Subject: Re: How does IDL do ...
Posted by David Foster on Tue, 13 May 1997 07:00:00 GMT
View Forum Message <> Reply to Message

John E. Davis wrote:
>
> On Fri, 02 May 1997 09:16:48 -0500, Liam Gumley <liam.gumley@ssec.wisc.edu>
> wrote:
>
> While I agree that IDL reduces development time, it does not always
> result in code that is as fast as FORTRAN. It is only (nearly) as
> fast as FORTRAN if you are able to vectorize all operations. However,
> if some function does not vectorize and it is called many times, the
> resulting code can run many times slower than FORTRAN. For example,
> an early version of the MARX AXAF simulator was written in IDL.
> Unfortunately, it was not possible to vectorize one or two critical
> pieces of the code (using the IDL 3.0 intrinsics; perhaps 5.0 provides
> the necessary intrinsic functions to permit complete vectorization).
> When the simulator was converted to C, it became about 20 times
> faster.
>
> Nevertheless, IDL (as well as freely available software such as
> SciLab, RLab, and Octave) seem to be good protyping tools and allow
> one to get useful work done without too much programming effort.
>
> --John

Keep in mind that in IDL it is always possible to code "critical
pieces of code" in C or Fortran and then link the code as a sharable
object. Granted, a function call is never as fast as in-line code,
but the overhead isn't much to speak of.

Dave
--

~~~~~~ ~~~~~~~
David S. Foster Univ. of California, San Diego
Programmer/Analyst Brain Image Analysis Laboratory
foster@bial1.ucsd.edu Department of Psychiatry
(619) 622-5892 8950 Via La Jolla Drive, Suite 2200
La Jolla, CA 92037
[UCSD Mail Code 0949]
~~~~~~ ~~~~~~~