

# Imagine or TTDDD Geometry Import Converter

This geometry utility imports Imagine or TTDDD binary geometry files. All geometry, surface attributes, hierarchy information, lights and cameras are properly extracted from the file.

Imagine files typically have file extensions of .job, .obj or just no extension at all. This converter expects that the file extension be renamed to .job so that the file type is not confused with the Wavefront file type (which uses .obj).

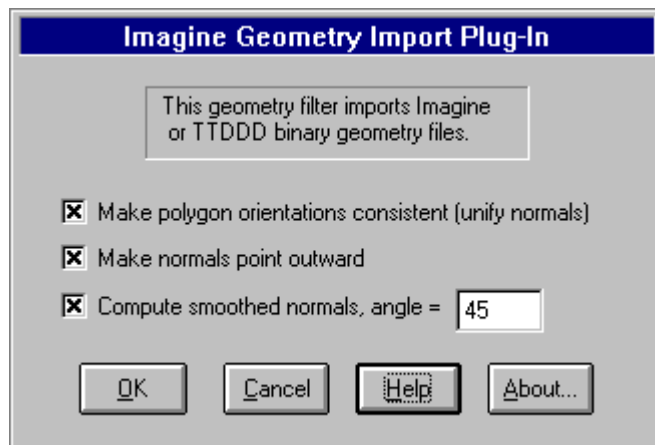
If any of the objects found in the file are reflective then a spherical environment map will be added to the surfaces created for the reflective objects. By default, all spherical environment maps will reference the texture definition: 'imagine\_sph\_env\_map\_texture'. By default the texture definition will use the TIFF image called 'env\_map.tif' which is a dummy filename. You should change this to a nice reflective image such as a sky or an image of chrome.

## Credits:

This converter is based on part on the T3D geometry library written by Mr. Glenn Lewis, used by permission. Glenn can be reached via email at [glewis@pcocd2.intel.com](mailto:glewis@pcocd2.intel.com) or via his Internet site at <http://www.c2.org/~glewis>.

## CONVERTER OPTIONS:

The following information explains the various options on the dialog box:



### Make polygon orientations consistent (Unify Normals)

Most polygons in an **Imagine** scene file do not have a consistent orientation (ie: some polygons are oriented clockwise while others are oriented counterclockwise). In order for the **Compute Averaged Normals** option to work all of the polygons must have a consistent orientation.

By enabling this option the import converter will walk across the polygon mesh and re-orient each polygon so that it has the same orientation as its neighbouring polygon(s). Please note that this will only work if neighbouring polygons share the same vertices.

### Make normals point outwards

In some cases the **Make polygon orientations consistent** option above will flip all of

the geometric and vertex normals so that they point inwards towards the center of each object. If this occurs then this option should be enabled so that the normals point outwards.

### **Compute averaged normals**

If this checkbox is enabled then new vertex normals will be computed for a polygon if it does not have any vertex normals already. The smoothing criterion is based on the angle between abutting polygons; common smoothed vertex normals will be computed if the angle between their geometric surfaces normals is less than the angle specified on the dialog box (which defaults to 30 degrees).

