Subject: IDL call_external to sprlib ?
Posted by zweimuel on Thu, 30 Mar 1995 08:00:00 GMT
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I would like to include a C-library into a IDL-program via the call_external
function. The sprlib is a library which does a lot of classification tasks,
which I need and I would like to visualize the results in IDL.
Now to the problem:
I compiled the library (sprlib.a) and made a shared library with
"ld -shared -all sprlib.a -o sprlib-so". Then I wrote a little C-program,
which calls the desired function of the sprlib and is itself called from IDL
with call_external.
IDL can find all functions and starts the sprlib. So far no problem. When I
want to read a dataset, the program crashes with a segmentation fault and
core dumped, but only if the dataset has more than about 5 samples. With a
little dataset everything works fine and the program ends properly.
When I call my little testprogram from another C-program without IDL, it can
load all datasets without any problem.
As far as I could trace the problem the routine crashes within sprlib when
it gets memory for a vector (malloc_sample()).
I use IDL Version 3.6.1a (IRIX mipseb) and the newest sprlib on a
SGI IRIS Indigo.

My questions:
 Has anybody successfully included sprlib into IDL?
 Are there any limitations to the call_external function? (I could
 allocate MB's of memory without any problem)
 How can I find the source of the problem, how to debug ?
 Which problems did you have with call_external and C ?

Any help is welcome.
BTW, I have read the docs in .../misc/dynamic_link and chapter 18 of the
user-documentation.

Hoping for help, Charly

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