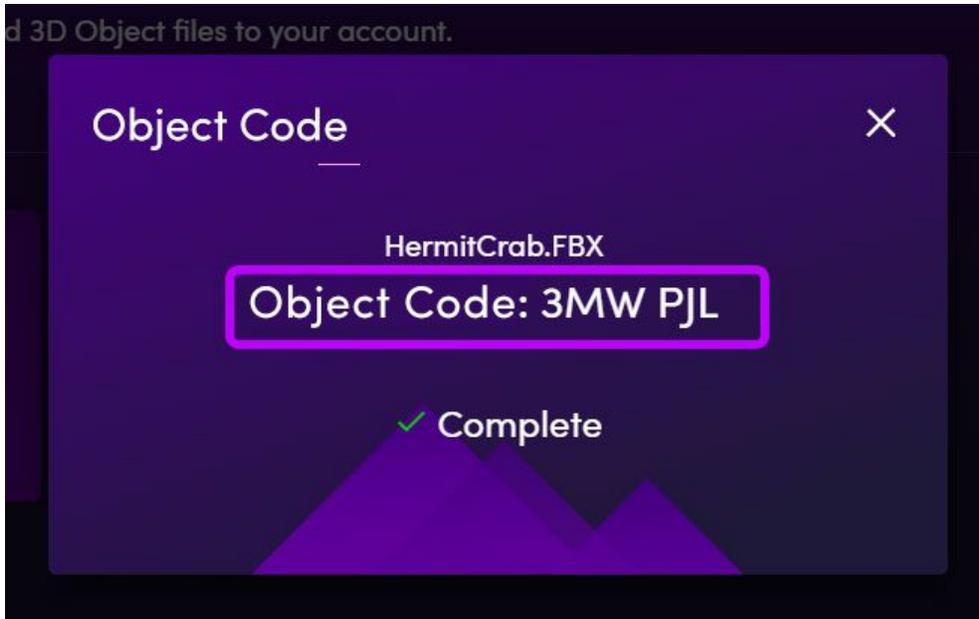
You may compress your textures (.jpg, .jpeg, or .png) and materials (.mtl) with your model in a .zip folder.

Compressed file/folder: only .zip supported.

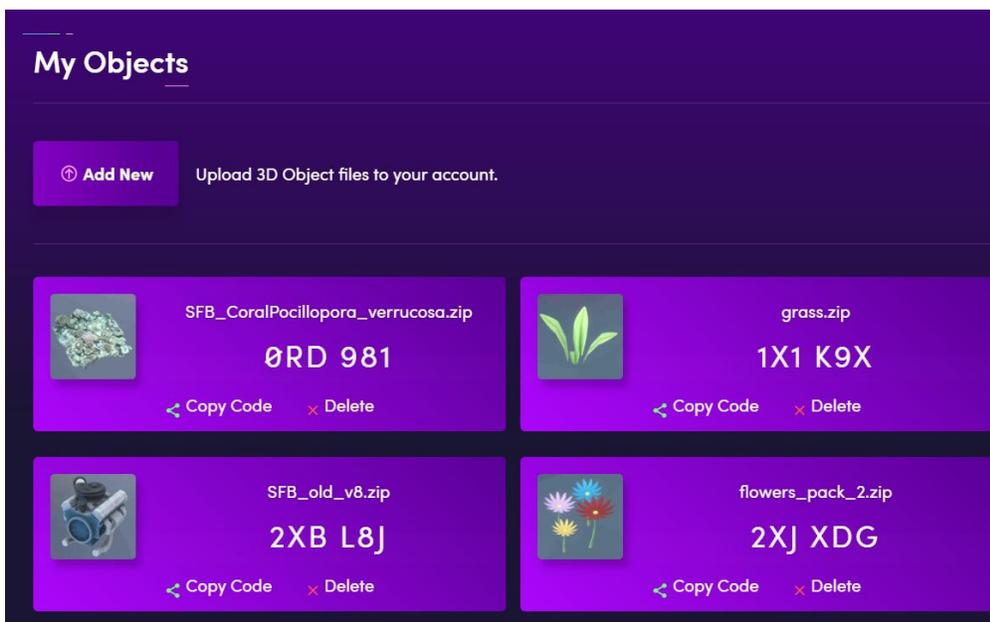
Texture size limit 2048, recommend 1024.

Textures supported: .jpg, .png, .jpeg

.fbx files can support animations, and the app will loop the entire range of keyframes.

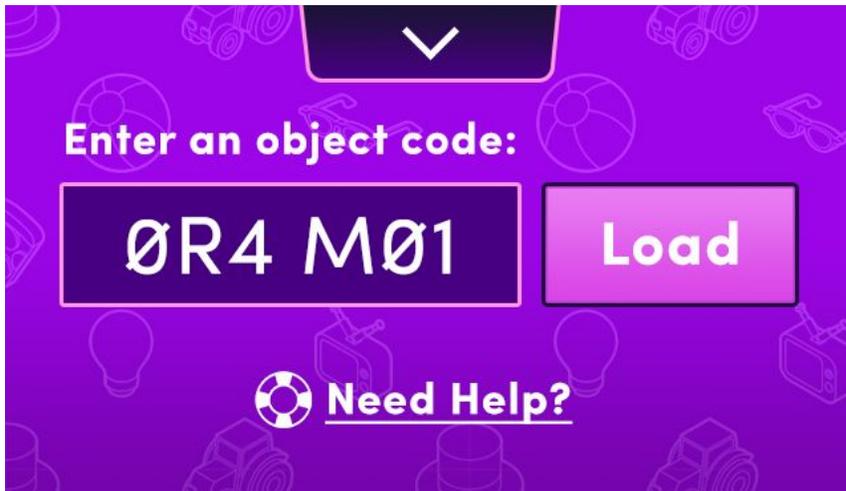


An **Object Code** will be generated for the uploaded object.

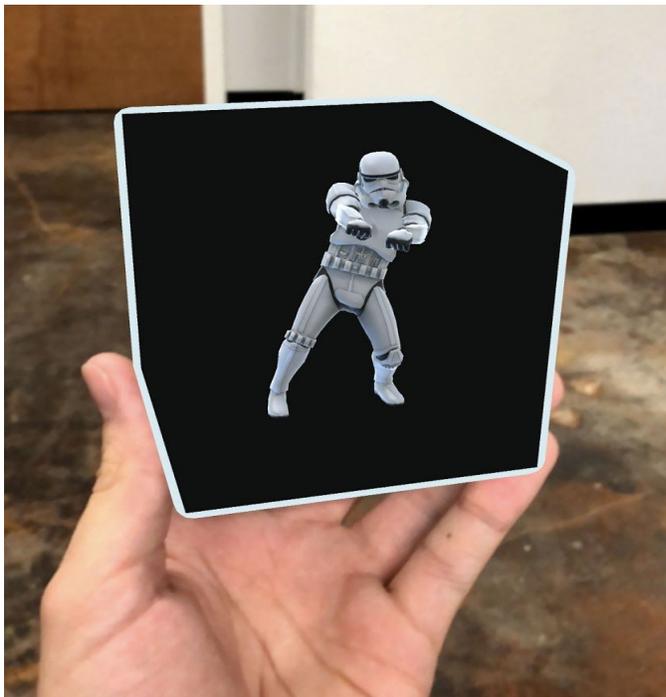


All uploaded objects will be listed on the **“My Objects”** page.

Viewing Objects on the MERGE Cube

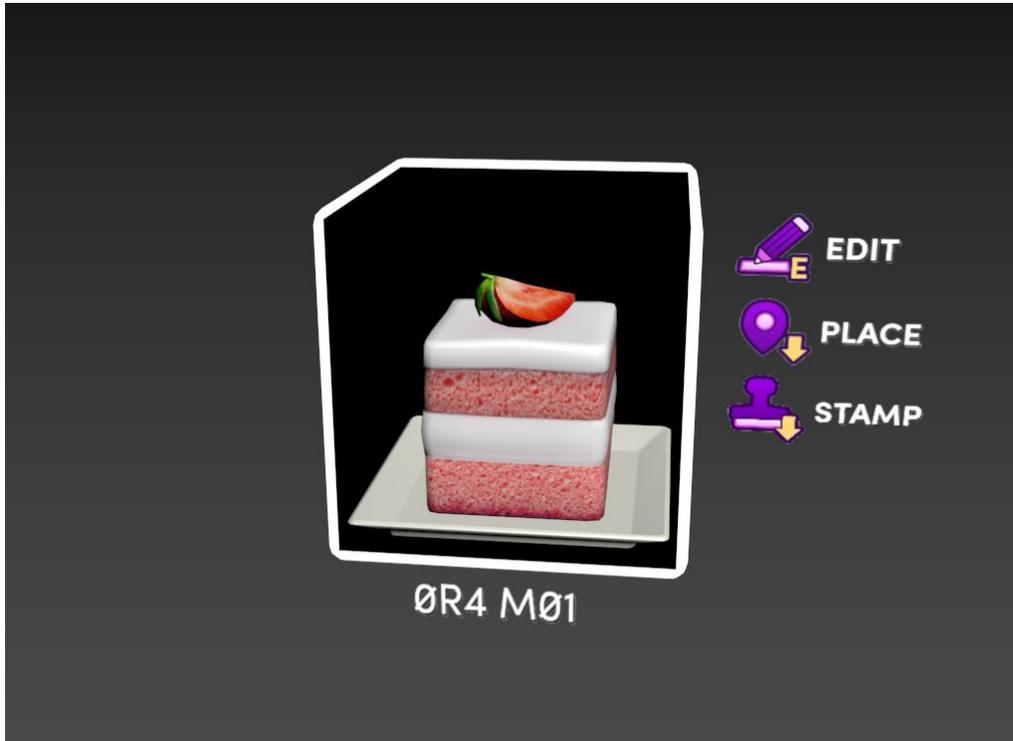


Enter the **Object Code** of your object and click “**Load**”.



Once your object is loaded point your phone at MERGE Cube to **View** it.

Object Viewer - VIEW



VIEW Tools:



EDIT - Opens **EDIT**. Allows user to edit default **Scale**, **Position** and **Rotation** of an object.*



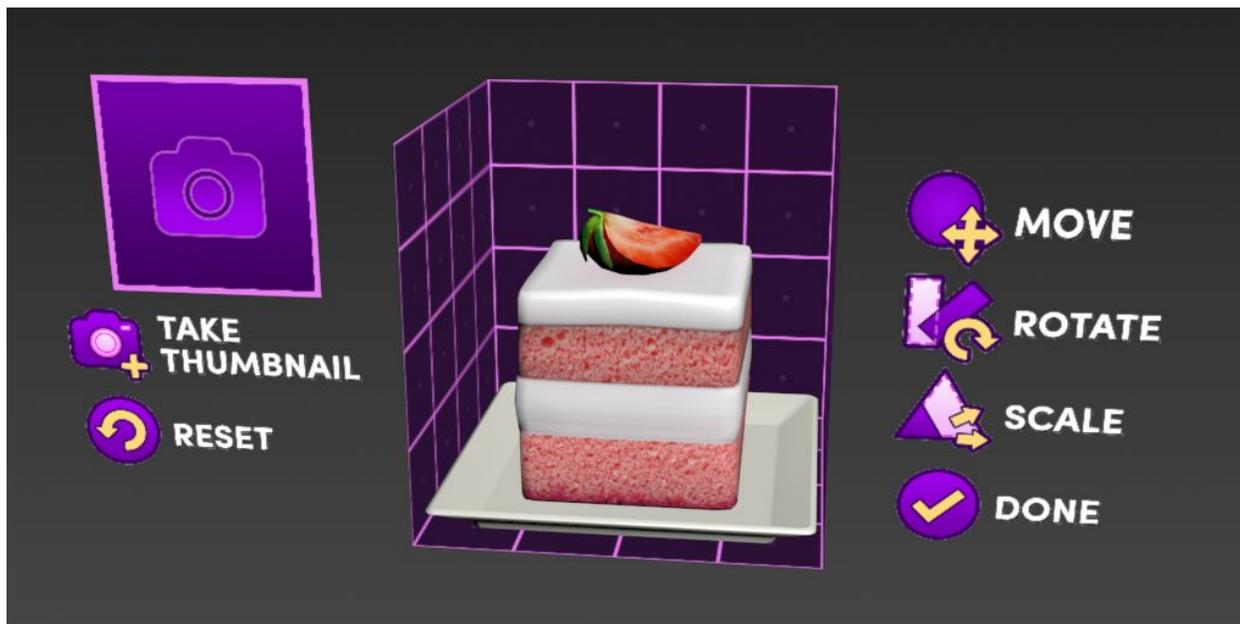
PLACE - Allows the user to **Place** an object in the real world on a ground plane.



STAMP - Allows user to **Stamp** multiple copies of an object in the real world using MERGE Cube as the placement location.

Object Viewer - EDIT

EDIT mode allows you manipulate the default position, scale, and rotation of the object inside MERGE Cube. This is how the object will appear when other users enter the access code.



EDIT Tools:



TAKE THUMBNAIL - Create a thumbnail of the object for MINIVERSE.



RESET - Sets all attributes back to the originally uploaded settings.



MOVE - Set the default position of the object in MERGE Cube.



ROTATE - Set the default rotation of the object in MERGE Cube.



SCALE - Set the default scale of the object in MERGE Cube.



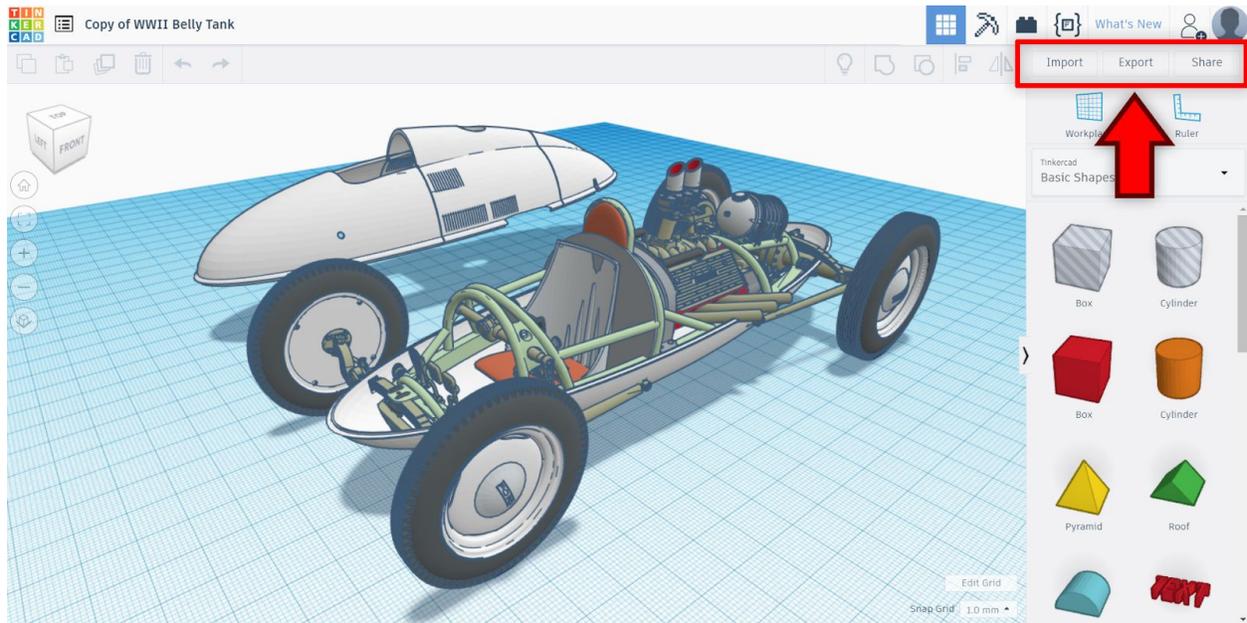
DONE - Save settings and return to **VIEW**.

Exporting Objects from Other 3D Programs

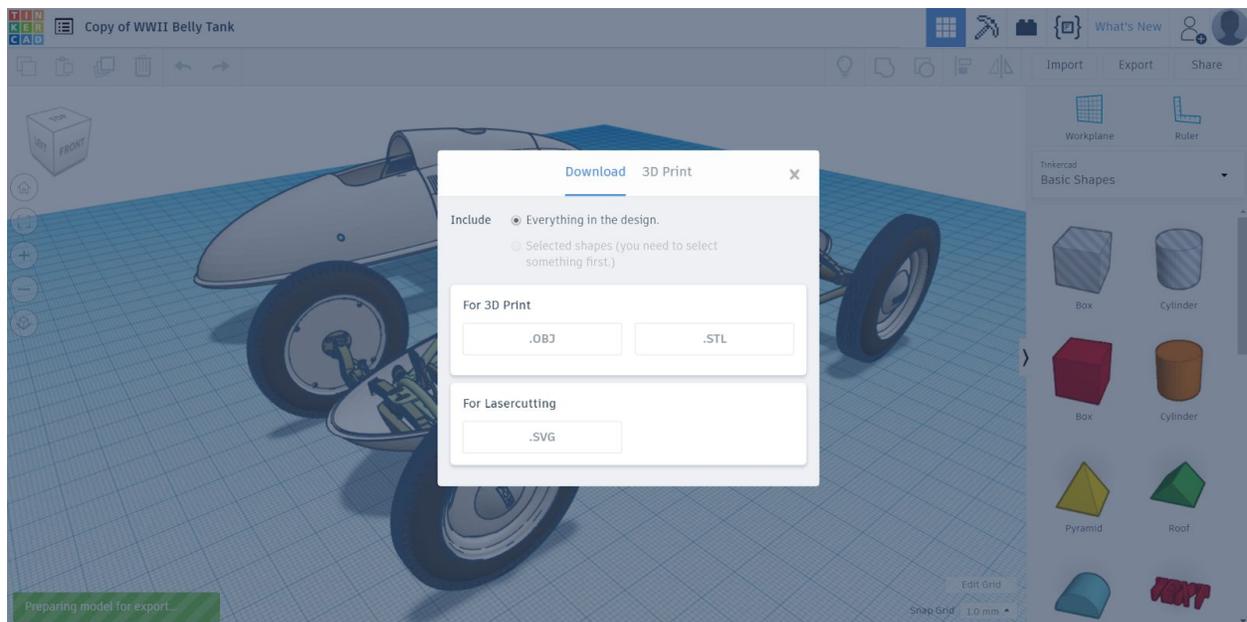


Tinkercad

Autodesk [Tinkercad]: <https://www.tinkercad.com/>

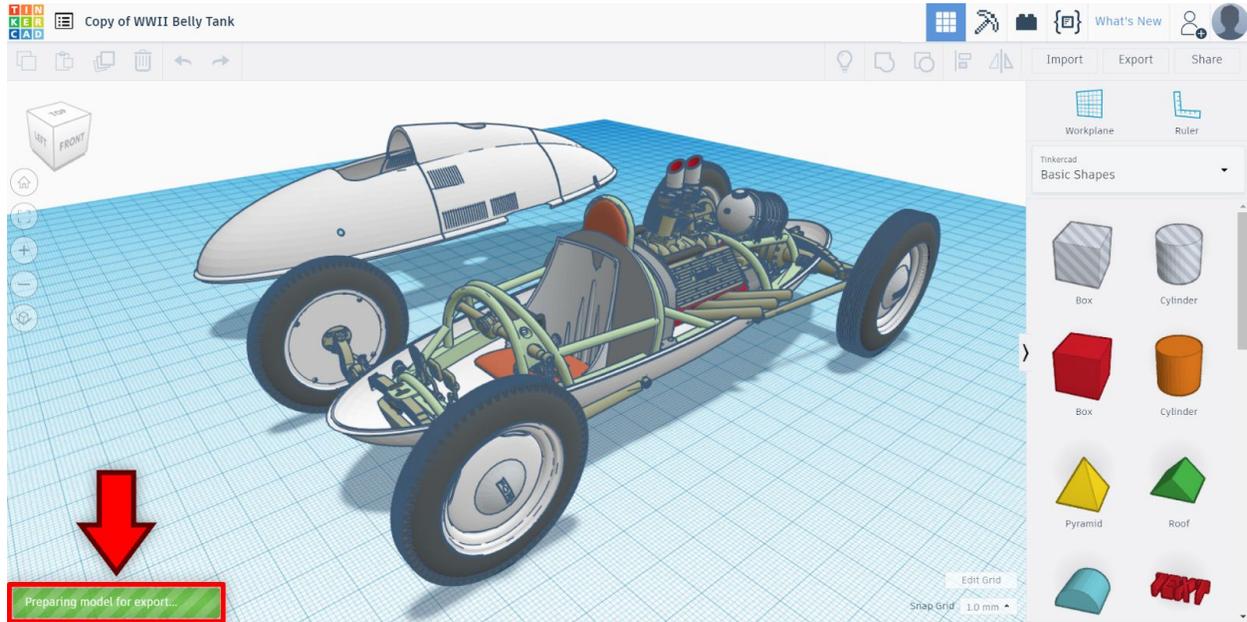


To begin the export process select the desired object and navigate to and click the “**Export**” button on the top right of the menu bar above the shapes menu.

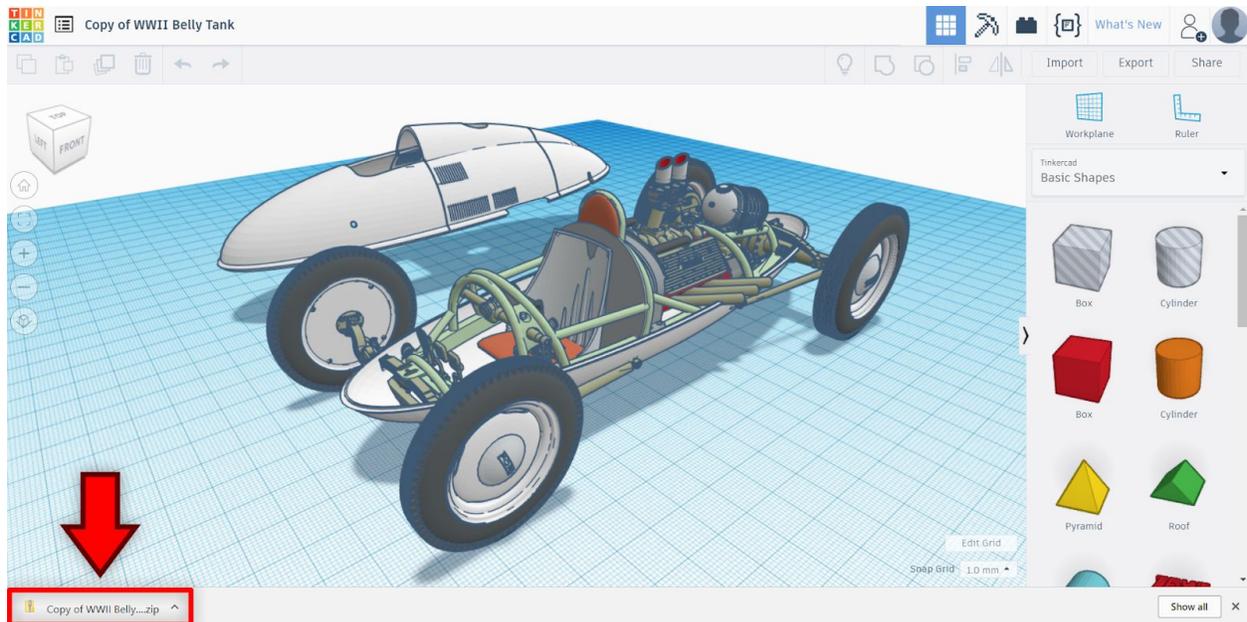


Select the desired object type you would like to export.

*Only **.OBJ** and **.STL** are supported by MINIVERSE.



Once you select the file format Tinkercad will begin preparing your file for download. This process can take several minutes depending on the complexity of the object.



Tinkercad will download a **.ZIP** containing the object. Upload the **.ZIP** to MINIVERSE.

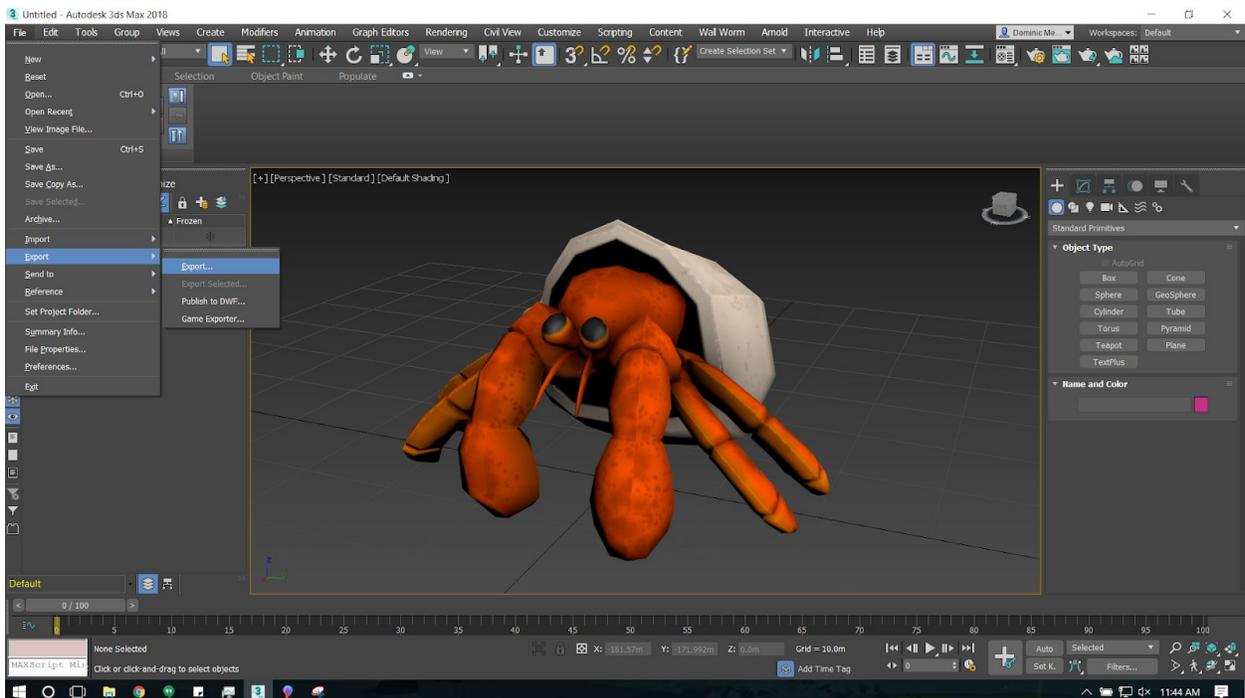


AUTODESK[®] 3DS MAX[®]

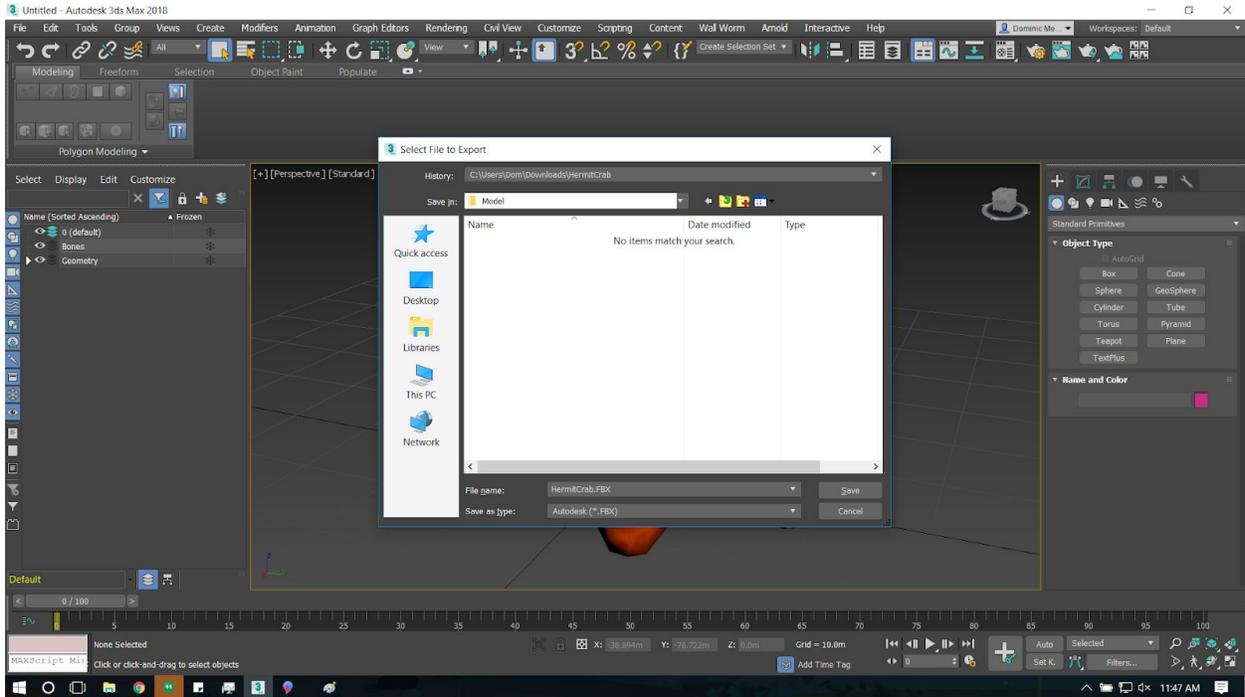
Autodesk 3DS Max

Autodesk [3DS Max]: [Product Page](#)

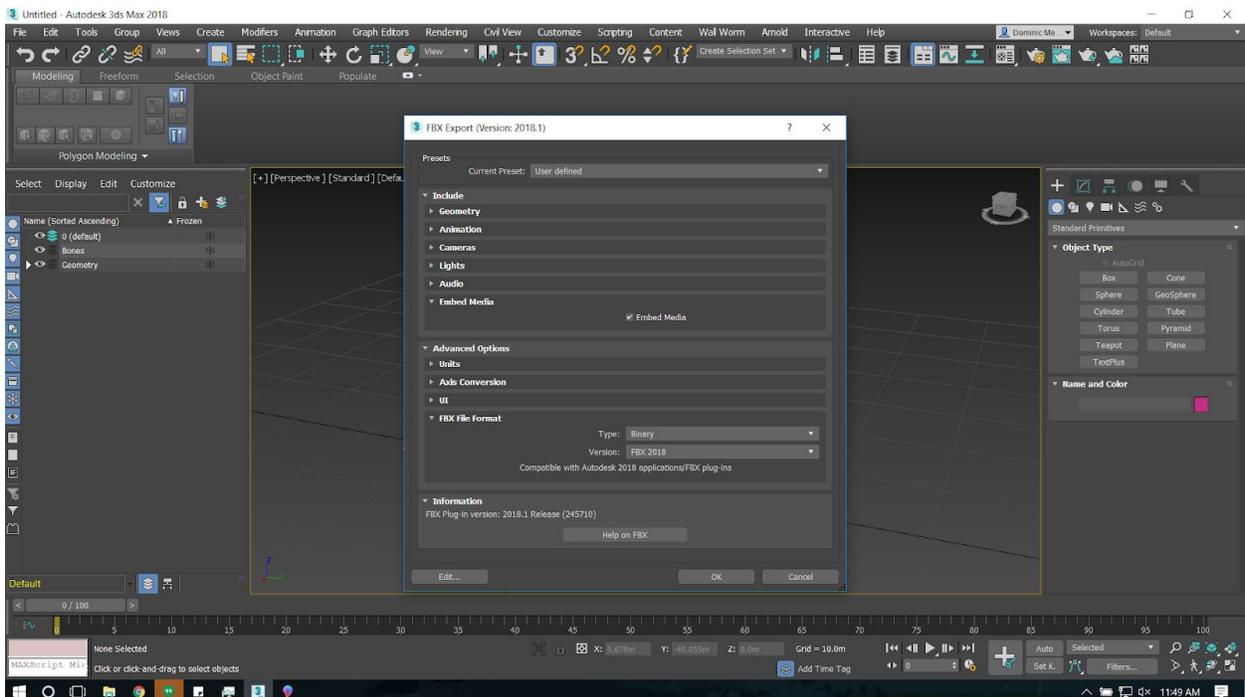
FBX Export from 3DS Max to Object Viewer:



Select **File > Export > Export**.

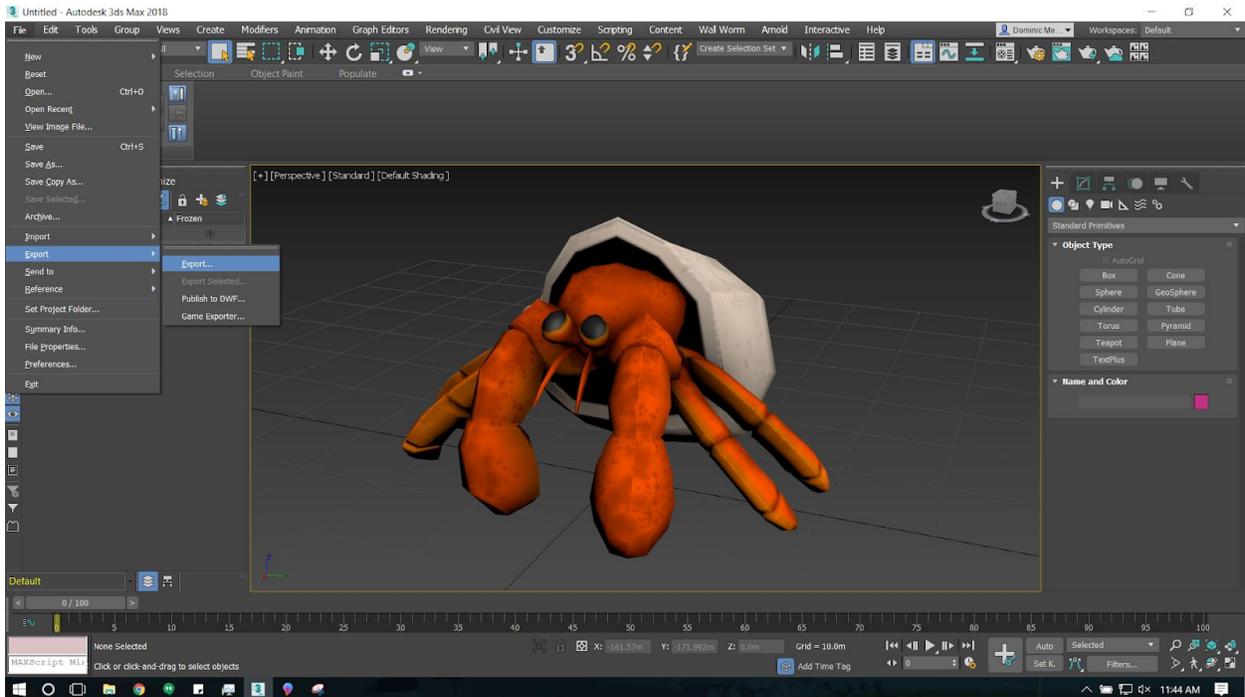


Choose a location to save the object. Name it accordingly. Set the file type to “Autodesk (*.FBX)” in the “Save as Type” drop down menu. Click “Save”.

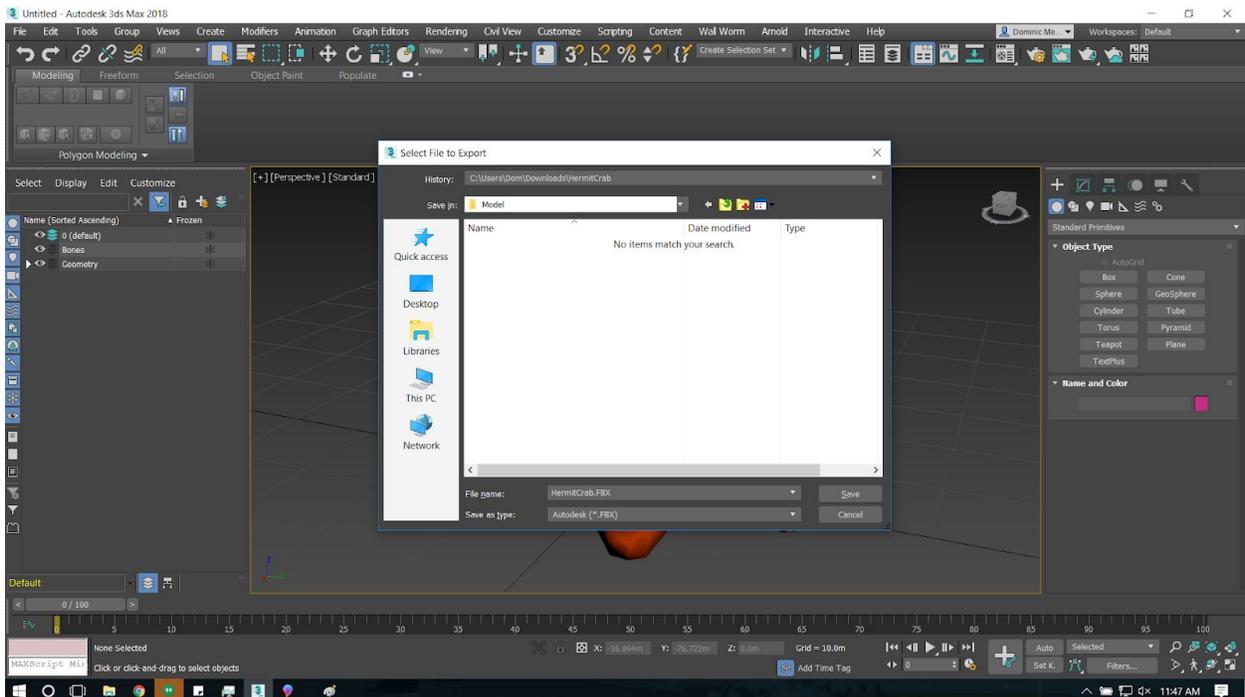


Once saved, the “FBX Export” dialogue will appear. In the “Include” Group make sure to check “Embed Media” and in the “Advanced Options” Group make sure to set the “FBX File Options”, Type to “Binary”. Select “OK”. The object is now ready to upload to Object Viewer.

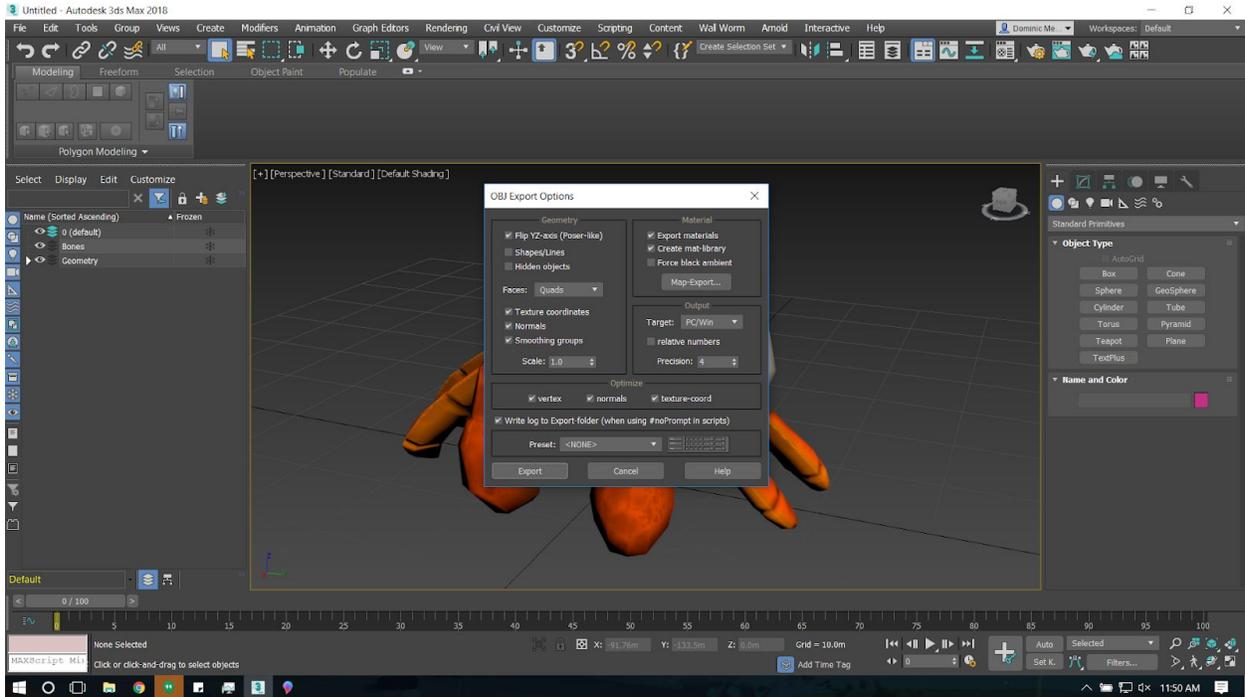
OBJ Export from 3DS Max to Object Viewer:



Navigate to the export option via the file menu. **File > Export > Export.**



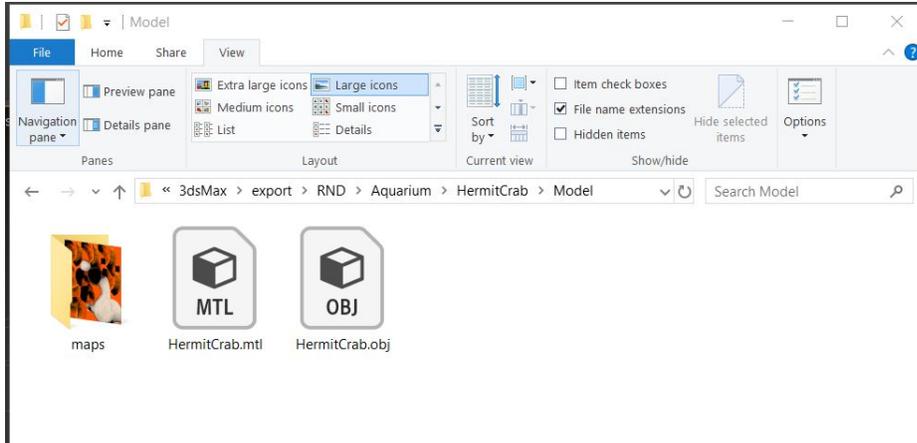
Choose the location to export via the **“Select File to Export”** dialogue. Name your object in the **“File Name”** Text field and set the file type to **“gw::OBJ-Exporter (*.OBJ)”** in the **“Save as Type”** drop down menu.



Once you complete the previous step the “**OBJ Export Options**” dialogue will appear. Make sure to match the following settings before you click Export.

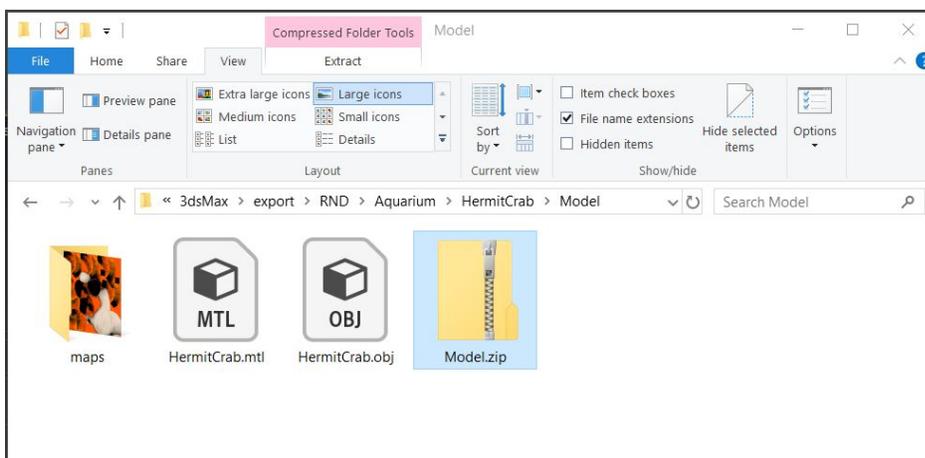
“Geometry” Box:	“Material” Box:	“Optimize” Box:
<ul style="list-style-type: none"> ● Flip YZ-axis (Poser-Like) ● Texture Coordinates ● Normals ● Smoothing Groups ● Scale 1.0 	<ul style="list-style-type: none"> ● Export Materials ● Create mat-library 	<ul style="list-style-type: none"> ● Vertex ● Normals ● Texture-coord

Once you match the OBJ Export Settings press the “**Export**” button



The exported object should look like this. The **object (.OBJ)**, a **material* (.MTL)**, and a **maps*** folder containing the texture(s) for your object.

*If your object does not have any textures you can simply upload the **.OBJ** to the MINIVERSE.



If your object has associated texture files select the **object (.OBJ)**, **material (.MTL)**, and **maps** folder containing the texture(s) for your object and put them into a compressed **.ZIP** file. Upload this **.ZIP** to the MINIVERSE.

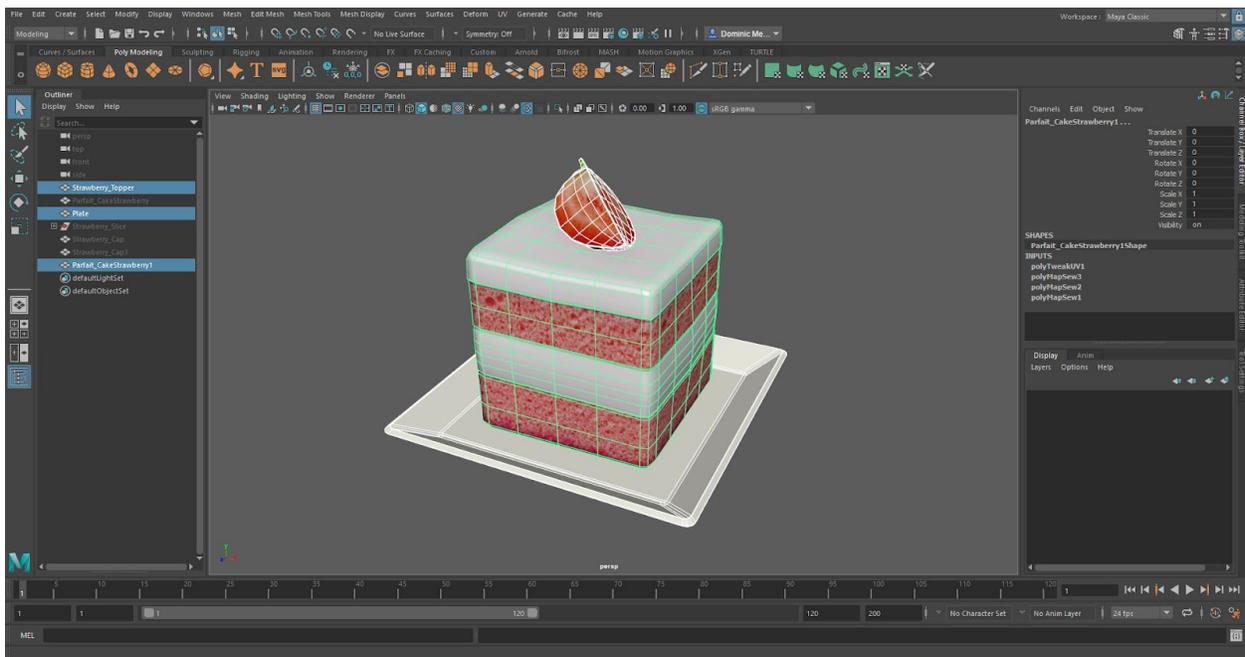
*Make sure your **.ZIP** folder is the name of your object.



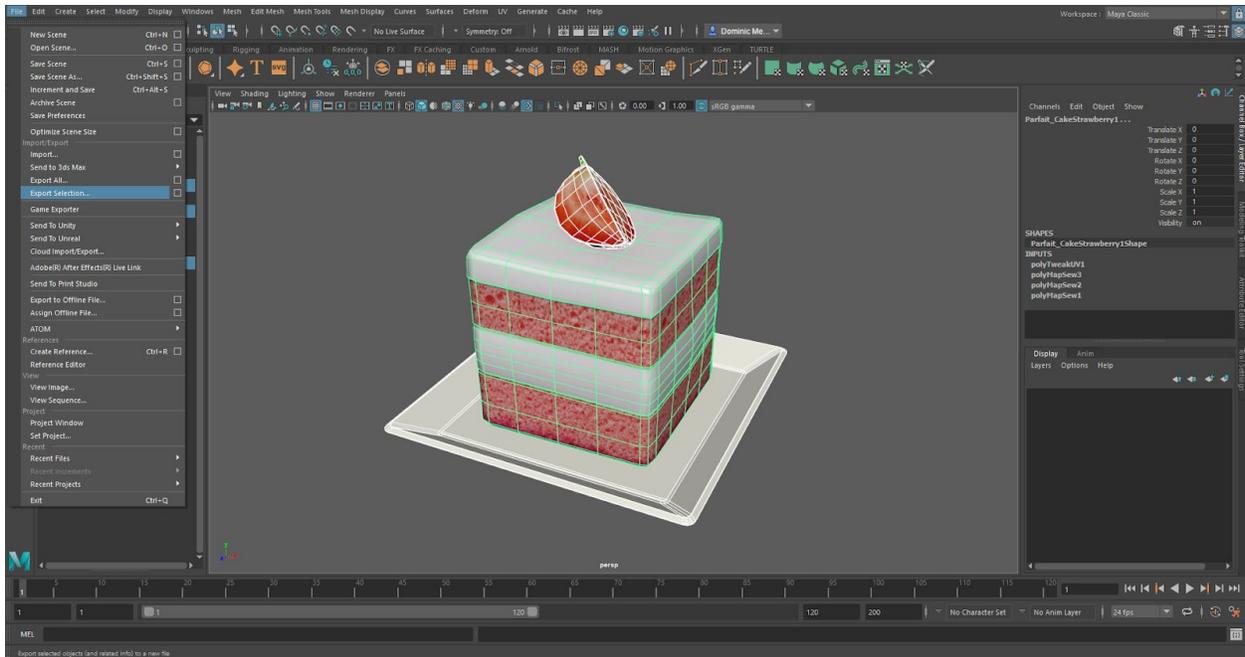
AUTODESK[®] MAYA[®]

Autodesk Maya

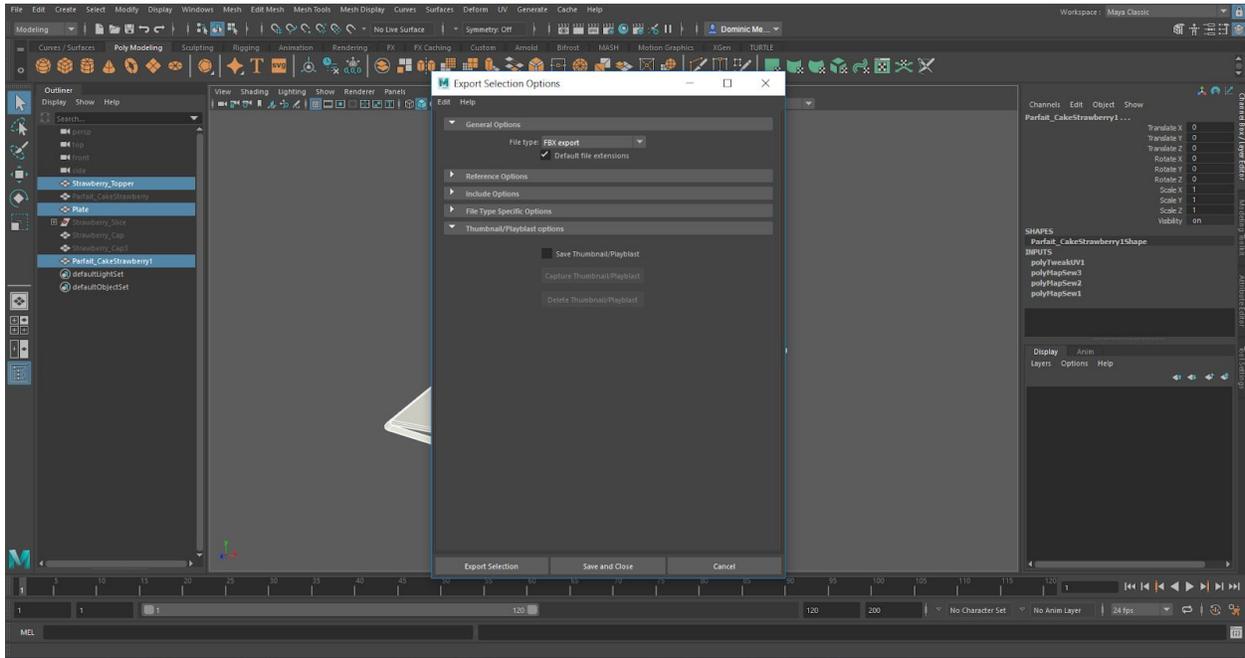
Autodesk [Maya]: [Product Page](#)



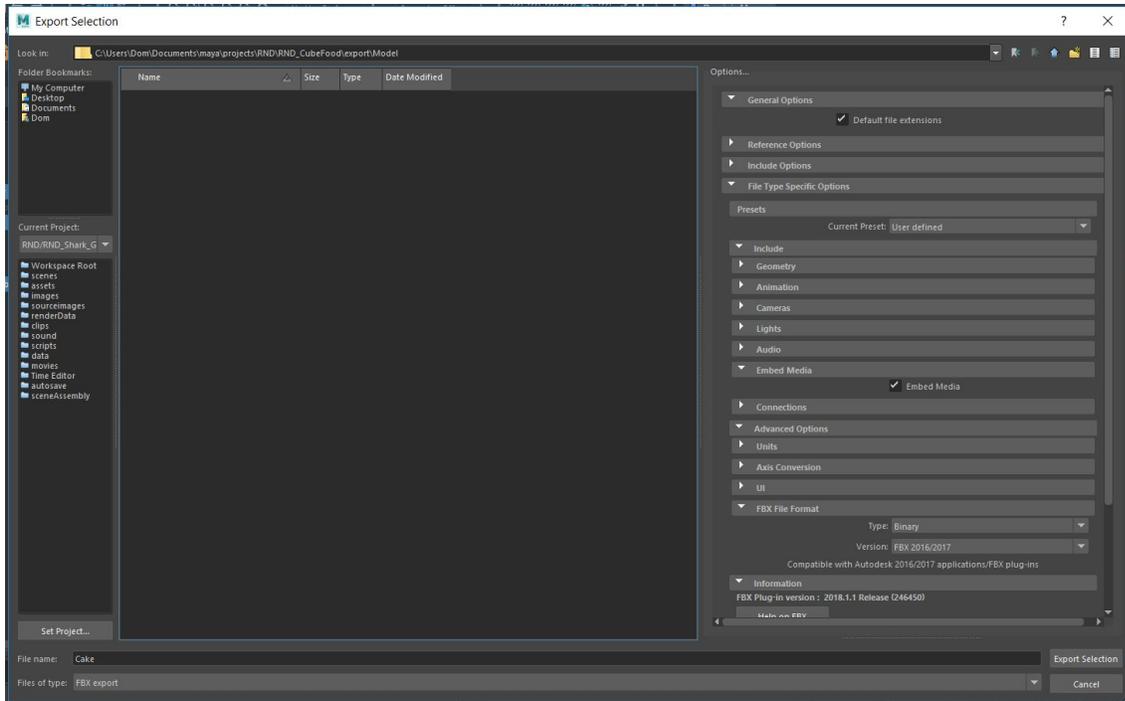
Select the objects to export.



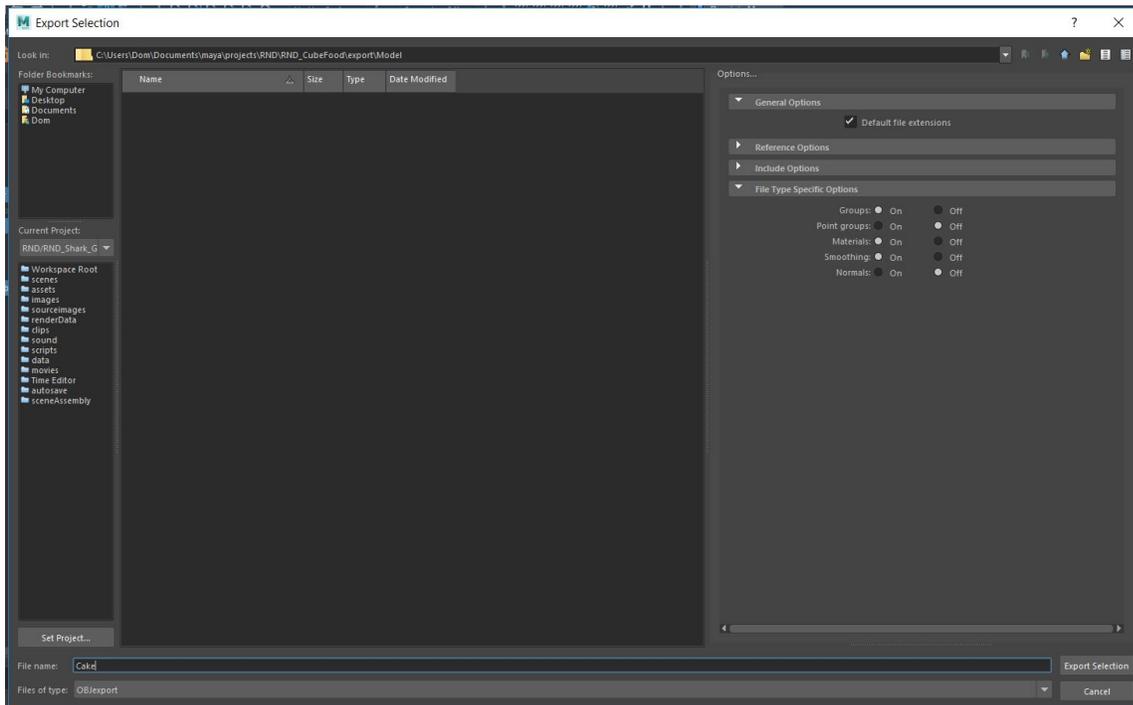
Navigate to **File > Export Selection** and select the options box to the right.



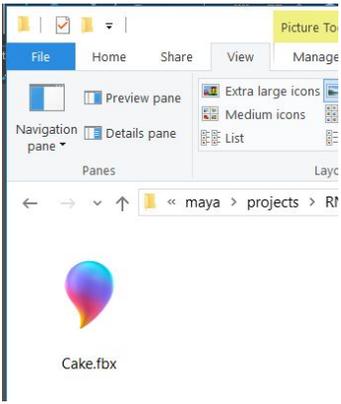
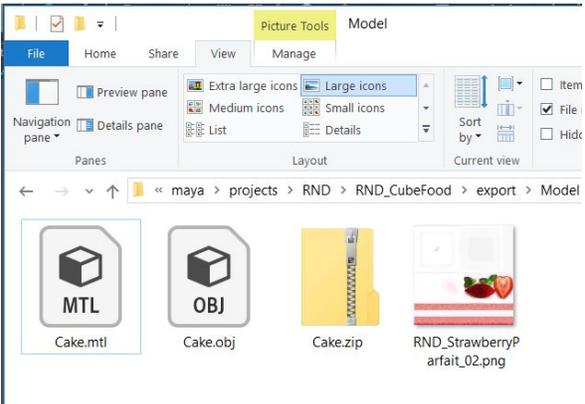
Make sure the file type **“FBX export”** is selected. Press **“Export Selection”**

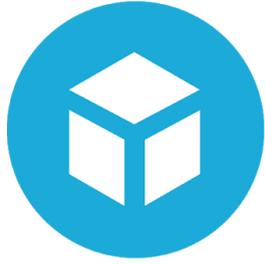


Make sure “**Embed Media**” is selected and that your “**FBX File Format**” type is “**Binary**”. Name your file and click “**Export Selection**”. The object is ready to be uploaded to MINIVERSE.



For .OBJ exports select the “**OBJExport**” option in the “**Files of Type**” drop down menu. Name your file and select a location to complete the export process.

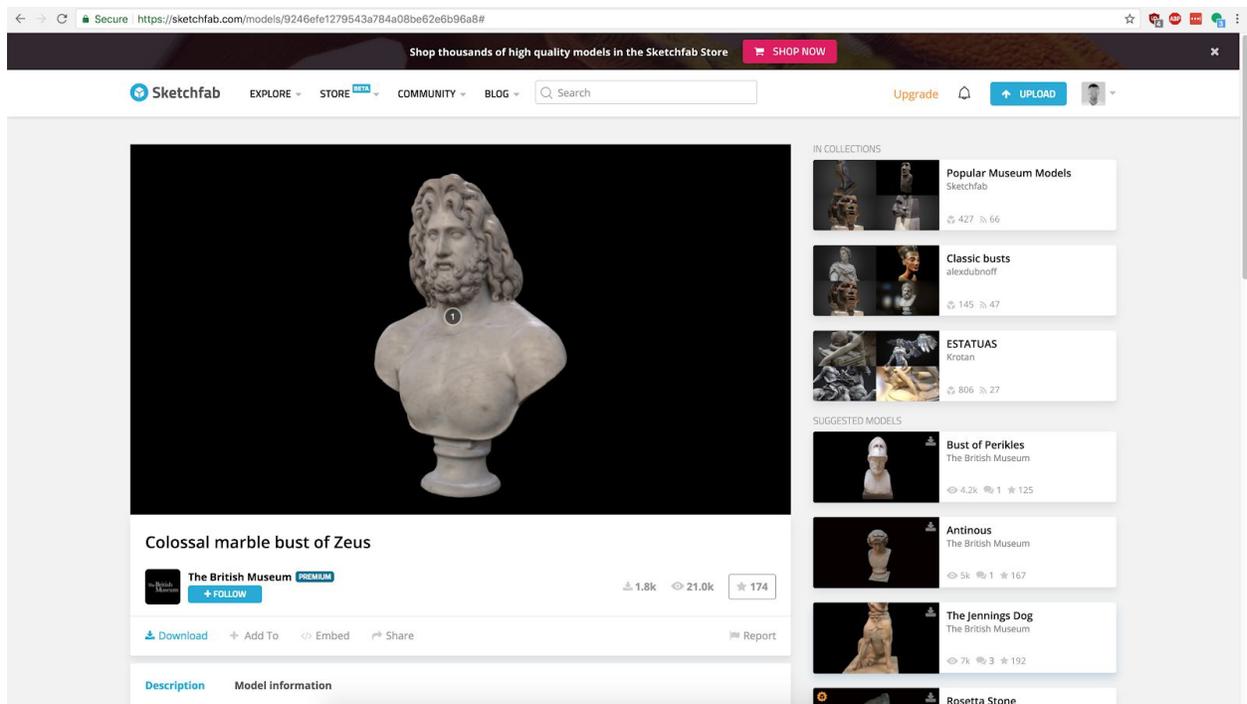
 <p>A screenshot of a Windows File Explorer window. The address bar shows the path: « maya » projects » R... The main area displays a single file icon for 'Cake.fbx', which is a colorful, teardrop-shaped icon.</p>	 <p>A screenshot of a Windows File Explorer window. The address bar shows the path: « maya » projects » RND » RND_CubeFood » export » Model. The main area displays four files: 'Cake.mtl' (Material Template Library file), 'Cake.obj' (Object file), 'Cake.zip' (compressed folder), and 'RND_StrawberryP arfait_02.png' (texture image).</p>
<p>An .FBX ready to upload to MINIVERSE.</p>	<p>Make sure to combine the object, texture and material file into a .ZIP then upload the .ZIP to MINIVERSE.</p>



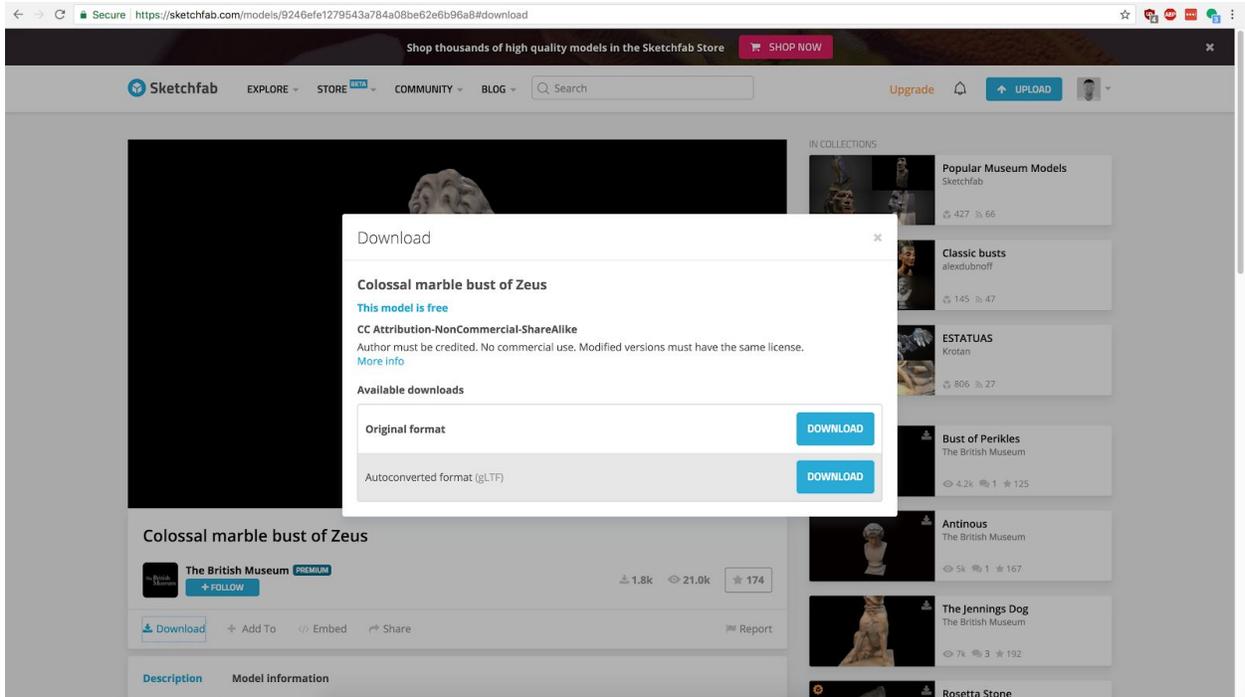
Sketchfab

Sketchfab

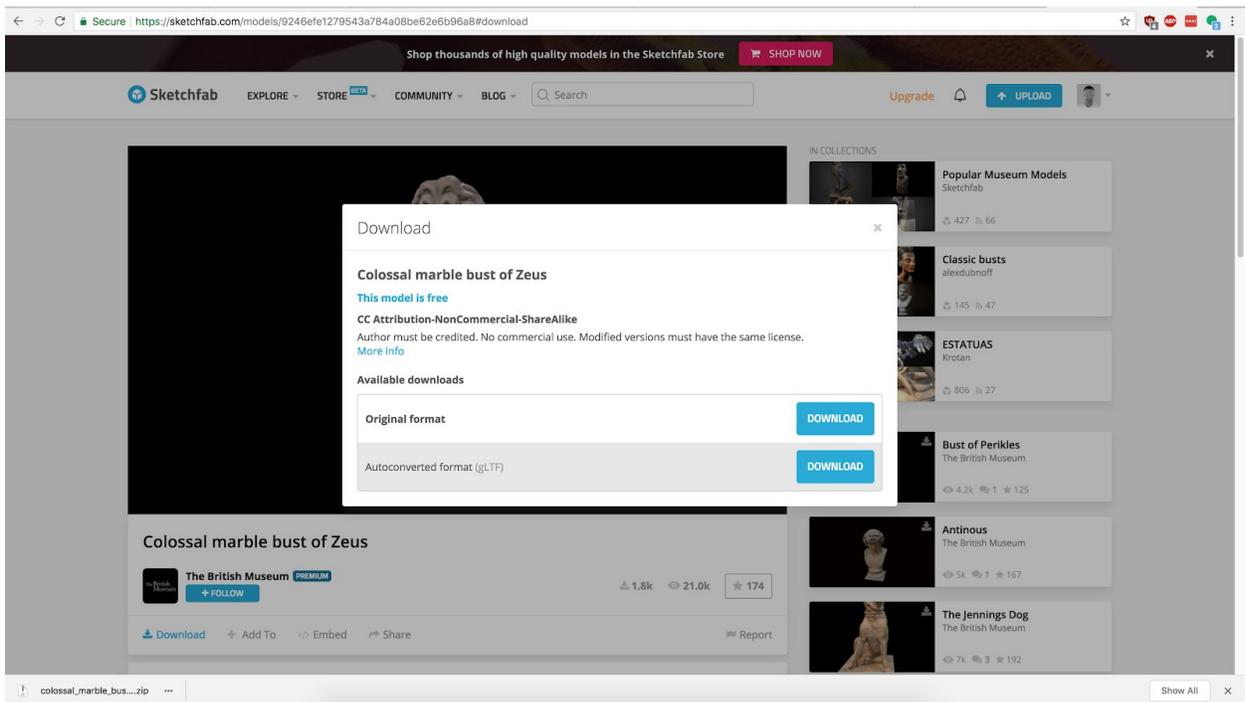
Sketchfab [Website]: [Website](https://www.sketchfab.com)



Select the download button from any downloadable object.



Choose the **“Autoconverted format (gLTF)”** option.



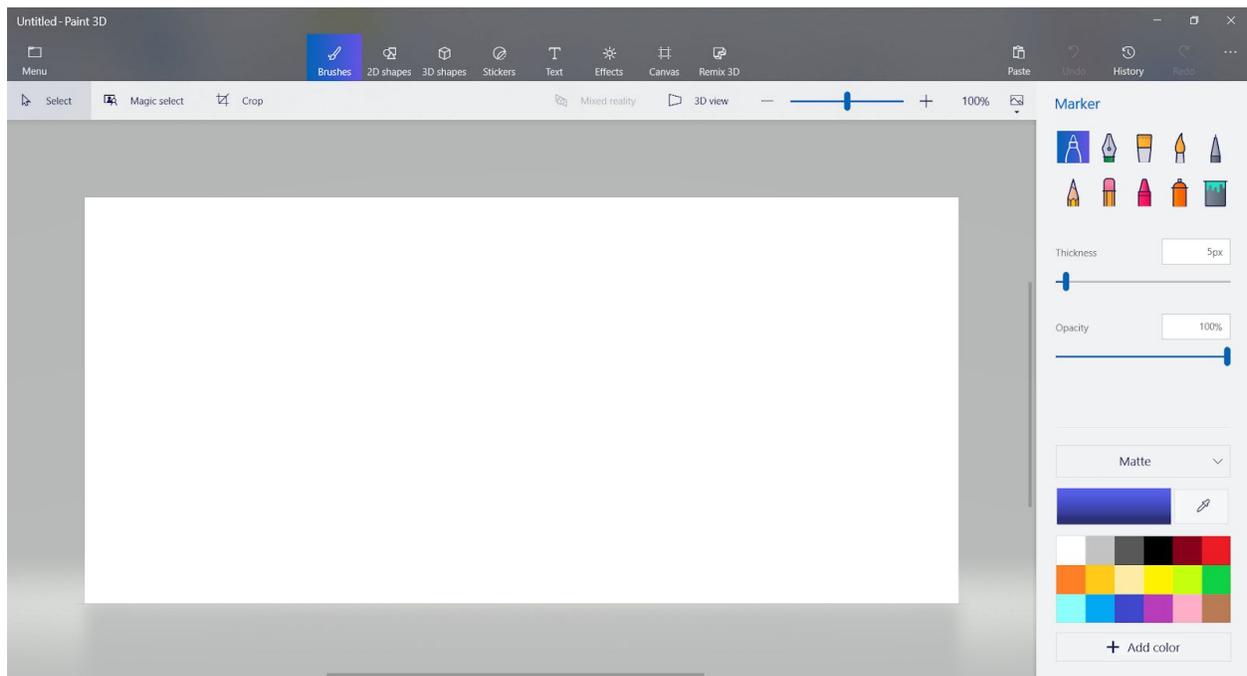
The file will now be located in your downloads folder as a .ZIP. Upload the .ZIP to MINIVERSE.



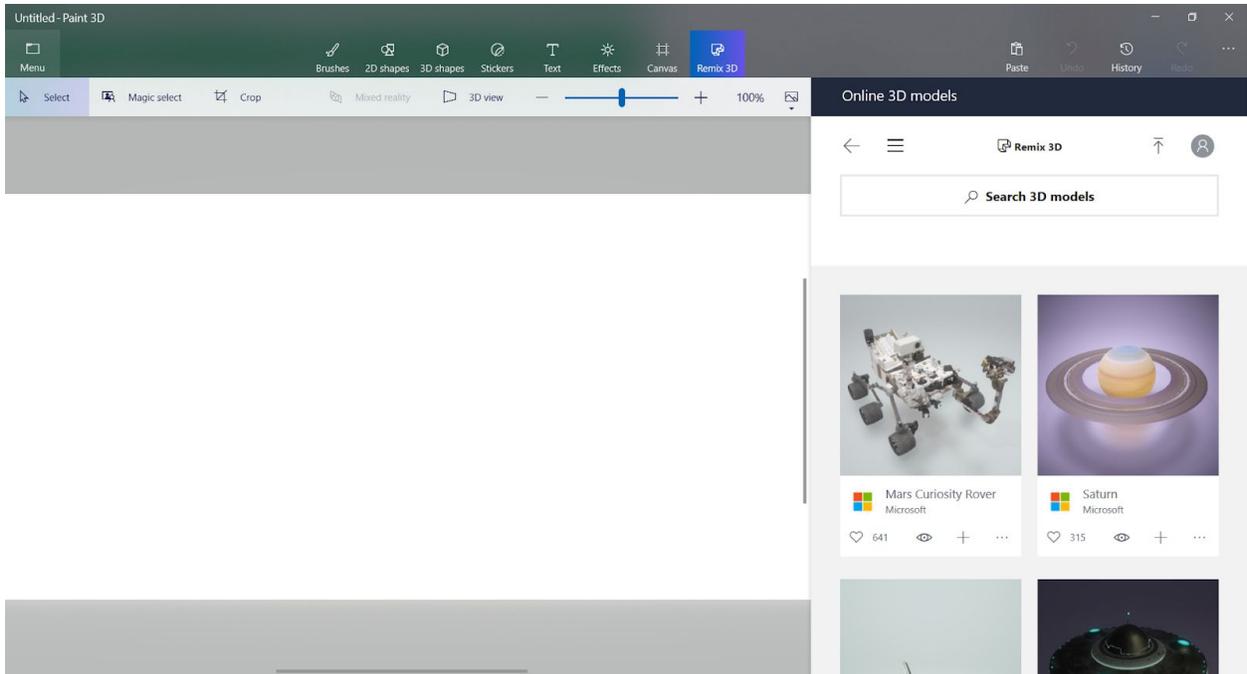
Paint 3D

Paint 3D

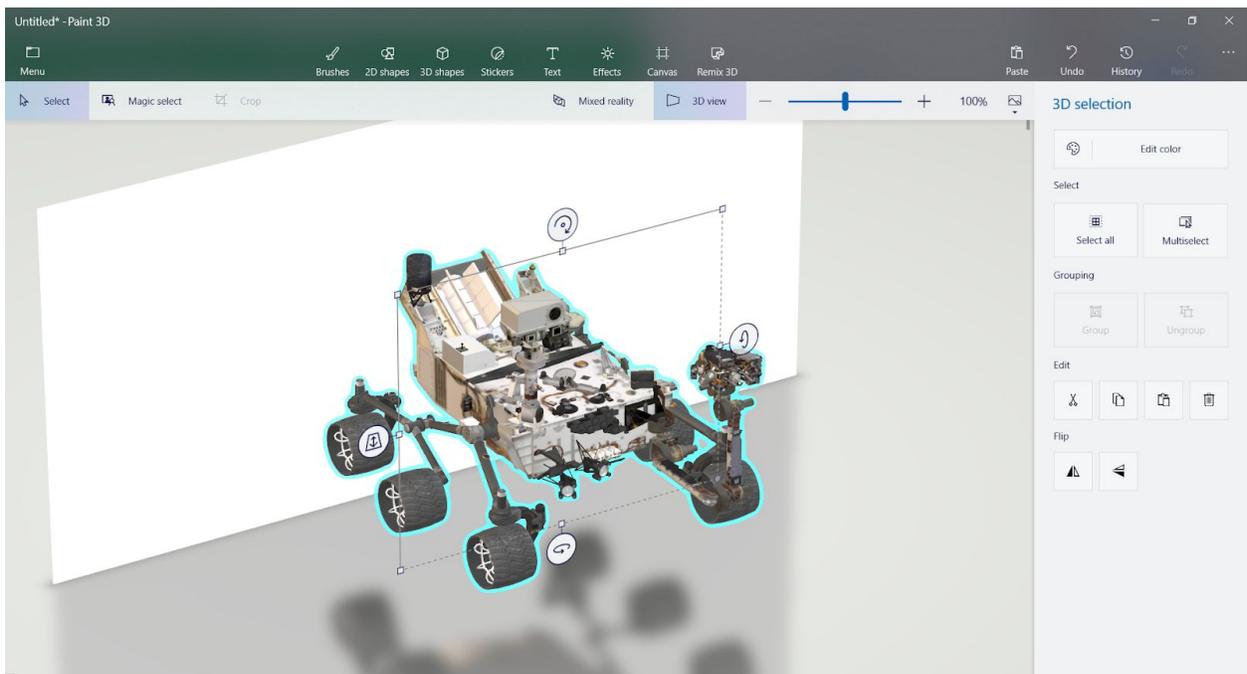
Paint 3D [Website]: [App Link](#)



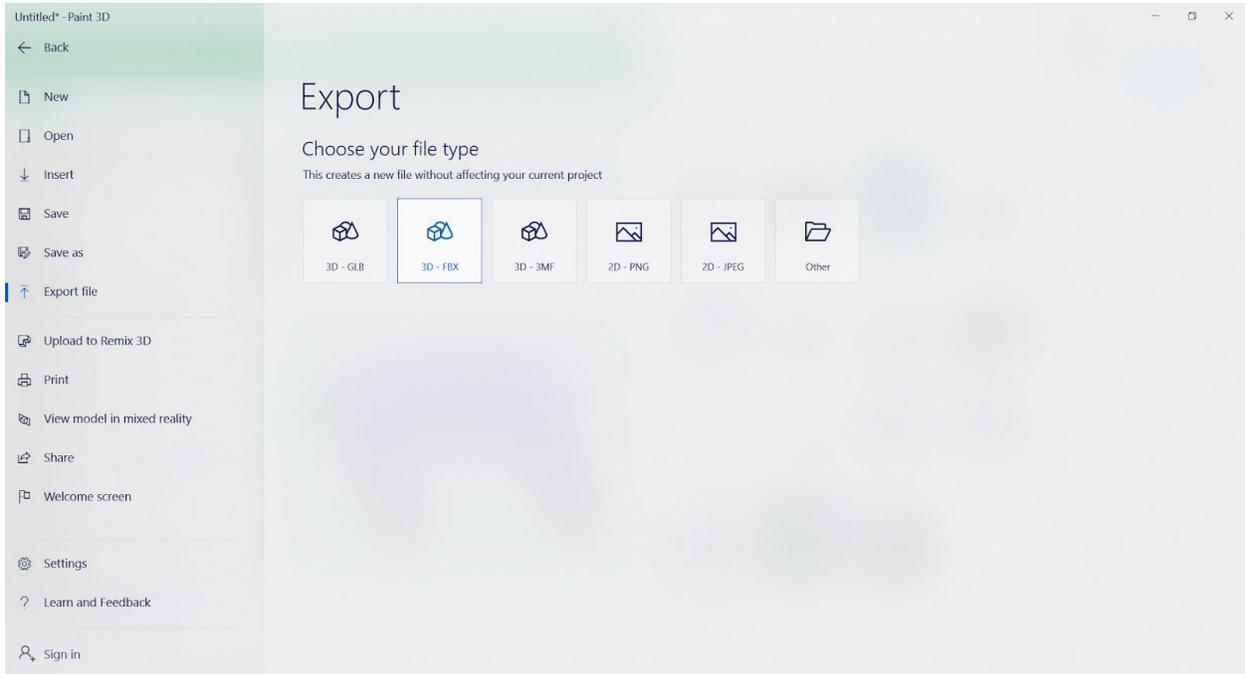
Click the “**Remix 3D**” icon in the top menu bar of Paint 3D.



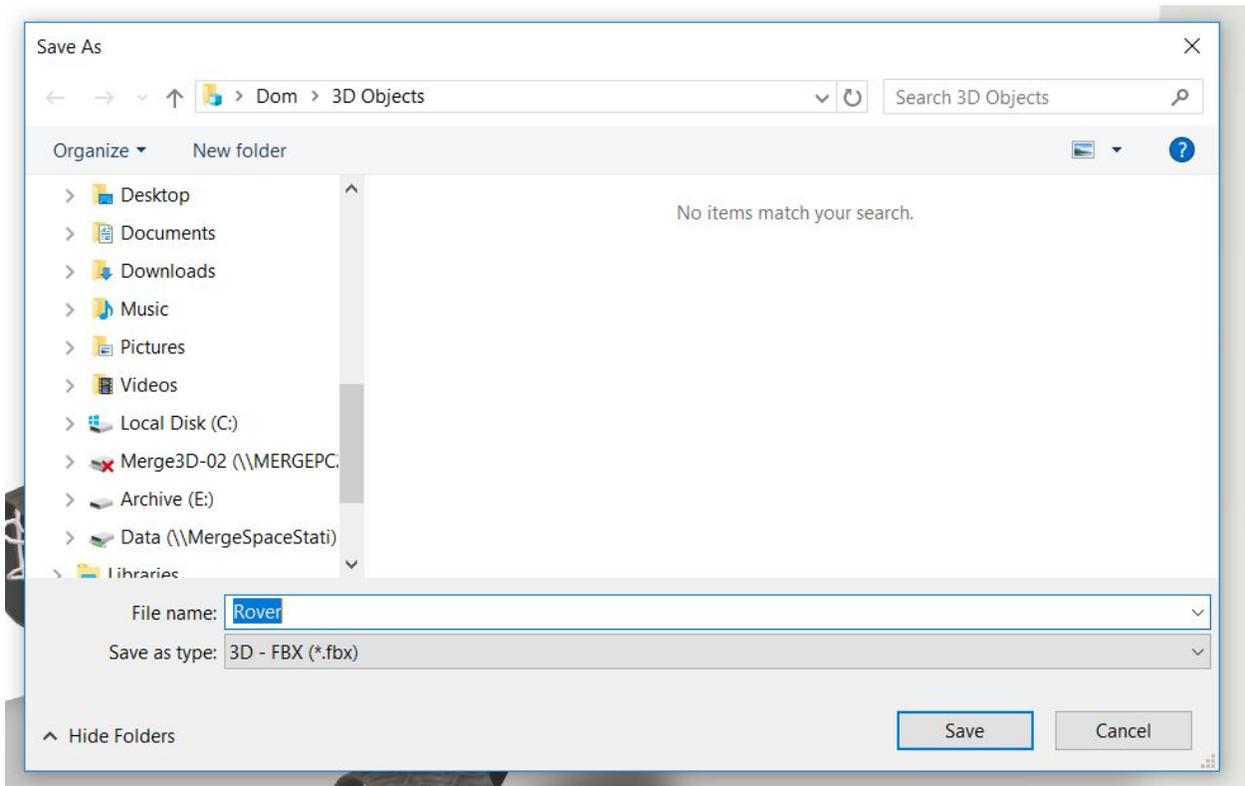
In the Remix 3D browser on the right, select an object.



Once you have an object click the **"Menu"** icon on the menu bar on the top left.



Select the **“Export File”** option on the left and choose **“3D-FBX”** as your file format. A **“Save As”** dialogue will appear.



In the **“Save As”** dialogue name your object and choose a location. Click **“Save”**. The object is ready to be uploaded to MINIVERSE.