Subject: Re: What does an optimal scientific programming language/environmentneed?
Posted by Brooks Moses on Sat, 20 Sep 2003 19:15:02 GMT
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Jason Nielsen wrote:
> On Fri, 19 Sep 2003, grunes wrote:
>> 8. A compiled mode that really is as fast as FORTRAN or C, if you add
>> those declarations. Compiler would produce 2nd level code for
>> compilation by g77 and gcc.
>
> If you could manage this you would definitely get peoples attention.
> Most modern array/matrix interpreted languages: Matlab, S-plus, R, Octave,
> Euler, IDL, Yorick, Ox, GAUSS etc., etc., etc. have most of your other
> points covered. However, all of them suffer from the fact that they are
> too slow for intensive simulation. I personally use a couple of these
> regularly and when the going gets tough re-code sections that are slowing
> things up in Fortran95 for dyn.loading. However writing some code in your
> favorite matrix language, adding some type declarations and compiling the
> sucker to a fast binary would be a nice touch.
[...]

Have you looked at the Matlab compiler? As I understand it, it converts Matlab code to C code (with lots of calls to Matlab-supplied libraries), and you should be able to get from there to a binary that's just as fast as if you'd recoded things from scratch. Possibly faster, since I suspect the Matlab libraries it calls are quite quick.

- Brooks