## Subject: Re: Ranting and Raving and getting back to global variables Posted by Martin Schultz on Tue, 21 Apr 1998 07:00:00 GMT

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## J.D. Smith wrote:

>

- > Allow me to elaborate on the situation which would require a more
- > flexible mechanism for importing and exporting main level variables.

[...]

Thanks! That makes sense indeed.

- > And as for the philosophical question of greater power vs. consolidation
- > and organization, I see it as a non-issue. I argue that if the
- > introduction of new features and flexibility makes a program less
- > accessible, they were not correctly implemented. The common backbone of
- > all good programs I've encountered is the hierarchical organization of
- > functionality: a gentle learning curve whose gentleness nonetheless
- > does not impose arbitrary limits on how high the curve goes. I realize
- > this is difficult to implement in the real world, but I don't see this
- > as an excuse. Take as an example the IDL Advanced Development tools for
- > linking with external programs, and even embedding IDL within a custom
- > program. These tools are certainly above the heads of most IDL users
- > (including myself, for the most part), but they are eminently useful and
- > powerful. Most users, however, can be perfectly productive without
- > knowing anything about them.

I certainly agree with you on this. It's just that I seem to know more people who struggle with the basics in IDL than with other "plotting" software. So there must be a big step before you can gently ride uphill on the learning curve. It may be true that one should not temper with IDL if one is only interested in producing the occasional line graph, there may be other point-and-click programs which are less frustrating, but I am convinced that IDL could win many more users if the first steps were simpler. If David's book became the standard users' manual and all those "but"s were eliminated (the consolidation) that could greatly facilitate beginner's access to our favorite software. And although I easily admit that I probably know less than 20% of IDL's features, I keep wondering why I have to look up all these !X and !Y tags in the online help every time I want to produce a plot that looks just a little different from others. And sometimes it is really hard to find out about "new" features: unless you know the name of the routine you are looking for, it can take quite a while before you find it, and if you are not sure whether it exists, you may give up early.

- > I believe IDL \*should\* focus on consolidating and cleaning their
- > interface, but I don't think they should delay or inhibit the

- > introduction of new features to help achieve this consolidation. As we
- > all know, the simplest program is the one which does nothing at all.

>

That may be a matter of resources, too. But you are certainly right: if there already i ssome code to do what you want, and it's just not documented and/or accessible, then release of this should certainly not be delayed. And as I understand David and others, there may be a couple of things to improve in the OOP part which may be of greater importance as well.

Regards, Martin.

PS: BTW: do you have an idea how much the results of your speed survey could be affected by network speed rather than machine speed? True: not too many users may sit right at the fancy workstation directly, so the results may well reflect "wall clock time" in a real environment. But can one judge the machines from this? Somehow I have a hard time believing that so many PC's have faster graphics than an SGI workstation.

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