Subject: Re: IDL graphics w/ no display
Posted by Liam Gumley on Mon, 08 Nov 2004 16:28:12 GMT
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Hey Ken,

I don't know if this came up in the thread, but Xvfb might solve your problem on that Mac side. It's a virtual frame buffer for X, and it allows you to run X11 graphics programs when a display device is not available. I've had very good luck with it. RSI has a tech tip with more information at

http://www.rsinc.com/services/techtip.asp?ttid=2382

You might have to hunt around a bit to find a binary. It may not help on the Windows side, however.

Cheers,
Liam.
Practical IDL Programming
http://www.gumley.com/

KM wrote:
> Hi Again,
>
> I used IDL daily from 1998 through 2002, but haven't since then, and
> forgot a bit. I just started in on a big project using IDL, and am
> looking for some suggestions/advice.
>
> We are using IDL as a backend to produce map graphics. It is a
> cross-platform program (Win/Mac) and the client wants it looking mac-ish
> on the Mac side, hence IDL is the backend, not the frontend. In fact,
> the deployment environment might not even have X11 installed! The
> front-end is also cross-platform, so on the Win side I also won't access
> the display with IDL, only with the frontend, just because this approach
> uses the same code for both Win and Mac.
>
> So I am producing images in IDL in Z buffer, writing PNGs to disk, and
> then telling the frontend (via a socket) that the image is ready. It
> reads it in and display it in a mac/win-like UI.
>
> But there are some limitations to this model.
>
> 1) Z buffer is limited to 256 colors. This is not a major limitation,
> but it does exist
>
> 2) Z buffer text looks terrible.
>

> 3) front-end doesn't have native/fast EPS render support
>
> I cannot use the "blow up * 4" trick for Z buffer text
> [http://dfanning.com/graphics_tips/zfonts.html] because it is too slow.
> I am using a very fast machine, but doing all the map stuff x4
> introduces a 1 second lag.
>
> I think I cannot use object graphics because I am working with map
> projections, map_continents, etc. and these don't work with object
> graphics, right?
>
> Maybe I could do the map/grid/continents at regular scale in Z, read
> them out, blow up z*4, print the title, colorbar labels, etc., read them
> out, rebin to regular size, and then "print" the labels in the image
> with a where statement. This might save a bit of time but seems like
> quite a hack. Maybe thats what I have to do with no access to the
> display. :/
>
> I don't think callable IDL would help. That could replace the socket and
> file->disk part, but it wouldn't help with the display. Plus, it sounds
> complex.
>
> Can anyone offer any advice/suggestions?
>
> Thanks,
>
> -k.
