1/6/2014

Unity importer doesn’t like TIFF files. We currently have to manually convert any TIFF files on export to PNG. This also means manually changing the file references in the OBJ files to point to the .png instead of the .tif.

COLLADA exporter only works on CATIA parts. Any other non-part geometry in CATIA will not export to COLLADA (imported polygon models, cables, pipes, ergo-men). This piece is partially completed.

COLLADA exporter has some problems with remapping texture coordinates in triangle fans.

The exported COLLADA files are not optimized. They contain redundant geometry and materials because the exporter, while it does not add redundancy, it just passes along what it found in CATIA.

The exported OBJ files are not optimized. They have the aforementioned redundancies from the COLLADA file, plus some more added by the OBJ flattening and de-instancing process.

We still have some problems with partially transparent textures in TUT. I have not narrowed down the source of the problem, but Wyck and I need to coordinate on how this is supposed to be expressed in the OBJ files.

CATIA materials are applied by modelers based on what looks right in CATIA under their lighting settings. These are somewhat standardized within DVG, but these settings are certainly different from the lighting in TUT. This can potentially be fixed by adjusting the lighting parameters of the materials in the OBJ file based on the difference between the CATIA and TUT standard lighting settings.

Some CATIA materials have environment mapping for shiny surfaces. Currently this is ignored by the COLLADA exporter (and the OBJ converter). This one is probably not worth the effort unless we see more usage of this feature.