
Subject: Returning a string array from a DLM
Posted by [Ed Wright](#) on Thu, 12 Dec 2002 23:44:45 GMT
[View Forum Message](#) <> [Reply to Message](#)

Question for DLM experts:

I wrote a DLM for a C routine that returns an array of strings. The first version of the DLM code has the return array declared as `char item[X][Y]`. After the C call, I created a temp array of strings via a `IDL_MakeTempArray` call, then looped over each string in the array copying the string to the array created in `IDL_MakeTempArray` via an `IDL_StrStore` call.

It worked..

So being quite industrious, I decided it a good idea to dynamically allocate the memory required for the string array. After a few hours of aggravation and a phone call to a friend who reminded me a pointer pointing to nothing might cause some problems, I have a DLM than can dynamically allocate the needed space for a string array then pass that array to my C routine as an argument for return.

Now the problem. On return to the IDL interpreter, I experience a plethora of malloc errors:

Given a script making two calls to the DLM, call format:

`cspice_lparse, string_with_separator, separator_string, item`

Item should return as an array of strings.

My test output -

```
IDL> xtspice_idl
Start tests
% Loaded DLM: COMBINE.
Start of module: st01_idl
In C routine:
String: a
String: b
String: c
In IDL, array =  a b c

In C routine:
String: a
String:
String: c
*** malloc[3990]: error for object 0x29cee0: Incorrect check sum for freed
object - object was probably modified after beeing freed; break at
```

szone_error
Segmentation fault

Any ideas as to my error? I do free the allocated array as the last step.

As always,
Ed Wright
