
Subject: Re: [call_external] how to use it ?

Posted by [Joel Gales](#) on Wed, 12 Dec 2001 19:38:20 GMT

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Richard Hitier wrote:

```
> Hi there,
>
> I've been trying to use this functionality for hours now,
> but... couldn't succeed :(
>
> 1st: the manual example doesn't work for me
>     the array pointer doesn't point to the good values.
>     (getting very high values ...)
>
> 2nd: in my own example it seems that I have to use long
>     interger in idle to be able to use (int) in the C code.
>
> I'm trying to modify an array throug C routine, but
> couldn't:
> working with the array pointer doesn't seem to alter the
> idl array at all.
>
> I'm working on a Solaris station,
> using gcc compiler.
>
> There are the files:
>
> -----test.c-----
> int function(int argc, void *argv[])
> {
>     int s=0,*ip;
>     int i;
>     for (i=0, ip=(int*)argv[0]; i<*(int*)argv[1]; i++, ip++)
>     {
>         s+=*ip;
>         printf("i:%d ip:%f \n",i,*ip);
>     }
>     return(s);
> }
> -----
>
> -----test.pro-----
> pro none, zize
>     tab = indgen(zize)
>     machin=10
>     print, "d'abord"
>     print, tab
```

```

> i=call_external('none.so', 'function', tab, n_elements(tab))
> print, "ensuite", i
> print, tab
> end
> -----
>
> -----Makefile-----
> .SUFFIXES:
> .SUFFIXES: .c .so
>
> .c.so:
>     gcc -g -fPIC $< -shared -o $@
>
> -----
>
> By the way, does any one knows about calling an idl
> procedure on unix command line as any other unix exe ?
>
> I mean gently passing the args via command line ?
>
> Thanks
> --
> richard Hitier

```

You need to declare *ip as short int in the C program because the indgen() function in IDL corresponds to 16 bit integers in C. Also to display the integer array values, you need "%d" rather than "%f" in the printf statement.

I also added a statement "*ip= -i" which sets the array values to their negative on return to IDL.

```

-----
int function(int argc, void *argv[])
{
    int s=0;
    short int *ip; /* indgen() in IDL corresponds to 16bit integer
in C */
    int i;
    for (i=0, ip=(short int*)argv[0]; i<*(int*)argv[1]; i++, ip++)
    {
        s+=*ip;
        printf("i:%d ip:%d \n",i,*ip);
        *ip = -i;
    }
    return(s);
}

```

}

Joel Gales
SIMBIOS GSFC/NASA Code 970.2
Phone: (301) 286-1403
FAX: (301) 286-0268
