
Subject: DXF and Face3D

Posted by [Thomas Launey](#) on Wed, 30 Aug 2006 14:03:42 GMT

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Hello,

I am trying to smooth all the mesh (Face3d) objects in a DXF file using the code below.

It fails however when I try to put the modified vertices back into the DXF object with the message:

```
IDL> test_IDLffDXF
```

```
% Loaded DLM: DXF.
```

```
% IDLFFDXF::PUTENTITY: DXF error: FACE3D connectivity list must contain only 4-vertex polygons.
```

```
% Execution halted at: TEST_IDLFFDXF    18 H:\test_idlffdx.f.pro
```

```
Pro test_IDLffDXF
```

```
DXF_file=dialog_pickfile(filter="*.DXF", /must_exist)
```

```
If N_elements(DXF_file) LT 1 then return
```

```
oDXF = OBJ_NEW('IDLffDXF')
```

```
status = oDXF->Read(DXF_file)
```

```
DXFTypes = oDXF->GetContents()
```

```
*** get all face3D entities
```

```
DXFsurface = oDXF->GetEntity(DXFTypes[where(DXFTypes EQ 10)])
```

```
vertices = DXFsurface.vertices
```

```
connectivity = DXFsurface.connectivity
```

```
N_object=n_elements(vertices)
```

```
For i=0, N_object-1 do Begin
```

```
vert=MESH_SMOOTH (*vertices[i], *connectivity[i])
```

```
*((DXFsurface.vertices)[i])=vert
```

```
EndFor
```

```
oDXF->PutEntity,DXFsurface
```

```
End
```

It seems that all I am doing is to move around the vertices, without changing the number of faces. A post by K. Schultz from June 2004 suggests to change the type to 9 (polygon) but also warn of potential problems with running vertices through the tessellator.

Any help would be greatly appreciated :-)

Thanks,

Thomas
