
Subject: File Listings

Posted by [Brian C. Ballard](#) on Wed, 28 Aug 1996 07:00:00 GMT

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Bon Jour,

RSI Tech support can not solve this, can you? My OS is UNIX (Sun Solaris 2.5), but I want my GUI to be portable to the PC.

---- Problem Summary ----

I don't know how to get directory listings under Win32.

---- Here's what I am trying to do ----

My GUI contains two sub-base widgets similar to the PICKFILE widget. (In fact, I stole some code from PICKFILE to do it.) Each sub-base has:

1. A text widget to type in a file filter (eg *.tif);
2. A list widget for subdirectories (to navigate directories);
3. A list widget for file names (to select a file); and,
4. A text widget (to type in a path/file name).

This allows the user to select files from two independent directories at the same time. In UNIX, I am spawning an 'ls' command to get the subdirectories and file names. This works fine in UNIX.

---- Problem Detail ----

My user wants to run the same application on IDL for Windows. For Windows and Mac OS, PICKFILE calls an undocumented C routine called OS_PICKFILE which interfaces with the "common" windows dialog for Win32 or Mac OS. I don't want to use this since the user will have to open it and close it for each file selected, and there is no way to show two independent OS_PICKFILE widgets inside the same window.

---- Question ----

Does anyone know how to get a simple directory listing (in text format) under windows? (Like "dir" in good old DOS.)

---- Possible Answer ----

Might I have to use an external C (or whatever) routine to get the file list? I would REALLY like to stay in IDL for portability reasons.

Any suggestions will be appreciated.

Gracias,

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Subject: Re: File Listings
Posted by [kak](#) on Thu, 29 Aug 1996 07:00:00 GMT
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"Brian C. Ballard" <bballard@orionint.com> writes:

> RSI Tech support can not solve this, can you? My OS is UNIX (Sun Solaris
> 2.5), but I want my GUI to be portable to the PC.

Heh, heh, better ask in this group; it's cheaper anyway...

> ---- Problem Summary ----
> I don't know how to get directory listings under Win32.

I can't believe that RSI's techsupport did not know this or maybe
it's me and I did not get your point.

Just use
`dir_entries = findfile('*.*',count=filecount)` ; for Windoze

and you get a string array `dir_entries` with all file and directory
names in the current directory. Keyword `count` returns the number
of found files.

However, under UNIX the metachars are interpreted different.
I would simply stick with spawning a `ls` command in this case.

The Windoze common dialog box has another annoying quirk: it's
button label is fixed to "Open". This is confusing in
applications where you want to choose a filename for saving instead
of opening a file.
IDL would better introduce a keyword for `OS_PICKFILE` to set the
respective button label from outside.

Before constructing your own pickfile widget, I would consult the
searchable list of IDL routines at <http://www.lpl.arizona.edu/idl.html>
It contains the routines from all publicly available IDL libraries.
Perhaps someone else has already done your work.

Karl

Subject: Re: File Listings
Posted by [Brian C. Ballard](#) on Thu, 29 Aug 1996 07:00:00 GMT
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Bon Jour, autre temp,

This is a summary of what I found out about my original question.
Thanks to Jim Pendleton of RSI (US) and Peter Mason of CSIRO (AU) for their help.

Ayer, escribi:

> ---- Question ----

> Does anyone know how to get a simple directory listing (in text format)
> under windows? (Like "dir" in good old DOS.)

I feel foolish for missing the FINDFILE function in the manuals. Here's part of what I ended up writing if anyone cares (UNIX works, Windows not tested yet):

<begin>

```
...
'unix': begin
...
;Get the directory listing, send errors to bit bucket
spawn, [ '/bin/sh', '-c', 'ls -1FLa ' + path + ' 2> /dev/null'], $
      junks, count = junkv, /noshell

;Dirs will end in "/", files don't
j = where( strpos( junks, '/') ge 0, junkv)
if ( junkv eq 0) then dirs = "" $
else begin
  ;Build the dirs list from elements that ended in /
  dirs = junks( j)
  ;Chop the "/" from the end of each element
  for i = 0, junkv-1 do $
    dirs(i) = strmid( dirs(i), 0, strlen( dirs(i))-1)
endelse
;Build file path/name, take care of root dir special case
if ( path ne '/') then $
  junks2 = path + "/" + filt $
else $
  junks2 = path + filt
...
end ;case UNIX
'Windows': begin
...
;Get the directory listing
junks = findfile( path + "\" + \"*.*)
;Dirs will end in '\', files don't
j = where( strpos( junks, '\') ge 0, junkv)
if (junkv eq 0) then dirs = "" $
else begin
  ;Build the dirs list from elements that ended in "\""
  dirs = junks(j)
  ;Chop the "\"" from the end of each element
```

```
    for i = 0, junkv-1 do $
      dirs(i) = strmid( dirs(i), 0, strlen( dirs(i))-1)
    endelse
...
end ; case Windows
...
<end>
NB: path can not end in "/" (unix) or "\" (windows).
```

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