Subject: Re: Plea for IDL 2000 (was: a plea for more reliable mathematical routines)
Posted by Theo Brauers on Thu, 16 Sep 1999 07:00:00 GMT

"Martin.Schultz@dkrz.de" wrote:
>
> * Mathematical routines: well, see the thread. But definitively, they
>   should all operate on DOUBLE as default and -- if at all -- allow a
>   /SINGLE keyword in case one runs out of memory with DOUBLE arrays.

Making them double does help in some cases but does not overcome the
problem of wrongly coded and badly documented math. I still think that
attaching a powerful well established math libary to IDL would help a
lot.

>
> * Foreign language support in the vector fonts would also be on my
>   wish list (but please don't go as far as Windows where you always
>   have to access the system's control panel to change from ',' as
>   decimal notation to '.' if you exchange data with colleagues in
>   an Excel spreadsheet). It would just be nice if one could e.g.
>   write "o for an o-umlaut (perhaps it would be great if the Tex2IDL
>   interface would become some integral part of IDL. TeX is extremely
>   powerful in formatting equations etc., and it is much more intuitive
>   to write 'A_3' or 'A_{3,2}' instead of 'A!L3!N' or 'A!L3,2!N'.
>   Also, TeX is fairly wide spread so people would not have to adapt
>   to yet another formatting syntax.
>
Good idea. BUT please dont come up with language versions of IDL! Dont
even mention that to a sales rep. At the end you are going to program
 WENN a DANN x=1
instead of
 IF a THEN x=1 .
Also imagine help files in French, Spanish, German, Japanese, ...

Theo

Subject: Re: Plea for IDL 2000 (was: a plea for more reliable mathematical routines)
Posted by Theo Brauers on Thu, 16 Sep 1999 07:00:00 GMT

"Martin.Schultz@dkrz.de" wrote:
>
> Sound to me as if Dave Stern should take this as a wakeup call and
> lock himself into the garage for a while ;-) Seriously: RSI has the

> source code, so for them it would be a head start to come up with a
> more modern version of IDL -- let's just name it IDL 2000 (although
> it might be a little late for this).

Great ideas and fully agree. However, it is never too late for
IDL 2001 (Odysse version) on the brand new HAL9000 !

Theo

Subject: Re: Plea for IDL 2000 (was: a plea for more reliable mathematical routines)
Posted by Theo Brauers on Mon, 20 Sep 1999 07:00:00 GMT
View Forum Message <> Reply to Message

"Martin.Schultz@dkrz.de" wrote:
>   at least the quirks keep your attention focused on IDL ;-)
> (not on your scientific problem though ;-() But to be constructive:
> how about a user-bug-fix initiative? A great many of IDL's routine
> are written in the IDL language, so everyone can go ahead and check them
> through (at least it's partly open source that way -- although RSI
> imposes a pretty stringent copyright notice on their routines). If
> RSI would be willing to cooperate here and perhaps set up a web site,
> ftp archive etc. where people could download the most recent versions
> of the IDL procedures, and upload their corrected versions (or submit
> them with some guarantee that they would appear in the archive with
> a reasonable response time) that could give them a bunch of programmers for
> free so to speak. To name an example: just last week I eliminated an
> annoying restriction in VELOVECT.PRO which is that it does not accept
> 2D arrays for X and Y and hence does not work for irregulariliy gridded
> data. Well, now it does;-) and I would be happy to contribute this fix.
> BUT OF COURSE: We need to be sure that our effort will be honored in that
> bug fixes will make it into the official distribution! Another example:
> wouldn't it be great to see MP_FIT appear in the official online help?

I am not satisfied with the procedure you are proposing. Firstly, I think
RSI should provide a state of the art math libary which is fully documented.
Secondly, the version changes in IDL are getting faster and faster and I
dont want to check their web site every week for new bug fixes and downloads.
At the end we tag every figure/table with: Based on IDL 6.1.122.a3;-)
I think there is no excuse today for a company selling an expensive(?)
software have problems with defined math. I went from C and Fortran to
IDL some years ago under the assumption IDL would provide simultaneously
nice programming, great graphics and correct math.

Theo

PS. It could be, however, that all the talk about the IDL math problems

is a hoax. Since the begin of this threat NOONE posted one of the putative math problems. At this point I agree with Martin that we need a bug pool somewhere on the web.

--

Dr. Theo Brauers
Institut fuer Atmosphaerische Chemie (ICG-3)
Forschungszentrum Juelich
52425 JUELICH, Germany
Tel. +49-2461-61-6646   Fax. +49-2461-61-5346
 http://www.kfa-juelich.de/icg/icg3/MITARBEITER/th.brauers.ht ml