
Subject: IDL in IPython notebooks

Posted by [Michael Galloy](#) on Wed, 04 Jun 2014 16:26:59 GMT

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IPython notebooks are really great for sharing work with others. Now you can use IDL instead of Python in them:

<http://michaelgalloy.com/2014/06/03/idl-ipython-notebook.htm> I

Here's the first section of my book converted to a notebook:

<http://michaelgalloy.com/wp-content/uploads/2014/06/ModernIDL-Section1.1.html>

Looks like there are still some issues with it, specifically the string handling, but the code is on GitHub.

Mike

--

Michael Galloy

www.michaelgalloy.com

Modern IDL: A Guide to IDL Programming (<http://modernidl.idldev.com>)

Research Mathematician

Tech-X Corporation

Subject: Re: IDL in IPython notebooks

Posted by [chuxiangning](#) on Wed, 11 Jun 2014 04:39:30 GMT

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Thanks for sharing! This is great!

One more problem: the pIDLy only supports Linux I suppose?
Looks like time to transfer from windows to linux for me

On Wednesday, June 4, 2014 9:26:59 AM UTC-7, Mike Galloy wrote:

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Subject: Re: IDL in IPython notebooks
Posted by [Michael Galloy](#) on Wed, 11 Jun 2014 15:34:48 GMT
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On 6/10/14, 10:39 pm, chu xiangning wrote:

> Thanks for sharing! This is great!
>
> One more problem: the pIDLy only supports Linux I suppose? Looks like
> time to transfer from windows to linux for me

It works on OS X for me.

Mike
--
Michael Galloy
www.michaelgalloy.com

Subject: Re: IDL in IPython notebooks
Posted by [Istagner89](#) on Thu, 12 Jun 2014 07:15:12 GMT
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While this is great it would be even better to have a IDL/GDL back-end for the IPython kernel front-end like julia and ruby has <http://nbviewer.ipython.org/url/jdj.mit.edu/~stevenj/IJulia%20Preview.ipynb>
[http://nbviewer.ipython.org/github/minad/iruby/blob/master/I Ruby-Example.ipynb](http://nbviewer.ipython.org/github/minad/iruby/blob/master/I%20Ruby-Example.ipynb)

Subject: Re: IDL in IPython notebooks
Posted by [Istagner89](#) on Thu, 12 Jun 2014 17:43:37 GMT
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Last night I looked into how difficult it would be to add an IDL/GDL kernel for the IPython notebook and the only major difficulty is the need for IDL/GDL binding for zeroMQ which IPython uses for communication between the python front-end and <insert language here> back-end. Here is some useful links I have found

<http://zeromq.org/community>

<http://andrew.gibiansky.com/blog/ipython/ipython-kernels/>

[http://ipython.org/ipython-doc/dev/development/messaging.htm](http://ipython.org/ipython-doc/dev/development/messaging.html) l

<http://stackoverflow.com/questions/16240747/sending-messages-from-other-languages-to-an-ipython-kernel>

Subject: Re: IDL in IPython notebooks
Posted by [Michael Galloy](#) on Fri, 13 Jun 2014 16:41:01 GMT
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On 6/12/14, 11:43 AM, Istagner89@gmail.com wrote:

> Last night I looked into how difficult it would be to add an IDL/GDL
> kernel for the IPython notebook and the only major difficulty is the
> need for IDL/GDL binding for zeroMQ which IPython uses for
> communication between the python front-end and <insert language here>
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> <http://zeromq.org/community>
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>
> <http://ipython.org/ipython-doc/dev/development/messaging.htm> I
>
> [http://stackoverflow.com/questions/16240747/sending-messages](http://stackoverflow.com/questions/16240747/sending-messages-from-other-languages-to-an-ipython-kernel)
-from-other-languages-to-an-ipython-kernel
>
>

I took a look at the OMQ header file and it doesn't look too bad although it would take some work to make bindings for the routines there. If I wrote an IDL DLM (I don't have experience extending GDL) for the OMQ routines, would you be interested in putting the rest together?

Mike

--

Michael Galloy
www.michaelgalloy.com
Modern IDL: A Guide to IDL Programming (<http://modernidl.idldev.com>)
Research Mathematician
Tech-X Corporation

Subject: Re: IDL in IPython notebooks
Posted by [lstagner89](#) on Fri, 13 Jun 2014 22:21:19 GMT
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I would like to but I am not sure when I will be able to do it. I am in the middle of my PhD and I have a long list of (according to my advisor) higher priority projects. In any case I will take a crack at it when my schedule clears up a bit. Of course, if someone else would like to implement it I would be happy to help in anyway I can.

Subject: Re: IDL in IPython notebooks
Posted by [Fabzi](#) on Tue, 08 Jul 2014 10:18:20 GMT
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Hi Mike,

this is all quite promising. I gave it a try and the problem in your example seems related to the use of "s" as variable name. Changing "s" to "ts" made it work for me. i.e:

```
%%idl  
s = 'Hello world!'  
print, s
```

prints: "Hello world!"

But on the next cell a simple:

```
$$idl  
print, s
```

prints a long array

but:

```
%%idl  
ts = 'Hello world!'
```

```
%%idl  
print, ts
```

works as expected.

I also tried to convert pIDLy and idlmagic to python3 but it's still too complicated for me as I am a python newbie...

Anyways, all this is quite exiting.

Cheers,

Fabien

Subject: Re: IDL in IPython notebooks
Posted by [Fabzi](#) on Tue, 08 Jul 2014 10:25:06 GMT
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On 08.07.2014 12:18, Fabien wrote:

> pIDLy and idlmagic to python3 but it's still too complicated

to be more precise: 2to3 works fine but when running pIDLy3 I got some errors which seem related to deeper differences between py2 and py3. So I gave up...
