Subject: Re: OS X 10.3 and IDL?
Posted by Karl Schultz on Mon, 03 Nov 2003 20:08:16 GMT
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"opa_rumple" <reiche@stout.physics.ucla.edu> wrote in message
news:51ee06c9.0311031059.67ec90a4@posting.google.com...
> bryan.jones@m.cc.utah.edu (Bryan William Jones) wrote in message
news:<84e0927a.0310161749.603d009b@posting.google.com>...
>> Has anybody here yet run IDL on OS X 10.3? Are there any issues I
>> should be aware of before the new dual G5 gets here and I transfer IDL
>> to the new box? i.e. Are there any issues with the G5?
>>
>> Bryan
>
> I upgraded to 10.3 and the new X11 recently.
> I have idl installed on my mac and on a Linux machine. To access the
> Linux machine I use
> the "ssh -XC host" command.
>
> The IDL version on my mac works fine but I got a problem with the
> remote machine using iTools.
> Before it was fine but now labels, axis and the drawing regions show
> up as black boxes. Because I didn't changed in the IDL installation I
> think it must by caused by the X11 server.
>
> Any idea, how to solve this problem?

I was able to reproduce it here; I'll file a bug report if there is not one
already.

Here is a workaround:

On your Linux machine, edit ~/.Xresources and add the line:

idl.renderer: 1

Then,

xrdb -merge ~/.Xresources

and restart IDL.

(Or do whatever it takes to use "software rendering".)

Here is the explanation:

IDL ran OK locally on your Mac because the OpenGL graphics were going through a direct optimized (and highly tested) connection. When you connect a remote application (IDL) to your X/GLX server, the graphics commands must be encoded into a wire protocol by the client (using libGL on Linux) and then decoded by the X/GLX server running on your Mac. It sort of looks like there is a bug in this conversation someplace and the texture data (used to draw text in IDL 6.0) is getting abused somehow as it crosses over the network.

The workaround tells IDL to not try to use the GLX protocol and to instead render the picture on the client side and then use X (not GLX) protocol to send the resulting image to the X server. There is an impact on your graphics performance profile when you do this, and whether that impact is good or bad depends on the complexity in your scene. You won't be leveraging the spiffy graphics hardware on your Mac, but you would not be getting much leverage anyway when running remotely.

That's the rub.

Karl
