
Subject: Problem addressing arrays from C routines running OSF
Posted by [Stubbe Faurischou Hvii](#) on Tue, 30 Jan 1996 08:00:00 GMT
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I am writing a program which have to access some routines written
in C. These routines

have the form somewhat like this:

---- C ----

```
int routine(int argc, void *argv[])
{
short *ptr = (short *)argv[0];

// do som operations on the array addressed using <ptr>

return TRUE;
}
```

---- IDL ----

```
; array = intarr(512, 512);
function routine, array
  return, call_external('routine.so', 'routine', array)
end
```

This method of addressing an array works under Solaris, SGI Irix
and Windows
but not under OSF/1 on a DEC alpha workstation.

I think that the problem is that IDL tries to send a 32 bit
pointer, and the
C program expects a 64 bit pointer (a good way to create chaos
:-))

Any suggestions on how to solve this problem?


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Subject: Re: Problem addressing arrays from C routines running OSF
Posted by [thompson](#) on Thu, 01 Feb 1996 08:00:00 GMT
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Stubbe Faurschou Hviid <stubbe@fys.ku.dk> writes:

(stuff deleted)

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> and Windows
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> :-)

I have successfully used CALL_EXTERNAL to C programs with IDL 3.6 under OSF/1.
I don't know enough about C programming to tell you why your program didn't
work, but you can find some examples in

<http://sohowww.nascom.nasa.gov/softops/cds/external/>

(You can also ftp to [sohoftp.nascom.nasa.gov](ftp://sohoftp.nascom.nasa.gov) and look in the directory
[/softops/cds/external.](#))

Maybe the problem is in the way you compile the routine. You'll notice that I
have different Makefiles for OSF and SunOS.

Bill Thompson
