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Subject: Scalar passing with call\_external  
Posted by [Brian Larsen](#) on Thu, 20 Mar 2008 19:48:29 GMT  
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All,

I am having a heck of a time with something here. I am trying to understand the behavior of a C routine that I am trying to call from IDL.

Given this C code: (ctest.c)

```
void ctest ( float a, float b, float *c, float v[3] )
{
    float tmp;
    tmp = a*b;
    v[0] = tmp;
    v[1] = a-b;
    v[2] = a+b;
    *c = 66;
}
```

And this IDL code: (ctest.pro)

```
make_dll, 'ctest', 'ctest', 'ctest', compile_directory = '.'
a = 5.
b = 3.
c = [7.]
v = fltarr(3)
ans = call_external('ctest.so', 'ctest', a, b, c, v, /auto_glue, value
= [1, 1, 0, 0])
print, ans, a, b, c, v
end
```

I expect the output to be:

```
<undetermined>  5.0  3.0  66.0
 15.0   2.0  8.0
```

But instead I get:

```
IDL> .run ctest
-1073774376  5.00000  3.00000  7.00000
 15.0000  2.00000  8.00000
```

So the root of the question is how do I pass scalar information back out of the C routine to the IDL? As that looks to be failing. Anyone have any useful tips here?

Cheers,

Brian

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