Subject: IDL graphics w/ no display
Posted by KM on Fri, 22 Oct 2004 22:21:07 GMT
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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.
