
Subject: Re: extracting all but...

Posted by [guillaume.drolet.1](#) on Sat, 19 Nov 2005 02:50:41 GMT

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kl_tah@hotmail.com a écrit :

> Hi All,
>
> I was wondering how I can extract all but a constant string from an
> array of strings?
> basically, I have an array of filenames with a particular directory
> prefixed to each of the filenames like so:
>
> files =
> ['/some/constant/directory/file1','/some/constant/directory/ file2',
> etc.]
>
> and would like to have just an array of the filenames without the
> prefixed directory name so that the result looks like:
>
> files = ['file1', 'file2', etc.]
>
>
> any ideas?
>
> Cheers,
> KL

Dear KL,

As a solution, I would use the 'STRSPLIT' function with the /EXTRACT keyword and '/' as a delimiter. It will return a string array containing 4 string: [some constant directory file2].

For example, inside a loop:

```
string_arr = strsplit(files[i], '/', /extract)
```

Then it's easy to get the last element of the array and put it in another array. I would repeat the operation for all your path+file.

Gui

Subject: Re: extracting all but...

Posted by [R.Bauer](#) on Sat, 19 Nov 2005 09:46:52 GMT

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kl_tah@hotmail.com wrote:

```
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>  
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> prefixed directory name so that the result looks like:  
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> files = ['file1', 'file2', etc.]  
>  
>  
> any ideas?  
>  
> Cheers,  
> KL
```

You could use our file_path_name_ext routine from our library

http://www.fz-juelich.de/icg/icg-i/idl_icglib/idl_source/idl_html/dbase/file_path_name_ext_dbase.pro.html

more routines are described here:

http://www.fz-juelich.de/icg/icg-i/idl_icglib/idl_lib_intro.html

idl has in idl6.0 introduced two routines FILE_BASENAME and FILE_DIRNAME.
There is no builtin routine to separate the extension - unfortunately.

file_path_name_ext returns a structure of path,name,ext input could be a
scalar or an array

cheers
Reimar

Subject: Re: extracting all but...
Posted by [William Daffer](#) on Sat, 19 Nov 2005 15:59:32 GMT
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kl_tah@hotmail.com writes:

```

> Hi All,
>
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>
>
> any ideas?

```

You didn't tell which version of IDL you're using, so I'm going to assume it's a fairly recent version.

If it's just a matter of removing the path, use `File_Basename()` which, like the unix utility ``basename'`, returns the last component of a path, i.e. the file name itself.

```
file_basename('/some/constant/directory/file1') == 'file1.'
```

You don't have to loop over the filenames, just do the whole vector at once.

```
the_part_you_want=file_basename(files)
```

If the constant part of path isn't the entire path and you know its value, you can use `STREGEX()`

```
parts = stregex(your_files,'/the/constant/part/(.*)$', $
               /extract,/subexp)
```

```
the_parts_you_want=parts[1,*]
```

You might want to `'reform()'` that, to make the first dimension go away.

If the part isn't constant, you're on your own. ;-)

whd

--

PAINTING, n. The art of protecting flat surfaces from the weather and

exposing them to the critic.

Formerly, painting and sculpture were combined in the same work: the ancients painted their statues. The only present alliance between the two arts is that the modern painter chisels his patrons.

-- Ambrose Bierce: *The Devil's Dictionary*

Subject: Re: extracting all but...

Posted by [David Fanning](#) on Sat, 19 Nov 2005 16:29:42 GMT

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Reimar Bauer writes:

> idl has in idl6.0 introduced two routines FILE_BASENAME and FILE_DIRNAME.
> There is no builtin routine to separate the extension - unfortunately.

Well, I'll offer up FSC_BASE_FILENAME, which can give you the directory, the filename, and the extension all in one go:

; EXAMPLE:

```
;
; IDL> thePath = "C:\rsi\idl7.8\lib\jester.pro"
; IDL> Print, FSC_Base_Filename(thePath, Directory=dir, Extension=ext)
;   jester
; IDL> Print, dir
;   C:\rsi\idl7.8\lib\
; IDL> Print, ext
;   pro
```

You can find it here:

http://www.dfanning.com/programs/fsc_base_filename.pro

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

Coyote's Guide to IDL Programming: <http://www.dfanning.com/>

Subject: Re: extracting all but...

Posted by [R.Bauer](#) on Sat, 19 Nov 2005 23:12:22 GMT

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David Fanning wrote:

> Reimar Bauer writes:
>
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>
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> directory, the filename, and the extension all in one go:
>
> ; EXAMPLE:
> ;
> ; IDL> thePath = "C:\rsi\idl7.8\lib\jester.pro"
> ; IDL> Print, FSC_Base_Filename(thePath, Directory=dir,Extension=ext)
> ; jester
> ; IDL> Print, dir
> ; C:\rsi\idl7.8\lib\
> ; IDL> Print, ext
> ; pro
>
> You can find it here:
>
> http://www.dfanning.com/programs/fsc_base_filename.pro
>
> Cheers,
>
> David

David,
your routine does not get the extension on this example in opposite of Theos
file_path_name_ext which works on windows and unix.
FSC_Base_Filename drops the dot :-(

```
IDL> thePath = '../.profile'
IDL> Print, FSC_Base_Filename(thePath, Directory=dir,Extension=ext)
% Compiled module: FSC_BASE_FILENAME.
% Compiled module: PATH_SEP.
% Compiled module: STRSPLIT.
profile
IDL> fpe=file_path_name_ext(thePath)
% Compiled module: FILE_PATH_NAME_EXT.
% Compiled module: REPLACE_STRING.
IDL> print,fpe.path
../
IDL> print,fpe.name

IDL> print,fpe.ext
```

.profile

cheers
Reimar
