Subject: Re: where can I find them
Posted by David Fanning on Tue, 07 May 2002 17:47:42 GMT
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Xiaoying Jin (xje4e@mizzou.edu) writes:

> If I know the name of the function, such as "DILATE", how can I find where
> IDL implement it? Is there a command in IDL to find the .pro or .dll files
> related to it?

IDL> ? dilate

> Besides, can "DILATE" do on an UINT image?

If you set the UINT and GRAY keywords.

Cheers,

David

--
David W. Fanning, Ph.D.
Fanning Software Consulting
Phone: 970-221-0438, E-mail: david@dfanning.com
Coyote's Guide to IDL Programming: http://www.dfanning.com/
Toll-Free IDL Book Orders: 1-888-461-0155

Subject: Re: where can I find them
Posted by Kenneth Mankoff on Tue, 07 May 2002 18:08:23 GMT
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David Fanning <david@dfanning.com> writes:

> Xiaoying Jin (xje4e@mizzou.edu) writes:
>
>> If I know the name of the function, such as "DILATE", how can I find where
>> IDL implement it? Is there a command in IDL to find the .pro or .dll files
>> related to it?
>
> IDL> ? dilate

or:
IDL> help, /source ; find where IDL stores the implementation

resolve_routine OR resolve_all should help you find .pro files
related to a given procedure (or, read the source that you found
via the help,/source command.

-k.
--
---------- ----------
Ken Mankoff http://lasp.colorado.edu/snoe/
http://lasp.colorado.edu/mars/
http://lasp.colorado.edu/~mankoff/ http://lasp.colorado.edu/marsrobot/
---------- ----------

Subject: Re: where can I find them
Posted by Xiaoying Jin on Tue, 07 May 2002 23:12:04 GMT
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"Kenneth Mankoff" <mankoff@snoe.colorado.edu> wrote in message
news:afu1pjrfu0.fsf@snoe.colorado.edu...
> David Fanning <david@dfanning.com> writes:
>
>> Xiaoying Jin (xje4e@mizzou.edu) writes:
>>
>>> If I know the name of the function, such as "DILATE", how can I find
where
>>> IDL implement it? Is there a command in IDL to find the .pro or .dll
files
>>> related to it?
>>
>> IDL> ? dilate

I use this command. It links me to the IDL Online Help of "DILATE".
It doesn't tell me the .pro or .dll files related to it.

> or:
> IDL> help, /source ; find where IDL stores the implementation
>
> resolve_routine OR resolve_all should help you find .pro files
> related to a given procedure (or, read the source that you found
> via the help,/source command.
It seems to me that this command can only find the routine .pro witten in
IDL.
I can not find the "DILATE" with this command or any files named
'dilate.pro'.
Maybe it is built in DLL and this command does not help?
Can I have the possibility to find the source of it?

Best regards,

Xiaoying Jin

Subject: Re: where can I find them
Posted by Rick Towler on Wed, 08 May 2002 00:17:36 GMT
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When using IDLDE "built-in" commands are highlighted in dark blue (procedures are darker than functions) whilst functions and procedures written in IDL are in light blue (again, procedures are darker than functions). This is with the default settings in IDLDE for windows.

DILATE comes up dark blue, leading me to believe it is written in C as part of IDL and the source is unavailable. Looking in print,!dir+'\lib' I don't see dilate.pro which seems to confirm IDLDE's behaviour.

-Rick

"Xiaoying Jin" <xje4e@mizzou.edu> wrote in message news:ab9mm1ofc1@dipsy.missouri.edu...
> "Kenneth Mankoff" <mankoff@snoe.colorado.edu> wrote in message
> news:afu1pjrfu0.fsf@snoe.colorado.edu...
>> David Fanning <david@dfanning.com> writes:
>>
>>> Xiaoying Jin (xje4e@mizzou.edu) writes:
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> 'dilate.pro'.
> Maybe it is built in DLL and this command does not help?
> Can I have the possibility to find the source of it?

>
> Best regards,
>
> Xiaoying Jin
>
>
>
>

Subject: Re: where can I find them
Posted by mperrin+news on Wed, 08 May 2002 02:07:24 GMT
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Xiaoying Jin <xje4e@mizzou.edu> wrote:
> Hi, there,
>
> If I know the name of the function, such as "DILATE", how can I find where
> IDL implement it? Is there a command in IDL to find the .pro or .dll files
> related to it?

I make frequent use of a procedure called "which" which does just this.
I forget where I originally got the code from... Ah, OK. A web search
finds it at
http://www.astro.washington.edu/deutsch-bin/getpro/library02 .html?WHICH

Actually, now that I look at that, that's *not* the same thing as the
"which.pro" that I have. The output is basically the same, but the one
I have is substantially faster. I've included the text of this below.
If anyone has any idea where this code originally came from or who
the author is, please let me know. I hope the unknown "JAV" responsible for
this code doesn't mind my posting it here, as it's really an exceptionally
usefull little bit of software.

- Marshall

```
pro which,proname
;Prints full filenames in IDL !path search order for a particular routine.
; proname (input string) procedure name (.pro will be appended) to find
;24-Aug-92 JAV Create.
;10-Mar-93 JAV Fixed bug; last directory in !path ignored; pad with ': '

if n_params() lt 1 then begin
  print,'syntax: which,proname(.pro assumed)'
  retall
endif
```

```
  pathlist = '.:' + !path + ': '  ;build IDL path list
  fcount = 0     ;reset file counter
  il = strlen(pathlist) - 1   ;length of path string
  ib = 0     ;begining substring index
  ie = strpos(pathlist,':',ib)   ;ending substring index
  repeat begin     ;true: found path separator
    path = strmid(pathlist,ib,ie-ib)  ;extract path element
    fullname = path + '/' + proname + '.pro' ;build full filename
    openr,unit,fullname,error=eno,/get_lun ;try to open file
    if eno eq 0 then begin   ;true: found file
      fcount = fcount + 1   ;increment file counter
      if path eq '.' then begin   ;true: in current directory
 spawn,'pwd',dot    ;get current working directory
 dot = dot(0)    ;convert to scalar
 print,fullname + ' (. = ' + dot + ')' ;print filename + current dir
      endif else begin    ;else: not in current directory
 print,fullname    ;print full name
      endelse
      free_lun,unit    ;close file
    endif
    ib = ie + 1     ;point beyond separator
    ie = strpos(pathlist,':',ib)  ;ending substring index
    if ie eq -1 then ie = il   ;point at end of path string
  endrep until ie eq il    ;until end of path reached
  if fcount eq 0 then begin   ;true: routine not found
    print,'which: ' + proname + '.pro not found on IDL !path.'
  endif
end
```

Subject: Re: where can I find them
Posted by Xiaoying Jin on Wed, 08 May 2002 03:34:20 GMT
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I suppose that 'which' function only works with .pro files.
As Kenneth Mankoff suggested, we can use "IDL> help, /source" to find them.

Regards,

Xiaoying Jin

"Marshall Perrin" <mperrin+news@arkham.berkeley.edu> wrote in message
news:aba18s$s70$1@agate.berkeley.edu...
> Xiaoying Jin <xje4e@mizzou.edu> wrote:
>> Hi, there,
>>
>> If I know the name of the function, such as "DILATE", how can I find

where
>> IDL implement it? Is there a command in IDL to find the .pro or .dll
files
>> related to it?
>
> I make frequent use of a procedure called "which" which does just this.
> I forget where I originally got the code from... Ah, OK. A web search
> finds it at
> http://www.astro.washington.edu/deutsch-bin/getpro/library02 .html?WHICH
>
> Actually, now that I look at that, that's *not* the same thing as the
> "which.pro" that I have. The output is basically the same, but the one
> I have is substantially faster. I've included the text of this below.
> If anyone has any idea where this code originally came from or who
> the author is, please let me know. I hope the unknown "JAV" responsible
for
> this code doesn't mind my posting it here, as it's really an exceptionally
> usefull little bit of software.
>
> - Marshall
>
>
> ----------
> pro which,proname
> ;Prints full filenames in IDL !path search order for a particular routine.
> ; proname (input string) procedure name (.pro will be appended) to find
> ;24-Aug-92 JAV Create.
> ;10-Mar-93 JAV Fixed bug; last directory in !path ignored; pad with ': '
>
> if n_params() lt 1 then begin
> print,'syntax: which,proname(.pro assumed)'
> retall
> endif
>
> pathlist = '.:' + !path + ': ' ;build IDL path list
> fcount = 0 ;reset file counter
> il = strlen(pathlist) - 1 ;length of path string
> ib = 0 ;begining substring index
> ie = strpos(pathlist,':',ib) ;ending substring index
> repeat begin ;true: found path separator
> path = strmid(pathlist,ib,ie-ib) ;extract path element
> fullname = path + '/' + proname + '.pro' ;build full filename
> openr,unit,fullname,error=eno,/get_lun ;try to open file
> if eno eq 0 then begin ;true: found file
> fcount = fcount + 1 ;increment file counter
> if path eq '.' then begin ;true: in current directory
> spawn,'pwd',dot ;get current working directory
> dot = dot(0) ;convert to scalar

```
>  print,fullname + ' (. = ' + dot + ')' ;print filename + current dir
>        endif else begin ;else: not in current directory
>  print,fullname ;print full name
>        endelse
>        free_lun,unit ;close file
>      endif
>      ib = ie + 1 ;point beyond separator
>      ie = strpos(pathlist,':',ib) ;ending substring index
>      if ie eq -1 then ie = il ;point at end of path string
>    endrep until ie eq il ;until end of path reached
>    if fcount eq 0 then begin ;true: routine not found
>      print,'which: ' + proname + '.pro not found on IDL !path.'
>    endif
>  end
```

Subject: Re: where can I find them
Posted by R.Bauer on Wed, 08 May 2002 09:36:54 GMT
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Kenneth Mankoff wrote:

```
>
>  David Fanning <david@dfanning.com> writes:
>
>>  Xiaoying Jin (xje4e@mizzou.edu) writes:
>>
>>>  If I know the name of the function, such as "DILATE", how can I find where
>>>  IDL implement it? Is there a command in IDL to find the .pro or .dll files
>>>  related to it?
>>
>>    IDL> ? dilate
>
>  or:
>  IDL> help, /source   ; find where IDL stores the implementation
>
>  resolve_routine OR resolve_all should help you find .pro files
>  related to a given procedure (or, read the source that you found
>  via the help,/source command.
```

I like more the file_which.

```
print,file_which('mean.pro')
% Compiled module: FILE_WHICH.
% Compiled module: PATH_SEP.
/usr/local/idl/idl/lib/mean.pro
```

Reimar

>
> -k.
> --
> -- ----------
> Ken Mankoff http://lasp.colorado.edu/snoe/
> http://lasp.colorado.edu/mars/
> http://lasp.colorado.edu/~mankoff/ http://lasp.colorado.edu/marsrobot/
> -- ----------

--
Reimar Bauer

Institut fuer Stratosphaerische Chemie (ICG-I)
Forschungszentrum Juelich
email: R.Bauer@fz-juelich.de
 -- -------
 a IDL library at ForschungsZentrum Juelich
 http://www.fz-juelich.de/icg/icg1/idl_icglib/idl_lib_intro.h tml
 == =======

Subject: Re: where can I find them
Posted by R.Bauer on Wed, 08 May 2002 09:40:53 GMT
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Dear all

If you have a look at IDLDE Run - Profile and System Modules
you get a complete list of IDL Routines.

I believe this list comes from

Routine_Info with the System keyword.

SYSTEM

Set this keyword to return a string array listing all IDL built-in
internal procedures. Built-in internal procedures are part of the IDL
executable, and are not written in the IDL language. If the FUNCTIONS
keyword is also set, ROUTINE_INFO returns a list of all IDL built-in
internal functions.

regards
Reimar

Rick Towler wrote:
>
> When using IDLDE "built-in" commands are highlighted in dark blue
> (procedures are darker than functions) whilst functions and procedures
> written in IDL are in light blue (again, procedures are darker than
> functions). This is with the default settings in IDLDE for windows.
>
> DILATE comes up dark blue, leading me to believe it is written in C as part
> of IDL and the source is unavailable. Looking in print,!dir+'\lib' I don't
> see dilate.pro which seems to confirm IDLDE's behaviour.
>
> -Rick
>
> "Xiaoying Jin" <xje4e@mizzou.edu> wrote in message
> news:ab9mm1ofc1@dipsy.missouri.edu...
>> "Kenneth Mankoff" <mankoff@snoe.colorado.edu> wrote in message
>> news:afu1pjrfu0.fsf@snoe.colorado.edu...
>>> David Fanning <david@dfanning.com> writes:
>>>
>>>> Xiaoying Jin (xje4e@mizzou.edu) writes:
>>>>
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>> where
>>>> > IDL implement it? Is there a command in IDL to find the .pro or .dll
>> files
>>>> > related to it?
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>>>> IDL> ? dilate
>>
>> I use this command. It links me to the IDL Online Help of "DILATE".
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>>> or:
>>> IDL> help, /source ; find where IDL stores the implementation
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>>> resolve_routine OR resolve_all should help you find .pro files
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>> I can not find the "DILATE" with this command or any files named
>> 'dilate.pro'.
>> Maybe it is built in DLL and this command does not help?
>> Can I have the possibility to find the source of it?
>>
>> Best regards,
>>
>> Xiaoying Jin

>>
>>
>>
>>

--
Reimar Bauer

Institut fuer Stratosphaerische Chemie (ICG-I)
Forschungszentrum Juelich
email: R.Bauer@fz-juelich.de
---------- -------
a IDL library at ForschungsZentrum Juelich
http://www.fz-juelich.de/icg/icg1/idl_icglib/idl_lib_intro.h tml
========== =======

Subject: Re: where can I find them
Posted by R.Bauer on Wed, 08 May 2002 09:41:38 GMT
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Marshall Perrin wrote:
>
> Xiaoying Jin <xje4e@mizzou.edu> wrote:
>> Hi, there,
>>
>> If I know the name of the function, such as "DILATE", how can I find where
>> IDL implement it? Is there a command in IDL to find the .pro or .dll files
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> I forget where I originally got the code from... Ah, OK. A web search
> finds it at
> http://www.astro.washington.edu/deutsch-bin/getpro/library02 .html?WHICH

in idl 5.5 there is a file_which implemented

Reimar

>
> Actually, now that I look at that, that's *not* the same thing as the
> "which.pro" that I have. The output is basically the same, but the one
> I have is substantially faster. I've included the text of this below.
> If anyone has any idea where this code originally came from or who
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```
>   - Marshall
>
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> ;24-Aug-92 JAV  Create.
> ;10-Mar-93 JAV  Fixed bug; last directory in !path ignored; pad with ': '
>
> if n_params() lt 1 then begin
>   print,'syntax: which,proname(.pro assumed)'
>   retall
> endif
>
>   pathlist = '.:' + !path + ': '              ;build IDL path list
>   fcount = 0                                  ;reset file counter
>   il = strlen(pathlist) - 1                   ;length of path string
>   ib = 0                                      ;begining substring index
>   ie = strpos(pathlist,':',ib)                ;ending substring index
>   repeat begin                                ;true: found path separator
>     path = strmid(pathlist,ib,ie-ib)          ;extract path element
>     fullname = path + '/' + proname + '.pro'  ;build full filename
>     openr,unit,fullname,error=eno,/get_lun    ;try to open file
>     if eno eq 0 then begin                    ;true: found file
>       fcount = fcount + 1                     ;increment file counter
>       if path eq '.' then begin               ;true: in current directory
>         spawn,'pwd',dot                       ;get current working directory
>         dot = dot(0)                          ;convert to scalar
>         print,fullname + ' (. = ' + dot + ')'  ;print filename + current dir
>       endif else begin                        ;else: not in current directory
>         print,fullname                        ;print full name
>       endelse
>       free_lun,unit                           ;close file
>     endif
>     ib = ie + 1                               ;point beyond separator
>     ie = strpos(pathlist,':',ib)              ;ending substring index
>     if ie eq -1 then ie = il                  ;point at end of path string
>   endrep until ie eq il                       ;until end of path reached
>   if fcount eq 0 then begin                   ;true: routine not found
>     print,'which: ' + proname + '.pro not found on IDL !path.'
>   endif
> end
```

--
Reimar Bauer

Institut fuer Stratosphaerische Chemie (ICG-I)
Forschungszentrum Juelich

email: R.Bauer@fz-juelich.de
---------- -------
a IDL library at ForschungsZentrum Juelich
http://www.fz-juelich.de/icg/icg1/idl_icglib/idl_lib_intro.h tml
========== =======