
Subject: Re: referencing structure arrays
Posted by [penteado](#) on Thu, 10 Sep 2009 16:36:21 GMT
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On Sep 10, 1:12 pm, niv <nivedita.raghu...@gmail.com> wrote:

```
> Sorry, looks like what I typed looks gibberish in places. I hope this
> one is more readable:
>
> Hi All,
>
> I have a problem referencing structure arrays and assigning values to
> them. So here is a snippet of my code:
>
> junk1=update_state(junk) ;creates a structure called junk1
> statearr=replicate(junk1,3) ;creates an array of structures
>
> infoptr=ptr_new({statearr:statearr}) ;need this to pass variables
> between programs
>
> align_images,state=state1 ;some program that aligns 2 images and
> stores the alignment results in state1
>
> ;assign values from the state1 structure to infoptr.statearr[0]
> structure
> (*infoptr).statearr[0].resvol_file_ptr=state1.resvol_file_ptr
> (*infoptr).statearr[0].air_file_ptr=state1.air_file_ptr
>
> Now, here is the problem. With the above code, it turns out that...
>
> (*infoptr).statearr[0].resvol_file_ptr, (*infoptr).statearr
> [1].resvol_file_ptr, (*infoptr).statearr[2].resvol_file_ptr
> all have the same values. Similarly with air_file_ptr. Even though I
> haven't assigned anything to the statearr 1 and 2 yet.
>
> Is there a specific way to reference these structure arrays? Any help
> is greatly appreciated!
>
> Thanks
> Niv
```

If I read it right, it sounds like state1.resvol_file_ptr is not a scalar, but is an array with 3 elements. Check it with n_elements (state1.resvol_file_ptr). Put it another way, I think what is happening is the same as

```
IDL> a=intarr(3)
IDL> print,a
    0    0    0
```

```
IDL> b=[1,1,1]
IDL> a[0]=b
IDL> print,a
    1    1    1
```

Which is that way because if you use an array element on the left side of an assignment, and assign to it an array with N elements, then N elements are assigned, starting at the one given on the left side.
