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Subject: CALL\_EXTERNAL and IDL\_STRING

Posted by [Frederique Soulard](#) on Fri, 22 Dec 2000 16:05:24 GMT

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We are trying to use the CALL\_EXTERNAL function in order to get strings from a C routine. The variables are defined as IDL\_STRING and have to be modifyable into the C routine. Our C routine reads strings from a binary file into C string variables. Then we are trying to copy the C strings into the IDL\_STRING pointers (copy byte after byte). We encounter problems while doing this (memory overlapping probably). Does someone has any advice to give in order to solve our problems (no question to re-develop the reading in IDL routine) ? Is a ByteArr method a solution ?

Thanks.

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Subject: Re: CALL\_EXTERNAL and IDL\_STRING

Posted by [Mark Rivers](#) on Thu, 04 Jan 2001 05:00:47 GMT

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Frederique Soulard wrote in message

<91vttb\$tpn\$1@s1.read.news.oleane.net>...

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> doing this (memory overlapping probably). Does someone has any advice to give

> in order to solve our problems (no question to re-develop the reading in IDL

> routine) ? Is a ByteArr method a solution ?

Yes, I always use byte arrays for this. In IDL dimension your byte arrays so that the dimension

which is the string length is greater than it will ever need to be in the C code. Have the C code

fill in the byte array with trailing NULLs. On return to IDL convert to a string or string array using the string() function.

Mark Rivers

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Subject: Re: CALL\_EXTERNAL and IDL\_STRING

Posted by [Nigel Wade](#) on Thu, 04 Jan 2001 10:55:54 GMT

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Mark Rivers wrote:

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>
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>
> Mark Rivers
```

Please pass the length of the IDL string to the C routine and make sure you don't copy more than the string can hold. Today's huge string is tomorrow's buffer overrun. I don't use CALL\_EXTERNAL so I don't really know much about it, but if you have an IDL\_STRING pointer can you use IDL\_StrStore to put your string into the IDL variable?

The alternative would be to write a "system routine" (i.e. using LINKIMAGE or a DLM). System routines can create IDL variables of any type.

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