Subject: Re: Readu, Writeu Causing Segmentation Fault
Posted by penteado on Mon, 07 Sep 2009 15:51:15 GMT
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On Sep 7, 5:29 am, Wox <s...@nomail.com> wrote:
> On Sun, 6 Sep 2009 21:21:28 -0700 (PDT), "A.R." <alrom...@gmail.com>
> wrote:
>
>
>
>> Hello everyone,
>
>> I have created rather large volumes (3-D binary arrays) in IDL that I
>> save as unformatted data (i.e. writeu). When the volume gets above a
>> certain size (around 2.2 GB) when I attempt to writeu or readu the
>> volume, I am kicked out of IDL with a segmentation fault. I don't
>> think it's a memory issue, I'm running 64-bit IDL on a 64-bit linux
>> running redhat enterprise with 12 GB of ram.
>
>> One workaround I've used for 'writeu' is to write to the file in
>> chunks, by using a for loop to write each slice of the volume
>> individually. This works for saving the volume, but then I have no
>> way to re-open the volume in IDL without the readu segmentation fault!
>
>> Anyone have any ideas for what could be causing this? I'm running IDL
>> Version 6.2.
>
>> I appreciate any suggestions/ideas you smart people might have! In
>> the meantime, I'll continue banging my head against the wall over this
>> one.
>
> This works for me:
> IDL> writeu,lun,lonarr(930,930,930) ;~3GB
>
> { x86_64 Win32 Windows Microsoft Windows 7.1 Apr 21 2009 64 64}

There is a page in the help specifically about large file support
(large being >2^31-1 bytes). In short, it says on some platforms IDL
may handle up to 64 bit file pointers, which can be seen in the value
of !VERSION.FILE_OFFSET_BITS. But some file systems and the available
memory may force smaller limits.

That part of the documentation is called "Reading and Writing Very
Large Files", and resides in

IDL Programmers' Guides > Application Programming > Part II:
Components of the IDL Language > Files and Input/Output