Subject: Re: efficient use of call\_external Posted by peter on Wed, 22 May 1996 07:00:00 GMT

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Nelson Tarr (nelson@star.net) wrote:

- : I am interested in any information on the speed improvement that can
- : be expected in translating parts of an IDL procedure to C. I plan on
- : using "call\_external" to invoke the functions within my C module.
- : I am also interested in suggestions about when it is most beneficial
- : to use C instead of IDL.

One rule of thumb is "Use call\_external to replace the inner loop of nested loops". That is, when you cannot avoid writing loops in IDL, you will see tremendous improvement by replacing the inner loop(s), but much less payback for replacing the outer loops. If you can vectorize the inner loop (i.e. rewrite it to use IDL array operations) you will see almost as much improvement.

If you are able to use IDL primitives and built-ins (e.g. array addition, FFT, transposes), don't expect any gain from call\_external.

Peter

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