
Subject: Re: Changing File Size with OPENU?

Posted by [Peter Mason](#) on Tue, 28 Oct 1997 08:00:00 GMT

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On Mon, 27 Oct 1997, Wayne Landsman wrote:

> I always thought that when opening a file with OPENU that the file wouldn't
> change size, unless one wrote past the end of the file. But below I give an
> example of a file changing size, even though I never reached the end of the
> file.

>

> I suspect this might be a IDL (or Solaris 2.6) bug, because if I uncomment
> the ;print,fstat(lun) line below, then the file size stays unchanged.

> Anybody know if the behaviour in the example below is expected?

<example cut>

The size change also happens on Digital Unix 4.0A with IDL 4.0.1 (and earlier versions).

I wasn't surprised by this behaviour in IDL, having first been totally freaked out by it in the C world. (I found out about it the hard way.) In C, you have to do a fseek() or fflush() in between changing from a read to a write (or vice versa) on the same streamed file unit, otherwise things just go wrong. (At least C documentation on fopen() usually points this out.)

IDL's normal I/O routines are based on C routines, and I guess that this is why they have the same problem. (IDL's POINT_LUN is equivalent to a fseek(). Also, I guess that FSTAT() incorporates a seek.)

It would be nice if the IDL docs mentioned this somewhere.

So, anyway, when changing from a read to a write (or vice versa) on the same file unit, you should always do something like:

POINT_LUN, -lun, junk

or, as you've tried, an FSTAT(),

or possibly FLUSH,lun.

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