Subject: new to IDL - question about modularity
Posted by Josh on Fri, 22 Jun 2007 22:48:49 GMT
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despite having five manuals on IDL in front of me, I'm having some
trouble with writing modular code. I think it lies in my lack of
understanding of the structure, but hopefully it's a simple issue...

I'm using IDL 6.3, and have written a single .pro file that looks
like,

pro xxx
...
end

pro yyy
...
end

pro zzz
...
end

in an effort to break up the tasks to be done. However, within the
zzz procedure I would like to access an array that was built in the
xxx procedure. I realize that's not possible, and was hoping for some
guidance as to a better way to do this.

Thanks!

Subject: Re: new to IDL - question about modularity
Posted by swingnut on Wed, 27 Jun 2007 20:56:40 GMT
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The best approach depends on what ELSE the xxx procedure is doing. On
the one hand, xxx could be building xxx as one of multiple tasks, in
which case xxx could well be left alone except for adding an argument
that will have have the array, or a structure containing the array in
one of its fields. On the other hand, if xxx doesn't do anything but
build the array, it really would be handier to make it a function. On
the other other hand, if, for example, xxx initializes a whole bunch
of variables, I'd recommend going changing xxx to be a function that
returns a structure, one of whose fields contains this array you want
for zzz. I have to say, putting it in a structure ain't a bad way to
go -- I have a template for plotting code that uses a couple of
structures (one of which is generated using FSC_Color, one of which
contains estimated bin sizes for some satellite data generated using

the header data for the satellite records I use); these structures really make it easier to do some things and to pass a collection of different types of data back and forth as a unit.

Making a structure is easy, you just put strings and variables together in a certain format: {tag, variable}, or, {first tag, first variable, second tag, second variable, ...}, where each tag will be the name used to access the value stored in that field. To get at values in the fields, you just store the structure in a variable and use the variable's name with a certain operator and a tag name:

myStruct={"tagOne", firstVariable, "tagTwo", secondVariable, ...}
print, myStruct.tagOne

It can get a lot more complicated than this, but that's really not an issue at this point based on the info you've provided.

Here's a couple of handy links about structures in IDL.

http://www.dfanning.com/tips/recursive_struct_tags.html
 http://groups.google.com/group/comp.lang.idl-pvwave/browse_t
hread/thread/1bca12b02ac21459/9ec919cd5115345d

On Jun 22, 5:48 pm, Josh <joshuamonta...@gmail.com> wrote:
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> guidance as to a better way to do this.
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> Thanks!

Subject: Re: New to IDL
Posted by David Fanning on Wed, 05 Jun 2013 22:15:27 GMT
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saroj thapa writes:

> I have a hdf file that has 6 different layers such as LAI, FPAR, LAI and FPAR and so on. Can any body suggest me how to i extract these layers seperatly using idl code, after seperating those layers how do i mosaic the similar layers such as LAI with LAi and FPAR with FPAR, and Finally sub-setting those mosiac image to my study site. I have huge number of images so i want to use scripting. If any body can help pls help me with basics and code. Thanks

I suppose it is time for our periodic reminder on how to ask a question
on a technical forum that is likely to get answered:

   http://www.catb.org/esr/faqs/smart-questions.html

If we start with basics, then I suggest we start with a link to where we
might find a file like this one, so we can figure out what in the world
you are talking about. :-)

Cheers,

David

--
David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.idlcoyote.com/
Sepore ma de ni thue. ("Perhaps thou speakest truth.")

Subject: Re: New to IDL
Posted by Carsten Lechte on Thu, 06 Jun 2013 14:47:44 GMT
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On 05/06/13 23:22, saroj thapa wrote:

> I have a hdf file that has 6 different layers ...

Is it a version 5 file? Then I would use the H5_PARSE function with the /READ_DATA parameter on the hdf file, and then explore the nested structures that it delivers.

chl