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Subject: Introducing FL  
Posted by [FL](#) on Sat, 01 Apr 2006 14:44:44 GMT  
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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.

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Subject: Re: Introducing FL  
Posted by [Craig Markwardt](#) on Sun, 02 Apr 2006 18:09:34 GMT  
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---

FL <fl@interware.hu> writes:

> 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  
>

So this is not an April Fools joke?

What is the relation to GDL?

I'm a little confused that a person who has contributed to a few threads in the past few years has suddenly come out with an IDL "compiler". I.e. developing a parser, virtual machine, libraries, etc. is not a simple effort. Where did F"oldy Lajos come from? :-)

And finally, with this proliferation of "almost-IDL" clones (FL, IDL, ANA, Yorick), I have to wonder why everybody has to re-invent the wheel (see above). I see the GDL people meticulously toiling over basic functionality, and it makes me wonder: wouldn't it have been better to write an IDL-to-{Python,Ruby,Perl} translator, and get the existing well tested script environment for free? And not only that, but Python for science seem about to really take off. An infusion of well-tested IDL libraries into that community might be enough cross-fertilization to really get a non-proprietary version of an IDL-like language going strong.

Craig

---

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Subject: Re: Introducing FL  
Posted by [biophys](#) on Sun, 02 Apr 2006 19:15:33 GMT  
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---

thanks, Lajos

Now I am convinced that FL is really fast, faster than IDL6.2! It was not a fair comparison in my previous post. That idl time\_test was run inside IDLDE and the fl time\_test in gnome-terminal with transparency enabled. It seems that enabling transparency does slow things down. Now if I run both time\_tests in gnome\_terminal with no background. FL is the clear winner! Very impressive!

IDL6.2 time\_test3 0.89sec  
FL0.6 time\_test3 0.43sec

bp

FL wrote:

> 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

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Subject: Re: Introducing FL  
Posted by [biophys](#) on Sun, 02 Apr 2006 19:31:55 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

Craig Markwardt wrote:

> FL <fl@interware.hu> writes:  
>  
>  
>> Hi guys!  
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>>  
>> FL binaries can be freely used and downloaded from the homepage  
>>  
>  
> So this is not an April Fools joke?

I thought it was April Fools joke too. Lajos must have chosen the release date on purpose. Thank GOD it is not a virus.:)

>  
> What is the relation to GDL?  
>

> I'm a little confused that a person who has contributed to a few  
> threads in the past few years has suddenly come out with an IDL  
> "compiler". I.e. developing a parser, virtual machine, libraries,  
> etc. is not a simple effort. Where did F"oldy Lajos come from? :-)  
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> And finally, with this proliferation of "almost-IDL" clones (FL, IDL,  
> ANA, Yorick), I have to wonder why everybody has to re-invent the  
> wheel (see above). I see the GDL people meticulously toiling over  
> basic functionality, and it makes me wonder: wouldn't it have been  
> better to write an IDL-to-{Python,Ruby,Perl} translator, and get the  
> existing well tested script environment for free? And not only that,  
> but Python for science seem about to really take off. An infusion of  
> well-tested IDL libraries into that community might be enough  
> cross-fertilization to really get a non-proprietary version of an  
> IDL-like language going strong.  
>  
> Craig

I'd like to see some thing like IDL Script Node for LabVIEW emergeing from the community. Well, a faster and more versatile IDL-like language is definitely the ultimate dream

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Subject: Re: Introducing FL  
Posted by [FL](#) on Sun, 02 Apr 2006 19:33:58 GMT  
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Hi,

I came from Mars, but it's a secret, don't tell anybody else :-)  
(<http://www.setileague.org/askdr/hungary.htm>)

FL has nothing to do with GDL. It started as a learning project in 2000. After twelve years of C programming, I decided to learn C++, and flex and bison, too. The reverse Polish notation calculator from the bison manual was the starting point, but it was too simple. I wanted to extend it, and C or Fortran were too complex. IDL came to my mind, as a simple language :-)

regards,  
lajos

On Sun, 2 Apr 2006, Craig Markwardt wrote:

```
> FL <fl@interware.hu> writes:
>
>
>> Hi guys!
>>
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>> is available. (IDL is a registered trademark of Research Systems Inc.)
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> etc. is not a simple effort. Where did F"oldy Lajos come from? :-)
>
> And finally, with this proliferation of "almost-IDL" clones (FL, IDL,
```

$\succ$ 

>

 $\succ$  $\succ$  $\succ$ 

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> Hi guys!

making a webpage, ... and a putting up scads of code.

:)

PS how is FOS (Fawltly Operating System, a MSwin compatible system) coming along?

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Subject: Re: Introducing FL  
Posted by [Foldy Lajos](#) on Mon, 03 Apr 2006 18:33:51 GMT  
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Hi,

On Mon, 3 Apr 2006, R.G. Stockwell wrote:

>  
> PS how is FOS (Fawltly Operating System, a MSwin compatible system)  
> coming along?  
>

well, excellent idea, FOS means 'shit' in Hungarian :-) But I think MSwin can't be surpassed.

regards,  
lajos

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---

Subject: Re: Introducing FL  
Posted by [JD Smith](#) on Mon, 03 Apr 2006 20:29:40 GMT  
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> ANA, Yorick), I have to wonder why everybody has to re-invent the  
> wheel (see above). I see the GDL people meticulously toiling over  
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> existing well tested script environment for free? And not only that,  
> but Python for science seem about to really take off. An infusion of  
> well-tested IDL libraries into that community might be enough  
> cross-fertilization to really get a non-proprietary version of an  
> IDL-like language going strong.

Python has been set to "take off" in the astronomy field for about 8 years, and it just hasn't really happened. In my view, it's just inertia. It took RSI 30 years to get to where they are, and they have built up an impressively large (if ungainly and not exactly stylish) bag of tricks. Since their recent emphasis has been in areas where most astronomy people I know don't have too much interest (point and click data exploration), things may change in the next 5 years. That said, most people in this field are increasing their use of IDL now

(since prices have come down from quasi-unreasonable for the small researcher).

JD

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Subject: Re: Introducing FL

Posted by [b\\_gom](#) on Mon, 03 Apr 2006 21:59:05 GMT

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Well, if this was an April fool's joke, it's above my head.

Anyhow, good work on a gargantuan project. Any plans for opening up the source? If not, how do you plan on completing the project, in terms of providing full support for all the internal functions, widgets, etc? It seems to me that this would require either astronomical time scales, or the effort of more than one mere mortal.

A brief sketch on the webpage showing the currently supported features and the ones that are in development would be useful.

Brad

FL wrote:

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>

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>

> FL binaries can be freely used and downloaded from the homepage

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>

>

> 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.

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Subject: Re: Introducing FL

Posted by [Craig Markwardt](#) on Tue, 04 Apr 2006 02:17:00 GMT

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JD Smith <jdsmith@as.arizona.edu> writes:

>> And finally, with this proliferation of "almost-IDL" clones (FL, IDL,  
>> ANA, Yorick), I have to wonder why everybody has to re-invent the  
>> wheel (see above). I see the GDL people meticulously toiling over  
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>> better to write an IDL-to-{Python,Ruby,Perl} translator, and get the  
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>> well-tested IDL libraries into that community might be enough  
>> cross-fertilization to really get a non-proprietary version of an  
>> IDL-like language going strong.  
>  
> Python has been set to "take off" in the astronomy field for about 8  
> years, and it just hasn't really happened. In my view, it's just

- > inertia. It took RSI 30 years to get to where they are, and they have
- > built up an impressively large (if ungainly and not exactly stylish)
- > bag of tricks.
- > ...

True, but that's kind of my point. \*If\* we could easily translate all our IDL code to Python (say), we'd have the immediate benefit of a stable and supported runtime environment, where the wheel had already been invented, and done well.

Then there are all sorts of possibilities. An individual could then (a) translate all of their routines to Python and then just "switch" to Python once and for all. Or (b) they could still think in IDL but compile to Python whenever needed.

Python would gain a whole suite of great science software originally written for IDL, and IDL users would gain the freedom to switch away from a proprietary environment. Everybody would gain! (with very little change in inertia)

I just don't think it's possible for the clone writers of GDL or FL can sustain the effort long enough to write a complete new invention of the wheel (interpreter environment plus library). [\*] Why not let the Python people do more than half of that?

Craig

[\*] - I do appreciate the impressive effort that the GDL and FL writers have put in!

--

-----  
Craig B. Markwardt, Ph.D. EMAIL: craigmnet@REMOVEcow.physics.wisc.edu  
Astrophysics, IDL, Finance, Derivatives | Remove "net" for better response  
-----

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Subject: Re: Introducing FL  
Posted by [Richard French](#) on Tue, 04 Apr 2006 03:51:00 GMT  
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On 4/3/06 10:17 PM, in article onzmj2ccf7.fsf@cow.physics.wisc.edu, "Craig Markwardt" <craigmnet@REMOVEcow.physics.wisc.edu> wrote:

- >
- > [\*] - I do appreciate the impressive effort that the GDL and FL
- > writers have put in!

Out of curiosity, are there any legal issues involved in reproducing the functionality of IDL? I know that you can't 'decompile' code, and I suspect that FL and GDL couldn't sell their products, but is there any gotcha with simply writing separate code that does exactly what IDL does, and giving it away for free?

Dick French

PS This question is inspired in part by the ongoing suit about the DaVinci Code, where the claim DOES involve \$\$\$...

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Subject: Re: Introducing FL  
Posted by [Y.T.](#) on Tue, 04 Apr 2006 04:28:23 GMT  
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Craig Markwardt wrote:

[good stuff mercilessly snipped]

>

> True, but that's kind of my point. \*If\* we could easily translate all  
> our IDL code to Python (say), we'd have the immediate benefit of a  
> stable and supported runtime environment, where the wheel had already

You're aware of PyDL, aren't you?

Speaking only for myself, I write stuff in IDL because I know IDL. That's all. That's where my "inertia" comes from. A converter that would produce perfect python from my IDL routines would be worthless to me.

At my place of employ I can get Matlab for free (i.e. site-license) but I'd be horribly worthless with Matlab because I'd be spending my time re-re-relearning when and where to place a comma or a semicolon and what was the syntax for a linear fit again? So I use GDL, because that allows me to get something \*done\*. As in \*now\*.

(I work for a federally funded research facility and you, the tax-payer, are expending my salary. Do you really think you're getting your money's worth out of the deal if I spend my time learning this years fad-language?)

cordially

Y.T.

--

Remove YourClothes before you email me.

---

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Subject: Re: Introducing FL

Posted by [Ben Panter](#) on Tue, 04 Apr 2006 10:13:09 GMT

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Y.T. wrote:

> Craig Markwardt wrote:  
> [good stuff mercilessly snipped]  
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>> our IDL code to Python (say), we'd have the immediate benefit of a  
>> stable and supported runtime environment, where the wheel had already  
>  
>  
> You're aware of PyDL, aren't you?

Which I guess is again different to PDL?

<http://pdl.perl.org/>

So many flavours...

Ben

--

Ben Panter, Garching, Germany.

Email false, <http://www.benpanter.co.uk>

or you could try ben at ^^^^^^^^^^^

---

---

Subject: Re: Introducing FL

Posted by [Paul Van Delst\[1\]](#) on Tue, 04 Apr 2006 12:23:43 GMT

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Y.T. wrote:

> Craig Markwardt wrote:  
> [good stuff mercilessly snipped]  
>  
>> True, but that's kind of my point. \*If\* we could easily translate all  
>> our IDL code to Python (say), we'd have the immediate benefit of a  
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>  
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- > re-re-relearning when and where to place a comma or a semicolon and
- > what was the syntax for a linear fit again? So I use GDL, because that
- > allows me to get something \*done\*. As in \*now\*.

That, of course, is very important but....

- >
- > (I work for a federally funded research facility and you, the
- > tax-payer, are expending my salary. Do you really think you're getting
- > your money's worth out of the deal if I spend my time learning this
- > years fad-language?)

Yes, actually (being a taxpayer who also happens to work at a federally funded research facility). Learning new programming languages is not unlike learning new spoken languages (except easier IMO). It broadens one's horizon to make different solution methodologies available. In some cases they may help your work, others not. I would be a foolish taxpayer if I expected you to not expend time learning new stuff that may make your job easier and more efficient. And, of course, there's the "personal improvement" aspect -- ya gotta be happy at what you do. :o)

paulv

p.s. I would love to get a matlab site license - even though I barely know enough matlab for the "hello world" chestnut. Until then, learning Ruby and Python while I wait for Fortran2003 compilers will have to do. :o)

--

Paul van Delst  
CIMSS @ NOAA/NCEP/EMC

---

Subject: Re: Introducing FL  
Posted by [FL](#) on Tue, 04 Apr 2006 13:22:47 GMT  
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Hi guys!

Now the April Fool's Day is over, so let's get back to work. People never can decide whether I am joking or not, and this was the case here, too. Announcing FL on April 1 was a joke, but FL itself is a serious project. FL is really compatible with IDL. FL really runs faster than IDL. And FL has features (eg PDF output, or line profiling) which IDL is missing.

Now you can run IDL programs under IDL, GDL and FL. That's good news. Competition is good for the end users. Think of Intel and AMD. Without AMD, our fastest CPU would be a 1.2 GHz Pentium III today (with a \$1500 price tag :-) If FL's only effect will be that RSI creates a faster virtual machine, then all of you will benefit from it.

In the next few months I will clean up code, fixing bugs and extending usability. If you have any ideas about features that the language should have, but never dared to ask for, now it's time to speak. Speak now or forever hold your peace :-)

regards,  
lajos

On Sat, 1 Apr 2006, FL wrote:

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>                               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)  
>  
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> (Földy Lajos)  
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> in reverse order :-). So my name is Lajos Foldy in English.  
>

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Subject: Re: Introducing FL  
Posted by [Michael Wallace](#) on Tue, 04 Apr 2006 13:53:55 GMT  
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Y.T. wrote:  
> You're aware of PyDL, aren't you?

Hmmm, Python Interface Declaration Language? I find SciPy  
([www.scipy.org](http://www.scipy.org)) much more interesting and more in line with this thread.  
:-)

-Mike

---

---

Subject: Re: Introducing FL  
Posted by [Ken Mankoff](#) on Tue, 04 Apr 2006 14:33:00 GMT  
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On Tue, 4 Apr 2006, FL wrote:  
> In the next few months I will clean up code, fixing bugs and  
> extending usability. If you have any ideas about features that the  
> language should have, but never dared to ask for, now it's time to  
> speak. Speak now or forever hold your peace :-)

OS X port. Use Qt or wxWidgets so there are native windows and widgets rather than X11/Motif.

-k.

---

Subject: Re: Introducing FL

Posted by [mmiller3](#) on Tue, 04 Apr 2006 15:07:41 GMT

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>>>> > "Y" == Y T <ytyourclothes@p.zapto.org> writes:

> You're aware of PyDL, aren't you?

Be carefull with the capitalization and overlap between TLAs and MLA - especailly when talking about "IDL".

There is PyDL, as in Python Interface Declaration Language ([www.prescod.net/pytypes](http://www.prescod.net/pytypes)) which is a different sort of IDL.

There is PyDL, as in a plotting package inspired by the plot routine in RSI's IDL ([vingilot.org/pydl](http://vingilot.org/pydl)).

There is also a link on the PyDL page to pyIDL. It says it is based on PyDL "for IDL embedding in python, and has more functionality." At that page ([www.its.caltech.edu/~mmckerns/software.html](http://www.its.caltech.edu/~mmckerns/software.html)), it says pyIDL is "based on Andrew McMurry's python-IDL"

Python-IDL ([www.astro.uio.no/~mcmurry/python-idl](http://www.astro.uio.no/~mcmurry/python-idl)) actually looks somewhat promising. It provides a python module that lets python code interact with an IDL session, as in

```
>>> import idl
>>> idl.ex('print, 1')
1
>>> idl.ex("a = 'Hello'")
>>> print idl.var.a
Hello
>>> print idl.fn.strlen("Hello")
5
```

> (I work for a federally funded research facility and you,  
> the tax-payer, are expending my salary. Do you really think  
> you're getting your money's worth out of the deal if I  
> spend my time learning this years fad-language?)



As a (mostly) federally funded researcher, I had to learn IDL when I moved to the medical field where it is the norm. In my previous incarnation, python was by far the better choice because it is 1) open source, and 2) much more capable.

I use IDL now because we have a large base of IDL code and it would be a pain to translate it all to python or anything else. While I appreciate IDL's capabilities, I often cringe as I reinvent something that python has had built in for years. On the other hand, I cheer as I see RSI slowly adding features that most other languages have always had (see for, example, `command_line_args` and persistent command line history that appear in IDL 6.2). For basic usability and libraries, IDL just doesn't stack up. For specialized libraries and graphics, IDL is great (iTools aside, that is!).

It looks like Python-IDL may be a wonderful way to mix the two, but I'm a little afraid to try IDL widgets with it (well, ok, a lot afraid!)

Mike

P.S. As I typed this, I discovered that iTools can be mistyped as iTrolls ;O

--

Michael A. Miller                      mmiller3@iupui.edu  
Imaging Sciences, Department of Radiology, IU School of Medicine

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Subject: Re: Introducing FL  
Posted by [mmiller3](#) on Tue, 04 Apr 2006 15:08:23 GMT  
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There is also a link on the PyDL page to pyIDL. It says it is

based on PyDL "for IDL embedding in python, and has more functionality." At that page ([www.its.caltech.edu/~mmckerns/software.html](http://www.its.caltech.edu/~mmckerns/software.html)), it says pyIDL is "based on Andrew McMurry's python-IDL"

Python-IDL ([www.astro.uio.no/~mcmurry/python-idl](http://www.astro.uio.no/~mcmurry/python-idl)) actually looks somewhat promising. It provides a python module that lets python code interact with an IDL session, as in

```
>>> import idl
>>> idl.ex('print, 1')
1
>>> idl.ex("a = 'Hello'")
>>> print idl.var.a
Hello
>>> print idl.fn.strlen("Hello")
5
```

- > (I work for a federally funded research facility and you,
- > the tax-payer, are expending my salary. Do you really think
- > you're getting your money's worth out of the deal if I
- > spend my time learning this years fad-language?)

As a (mostly) federally funded researcher, I had to learn IDL when I moved to the medical field where it is the norm. In my previous incarnation, python was by far the better choice because it is 1) open source, and 2) much more capable.

I use IDL now because we have a large base of IDL code and it would be a pain to translate it all to python or anything else. While I appreciate IDL's capabilities, I often cringe as I reinvent something that python has had built in for years. On the other hand, I cheer as I see RSI slowly adding features that most other languages have always had (see for, example, `command_line_args` and persistent command line history that appear in IDL 6.2). For basic usability and libraries, IDL just doesn't stack up. For specialized libraries and graphics, IDL is great (iTools aside, that is!).

It looks like Python-IDL may be a wonderful way to mix the two, but I'm a little afraid to try IDL widgets with it (well, ok, a lot afraid!)

Mike

P.S. As I typed this, I discovered that iTools can be mistyped as iTrolls ;O

Michael A. Miller                                  mmiller3@iupui.edu  
Imaging Sciences, Department of Radiology, IU School of Medicine

Subject: Re: Introducing FL  
Posted by [mmiller3](#) on Tue, 04 Apr 2006 15:16:19 GMT  
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```
>>>> > "FL" == FL <fl@interware.hu> writes:
```

> In the next few months I will clean up code, fixing bugs  
> and extending usability. If you have any ideas about  
> features that the language should have, but never dared to  
> ask for, now it's time to speak. Speak now or forever hold  
> your peace :-)

Please, an open source license. Otherwise I don't see how it can compete against RSI's IDL.

Mike

Subject: Re: Introducing FL  
Posted by [FL](#) on Tue, 04 Apr 2006 15:21:37 GMT  
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Well, I use FLTK (<http://www.fltk.org>). It's small, portable and efficient. And it has FL in it's name :- ) (although it is pure coincidence)

As far as OS X is concerned, Mac's are very rare in this corner of the world. (Is someone from Apple reading this newsgroup? :-)

regards,  
lajos

On Tue, 4 Apr 2006, Ken Mankoff wrote:

```
>  
> On Tue, 4 Apr 2006, FL wrote:  
>> In the next few months I will clean up code, fixing bugs and  
>> extending usability. If you have any ideas about features that the  
>> language should have, but never dared to ask for, now it's time to  
>> speak. Speak now or forever hold your peace :-)  
>
```

> OS X port. Use Qt or wxWidgets so there are native windows and  
> widgets rather than X11/Motif.  
>  
> -k.  
>  
>

---

---

Subject: Re: Introducing FL  
Posted by [Craig Markwardt](#) on Tue, 04 Apr 2006 15:41:50 GMT  
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"Richard G. French" <rfrench@wellesley.edu> writes:

> On 4/3/06 10:17 PM, in article onzmj2ccf7.fsf@cow.physics.wisc.edu, "Craig  
> Markwardt" <craigmnet@REMOVEcow.physics.wisc.edu> wrote:  
>  
>>  
>> [\*] - I do appreciate the impressive effort that the GDL and FL  
>> writers have put in!  
>  
>  
> Out of curiosity, are there any legal issues involved in reproducing the  
> functionality of IDL? I know that you can't 'decompile' code, and I suspect  
> that FL and GDL couldn't sell their products, but is there any gotcha with  
> simply writing separate code that does exactly what IDL does, and giving it  
> away for free?

I don't see why not, it's [still] a free country and world.  
Craig

--

-----  
Craig B. Markwardt, Ph.D.    EMAIL: [craigmnet@REMOVEcow.physics.wisc.edu](mailto:craigmnet@REMOVEcow.physics.wisc.edu)  
Astrophysics, IDL, Finance, Derivatives | Remove "net" for better response  
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Subject: Re: Introducing FL  
Posted by [Craig Markwardt](#) on Tue, 04 Apr 2006 15:45:49 GMT  
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"Y.T." <ytyourclothes@p.zapto.org> writes:

> Craig Markwardt wrote:  
> [good stuff mercilessly snipped]

>>  
>> True, but that's kind of my point. \*If\* we could easily translate all  
>> our IDL code to Python (say), we'd have the immediate benefit of a  
>> stable and supported runtime environment, where the wheel had already  
>  
>  
> You're aware of PyDL, aren't you?

I'm also aware that PyDL development dropped off after a few months.  
That is a risk when you have one or a few people developing a large  
package.

> Speaking only for myself, I write stuff in IDL because I know IDL.  
> That's all. That's where my "inertia" comes from. A converter that  
> would produce perfect python from my IDL routines would be worthless to  
> me.

I totally appreciate your sentiment. In fact, I feel the same way.  
But if the translation happened behind the scenes and transparently  
every time you modified your IDL .pro file, why would you need to care?

I'm not saying you should "switch" (though that was my option "a"). I  
think it's possible to make the IDL->python->bytecode compilation fast  
and automatic enough that people could keep their IDL language, even  
though they were actually using python behind the scenes.

Craig

--

-----  
Craig B. Markwardt, Ph.D.    EMAIL: [craigmnet@REMOVEcow.physics.wisc.edu](mailto:craigmnet@REMOVEcow.physics.wisc.edu)  
Astrophysics, IDL, Finance, Derivatives | Remove "net" for better response  
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Subject: Re: Introducing FL  
Posted by [JD Smith](#) on Tue, 04 Apr 2006 19:38:05 GMT  
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> I use IDL now because we have a large base of IDL code and it  
> would be a pain to translate it all to python or anything else.  
> While I appreciate IDL's capabilities, I often cringe as I  
> reinvent something that python has had built in for years. On  
> the other hand, I cheer as I see RSI slowly adding features that  
> most other languages have always had (see for, example,  
> `command_line_args` and persistent command line history that appear  
> in IDL 6.2). For basic usability and libraries, IDL just doesn't  
> stack up. For specialized libraries and graphics, IDL is great

> (iTools aside, that is!).  
>  
> It looks like Python-IDL may be a wonderful way to mix the two,  
> but I'm a little afraid to try IDL widgets with it (well, ok, a  
> lot afraid!)

So it's not really a replacement, since it requires a functioning IDL  
(or GDL?) around to communicate with.

There are two basic issues at hand, as Craig has been arguing:

1. Is it feasible to replicate even a small fraction of all the  
MATH/WIDGET/OBJECT/GRAPHICS/3D/MAPPING/NUMERIC routines which RSI  
has included in IDL?
2. Even if it is feasible, is it a good idea?

I tend to think the answer to both of these is "No", which puts me  
squarely in the camp of migration rather than replication. If, as  
Craig opines, we could create an IDL->XXX translator which works most  
of the time, and allows legacy code like AstroLib to function  
perfectly well, then we've managed some fraction of the battle. The  
rest of the battle is to get functional replacements for most of those  
weird little corners of IDL that none of us uses everyday, but every  
one of us have used with great effect and amazement on rare occasion.

JD

---

Subject: Re: Introducing FL  
Posted by [George N. White III](#) on Tue, 04 Apr 2006 23:28:05 GMT  
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On Tue, 4 Apr 2006, Paul Van Delst wrote:

> Y.T. wrote:  
> [...]  
>> At my place of employ I can get Matlab for free (i.e. site-license) but  
>> I'd be horribly worthless with Matlab because I'd be spending my time  
>> re-re-relearning when and where to place a comma or a semicolon and  
>> what was the syntax for a linear fit again? So I use GDL, because that  
>> allows me to get something \*done\*. As in \*now\*.  
>  
> That, of course, is very important but....  
>>  
>> (I work for a federally funded research facility and you, the  
>> tax-payer, are expending my salary. Do you really think you're getting  
>> your money's worth out of the deal if I spend my time learning this

>> years fad-language?)  
>  
> Yes, actually (being a taxpayer who also happens to work at a federally  
> funded research facility). Learning new programming languages is not unlike  
> learning new spoken languages (except easier IMO). It broadens one's horizon  
> to make different solution methodologies available. In some cases they may  
> help your work, others not. I would be a foolish taxpayer if I expected you  
> to not expend time learning new stuff that may make your job easier and more  
> efficient. And, of course, there's the "personal improvement" aspect -- ya  
> gotta be happy at what you do. :o)  
>  
> paulv  
>  
> p.s. I would love to get a matlab site license - even though I barely know  
> enough matlab for the "hello world" chestnut. Until then, learning Ruby and  
> Python while I wait for Fortran2003 compilers will have to do. :o)

I also work at a government funded research facility where we have had Matlab longer than we have had IDL (since the days when Cleve Moler worked for Ardent). I have coded a number of core algorithms we use in both Matlab and IDL as a sort of crib sheet for post-docs (many have worked with Matlab, few with IDL). For my work, Matlab suffers in comparison to IDL because (like S+) it encourages you to use doubles, but (unlike S+) it lacks missing value support which is important for the things I do where doubles are appropriate. If I needed sparse arrays I wouldn't mind the doubles so much, but these days I'm more interested in finding tools that support the OpenEXR 16-bit floating pt. format.

All these languages handle 75-80% of the problems I have without straining. Where they differ is in the interests of the user community and in the ability to handle the other 20-25% of the problems without asking for money to upgrade my hardware.

--

George N. White III <aa056@chebucto.ns.ca>

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Subject: Re: Introducing FL  
Posted by [Maurizio Tomasi](#) on Thu, 06 Apr 2006 07:14:53 GMT  
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FL wrote:

> In the next few months I will clean up code, fixing bugs and extending  
> usability. If you have any ideas about features that the language should  
> have, but never dared to ask for, now it's time to speak. Speak now or  
> forever hold your peace :-)

Is FL going to implement LINKIMAGE and dynamic linked modules? It would

be a good way for other users to contribute even without having the source code for FL!

Maurizio.

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Subject: Re: Introducing FL  
Posted by [FL](#) on Thu, 06 Apr 2006 16:50:54 GMT  
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---

yes, sure. After stabilizing the internals I will add linkimage or DLM support.

regards,  
lajos

On Thu, 6 Apr 2006, Maurizio Tomasi wrote:

> FL wrote:  
>> In the next few months I will clean up code, fixing bugs and extending  
>> usability. If you have any ideas about features that the language should  
>> have, but never dared to ask for, now it's time to speak. Speak now or  
>> forever hold your peace :-)  
>  
> Is FL going to implement LINKIMAGE and dynamic linked modules? It would  
> be a good way for other users to contribute even without having the  
> source code for FL!  
>  
> Maurizio.  
>

---