
Subject: Re: CALL_EXTERNAL and structures
Posted by [rivers](#) on Mon, 23 Jun 1997 07:00:00 GMT
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In article <33AE2A0D.481@vision.ee.ethz.ch>, Hubert Rehrauer <rehrauer@vision.ee.ethz.ch> writes:

```
> Hello,
>
> I got the following problem. I want to call a C function that modifies a
> IDL structure. This works pretty well, except for structure tags that
> have an array-type.
> /*
>   IDL input:
>
>   $ cc -G -Kpic -c -lm -v idltest.c
>   $ ld -G -o idltest.so idltest.o
> a= 5L
> b = DBLARR(4)
> data ={ first: a, second: b }
```

...

```
> /* content of the file 'idltest.c' */
> typedef struct {
>   long first;
>   double * second;
> } data;
```

The declaration "double * second" is your problem. "second" is not a pointer to a double, it is an array of doubles, i.e. the array occupies memory immediately after the long "first", not at a location pointed to by a pointer after "first". I have not tried it, but I predict that if you change the declation and code to:

```
typedef struct {
    long first;
    double second[4];
} data;
...
d->first = 25;
d->second[0] = 1.4;
d->second[2] =3.8;
```

that it will work.

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