
Subject: Re: Linux Question

Posted by [mperrin+news](#) on Thu, 17 Feb 2005 03:50:27 GMT

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David Fanning <davidf@dfanning.com> wrote:

- > I am always amazed with what people put up with,
- > but this was really an eye-opening experience.
- > I recommend *anyone* who writes software for a
- > living go spend a couple of months with the end-users.
- > You will never be the same. :-)

I feel that someone needs to stand up here and offer a valiant defense of the astrophysics community, but I fear it's too late and we've all already been irrevocably branded as hopeless luddites. :-)

I think part of the problem is that IDL ships with poor default settings in many cases. It can be configured to do the right thing, if you know how to tweak your .idlstartup file to add some DECOMPOSED and RETAIN keywords, etc, but you shouldn't have to do that to get reasonable functionality! I think many astronomers come to IDL with previous experience with things like Matlab or Mathematica, where you *don't* need to do that sort of tweaking. Window repaints work correctly in Mathematica right away! So when faced with IDL windows that get permanently damaged as soon as something passes in front of them, why isn't it reasonable to assume that's "just how IDL is"?

That's not to say I disagree completely with the tone of this thread. There *are* a lot of people who don't understand computing nearly as well as perhaps they should; I'd love to see more computer emphasis added to the undergraduate physics curriculum, but the invariable faculty response is "but there's already too much material; what courses should we drop if we add a computer requirement or two?" Still, I think it needs to happen sooner or later. But I see a distinction between fundamental issues of numerical data analysis (e.g. representation of floating-point numbers, error propagation, algorithms, and so on) versus details specific to some individual piece of software (setting RETAIN=2 or knowing how to convert between DATA and NORMALIZED coordinates, or whatever). One should strive to minimize how much of the latter one needs to know, so that you can concentrate on the former! In my opinion, something like imdisp or tvimage should become *standard* with IDL: too many people out there end up learning "tv" first and then getting stuck rolling their own more useful display codes from scratch, and that's a waste...

On a regular basis, I program in IDL, C/C++, Perl, Tcl/Tk, various shells, and Motorola DSP assembler (and occasionally I end up in Python or Fortran too). That menagerie of languages is my problem, not yours, but I hope you don't fault me for wanting to get the most

science done in IDL as possible with the minimum amount of screwing around with configuration parameters or learning language esoterica! (Same reason why I, and nearly every other astronomer I know, have switched to Macs as much as possible: minimal need to screw around for hours just to get things working!)

I'll go crawl back in my hole with the other end-users for a while now and be quiet again. :-)

- Marshall
