Subject: Re: IDL bus errors Posted by David Foster on Thu, 04 Apr 1996 08:00:00 GMT View Forum Message <> Reply to Message

rfinch@water.ca.gov (Ralph Finch) wrote:

> IDL 4.0.1, Solaris 2.4, Sparc 20.

>

- > We use a 15,000+ line IDL program to manipulate data. It's not
- > uncommon for this program to crash several times during the day with a
- > bus error, which is pretty annoying, because apart from the crash it's
- > just about impossible to track the source of the error without putting
- > in lots of print statements throughout the code to track location. Do
- > other people get this problem, and if so, do you think it's an IDL
- > problem or our programming? How can we identify the location and fix
- > it?

>

First, while you are debugging the program remove all occurances of ON\_ERROR, 2 (you want the default, which is to stop at the statement that caused the error). This allows IDL to give a more informative error message, including line-numbers from the offending statement (if you use ON\_ERROR 2 in your event handler, you get only the line-number from the offending function (if it IS in a function), and if the function calls are nested, it gets really messy).

Second, if you are using CALL\_EXTERNAL to call C or Fortran functions, then look carefully at these. Check the arguments to make sure they agree in type, size, etc. The only Bus errors I've encountered occured when I was debugging a CALL\_EXTERNAL call, and the problem was usually the arguments.

Hope this is useful. Feel free to contact me if you have any questions.

Dave Foster UCSD Brain Image Analysis Lab foster@bial1.ucsd.edu