Subject: Re: lost data?
Posted by Liam E. Gumley on Thu, 10 May 2001 14:55:01 GMT
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src wrote:
> Is there a bug in IDL's Save/Restore command? I've just spent the last 18
> days running a Monte Carlo simulation to seemingly lose all my data. The
> problem occured when our license manager stopped responding (network
> problem) hence the IDL session running the simulation crashed. The MC
> code is designed to save results periodically as it runs (just in case
> this sort of thing happens). I've just tried:
>
> "restore, 'mc_file.sav', /Verbose"
>
> only to get:
>
> % RESTORE: IDL version 5.3 (linux, x86).
> % RESTORE: Truncated save file, restored as much as possible:
>
> That "resored as much as possible:" is in fact 0 (zero). Despite the file
> itself being 17 Mb! Some of my .sav files are a lot bigger than this, yet
> don't seem to have any problems. Is there anyway to recover this file, or
> prevent this happening again in the future? I'm going to very upset to
> lose 18 days work...

I ran into the same problem a long time ago when I used to run long FORTRAN jobs on a VAX/VMS system. My batch job wrote data to a netCDF file as it ran, but if the batch job died, the file would be incomplete and therefore unusable.

Fortunately, netCDF offers a mechanism that allows you to synchronize an open file to disk. In IDL, it's done as follows:

ncdf_control, cdfid, /sync

where cdfid is the identifier of an open netCDF file. You will need to create a netCDF file which has an unlimited dimension; see the example for ncdf_vardef in the online help for an example.

Another option, which I have not tested, is to write the results from your simulation to a binary output file (not a SAVE file), and then periodically execute the flush procedure, e.g.,

flush, lun

where lun is the logical unit number of the file to be synchronized to disk.

Cheers,
Liam.
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