Subject: Re: Can a CALL_EXTERNAL .dll create a window?
Posted by Karl Schultz on Wed, 03 Sep 2003 16:03:43 GMT
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"Rick Towler" <rtowler@u.washington.edu> wrote in message
news:bioi8g$231e$1@nntp6.u.washington.edu...
>
> "Karl Schultz" wrote in message...
>>
>> "Matt Feinstein" wrote in message...
>>> Hi all--
>>>
>>> I'm trying to write a CALL_EXTERNAL .dll that does off-screen
>>> hardware-assisted OpenGL rendering.
>>
>> One (rather different) approach is to create an object of some sort that
> is
>> derived from an existing IDL graphics object and override its Draw
method.
>> You can override the Draw method in IDL .PRO code and have it do a
>> CALL_EXTERNAL to your C code that calls OpenGL. At this point, there is
>> already a window and GL context active that were created by IDL and are
> the
>> window and GL context that your OpenGL calls will be directed to. Of
>> course, this means you'll be using a window provided by IDL.
>>
>> I know this works because I recently hacked up a class derived from
>> IDLgrVolume that calls the Volume Graphics library (VGL -
>> http://www.volumegraphics.com/products/vgl/) to render a volume, instead
> of
>> using IDL's volume renderer. When I told the VGL to render, it just
> happily
>> used its OpenGL calls in the IDL window and context. The results were
>> pretty encouraging, but my time and trial VGL license expired. I've
been
>> thinking about tossing what I have into the user-conrtrib lib anyhow.
>>
>
>
> Hi Karl,
>
> When you get a chance, *do* put this into the user contrib site. It
sounds
> like a wad of fun just waiting to burn my time.
>
> -Rick
>
>

"It sounds like a wad of fun just waiting to burn my time."

So true. :-) It is fun, but there also may be some practical use for it.
If a person has a bunch of volume data and a pretty good investment in IDL code to manage and display it, it might be worthwhile to get VGL and expand what I've started to get some more volume visualization options while staying in the IDL framework. VGL itself is pretty awesome.

The files are now in the Advanced Visualization section of the user contrib lib. I almost wish we had an "Extreme Object Graphics" section, because it would fit well there. You DO need to get VGL (see link above). You can get a free trial version, but you have to register and wait for a human to process it, so you may have to wait a day. And this code isn't finished or polished, but it is a start. And a couple of demos should just work once you've got VGL installed. I threw in some comments and a README, but it has been awhile since I last executed the code.

Have fun,
Karl
