
Subject: Re: IDL call_external to sprlib ?

Posted by on Fri, 31 Mar 1995 08:00:00 GMT

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zweimuel@fcgsg03 (Zweimueller Karl) wrote:

>
> 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:

[cut cut cut]

> it gets memory for a vector (malloc_sample()).

Is this vector something IDL is aware of ?

I think (please someone correct me if I'm wrong) you cannot allocate memory in any external routines for later use by IDL.

IDL needs to take care of allocation itself, that is - if you want the external object to fill a vector with some useful data, you need to create a vector in idl and use it as a parameter in call_external. The return value from call_external can only be a scalar.

The obvious disadvantage (one of them!) by this is that you need to know the size of the vector, or at least the largest possible size of it, before doing the call_external()

i.e. : a silly call_external representation of indgen()

```
IDL> dim=20L
```

```
IDL> a=intarr(dim) ;IDL allocates mem for the resultin array
```

```
IDL> res=call_external('mylib.so', 'indgen', dim, a)
```

```
int indgen(int argc, void *argv[])
{
    int nelem;
    short int i, *vector;

    nelem = *(int *)argv[0];
    vector = (short int *)argv[1];
    for(i=0; i<nelem;i++)
        vector[i] = i;
    return (1);
}
```

> 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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Besides, I think IDL's memory management needs a complete
rewrite!

Frank

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