
Subject: ? Number of lines in a file
Posted by [gunter](#) on Fri, 31 Jan 1997 08:00:00 GMT
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I need to know how many lines are in a file so I use:

```
spawn, "fgrep -cv 'gbrsh' "+filename, n_lines
```

Is there a more efficient way to do this? I've searched the manuals with no luck.

BTW, I'm running on a UNIX system for those confused by the above line. ;)

--
david gunter
<http://www.mcs.anl.gov/people/gunter/>

"When you are a Bear of Very Little Brain, and you Think of Things, you find sometimes that a Thing which seemed very Thingish inside you is quite different when it gets out into the open and has other people looking at it."
- A.A. Milne, "The House At Pooh Corner"

Subject: Re: ? Number of lines in a file
Posted by [D.Kennedy](#) on Wed, 05 Feb 1997 08:00:00 GMT
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In article <5ctkah\$rq@uwm.edu>,
gunter@alpha1.csd.uwm.edu (David Gunter) writes:
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>
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> BTW, I'm running on a UNIX system for those confused by the above line. ;)

Well, this isn't much easier but 'wc -l'(UNIX) returns the number of lines in a file, it simplifies things if nothing else.

--
David Kennedy, Dept. of Pure & Applied Physics, Queen's University of Belfast
Email: D.Kennedy@Queens-Belfast.ac.uk | URL: <http://star.pst.qub.ac.uk/~dcjk/>
Hi! I'm a .signature virus! Copy me into yours and join the fun!

Subject: Re: ? Number of lines in a file

Posted by [derekfox](#) on Thu, 06 Feb 1997 08:00:00 GMT

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In article <1997Feb5.160127.7541@queens-belfast.ac.uk>, D.Kennedy@qub.ac.uk (David Kennedy) writes:

```
> In article <5ctkah$rq@uwm.edu>,
> gunter@alpha1.csd.uwm.edu (David Gunter) writes:
>> I need to know how many lines are in a file so I use:
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```

If you're willing to have another one-trick pony sitting in your \$IDL_PATH, using IDL-only routines will be much faster (factor of 50 improvement on my machine), after compilation, than any "spawn".

Try this "n_lines.pro".

One warning: results seem to differ from those of `wc -l` for non-ascii files.

--Derek Fox

```
function n_lines,file

on_ioerror,ioerr
openr,unit,file,/get_lun,error=err
if err ne 0 then begin
    ioerr:
    message,'Error reading file '+file,/inform
    return,-1
endif

nlines=0l & line=""
while not eof(unit) do begin
    readf,unit,line
    nlines=nlines+1
endwhile
free_lun,unit
```

```
return,nlines
end
```

Subject: Re: ? Number of lines in a file
Posted by [Karlheinz Knipp](#) on Thu, 06 Feb 1997 08:00:00 GMT
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David Kennedy wrote:

```
>
> In article <5ctkah$rq@uwm.edu>,
>   gunter@alpha1.csd.uwm.edu (David Gunter) writes:
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> David Kennedy, Dept. of Pure & Applied Physics, Queen's University of Belfast
> Email: D.Kennedy@Queens-Belfast.ac.uk | URL: http://star.pst.qub.ac.uk/~dcjk/
>   Hi! I'm a .signature virus! Copy me into yours and join the fun!
```

1. Under UNIX it's also possible to use: `awk "END {print NR}"`
but again: it's a system-call

2. How about the following:

```
;
-----
; open file, get number of bytes, associate data

openr, uni, input_file, /get_lun  &  point_lun, uni, 0
stat = fstat(uni)
bytes = stat.size

if bytes eq 0 then begin
  free_lun, uni
  return, 0
endif
```

```

i = assoc(uni, bytarr(bytes))

;
-----
; count

test = where(i(0) eq 10b)
if test(0) eq -1 then count = 0 else count = n_elements(test)

;
-----
; free file, return & end

free_lun, uni
return, count
end

```

Have fun,
Karl

--
Karlheinz Knipp knipp@digitalmap.hi.bosch.de
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Subject: Re: ? Number of lines in a file
Posted by [R. Bauer](#) on Mon, 10 Feb 1997 08:00:00 GMT
[View Forum Message](#) <> [Reply to Message](#)

David Gunter wrote:

```

>
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>     spawn, "fgrep -cv 'gbrsh' "+filename, n_lines
>
> Is there a more efficient way to do this? I've searched the manuals with no
> luck.
>
> BTW, I'm running on a UNIX system for those confused by the above line. ;)
>

```

It is!

Look at this,

Idl is very fast in processing of arrays. So the idea was to find out how many bytes are in a file then it could be opened and read at once as a bytearr.

After this I count the 10B which indicates the number of lines.

I include my two routines to this mail.

```
; Copyright   R.Bauer 2. Jan. 1996
```

```
; the idea to use fstat instead of spawn ls -l was given by
```

```
; Phil Williams
```

```
function filesize, filename
```

```
if n_params(0) lt 1 then begin
```

```
  help:  print, ' Diese Hilfe kommt mit a=filesize().'
```

```
  print, ' '
```

```
  print, ' stellt fest wieviele Bytes in einer Datei sind.'
```

```
  print, "
```

```
  print, 'Example'
```

```
  print, "a=filesize('testfile.asc')"
```

```
  print, '----- --'
```

```
  return, -1
```

```
  help_open: print, '(filesize) Das File: ', filename, ' gibt es nicht.'
```

```
  return, -1
```

```
ENDIF
```

```
openr, lun, filename, /get_lun,error=err
```

```
if err ne 0 then goto, help_open
```

```
stats = fstat(lun)
```

```
free_lun, lun
```

```
return, stats.size
```

```
end
```

```
===== cut here =====
```

```
; MODIFICATION HISTORY:
```

```
; Copyright R.Bauer 2. Jan. 1996
```

```
;-
```

```

function fileline, filename

if n_params(0) lt 1 then begin
  help:  print, ' Diese Hilfe kommt mit a=fileline().'
  print, ' '
  print, ' stellt fest wieviele Zeilen in einer ASCII Datei sind.'
  print, "
  print, 'Example'
  print, "a=fileline('testfile.asc')"
  print, '----- --'
  return, -1
  help_open: print, '(fileline) Das File: ', filename, ' gibt es nicht.'
  return, -1
ENDIF

byt=filesize(filename)

if byt eq -1 then goto, help_open

lesefeld=bytarr(byt)

openr, lun, filename, /get_lun, error=err
if err ne 0 then goto, help_open
readu, lun, lesefeld ;lese=string(a)
close, lun

free_lun, lun
line=where(lesefeld eq 10B, count_line)
;help, count_line

return, count_line
END

--
R.Bauer

```

Institut fuer Stratosphaerische Chemie (ICG-1)
 Forschungszentrum Juelich
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