Subject: Re: Trouble reading unformatted f77 (unix) integers?
Posted by thompson on Wed, 10 May 1995 07:00:00 GMT
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Brett Hennig <bretth@lovelace.maths.monash.edu.au> writes:

> Here's the problem:
> The F77 code:
> open(unit=51,name='test1.dat',status='unknown',form='unforma tted')
> write(51)1,2,3
> close(51)
> end

> The idl code(that doesn't work):

> openr,n,'test1.dat',/get_lun,/f77_unformatted
> x=0 & y=0 & z=0
> readu,n,x,y,z
> print,x,y,z -----> 1 0 2
> free_lun,n
> end

> Code that does:
> openr,n,'test1.dat',/get_lun,/f77_unformatted
> x=0 & y=0 & z=0 & dum1=0 & dum2=0
> readu,n,x,dum1,y,dum2,z
> print,x,dum1,y,dum2,z -----> 1 0 2 0 3
> free_lun,n
> end

> is idl not interpreting the input correctly? or.. ? ?

Your problem is very simple. The default integer data type in FORTRAN takes up four bytes (INTEGER*4). In IDL parlance, this is known as a long integer. The default IDL integer type is a short integer which only takes up two bytes.

The following code should work correctly.

```
openr,n,'test1.dat',/get_lun,/f77_unformatted
x=0L & y=0L & z=0L
readu,n,x,y,z
print,x,y,z
free_lun,n
end
```

As should this.

```
openr,n,'test1.dat',/get_lun,/f77_unformatted
```

```
xyz=lonarr(3)
readu,n,xyz
print,xyz
free_lun,n
end
```

Bill Thompson
