
Subject: Re: interface between IDL and Matlab

Posted by [Abraham campbell](#) on Tue, 22 Jan 2008 18:08:54 GMT

[View Forum Message](#) <> [Reply to Message](#)

ChiChiRuiz@gmail.com wrote:

> Hi,
>
> I've been using IDL for data processing/analysis, so most of my code
> (data readers/writers, and utility code) are in IDL. However, lately
> I was asked to explore possibility to use Matlab's statistical
> visualization toolbox. I don't want to re-write my data processing
> code in matlab or write my own statistical visualization in IDL, what
> other options do I have? Is there a way to call Matlab from IDL or
> vice versa? Thanks in advance.
>
> -Angie

If you are on Windows, there might be a way. I believe that Matlab has an ActiveX control that gives you access to it. So, you could use the IDL-COM import subsystem to create an instance of the Matlab ActiveX control, and issue commands to it from IDL...though, marshaling data back and forth might be tricky. COM data types are fickle; and, the implementation of a particular COM/ActiveX control might limit the supported COM data types.

If you are on Unix, you might have to create a custom IDL DLM that accesses Matlab via entry points in a shared library, or some other Matlab mechanism for C-callable access.

Abraham

Subject: Re: interface between IDL and Matlab

Posted by [jeffnetles4870](#) on Tue, 22 Jan 2008 18:13:53 GMT

[View Forum Message](#) <> [Reply to Message](#)

On Jan 22, 12:30 pm, "ChiChiR...@gmail.com" <ChiChiR...@gmail.com> wrote:

> Hi,
>
> I've been using IDL for data processing/analysis, so most of my code
> (data readers/writers, and utility code) are in IDL. However, lately
> I was asked to explore possibility to use Matlab's statistical
> visualization toolbox. I don't want to re-write my data processing
> code in matlab or write my own statistical visualization in IDL, what
> other options do I have? Is there a way to call Matlab from IDL or
> vice versa? Thanks in advance.
>

> -Angie

If you're on windows you could set up a link between the two programs using ActiveX/COM routines. Someone posted some sample code on this group a few years ago that might help get you started on that. You might try searching this group for the code. Also, although I can't put my hands on it right now, I do have a .mat file reader written in IDL that I downloaded from the web - from APL I think?? Not sure if that would be helpful or not....

Jeff

Subject: Re: interface between IDL and Matlab
Posted by [jeffnettles4870](#) on Tue, 22 Jan 2008 18:16:54 GMT
[View Forum Message](#) <> [Reply to Message](#)

On Jan 22, 1:13 pm, jeffnettles4...@gmail.com wrote:

> On Jan 22, 12:30 pm, "ChiChiR...@gmail.com" <ChiChiR...@gmail.com>

> wrote:

>

>> Hi,

>

>> I've been using IDL for data processing/analysis, so most of my code
>> (data readers/writers, and utility code) are in IDL. However, lately
>> I was asked to explore possibility to use Matlab's statistical
>> visualization toolbox. I don't want to re-write my data processing
>> code in matlab or write my own statistical visualization in IDL, what
>> other options do I have? Is there a way to call Matlab from IDL or
>> vice versa? Thanks in advance.

>

>> -Angie

>

> If you're on windows you could set up a link between the two programs
> using ActiveX/COM routines. Someone posted some sample code on this
> group a few years ago that might help get you started on that. You
> might try searching this group for the code. Also, although I can't
> put my hands on it right now, I do have a .mat file reader written in
> IDL that I downloaded from the web - from APL I think?? Not sure if
> that would be helpful or not....

>

> Jeff

I should note, however, that I think the .mat file reader i have (somewhere) only reads older .mat files - if the file format specifcation has changed the code might not work.

Jeff

Subject: Re: interface between IDL and Matlab
Posted by [Rich Younger](#) on Tue, 22 Jan 2008 19:56:40 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi Angie,

Matlab reads HDF 4 and 5 very well (I understand .mat files are actually HDF). If you don't need tight integration between IDL and Matlab, you could throw together some routines to write out your processed data sets in HDF and read them back in Matlab. And of course, this wouldn't be a full answer without the requisite Fanning genuflection:

http://www.dfanning.com/tips/hdf_documentation.html

Rich

ChiChiRuiz@gmail.com wrote:

> Hi,
>
> I've been using IDL for data processing/analysis, so most of my code
> (data readers/writers, and utility code) are in IDL. However, lately
> I was asked to explore possibility to use Matlab's statistical
> visualization toolbox. I don't want to re-write my data processing
> code in matlab or write my own statistical visualization in IDL, what
> other options do I have? Is there a way to call Matlab from IDL or
> vice versa? Thanks in advance.
>
> -Angie
