
Subject: Re: Introducing FL

Posted by [biophys](#) on Sat, 01 Apr 2006 19:23:55 GMT

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good job, Lajos! It does run as fast as idl6.2 with some of my old code. i've noticed backingstore problems with my linux machine. device, retain=2 does not work. i'd like to know how to set working dir/search path/start_up file.

cheers,
bp

side by side comparison of time_test2(incomplete, see below):

IDL

IDL> time_test2

% Compiled module: TIME_TEST2.

% Compiled module: TIME_TEST.

|TIME_TEST2 performance for IDL 6.2:

| OS_FAMILY=unix, OS=linux, ARCH=x86

| Sat Apr 1 11:11:07 2006

1	0.0301080	Empty For loop,	2000000	times
2	0.0234098	Call empty procedure (1 param)	100,000	times
3	0.0129421	Add 100,000 integer scalars and store		
4	0.0131989	25,000 scalar loops each of 5 ops, 2 =, 1 if)		
5	0.00566292	Mult 512 by 512 byte by constant and store,	10	times
6	0.0338290	Shift 512 by 512 byte and store,	100	times
7	0.0265679	Add constant to 512 x 512 byte array and store,	50	times
8	0.0145931	Add two 512 by 512 byte images and store,	30	times
9	0.0347710	Mult 512 by 512 floating by constant and store,	30	times
10	0.0317931	Add constant to 512 x 512 floating and store,	40	times
11	0.0483379	Add two 512 by 512 floating images and store,	30	times
12	0.00934505	Generate 225000 random numbers		
13	0.0171521	Invert a 150 by 150 random matrix		
14	0.00771499	LU Decomposition of a 150 by 150 random matrix		
15	0.0133338	Transpose 256 x 256 byte, FOR loops		
16	0.0229912	Transpose 256 x 256 byte, row and column ops x	10	
17	0.00440502	Transpose 256 x 256 byte, TRANSPOSE function x	10	
18	0.0311699	Log of 100,000 numbers, FOR loop		
19	0.00604892	Log of 100,000 numbers, vector ops		
20	0.0194640	131072 point forward plus inverse FFT		
21	0.0228901	Smooth 512 by 512 byte array, 5x5 boxcar,	10	

```

times
    22  0.00685596 Smooth 512 by 512 floating array, 5x5 boxcar, 2
times
% Compiled module: FILEPATH.
    23  0.0223649 Write and read 512 by 512 byte array x 20
    0.458950=Total Time,    0.016516175=Geometric mean,    23
tests.
##### IDL #####

```

```
##### FL #####
```

```
FL> cd, "/usr/local/rsi/idl/lib"
```

```
FL> time_test2
```

```

% Compiled routine: TIME_TEST2
% Compiled routine: TIME_TEST_TIMER
% Compiled routine: TIME_TEST_INIT
% Compiled routine: TIME_COMPARE
% Compiled routine: TIME_TEST_RESET
% Compiled routine: TIME_TEST_DUMMY
% Compiled routine: GRAPHICS_TIMES2_INTERNAL
% Compiled routine: GRAPHICS_TIMES3_INTERNAL
% Compiled routine: TIME_TEST2_INTERNAL
% Compiled routine: TIME_TEST3_INTERNAL
% Compiled routine: GRAPHICS_TIMES_INTERNAL
% Compiled routine: TIME_TEST
% Warning: N_PARAMS: extra arguments ignored
|TIME_TEST2 performance for IDL 0.6:
|   OS_FAMILY=unix, OS=linux, ARCH=x86
|   Sat Apr  1 11:10:29 2006

```

```

    1  0.0307741 Empty For loop,    2000000 times
    2  0.0128050 Call empty procedure (1 param) 100,000 times
    3  0.00270391 Add 100,000 integer scalars and store
    4  0.0155468 25,000 scalar loops each of 5 ops, 2 =, 1 if)
    5  0.00199509 Mult 512 by 512 byte by constant and store, 10
times
    6  0.0217750 Shift 512 by 512 byte and store, 100 times
    7  0.00250912 Add constant to 512 x 512 byte array and store,
50 times
    8  0.00150394 Add two 512 by 512 byte images and store, 30
times
    9  0.0279901 Mult 512 by 512 floating by constant and store,
30 times
   10  0.0378730 Add constant to 512 x 512 floating and store, 40
times
   11  0.0412631 Add two 512 by 512 floating images and store, 30
times
   12  0.00127006 Generate 225000 random numbers

```

```

13 0.00448203 Invert a 150 by 150 random matrix
14 0.0115409 LU Decomposition of a 150 by 150 random matrix
15 0.0201399 Transpose 256 x 256 byte, FOR loops
16 0.00537109 Transpose 256 x 256 byte, row and column ops x 10
17 0.00193810 Transpose 256 x 256 byte, TRANSPOSE function x 10
18 0.0396800 Log of 100,000 numbers, FOR loop
19 0.00554919 Log of 100,000 numbers, vector ops
20 0.0392570 131072 point forward plus inverse FFT
21 0.0368030 Smooth 512 by 512 byte array, 5x5 boxcar, 10
times
22 0.00418997 Smooth 512 by 512 floating array, 5x5 boxcar, 2
times
% Compiled routine: FILEPATH
% Warning: OPENW: extra arguments ignored
% Error: OPENW: can not open file: test.dat
% Error occured at:
% TIME_TEST2_INTERNAL 491
/usr/local/rsi/idl_6.2/lib/time_test.pro
% TIME_TEST2 24
/usr/local/rsi/idl_6.2/lib/time_test2.pro
% $MAIN$
% Execution halted at:
% TIME_TEST2 24 /usr/local/rsi/idl_6.2/lib/time_test2.pro
% $MAIN$
FL> device, retain=2
% Error: DEVICE: keyword not allowed: RETAIN
% Execution halted at:
% TIME_TEST2 24 /usr/local/rsi/idl_6.2/lib/time_test2.pro
% $MAIN$

```

```
##### FL #####
```

FL wrote:

```

> Hi guys!
>
> The first public snapshot of Fawltly Language, an IDL compatible compiler
> is available. (IDL is a registered trademark of Research Systems Inc.)
>
> FL binaries can be freely used and downloaded from the homepage
>

```

> <http://web.interware.hu/fl>
>
>
> Available packages:
>
> fl_0.6-i686-linux.tar.gz (Linux, Pentium II.
> kernel 2.4/2.6, glibc >= 2.2.5)
>
> fl_0.6-amd64-linux.tar.gz (Linux, AMD Athlon64,
> kernel 2.6, glibc >= 2.3.3)
>
> and for the bravehearted:
>
> fl_0.6-i686-mingw.zip (Windows 2000/XP/?, Pentium II)
>
>
> Features:
>
> - all language elements are supported
>
> - multithreaded operators
>
> - array operations use MMX/SSE/SSE2, if available
>
> - module profiling
>
> - line profiling
>
> - about 280 library functions (more or less usable)
>
> - true-color (24 bit) direct graphics devices: X, WIN, PS, PDF, Z
>
> - run-time performance: for many programs, FL is faster than IDL
> (eg. the empty loop is three times faster in FL :-)
>
>
> Enjoy!
>
> fl
> (Földy Lajos)
>
>
> ps: Hungarian names are in reverse order. Wait, no! English names are
> in reverse order :-). So my name is Lajos Foldy in English.

Subject: Re: Introducing FL

Posted by [FL](#) on Sun, 02 Apr 2006 08:35:26 GMT

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Hi,

On Sat, 1 Apr 2006, biophys wrote:

> good job, Lajos! It does run as fast as idl6.2 with some of my old
> code. i've noticed backingstore problems with my linux machine. device,
> retain=2 does not work. i'd like to know how to set working dir/search
> path/start_up file.
>
> cheers,
> bp
>

Thanks!

HELP, /LIB will list all system routines with available parameters.
RETAIN for DEVICE is not allowed yet, but it is on my todo list.

time_test needs write permission to the current directory. You can move
around with CD, 'dir' (read the working dir with CD, CURR=curr & PRINT,
curr). Search path is the normal !PATH. The start up file name can be
given in the FL_STARTUP env. variable.

So you can run time_test by

```
CD, 'some_dir_with_write_permission'  
!PATH+=':/usr/local/rsi/idl/lib'  
TIME_TEST3
```

regards,
lajos
