

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.

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## > IDL input:

>

```
> $ cc -G -Kpic -c -Im -v idltest.c
```

```
> $ Id -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 declaration and code to:

```
typedef struct {  
    long first;  
    double second[4];  
} data;
```

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```
d->first = 25;  
d->second[0] = 1.4;  
d->second[2] = 3.8;
```

that it will work.

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