
Subject: Re: how to find number of lines in an ASCII file?
Posted by [Kevin Ivory](#) on Wed, 19 Aug 1998 07:00:00 GMT
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Jason Li wrote:

```
>> I want to read them all and save into an array: data[8, numberOfLines]. But
>> I don't know numberOfLines in the file before hand. What is the most efficient
>> way to find that out?
```

Phillip & Suzanne David wrote:

```
> ...
> while (not eof(lun)) do begin
>   readf, lun, line
>   text = [text, line]           ; <---
> endwhile
> ...
```

The marked line is really going to slash your memory, since new memory will have to be allocated in each loop.

As for the efficient ways:

1. Simply count the lines in the loop above
(best to use a long integer in case you have more the 32000 lines).
2. Even more efficient is to spawn the 'wc -l' command if you are on a unix system. Alas, this is not platform independent.

Attached is my n_lines.pro which can do both.

Best regards
Kevin

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; Time-stamp: <n_lines.pro Fri Feb 13 14:18:47 MET 1998>

```
function n_lines, file, unix=unix
;+
; Purpose:
;   Count the number of lines in a file.
; Argument:
;   file string name of file
; Optional keywords:
;   unix int spawn the unix 'wc' system command
; Restrictions:
;   Spawning the 'wc' unix system command is significantly faster than the
```

```

; portable IDL method - but it is not platform independent. :-(
;-
if n_params() lt 1 then begin
    message, /info, 'Filename required.'
    return, -1
endif

; if !version.os_family eq 'unix' then begin ; no keyword setting required
if keyword_set(unix) then begin
    spawn, ['wc', '-l', file], result, /noshell
    nlines = long(result(0))
endif else begin
    openr, lun, file, /get_lun, error=err
    if err ne 0 then begin
        message, /info, 'Error reading file ' + file
        return, -1
    endif

    nlines = 0l & line = ""
    while not eof(lun) do begin
        readf, lun, line
        nlines = nlines + 1l
    endwhile
    free_lun, lun
endelse
return, nlines
end

```
