

Subject: Re: N_TAGS(, /LENGTH) strange result!
Posted by [mgs](#) on Tue, 05 Jan 1999 08:00:00 GMT

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In article <01be38eb\$bb18fe80\$56040a0a@loliveira.ipimar.pt>, "Luis Oliveira" <eu_luis@hotmail.com> wrote:

> Hi all readers.

 $\succ$

> My problem with N_TAGS(?,/LENGTH) is that it's result with some structures

> is different from the size of the files that That structures originate?!

> (Differences of about 3 or 4 bytes.)

 $\succ$

> I am using IDL to read some unformatted data file that was written with a C

> program. The size calculated with the C structures was the same as the size

> of that structures in files. N TAGS gives a different value, but when I

> write the same structure with IDL to a file, it's size is the same as the C

> structures!

 $\succ$

> My IDL version is 5.11 in a windows95 PC.

 $\succ$

> Thanks for any light on this subject...

 $\succ$

> Luis

 $\succ$

> PS: After some tests, I've seen that this happens with structures that have

> members that are structures... here goes an example:

I suspect you're running into problems with the number of bits in the processing architecture. Sorry, I don't know how to word the explanation decently. Basically, your 32-bit PC is probably adjusting part of your structure to sit on byte boundaries. I've seen similar things when dealing with PC's, Mac's (32-bit systems) and UNIX (32-bit and 64-bit systems).

—

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Subject: N TAGS(, /LENGTH) strange result!

Posted by [Luis Oliveira](#) on Wed, 06 Jan 1999 08:00:00 GMT

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Hi all readers,

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I am using IDL to read some unformatted data file that was written with a C program. The size calculated with the C structures was the same as the size of that structures in files. N_TAGS gives a different value, but when I write the same structure with IDL to a file, it's size is the same as the C structures!

My IDL version is 5.11 in a windows95 PC.

Thanks for any light on this subject...

Luis

PS: After some tests, I've seen that this happens with structures that have members that are structures... here goes an example:

```
IDL> x={a:0L,b:0,c:bytarr(5),d:0B,e:bytarr(3),g:{a:0B,b:0}}
IDL> print,n_tags(x,/length)
      20
IDL> x={a:0L,b:0,c:bytarr(5),d:0B,e:bytarr(3),g:{a:0B,b:0},f:0B}
IDL> print,n_tags(x,/length)
      24
```

This two structures only differ by one byte! The real length is 18 and 19. Now, if I write the structure to a file:

```
IDL> openw,1,'lixo.txt',/delete
IDL> writeu,1,x
IDL> print,(fstat(1)).size ;To return the size of the file
      19
IDL> close,1
```
