Subject: Moving from mainframe to workstation graphics
Posted by mathur on Sat, 22 Jun 1991 06:29:29 GMT
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My major professor and his group have several hundred man-hours
of work invested in graphics programs using the DISSPLA library and
running on a mainframe in a batch environment. Although we have had
access to workstations (DECStation 5000, 3100's) for almost an year we
still find ourselves using them as nothing more than display terminals
for the graphics output from the mainframe programs. We would, of
course, like to use the available hardware more effectively but cannot
afford to spend a lot of time in porting our applications since we are
primarily engineers/scientists and not graphics programmers.

The main reason for moving to workstation based graphics is of
course the ability to do interactive manipulations but the quality of
hardcopy output (both printed and slides ) remains a main concern.  In
this matter we have been rather spoiled by the high quality of DISSPLA
output and will find it difficult to settle for anything less. I
should add that our work is mainly visualization of CFD (computational
fluid dynamics) results --- lots of X-Y plots , contour and vector
plots in both 2-D and 3-D. In other words, we make use of most of
DISSPLA features except for the business and cartographic options.

As I see it we have two options .

1. Get DISSPLA on the workstations. This will certainly make the
porting of our existing applications quite trivial. I would like to
know first of all if this is possible (I do know that they have an X
driver now) and if so how easy would it be to incorporate interactive
features. Based on my experience, it does not seem to me that DISSPLA
is designed well for easy addition of, say, pull-down menus.

2. Consider other packages. PV-WAVE is one name I know, having seen a
demo, but there must be several others. The main concern here would be
the degree of compatibility with DISSPLA so that we don't have to
spend a whole lot of time reorienting ourselves. What are good choices
for our kind of applications ?

I would like to hear opinions on either points, specially from people
who have been involved in similar transitions. Any advice, product
recommendations, contact numbers, horror stories etc. will be
appreciated. I would prefer replies directly to me since I don't
normally read these Newsgroups but I will monitor them over the next
few days anyway.

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