How to Create Ogre .mesh Files

By Tyler DeWitt

Required:

- Blender
- Blender2Ogre
- Ogre Command Line Tools (v. 1.7.2)

  https://bitbucket.org/MindCalamity/blender2ogre

  * The link above contains both links to download the required programs and instructions similar to mine.

Step 1:

In order to export your work in Blender, you must first have the OGRE Exporter installed as an add-on in the program. Grab the latest version of Blender2Ogre from this link:

  https://code.google.com/p/blender2ogre/downloads/list

Extract the .zip into your favorite directory. Then in Blender, go to File > User Preferences > Addons and install the io_export_ogreDotScene.py script from where you extracted it. Once installed, simply check its box to include it as an option.
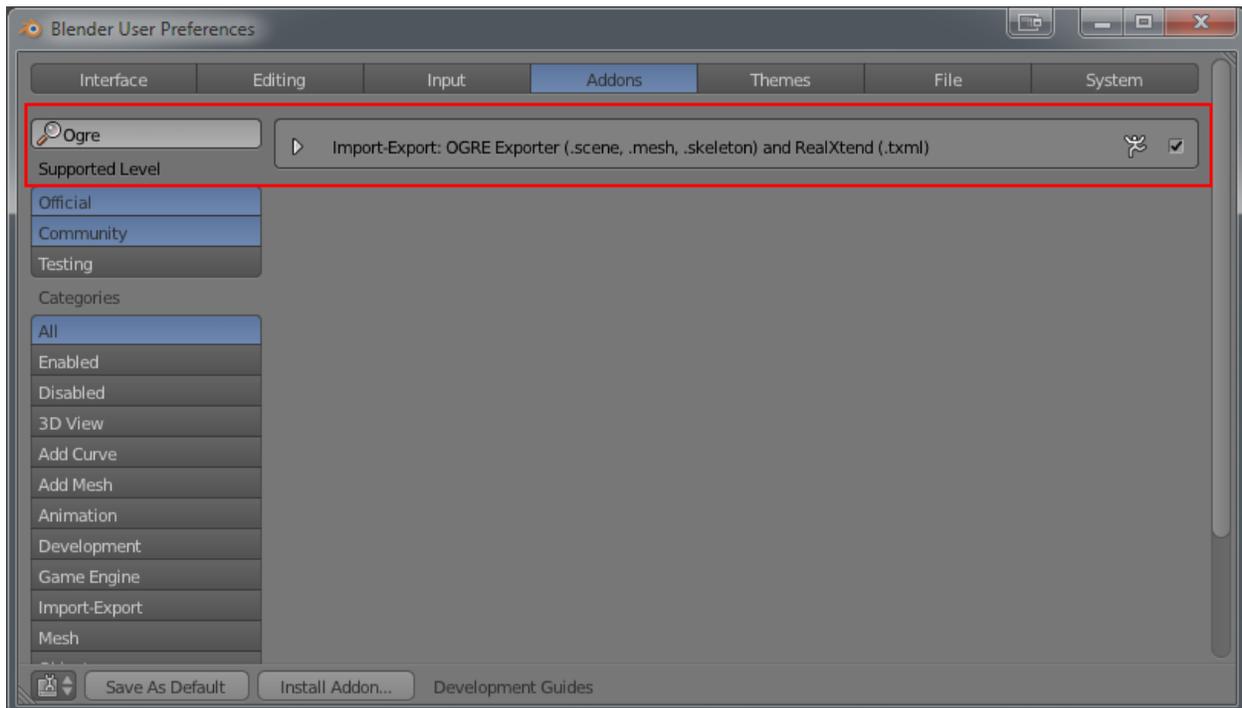
Remember that Blender uses Cartesian coordinates (z-axis upward) while Ogre's y-axis is upward, so compensate for this by reconfiguring the axis orientation in the export settings (I believe the orientation with the z underlined is the one you want). Exporting a .mesh also gives you a .material file too!

Step 2:

Now your Blender project exports as a .mesh.xml, but it's not a binary .mesh file just yet. This is when the Ogre Command Line Tools come in. Download the tools at this link:

http://www.ogre3d.org/download/tools

If you are attempting this on Linux refer to the very first link for instructions on installing the tools, as this link only offers versions for Windows and OSX.

Unzip the tools into your favorite directory, and study the README file as it will tell you exactly what is needed. Bring up the Command Prompt or Terminal. Traverse to the directory where the tools were unzipped and call the 'OgreXMLConverter' executable with your source .xml file from Blender and a destination file as arguments in that order. For example:

OgreXMLConverter boat.mesh.xml boat.mesh

You can also drag your .xml onto the executable and it will work the same. Like I said, look through the README for your benefit, it knows more than me.

Step 3:

Once the conversion is complete, you are ready to plug your .mesh into your Ogre project! However from what I've experienced Blender does not export the details such as the scale and facing direction of your mesh, so your model may be the wrong size and/or facing the wrong way (remember the jet ski?). MeshMagick from the Ogre Command Line Tools earlier is your solution, and it was included in the .zip file. It can scale your mesh's size and rotate it as well. Use is in the command line in the same way as OgreXMLConverter and refer to the README on how to do it, it explains better than I ever could. As a note, the rotate option was not working for me, so I simply swapped the mesh's x and z axes instead.

If this was unclear on any steps or if I am forgetting something, please let me know. Cheers!