Subject: CALL_EXTERNAL and strarr()
Posted by Richard Tyc on Wed, 08 Dec 1999 08:00:00 GMT
View Forum Message <> Reply to Message

I need to call an external C function (unix/shared lib method) which will collect a string array of different size strings. I have been using call_external with success on returning other types (floats, strings etc) but this seems more challenging. The problem being I don't know how large each string will be in the string array so it needs to be dynamically allocated.

I know the following can pass IN a string array and return a single string:

```
replyStr = CALL_EXTERNAL('IDLquery_call.so','GetPatientList',strarr,$
                N_ELEMENTS(strarr),  /S_VALUE)
```

the key point in the C function being to make the returned string static to avoid memory leaks.

Anyone care to point out how I might be able to retrieve a string array.

I was thinking about IDL_ImportArray or IDL_ImportNamedArray to create an IDL Array.

so lets say in my C function I have

```
 char *list[100] ;    or should it be IDL_STRING *list100 ; ??????
```

and the function has gone off an filled this list with various sized array strings.
(eg. list[0] = strdup("5char") list[1] = strdup("06char") where strdup is using malloc implicitly)

Assuming I create an IDL array from this data, what mechanism do I have of returning this data in the call_external function.

Thanks in Advance
Rich