Subject: call_external segmentation fault
Posted by sc.bugger on Thu, 16 Aug 2007 00:36:49 GMT
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Are there some pitfalls in using 'call_external' of C libraries which
were created by different gcc versions?
I have exactly the same code working on the one computer (linux x86
m32, gcc 3.4.5) and crashing on the other one (linux x86, m32, gcc
4.2.1). What can be the problem?
I use "gcc -fPIC -c mypro.c && ld -shared -o libmypro.so mypro.o"
Here is the code, nothing especially:

---------- mypro.c ----------
```
#include <stdio.h>
#include <math.h>
#include "/opt/idl/external/include/idl_export.h"

int wsum(int argc, void *argv[])
{
    float *coeff, *xmax, *out, *xvalue;
    IDL_MEMINT *nc, *nx, i,j;

    wights = (float *)      argv[0];
    nc    = (IDL_MEMINT *) argv[1];
    nx    = (IDL_MEMINT *) argv[2];
    xmax  = (float *)      argv[3];
    out   = (float *)      argv[4];

    for (i=0; i<*nx; i++)
 {
     *xvalue = -*xmax + 2. * *xmax * i/(*nx-1);
     *(out + i) = 0.;
     for (j=0; j<*nc; j++)
  *(out + i) += pow(*xvalue,j+1) * *(wights + j);
 }

    return 1;
}
```

---------- mytest.pro ----------
```
function mytest, wights, nx, xmax, out

  return, call_external('libmypro.so','wsum',$
                        wights, $
                        n_elements(coeffs), $
                        nx, $
                        xmax, $
```

out, /f_value)

end

Thank you for any hint.
Vlad
