Subject: Re: Memory leak in IDL hdf5 library?
Posted by David Fanning on Mon, 24 Jan 2011 21:08:51 GMT
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Eddie Schlafly writes:

> I take it that you don't see any leak under Windows?

No, I don't think so. I don't see anything dramatic
happening with memory.
>
> Thanks for pointing out h5_close! I just followed the example files from
> the hdf5 documentation, which didn't used h5_close.
>
> If I add an h5_close at the end of ex_read_hdf5 and ex_create_hdf5, I no
> longer leak memory. If, however, I just try to h5_close when I'm done
> reading in a bunch of files, I still leak.
>
> Adding h5_close, however, doesn't change the problem I am having where
> the amount of memory used is many times the size of the file being read
> in. The ~40K file I am reading in ends up reading in to about 50 MB of
> memory, which is freed by the h5_close. The files are also slower to
> read in than I would expect. If I write out a structure with a zero in
> it, rather than a nested structure with a zero in it, things read in
> quickly and no memory is leaked, even without h5_close.

I'm really just waving my hands here, but if I read the
H5_CLOSE documentation correctly, I would guess that there
is an enormous amount of overhead in "linking" to the H5
libraries. I would guess it is this memory that is freed
with H5_CLOSE. Reading the files is probably slower because
you have to load and unload all this overhead each time.

Have you discussed this with ITTVIS? What do they recommend?

Cheers,

David

--
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Coyote's Guide to IDL Programming: http://www.idlcoyote.com/
Sepore ma de ni thui. ("Perhaps thou speakest truth.")