Subject: Re: n-point FFT

Posted by Richard G. French on Tue, 28 Nov 2000 02:09:24 GMT

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Has anyone tried to get an IDL interface working for the FFTW routine that is documented on http://www.fftw.org/? For those of you who don't know what it is, here is a brief description from their web page:

"FFTW is a C subroutine library for computing the Discrete Fourier Transform (DFT) in one or more dimensions, of both real and complex data, and of arbitrary input size. We believe that FFTW, which is free software, should become the FFT library of choice for most applications. Our benchmarks, performed on on a variety of platforms, show that FFTW's performance is typically superior to that of other publicly available FFT software. Moreover, FFTW's performance is portable: the program will perform well on most architectures without modification."

FFTW has lots of different methods of doing FFT's, and one of the novel features of the program is that it figures out which method is fastest for your particular problem by running a test case. Then, once it has selected the best method, it uses that for all of the runs you need to do. It is most useful when you have lots of transforms to do, and you want to have them all done as fast as possible.

I've seen an fftw.so version on a SUN Ultra-5 distribution, but I have not yet been able to get it working on my DEC (oops - Compaq) Alpha. Has anyone else tried to figure out how to get this working?

Thanks! Dick French