Subject: make_dll and call_external woes
Posted by James[2] on Sun, 18 Apr 2010 22:02:27 GMT
View Forum Message <> Reply to Message

Hi everyone,

I'm working on some code that's loop-heavy, so I'd like to do the loopy part with an external C program. I'm using MAKE_DLL to compile and then CALL_EXTERNAL. My system is Windows XP with the Microsoft Visual C++ Express compiler, running in 32-bit mode.

I'm using very large data sets, so I would like to pass only pointers to my C function. I wrote a little test program like this. It takes all the arguments that my actual program needs, but it just alters one value to see if anything happens:

```
void raycast(unsigned char * image, unsigned char * angles, unsigned
char * magnitudes, int * dims)
{
 angles[0] = 100;
}
```

I compile this using MAKE_DLL successfully. I've tested if the code is getting called by adding an IDL_message(), and it works - the message prints out on the IDL console. Unfortunately, the above code does not work. I call it in IDL like this:

```
[stack is a preexisting 3-dimensional byte array]
   dims = fix(size(*stack, /dimensions))
   angles = ptr_new(bytarr(dims))
   magnitudes = ptr_new(bytarr(dims))
   dimsptr = ptr_new(long(reverse(dims)))
   call_external (dir + "raycast.dll", "raycast", $
           stack, angles, magnitudes, dimsptr, /cdecl, /all_value)
```

but when I check the value of (*angles)[0] afterward, it's still 0. I also check with max(*angles) and it's 0 as well. Why is my C program not changing anything in the array? I get the same problem whether I include the /ALL_VALUE keyword or not.

Many thanks to anyone who can make sense of this issue!