
Subject: Indexing structures of different type

Posted by [Donglai Gong Rm3110 x](#) on Thu, 17 Jun 1999 07:00:00 GMT

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Hi, does anyone know how to index structures of different types in IDL?

REPLICATE won't work since it creates an array of the same structure, so I'm thinking of doing a structure of structures. However I don't know how to index them for use in a loop. Thanks in advance.

Donglai Gong

Subject: Re: Indexing structures of different type

Posted by [David Foster](#) on Tue, 22 Jun 1999 07:00:00 GMT

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Donglai Gong Rm3110 x1569 wrote:

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> Donglai Gong

Use an array of pointers and index that array:

```
struct_ptrs = ptrarr(10, /allocate_heap)
```

```
*struct_ptrs[0] = struct1
```

```
*struct_ptrs[1] = struct2
```

```
...
```

```
(*struct_ptrs[0]).tag1 = ...
```

Check out the docs for PTRARR, PTR_NEW, PTR_FREE, and PTR_VALID.

Also look at TAG_NAMES and the use of tag *numbers* instead of names when accessing structure elements.

Dave Foster

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Subject: Re: Indexing structures of different type  
Posted by [Pavel Romashkin](#) on Mon, 28 Jun 1999 07:00:00 GMT  
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Structure fields can be indexed similarly to arrays. Use syntax similar to:

```
for i=0, n_elements(tag_names(My_struct))-1 do help, My_struct.(i), /struct
```

This will step through all sub-structures in My\_struct. Notice that you MUST use parenthesis, not [ ] brackets, when indexing structures.

Cheers,  
Pavel

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