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 Pendletom of RSI (US) and Peter Mason of CSIRO (AU) for their help.

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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 vet):
<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(i)
    ;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
  i = 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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