
Subject: Re: dynamic memory in call_external
Posted by [rivers](#) on Tue, 26 Jan 1999 08:00:00 GMT
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In article <88lnirufne.fsf@catspaw.jpl.nasa.gov>, Vapuser <vapuser@catspaw.jpl.nasa.gov> writes:

>
>
> I have someone in my office who wants to know:
>
> Is it advisable to create and destroy memory within a CALL_EXTERNAL
> routine? (that is, can one safely use malloc and free?) Or must one
> make the routine(s) in question LINKIMAGE routines and the idl memory
> management routines (IDL_MEMAlloc, IDL_MEMfree and IDL_GetScratch)
> available in that environment.

No, you should not create and destroy memory within CALL_EXTERNAL. The reason is that when you use CALL_EXTERNAL you are passed only the address of the data storage part of the IDL variable. You are not passed other important pieces of information for that variable, such as how big it is, what the data type is, etc. If you create and destroy memory you will only change the pointer, but not the other descriptive information. It might work OK if you are sure you won't change the size or type of the IDL variable, but I would not bet on it.

> Secondly, can one create an array in IDL (in the interpreter) that
> is page aligned (i.e. as if one had done it using the 'valloc' version
> of malloc in C) which can then be passed down into the CALL_EXTERNAL
> routine.

I don't think so.

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