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Subject: Re: about DXF format

Posted by [Vince Hradil](#) on Thu, 21 Jun 2007 14:50:32 GMT

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On Jun 21, 8:51 am, JMZawo...@gmail.com wrote:

> Thanks for offering the code. Unfortunately it did not work and it was  
> not because of the missing COLORS procedure. My DXF files are composed  
> primarily of 3DBLOCKS. These appear to go unparsed in your routine.  
> What I really need is something that will read the DXf files and  
> output a set of mesh\_objects, one for each layer. This what IDLffDXf  
> should do, but does not.

>  
> Thanks again for the effort.

>  
> Joe

> On Jun 18, 10:55 am, hradilv <hrad...@yahoo.com> wrote:

>  
>> On Jun 18, 7:23 am, JMZawo...@gmail.com wrote:

>  
>>> On Jun 16, 10:20 pm, airy.ji...@gmail.com wrote:

>  
>>>> no more people would like to discuss this topic?what a pity!

>  
>>> I have had nothing but trouble trying to export DXF files from AutoCAD  
>>> and read them with IDLffDXF. Some (most) objects never appear and  
>>> others are improperly positioned or rotated. My limited investigations  
>>> led me to conclude that while DXF may be an open standard to exchange  
>>> CAD models, it also allows for the inclusion of proprietary formatting  
>>> and objects. True, IDL does not support all object types that may  
>>> occur in DXF files, but this is not the primary problem. If you read  
>>> the DXF file directly (it's ASCII) you'll note a lot of AutoCAD  
>>> specific stuff in there that I gather tells AutoCAD more about how to  
>>> position and orient objects in the model. It would be much more useful  
>>> to me if IDL could read/write either IGES or STEP files as these are  
>>> really designed to exchange model geometries. I currently export these  
>>> types from AutoCAD and translate them to IDL-compatible DXF files  
>>> using 3rd party software from TechnoSoft (AML).

>  
>> In my experience, it IS possible to parse a dxf file. You just have  
>> to read the docs that describe the format, then parse the file  
>> correctly. The trick is that some entities contain other entities and  
>> lines and they all have different local and global origins and scale  
>> factors. Yeah, it complicated, but I've written a parser to parse a  
>> few dxf files, and works (most of the time).

>  
>> Here's my very crude code. Just try >plot\_dxf, "file.dxf"

>

```
>> function resolve_inserts, innow, inserts, plines  
>> ... snip ...
```

That's true, I wrote it for one particular purpose - to parse lines and polylines.

I guess you meant 3DFACE or 3DSOLID (everything is a block?? isn't it. [it's been a while since I looked at this]).

Anyway, maybe you can use mine as a start. Here's a link to the DXF format, if you haven't found it yet: <http://tinyurl.com/232tsa>

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