Subject: filename check
Posted by Stuart Colley on Tue, 24 Oct 2000 07:00:00 GMT
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Can anyone suggest a way to check that a file exists before attempting to read from it, since the error messages obtained from trying to read from a non-existing file, don't make it clear that file doesn't exist.

cheers, S

Subject: Re: filename check
Posted by Edward Max Pottasch on Tue, 24 Oct 2000 07:00:00 GMT
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Stuart Colley <src@star.ucl.ac.uk> wrote in message news:Pine.OSF.3.96.1001024143333.20360F-100000@zuaxp7.star.u cl.ac.uk...

>

- > Can anyone suggest a way to check that a file exists before attempting to
- > read from it, since the error messages obtained from trying to read from a
- > non-existing file, don't make it clear that file doesn't exist.

>

- > cheers,
- > S

>

hi Stuart,

my way of IDL programming is rather simple since I am only familiar with the older versions of IDL (v.3.4.1). Anyway this works for me:

ciao, Ed

fn='filename'

; check if file exists ff=FINDFILE(fn)

IF (ff(0) EQ fn) THEN BEGIN

; do your stuff

ENDIF

Subject: Re: filename check Posted by Paul van Delst on Tue, 24 Oct 2000 07:00:00 GMT

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```
Craig Markwardt wrote:
```

```
> Stuart Colley <src@star.ucl.ac.uk> writes:
```

- >> Can anyone suggest a way to check that a file exists before attempting to
- >> read from it, since the error messages obtained from trying to read from a
- >> non-existing file, don't make it clear that file doesn't exist.

>

- > Use the ERROR keyword to OPENR to detect an error condition quietly.
- > The value returned in this keyword will be non-zero if the file could
- > not be opened. Also the !ERROR STATE system variable will contain
- > helpful information describing the error:

>

- NAME STRING 'IDL_M_CNTOPNFIL'
- > MSG STRING 'OPENR: Error opening file: snorg.'
- > SYS_MSG STRING 'No such file or directory'

>

- > According to RSI, the error conditions in !ERROR_STATE.NAME are
- > guaranteed to remain constant in future versions of IDL. To implement
- > it in practice, consider this:

>

- > get_lun, unit
- > openr, unit, filename, error=err

>

- > if err NE 0 then begin
- > free_lun, unit
- > message, 'ERROR: could not open '+filename
- > endif
- > ; Read file ...

>

- > I tend to use GET_LUN explicitly so that the unit is guaranteed to be
- > valid when it is freed. I've nit-picked about this on the newsgroup
- > before.

Seeing the word nit-pick makes me want to so here goes.... :o)

I used to do the above but now I use CATCH for even open errors, forgoing the ERROR= keyword in the open statements:

CATCH, error status

IF (error_status NE 0) THEN BEGIN
MESSAGE, !ERR_STRING, /CONTINUE
FREE_LUN, lun ; If needed
CATCH, /CANCEL
RETURN, failure_code

ENDIF

GET_LUN, lun ; Craig is right. Do this! OPENR, lun, filename

...

And if one of my nested routines returns an error, then

IF (result NE success_code) THEN MESSAGE, 'This routine failed!', /NONAME, /NOPRINT

which sets all the error variables and the CATCH takes over.

For some bizarre reason, despite the double use of MESSAGE in the second example, error handling this way makes me feel all warm and fuzzy on the inside coz I only have two exit points - the bad one and the good one. Yay.

O.k. so it's not really a nit-pick, but what the hell. :o)

paulv

--

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Camp Springs MD 20746

Subject: Re: filename check

Posted by Dick Jackson on Tue, 24 Oct 2000 07:00:00 GMT

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"Stuart Colley" <src@star.ucl.ac.uk> wrote...

>

- > Can anyone suggest a way to check that a file exists before attempting to
- > read from it, since the error messages obtained from trying to read from a
- > non-existing file, don't make it clear that file doesn't exist.

Of course, the solutions in all the other replies point to why this was needed, and now appears in IDL 5.4:

IDL> Print, File_Test('image.gif')
0
IDL> Print, File_Test('image.tif')

File_Test has many fancy keywords for "what kind of file do you expect to find?", etc.: [, /DIRECTORY | , /EXECUTABLE | , /READ | , /REGULAR | , /WRITE | , /ZERO_LENGTH] [, GET_MODE=variable] Cheers, -Dick dick@d-jackson.com Dick Jackson D-Jackson Software Consulting / http://www.d-jackson.com Calgary, Alberta, Canada / Voice/Fax: +1-403-242-7398 Subject: Re: filename check Posted by R.Bauer on Wed, 25 Oct 2000 07:00:00 GMT View Forum Message <> Reply to Message Dear Stuart, there are two more routines avaliable for you from our library. file_exist: **PURPOSE:** The result of this function is 1 if a file exist and 0 if not CATEGORY: **DATAFILES CALLING SEQUENCE:** Result=file_exist(file_name,[valid=valid]) http://www.fz-juelich.de/icg/icg1/idl_icglib/idl_source/idl_ html/dbase/download/file_exist.tar.gz http://www.fz-juelich.de/icg/icg1/idl_icglib/idl_source/idl_ html/dbase/download/file_exist.sav is read access: : PURPOSE: Test if read access is possible of a file **CATEGORY:**

```
; PROG_TOOLS
;
; CALLING SEQUENCE:
; result=is_read_access(path_and_file)
;
```

http://www.fz-juelich.de/icg/icg1/idl_icglib/idl_source/idl_html/dbase/download/is_read_access.tar.gz http://www.fz-juelich.de/icg/icg1/idl_icglib/idl_source/idl_html/dbase/download/is_read_access.sav

For further routines and copyright and licence. http://www.fz-juelich.de/icg/icg1/idl_icglib/idl_lib_intro.h tml

regards Reimar

Subject: Re: filename

Posted by Martin Schultz on Wed, 07 Feb 2001 13:21:31 GMT

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Gernot Reishofer wrote:

>

> hi,

>

- > I have to save two files with the same filename but different
- > extensions. Using DIALOG_PICKFILE creates path+filename+extention.
- > Can you experts tell me the shortest way to get the filename avoiding
- > too many string operations?

>

> thanks for help

>

> Gernot

I'm not sure it is the shortest, but it is sure convenient to use a utility routine from one of several public domain librariers for this. In my own library this is extract_filename.pro. You can browse through this and other libraries at http://www.mpimet.mpg.de/~schultz.martin/idl/

CHeers, Martin

--

Subject: Re: filename

Posted by Pavel A. Romashkin on Wed, 07 Feb 2001 17:20:02 GMT

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I face this all the time, and must confess in being too lazy to write a solution. I usually search for a delimiter from the string end (Strpos(path, delimiter, /reverse)) or use Get_Path keyword, Strlen the path and Strmid the returned value from that location to the end:

```
full_loc = Dialog_pickfile(get_path=path)
length = strlen(path)
file_name = strmid(full_loc, length)
```

Three lines of code; oh well. Need a wrapper function to make it one line :-)

Cheers, Pavel

Gernot Reishofer wrote:

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>

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- > extensions. Using DIALOG_PICKFILE creates path+filename+extention.
- > Can you experts tell me the shortest way to get the filename avoiding
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> Gernot