
Subject: How does IDL find functions?

Posted by [robertschaefer](#) on Fri, 17 Jun 2005 19:07:07 GMT

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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 elegantly? -> 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 elegantly? -> strsplit with '=(' :

> definitely not)

3- I think it will better with a STRMATCH or STREGEX.

This code can help you (extract from the old post

http://groups-beta.google.com/group/comp.lang.idl-pvwave/browse_thread/thread/bd3fc18ab72631ea/33089f602feb945c?hl=en#33089f602feb945c):

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
>

--

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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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robertschaef@mx.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, Hoesa 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...
> robertschaef@gm.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 [robertschaef](#) 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...?
