
Subject: Re: slow file-handling

Posted by [David Theil](#) on Mon, 02 Sep 1996 07:00:00 GMT

[View Forum Message](#) <> [Reply to Message](#)

Jorn Helbert wrote:

```
>
> Hi,
> I have a problem reading in a large data-file
> if i just read it
> line by line it takes nearly ten minutes on a sparc twenty. my read
> block is the following
> <CODE>
> WHILE NOT eof(u1) DO BEGIN
>   readf,u1,t_temp,foo,foo,foo,b_temp
>   t_u = [t_u,t_temp]
>   b_u = [b_u,b_temp]
> END
>
> Any ideas how to speed this up?
```

As long as you are doing this with a loop, this will be slow.
In general IDL is pretty slow with loops.

Option 1:

Read it in once the slow way and then save it as a binary file for future reading, either using 'save' or 'assoc'.

Option2:

If you have many different text files you have to work with, you might want to use a spawned or "call_external" called c or fortran program to read them and then rewrite them as binaries.

Option3:

Another possibility that will MIGHT be faster is to define a structure that matches each row of data and then create an array of this structure with one element for each line.

```
a=replicate{temp, t:double(0.0), foo1:double(0.0), foo2:double(0.0), $
foo3:double(0.0), bx:double(0.0), by:double(0.0), bz:double(0.0), $
nmuberofrows}
```

```
openr,u1,'text.file'
readf,u1,a
close,u1
t_u = a(*).t
b_xu = a(*).bx
b_yu = a(*).by
b_zu = a(*).bz
```

and then extract the info you really want out of the structure, "a"

You can find out the length of your files using some sort of system command, like "wc" in UNIX. If you spawn this and write the output to another file and read THAT to determine numberofrows you can make the whole thing an automated program. Otherwise you will get an eof error if numberofrows is too large, although the entire file will still be read into "a".

option 2 is probably the quickest but also the most pain to implement. It is worthwhile if this is a program where speed is critical and you will have to read many different files every time you run.

David Theil

home	work
	University of Colorado
3360 34th St. D	campus box 389
Boulder, Colorado	Boulder, Colorado
80301	80309
(303)449-3113	(303)492-0895

No guts, no glory.
