Subject: Re: best way to find the variable name of a structure from RESTORE-ing a sav file

Posted by David Fanning on Fri, 20 Sep 2002 16:14:18 GMT

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Robert Stockwell (rgs1967@hotmail.com) writes:

```
> anyone have good ideas on how to programatically find
> the name of a variable in memory, that happens to be
> a structure. The reason I don't know the name is that I
> am restoring a structure from an IDL sav file. The structure
> is the only thing in the sav file.
>
> For instance, I am writing a function like:
> function readsavdata, filename
>
  restore,filename=filename
  ; here I have a structure in memory, with a variable name I do not know.
>
> help
> ; next line is the result of the help command
> ; IDL> NWS_MMT_FCAST_TEMPERATURE_ARRAY
                                                               STRUCT = -> < Anonymous>
Array[950040]
>
> return, ?????? ; i need the name of this structure
> end; end of function
>
 How do I get this variable name "NWS MMT FCAST TEMPERATURE ARRAY" so I can
> put in a line like
>
 return, NWS_MMT_FCAST_TEMPERATURE_ARRAY
> at the end of the function.
Try this:
 Function ReadSavData, filename
  Restore, Filename=filename
  varname = Routine_Names(Variables=0)
  variable = Routine_Names(varname[0], Fetch=0)
  RETURN, variable
 END
```

This is not exactly documented anywhere, so your mileage may vary. It works here in IDL 5.5. :-)

Cheers,

David

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Subject: Re: best way to find the variable name of a structure from RESTORE-ing a sav file

Posted by R.Bauer on Fri, 20 Sep 2002 17:00:33 GMT

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Robert Stockwell wrote:

- > anyone have good ideas on how to programatically find
- > the name of a variable in memory, that happens to be
- > a structure. The reason I don't know the name is that I
- > am restoring a structure from an IDL sav file. The structure
- > is the only thing in the sav file.

>

Dear Robert,

you should have a look at the Craig Markwardt library about restore.

cmrestore

You find it at http://astrog.physics.wisc.edu/~craigm/idl/idl.html

Reimar

>

> For instance, I am writing a function like:

>

> function readsavdata, filename

>

> restore,filename=filename

>

> ; here I have a structure in memory, with a variable name I do not know.

```
>
>
>
> help
> ; next line is the result of the help command
> ; IDL> NWS_MMT_FCAST_TEMPERATURE_ARRAY
                                                         STRUCT = ->
 <Anonymous> Array[950040]
>
> return, ?????? ; i need the name of this structure
>
 end; end of function
>
>
 How do I get this variable name "NWS_MMT_FCAST_TEMPERATURE_ARRAY" so I can
 put in a line like
> return,NWS_MMT_FCAST_TEMPERATURE_ARRAY
> at the end of the function. I suppose I can capture and parse the help
> command and issue an execute command, but there must be a way to find
> that info
> that is a little nicer.
>
>
> Cheers,
> bob
Reimar Bauer
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    a IDL library at ForschungsZentrum Juelich
 http://www.fz-juelich.de/icg/icg-i/idl_icglib/idl_lib_intro. html
______
```