## Subject: Re: Alternative (user-defined) device drivers??? Posted by bowman on Wed, 28 Apr 1993 14:59:01 GMT

View Forum Message <> Reply to Message

In article <1993Apr27.181034.5822@Il.mit.edu>, ryba@Il.mit.edu (Marty Ryba) wrote:

>

- > In our laboratory, the use of IDL and PV-Wave is increasing, and we have
- > come across one bottleneck: our Publications department. The graphic arts
- > people use (I believe) Abobe Illustrator on MacIntosh's. They are loath
- > to incorporate user-supplied graphics in Encapsulated PostScript or such,
- > since it is impossible to edit, and I'm not sure if Illustrator supports
- > CGM files. Besides, CGM doesn't support some of the niceties of PostScript
- > (e.g., Helvetica-Bold at correct point size). Illustrator does have a
- > device-independent Interchange Format, and someone at the lab has written
- > a plotting program (at least for XY plots) that can output EPS or this
- > interchange format. What I'd like to do is build a device driver for this
- > format inside IDL so I can utilize the full power of IDL in graphics for
- > submission. Currently, Pubs just scans and hand-edits the graphics--a
- > real waste of time. Would this be possible to implement? Or should I beat
- > on Pubs to accept EPSI and/or CGM?

Canvas will import CGM files, so one method I use is to create CGM files and use Canvas to edit them. I can adjust line widths and replace stroke fonts with Postscript fonts. It is not ideal, but it is better than editing a scanned document, since it preserves the 'objects' in the graphic.

When possible, I try to tweak the Postscript plotting so that I don't have to edit it at all. This does make the IDL programs longer and more complicated. I can generally get acceptable final graphics except when I have things like 3-D wiremesh plots, since standard Postscript won't do 3-D transformations of fonts. You do have to put up with some minor quirks, like incorrectly aligned labels on the y-axis in graphs. If these are a serious problem, you can use method 1 (CGM files).

Dr. Kenneth P. Bowman
Climate System Research Program
Department of Meteorology
Texas A&M University

College Station, TX 77843-3150

409-862-4060 409-862-4132 fax bowman@csrp.tamu.edu