
Subject: Re: CALL_EXTERNAL and memory allocation
Posted by [Michael Zingale](#) on Sun, 10 Mar 2002 23:43:18 GMT
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I should also point out that I have an example of reading a string from an HDF5 dataset into IDL via call_external at the bottom of the following page:

http://www.ucolick.org/~zingale/io_tutorial/

in the file idl_hdf5.tar

Mike

Michael Zingale wrote:

```
> I typically do something like the following:
>
>
> in IDL:
>
> string = ' '
>
> ierr = call_external('lib.so', 'read_string', string)
>
>
> and in C:
>
> IDL_STRING* string = (IDL_STRING *) argv[0];
>
> then fill string.s with the string.
>
>
> To do an array of strings, it is a little more complicated. If you do
>
> unklables = strarr(num),
>
> you must initialize each string with a UNIQUE value, otherwise, IDL
> gives them the same memory address. I do something like this:
>
> unklables = strarr(nvar)
>
> ; this is important -- each string must be initialized to a unique
> ; 'word', otherwise all the unklables will share the same address in
> ; memory
> for i = 0, nvar-1 do begin
>     unklables[i] = string(i, format = '(i4)')
> endfor
```

>
> Then I can fill this in IDL w/o problems.
>
> Mike
>
>
>
>
>
>
>
> lyubo wrote:
>
>> I have to get back a string from C, and if I have a null string
>> defined in IDL and passed to C it won't work, because there
>> isn't any memory allocated to the string.
>>
>> In general, how can I allocate memory for a string in IDL?
>>
>> lyubo
>>
>>
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>>
>
>
