## Subject: How does IDL find functions? Posted by robertschaefer on Fri, 17 Jun 2005 19:07:07 GMT View Forum Message <> Reply to Message

Hello IDL community,

I'm looking for a smart solution to find functions from my own lib inside a self written function or procedure.

The idea is to get a tree of embedded self written functions.

My solution looks like this but I think there must be an easier way:

- -generate a list of functions in user-lib
- -Read the function where to search (openr)
- -compare each line (string) with the list of lib functions (how to extract function names egantly? -> strsplit with '=\*(' : definitely not)
- -save coincide functions (strings) and go on searching into found functions

Does anybody (I'm sure ;-) ) know how IDL find functions on compiling? This may be exactly the right (fast) way...

Any ideas? ... Thanks for help...

Best regards

robert

Subject: Re: How does IDL find functions?
Posted by Antonio Santiago on Mon, 20 Jun 2005 06:13:16 GMT
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robertschaefer@gmx.de wrote:

> Hello IDL community,

>

- > I'm looking for a smart solution to find functions from my own lib
- > inside a self written function or procedure.
- > The idea is to get a tree of embedded self written functions.

That is: parse a file SOME\_FILE.PRO and find if it contains any function of your own library.

- > My solution looks like this but I think there must be an easier way:
- >
- > -generate a list of functions in user-lib

- 1- You need to load into memory (array) a list of your functions name.
- > -Read the function where to search (openr)
- 2- Read each file line.
- > -compare each line (string) with the list of lib functions
- > (how to extract function names egantly? -> strsplit with '=\*(':
- > definitely not)
- 3- I think it will better with a STRMACTH or STREGEX.

This code can help you (extract from the old post http://groups-beta.google.com/group/comp.lang.idl-pvwave/bro wse thread/bd3fc18ab72631ea/33089f602feb945c?hl=en#33 089f602feb945c):

Parse an entory file 'file' and found all functions or procedures that starts with 'findstring'.

```
;PRO parse, file, findstring
   ;; Open the file test.lis:
   OPENR, 1, file
   ;; Define a string variable:
   line = "
   ;; Loop until EOF is found:
   found = 0
   line_number = 0
   WHILE (~ EOF(1)) AND (NOT found) DO BEGIN
      ;; Read a line of text:
     READF, 1, line
      ;; Check if match your procedure/function name
      match = STREGEX(STRUPCASE(line), '(PROCEDURE|FUNCTION) ' + $
               "+STRUPCASE(findstring), $
               /BOOLEAN)
     IF match THEN print, line_number, '-', line
      line number++
   ENDWHILE
   :: Close the file:
   CLOSE, 1
END
```

- > -save coincide functions (strings) and go on searching into found
- > functions
- 4- I dont understand this part. Save the function that coincides with your function names and then find recursively into functions with different name??

```
> Does anybody (I'm sure ;-) ) know how IDL find functions on compiling?
 This may be exactly the right (fast) way...
> Any ideas? ...Thanks for help...
>
> Best regards
> robert
Antonio Santiago P�rez
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Subject: Re: How does IDL find functions?
Posted by Mark Hadfield on Mon, 20 Jun 2005 21:28:58 GMT
```

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robertschaefer@gmx.de wrote:

> Hello IDL community,

- > I'm looking for a smart solution to find functions from my own lib
- > inside a self written function or procedure.
- > The idea is to get a tree of embedded self written functions.

What do you mean by "self-written"?

Mark Hadfield "Kei puwaha te tai nei, Hoea tahi tatou" m.hadfield@niwa.co.nz National Institute for Water and Atmospheric Research (NIWA)

Subject: Re: How does IDL find functions? Posted by R.G. Stockwell on Mon, 20 Jun 2005 21:52:26 GMT "Mark Hadfield" <m.hadfield@niwa.co.nz> wrote in message news:d97ceq\$g2q\$1@newsreader.mailgate.org...

- > robertschaefer@gmx.de wrote:
- >> Hello IDL community,

>>

- >> I'm looking for a smart solution to find functions from my own lib
- >> inside a self written function or procedure.
- >> The idea is to get a tree of embedded self written functions.

>

> What do you mean by "self-written"?

Hmmm, self-written, interesting challenge....

-bob

Subject: Re: How does IDL find functions?
Posted by robertschaefer on Thu, 23 Jun 2005 12:40:32 GMT
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Thank you Benjamin, Reimar, Andrew and Antonio for your help, Antonios example to use the "STREGEX" Function helped me to solve the problem without compiling.

@ Mark: Maybe I have to excuse, that my english is not so good. With "self written functions" i meant the functions belonging to my user lib.

...but the previous authors understand my problem... so...?