

## Quickdraw 3D Geometry Import Converter

This geometry import converter reads in all aspects of an Apple Quickdraw 3D binary and ASCII file.

Supported attributes include, but are not limited to:

- Extraction of geometry hierarchy,
- Box, cone, cylinder, disc, ellipsoid, polygon, torus, triangle and trigrid primitives,
- GeneralPolygons with holes,
- Meshed polygons with MeshCorners, VertexAttributeSetList and FaceAttributeSetList,
- NURB patches,
- Unsupported primitives are: ellipse, line, NURB curve 2D & 3D, polyline.

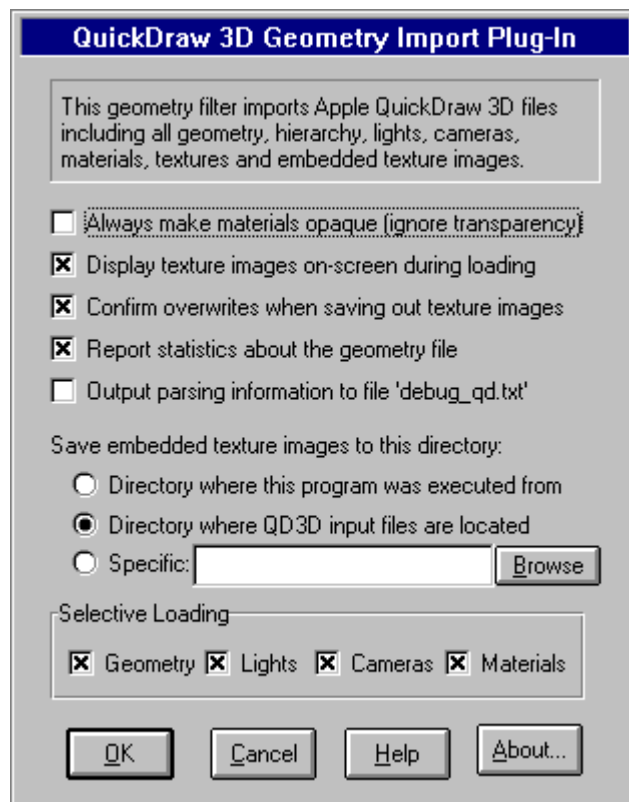
All sub-attributes are supported including: ambient coefficient, diffuse color, highlight state, vertex normal, shading (u,v), specular color, specular control, surface tangent and transparency color.

### NOTES:

1. QuickDraw 3D files allow bitmap texture images to be stored within the object file itself rather than externally. This converter extracts these embedded images and stores them on disk as TIFF files. The directory where these filenames are stored is controlled with the **Save Embedded Texture Images to this Directory** option described below.

### CONVERTER OPTIONS:

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



**Always make materials opaque (ignore transparency)**

If this checkbox is enabled then all transparency information in the imported file will be ignored. If you find that an imported object looks completely black or it is completely transparent then enable this option so that the transparency info is ignored.

### **Display texture on-screen during loading**

QuickDraw 3D files allow bitmap texture images to be stored within the object file itself rather than externally. This converter extracts these embedded images and stores them on disk as TIFF files to the directory specified by the **Save Embedded Texture Images to this Directory** option described below.

If this checkbox is enabled then the extracted bitmap images will be displayed in a window while the file is being loaded.

### **Confirm overwrites when saving out texture images**

QuickDraw 3D files allow bitmap texture images to be stored within the object file itself rather than externally. This converter extracts these embedded images and stores them on disk as TIFF files to the directory specified by the **Save Embedded Texture Images to this Directory** option described below.

If this checkbox is enabled then the program will first confirm whether a texture file (which is being extracted from the QuickDraw 3D file and saved to disk) should be overwritten. If the user does not want the file, which already exists on disk, to be overwritten then the converter will skip it. If this checkbox is not enabled then any potential file overwrites will not be confirmed.

### **Report statistics about the geometry file**

If this checkbox is enabled then the converter will report the number of polygons read in as well as the number of normals, texture coordinates and vertices.

### **Output parsing information to the file debug\_qd.txt**

If this checkbox is check-marked then the contents of the QuickDraw 3D file will be verbosely described and output to the file **debug\_qd.txt**.

### **Save Embedded Texture Images to this Directory**

QuickDraw 3D files allow bitmap texture images to be stored within the object file itself rather than externally. This converter extracts these embedded images and stores them on disk as TIFF files to the directory specified by this option.

#### **Directory where this program was executed from**

The extracted TIFF images will be saved in the directory where this program began execution (which is usually the same as where this program is located on disk). This is not a preferable option since this directory will eventually become cluttered with TIFF images extracted from QuickDraw 3D files.

#### **Directory where QuickDraw 3d input files are located**

The extracted TIFF images will be saved in the same directory where the QuickDraw 3D input file was read from. This is the default but in general you should store the TIFF files in a common textures directory.

#### **Specific (+Browse button)**

The extracted TIFF images will be saved in the directory indicated by the type-in edit box. If no directory is shown, or you want to change the current output directory, then the **Browse** button can be pressed to select the desired destination directory.

## **Selective Loading**

The following checkboxes allow all or only some parts of the QuickDraw 3D file to be loaded:

### **Geometry**

If checkmarked, then load in all of the object geometry.

### **Lights**

If checkmarked, then load in the lights.

### **Cameras**

If checkmarked, then load in the cameras.

### **Materials**

If checkmarked, then load in the materials and textures.

