Subject: Re: importing ascii files
Posted by Pavel A. Romashkin on Thu, 11 Jul 2002 22:04:20 GMT
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How about the following:

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; P. Romashkin, 2001
; Parameters: FILENAME - name of ASCII file to read, OUT - structure with
; names of variables as fields, N_COLS - number of columns to read.

pro read_ascii_columns, filename, out, n_cols=n_cols
compile_opt IDL2, obsolete
 if n_elements(n_cols) eq 0 then message, 'Specify number of columns!'
 header = ''

 buffer = fltarr(n_cols, 1000)
 openr, SourceFile, /get_lun, filename
 readf, SourceFile, header

  ; If Buffer was longer than file, reading will fail. In such case,
reduce buffer.
 FileTooShort = 0b ; Just to skip buffer reduction the first time.
 on_ioError, reduce_buffer
 reduce_buffer : if FileTooShort eq 1b then begin
  unread_rows = (fstat(SourceFile)).Transfer_Count / n_cols
  if unread_rows eq 0 then goto, finish
  Buffer=fltarr(n_cols, unread_rows)
  point_lun, SourceFile, LastPos
 endif
 FileTooShort = 1b ; In case of ioError, this will be set to 1b

 while not EOF(SourceFile) do begin
  point_lun, (-SourceFile), LastPos ;Memorize start in case it fails.
  readf, SourceFile, Buffer
  if n_elements(resultArray) eq 0 then resultArray = Buffer $
   else ResultArray = [[ResultArray], [Buffer]]
 endwhile

 finish:
 free_lun, SourceFile ; Done using the file.

 header = strsplit(header, /extract)
 resultArray = transpose(resultArray)
 out = create_struct(header[0], resultArray[*, 0])
 for i = 1, n_elements(header)-1 do $
  out = create_struct(out, header[i], resultArray[*, i])
end
**********************
```

You may have to clean up line breaks.
Cheers,
Pavel

Heather wrote:
>
> We have a program written in IDL that extracts data and puts it into a
> text file. We want to put the columns of the text file into some kind
> of storage device so that we can access the columns separately in
> another IDL program. We are trying to write a program that
> incorporates the import_ascii macro, but are open to any other ideas
> at this point.
>
> Heather
