Subject: IDL vs Yorick?
Posted by Ralf Flicker on Sat, 05 Oct 2002 13:42:01 GMT
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At the risk of reiterating an old debate (if there was one), I would like to hear people's opinions about the open source interpreted language called Yorick.

With RSI/Kodak's recent licensing policies and costs, Yorick's attractive features are of course that it's open source and available for all platforms. This provides in principle unlimited portability. But if performance were found to be similar or inferior to that of IDL I would of course stick to IDL, so I recently started benchmarking Yorick versus IDL to see if there was a reason for me personally to consider a switch to Yorick. The preliminary results are thought provoking. The test included:

1) defining 3 real and 1 complex double precision 512x512 arrays of uniformly distributed random numbers
2) matrix multiplication of two real arrays
3) 20 FFTs of a complex array (using the fft_setup only once in Yorick)
4) 20 "where" operations on complex array

The median time required for these computations on my computer (600MHz, single cpu) after a handful of runs were (in seconds):

	IDL	Yorick
1	0.19	0.19
2	18.1	8.1
3	17.4	9.0
4	1.30	1.45
Total:	36.99	18.74

I had also intended to include a SVD in the test, but this bugged out in Yorick for some reason (why? anyone?). In a second test I also found the scaling law of the FFT (ideally ~ N^2log N) to be slightly more benign in Yorick - I found an exponent of 2.5 in IDL and 2.35 in Yorick. I would appreciate thoughts and comments on these numbers, and in particular I would be interested to hear what other people have found in comparing IDL and Yorick.

(googling on "Yorick+IDL" among the comp.* groups turned up a few posts by Craig and Randall and other posters of this ng, and Siegfried Gonzi posting in other groups - I hope you don't mind rehashing the issue)

Input appreciated.

ralf