
Subject: Re: SGI 6.5 and CALL_EXT Problem
Posted by [Nigel Wade](#) on Fri, 04 Jun 1999 07:00:00 GMT
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rmlongfield@my-deja.com wrote:

>
> Hi all,
> I need help with something that used to work and now doesn't.
> My SGI O2 has just been upgraded to 6.5. Prior to this I have used
> CALL_EXTERNAL successfully with C and Fortran programs.
>

There are various reasons why a DSO failed to load. The simplest is that IDL really couldn't find it, either because it is incorrectly named or because it isn't on the run-time library search path. Another reason is that IDL requires the DSO to be built using the O32 ABI under IRIX. A third reason is that it may have undefined externals if you link against library which has changed between OS releases.

You can check for the first by copying the DSO to the directory where you are running IDL from, the current directory should be searched for DSOs.

You can check for the second reason by using the 'file' command:
% file idl_calc_pos.so
will tell you what type of library has been created.
IDL needs mips-2 dynamic libs. If it is a mips-3 dynamic lib it was built using the N32 ABI and will need to be re-compiled.

If the compiler defaults have changed this could happen. See the man page for the compiler and ABI(5) for more details. If the installation has changed the compiler defaults to N32 then you will need to compile and link with the -o32 option added to the command line.

Finally, to check for undefined externals use the nm command. There will be many instances (e.g. any calls to routines in the C library). But if you eliminate these you should be able to find which external is not satisfied.

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