Subject: Re: File sizes and the SAVE command Posted by Klaus Scipal on Wed, 22 Mar 2006 15:17:28 GMT

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Hi Reimar

re compress:

Compress helps but on the cost of time when reading/writing the data.

re xdr:

but why is the filesize then so different

In our case for a float array it will take 2096 bytes to store the overhead and for the integer array 202096 bytes. This difference can not only be the result of the XDR description.

But maybe the XDR format use 4 bytes instead of 2 bytes for integer representation?

Klaus

```
"Reimar Bauer" <R.Bauer@fz-juelich.de> wrote in message
news:dvrj9m$be87$1@zam602.zam.kfa-juelich.de...
> Klaus Scipal wrote:
>> The problem is not related to the calculation of the filesize, but the
>> actual amount of memory required
>> Take two arrays
>> a=intarr(100000)
>> b=fltarr(100000)
>>
>> and save them using the save comannd
>> the file for array a takes 402096 bytes diskspace
>> the file for array b takes 402096 bytes diskspace
>>
>> save them using openw & writeu
>> the file for array a takes 200000 bytes diskspace
>> the file for array b takes 400000 bytes diskspace
```

>> So the save command seems to waste a lot of diskspace, but why? Does the

>> save command convert an integer automatically into a longinteger?

>> save command convert an integer automatically into a longinteger:
>>

>> Klaus

>>

>>

> why not using /compress ?

```
>
> An idl sav file is not only a binary copy of your value. It does use a
> XDR exchange data format to create files which are platform independent.
> Each value has always it's XDR description included.
>
> In general one of the scientific data formats e.g. netCDF are much
> better to store your data in a common structure which is exchangable to
  a lot of platforms too
>
>
  cheers
  Reimar
>
>
>
>
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       a IDL library at ForschungsZentrum Juelich
>
  http://www.fz-juelich.de/icg/icg-i/idl_icglib/idl_lib_intro. html
```