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Subject: Re: Any interest in an IDL to Python interface?  
Posted by [R.Bauer](#) on Mon, 03 Mar 2008 14:26:00 GMT  
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m\_schellens@hotmail.com schrieb:

- > GDL
- > <http://sourceforge.net/projects/gnudatalanguage>
- >
- > has this functionality.
- > Actually both ways: One can call python from GDL similar as described
- > and GDL can be compiled as a python module.
- > The drawback is that GDL only supports python numarray yet.
- >

yeah but because it is completely open source someone who is interested could help to implement some other modules.

Btw. do you have done a request for gdl as a summer of code project?

cheers  
Reimar

- >
- >
- > On Feb 28, 5:00 pm, Jason Ferrara <jason.ferr...@jacquette.com> wrote:
- >> We're thinking of coming out with product that acts as a bridge
- >> between IDL and Python, and are trying to get an idea of how much of a
- >> demand there is for this sort of thing.
- >>
- >> It would make Python modules usable directly from IDL.
- >>
- >> Some simple usage examples, meant to show how the interface works,
- >> rather than why you might want to use Python from IDL.
- >>
- >> Using the Python Imaging Library to load an image, rotate it, and then
- >> place it in an IDL array.
- >> IDL> numpy=pyimport('numpy')
- >> Loaded DLM: PYTHONFROMIDL.
- >> IDL> pilimage=pyimport('PIL.Image')
- >> IDL> img=pilimage->open('scan.jpeg')
- >> IDL> img=img->rotate(30)
- >> IDL> imgarr=numpy->array(img)
- >> IDL> help, imgarr
- >> IMGARR        BYTE     = Array[3, 850, 864]
- >> IDL> tv, imgarr, /true, order=1

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>>
>> Defining and calling an arbitrary python function.
>> IDL> py=pyimport('__main__')
>> IDL> py->exec, "def mulbytwo(a):"+string(10b)+"  return [x*2 for x
>> in a]"
>> IDL> print, py->mulbytwo([1,2,3,4,5])
>>      2      4      6      8     10
>>
>> Features of the interface:
>>
>> Python objects (including modules) appear in IDL as IDL objects.
>>
>> Automatic conversion of method parameters from IDL variables to the
>> appropriate python type.
>>
>> Automatic conversion of return values to IDL types.
>>
>> The Python environment runs in the same process as IDL, so parameter
>> passing is fast.
>>
>> Automatic garbage collection of IDL objects that represent Python
>> objects, so calling OBJ_DESTROY is not required. This makes the
>> objects behave more Python like, so that you can do things like
>> "img=((pilimage->open('scan.jpeg'))->rotate(30))->convert('L') "
>> without leaking objects or having to call HEAP_GC.
>>
>> Would anyone find this useful?
>>
>> Thanks
>>
>> Jason Ferrara
>> Jacquette Consulting, Inc.
>
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