Subject: Mixed ASCII/Binary Files
Posted by DALY on Wed, 25 Jun 1997 07:00:00 GMT
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Hi,

I'm running IDL 4.0.1 under Windows 95 and am having a heck of
a time doing anything with mixed ASCII/binary files (header/data)
files. I've tried all kinds of tricks to read the header and then
the data, but IDL's file pointer keeps getting lost. Does anybody
know of any fixes/patches? I know I can separate the header and
data with another package and then read into IDL, but that kind of defeats
the purpose of having a high-power package like IDL. Any
comments/suggestions will be greatly appreciated.

Thanks,
Chaz Daly

Subject: Re: Mixed ASCII/Binary Files
Posted by David Foster on Thu, 26 Jun 1997 07:00:00 GMT
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DALY wrote:
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Chaz -

I'm not sure what kind of data you're trying to read, but I'll
include a code snippet from a program I have that will extract
individual 2D images out of a single file that contains a 3D array.
The file can have a header, and you can either specify the size of
the header to "skip" (and return as argument) or specify a specific
string that signifies the end of the flag. Here's the code, it may
serve as an example. Let me know if you'd be interested in the entire
program.

```
    ; Skip over header if HEADER_SIZE or HEADER_FLAG specified
```

```
    if ( keyword_set( HEADER_SIZE ) ) then begin
       header_array = bytarr( header_size )
       readu, unit, header_array
    endif else if ( keyword_set( HEADER_FLAG ) ) then begin

       ; Search file for flag signaling end of header

       line = ''
       temp = ''

       while ( line ne header_flag and not eof( unit ) ) do begin
          finfo = fstat( unit )   ; Get file position before read
          readf, unit, line
          if ( keyword_set( HEADER_ARRAY ) ) then $
             temp = [ temp, line ]
       endwhile

       if ( keyword_set( HEADER_ARRAY ) ) then begin
          header_array = temp( 1 : n_elements( temp ) - 1 )
          temp = 0
       endif

       ; Ensure that file pointer is just AFTER the header flag!
       ;  (READF may have grabbed too many bytes)

       point_lun, unit, finfo.cur_ptr + strlen( header_flag )

       if ( line ne header_flag ) then begin
          status = 1
          message, 'Header flag ' + header_flag + $
                ' not found in file ' + fname, /continue
       endif
```

Hope this helps.

Dave
--

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"I have this theory that if we're told we're bad,

then that's the only idea we'll ever have.
But maybe if we are surrounded in beauty,
someday we will become what we see." - Jewel Kilcher

Subject: Re: Mixed ASCII/Binary Files
Posted by DALY on Thu, 26 Jun 1997 07:00:00 GMT
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Hi Chaz Daly here,

I'm the originator of this thread. Thanks to all for the help...
Brian Jackel's fix worked best. Here are the specifics...

I created files using Labview 3.0.1. The files consist of
a 6 line ASCII header (the header values can be positive
or negative so the header length is variable) followed by
image data. The number of pixels being contained in the header.

I tried reading the header in in a variety of ways and then, using
FSTAT, tried to pick up reading the binary (image) data where the
header left off. Problem was that the pointer returned by FSTAT
would sometimes be way past the end of the header.

Brian told me to set my BUFSIZE = 0 on opening the file...it worked!
Again, thanks to everybody for the help...

Chaz Daly out

On Wed, 25 Jun 1997, DALY wrote:

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