

Carsten Pathe wrote:

```
> Hi there,  
>  
> I am wondering about the IDL save command and the disk space of the  
> created save files.  
> Just an simple example:  
>  
> a=intarr(100000)  
> tmp = size(a)  
> print, string(format='(f10.3)',(tmp(1)*tmp(2))/(2.^10.))+ ' kbyte'  
> ;195.313 kbyte  
> save, a, filename='d:\temp\test\b.dat'  
>  
> b=fltarr(100000)  
> tmp = size(b)  
> print, string(format='(f10.3)',(tmp(1)*tmp(2))/(2.^10.))+ ' kbyte'  
> ;390.625 kbyte  
> save, a, filename='d:\temp\test\a.dat'  
>  
> c=dblarr(100000)  
> tmp = size(c)  
> print, string(format='(f10.3)',(tmp(1)*tmp(2))/(2.^10.))+ ' kbyte'  
> ;488.281 kbyte  
> save, c, filename='d:\temp\test\c.dat'  
>  
> When you look at the created files and their sizes, you will see the  
> following:  
> a.dat 393 kb  
> b.dat 393 kb  
> c.dat 784 kb  
>  
> If you compare the file sizes to the sizes, the arrays were allocating  
> in the memory before they were save to disk, you see differences which  
> will cost you a lot of disk space when saving arrays of several hundred  
> megabytes.  
> Does anybody know, why the save command is producing files larger than  
> they should be?
```

Because (size(a))[2] is the type code, which has nothing to do with the byte size of each type, which is:

TYPE	#BYTES
------	--------

Byte	1
------	---

Integer	2
Unsigned Integer	2
Long	4
Unsigned Long	4
64-bit Long	8
64-bit Unsigned Long	8
Floating-point	4
Double-precision	8

Ciao,
Paolo

>
> PS: I know, that I can also use:
> openw, 10, 'd:\temp\test\a.dat'
> writeu, 10, a
> close, 10
> But when I want to restore the data, I have to know the structure of the
> data to restore - which is not always the case.
>
> Thanks a lot help
