
Subject: Re: Array of Structures
Posted by [R.Bauer](#) on Thu, 15 Apr 2004 15:51:17 GMT
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Dan Steinberg wrote:

> I am wondering if it is possible to create an array of structures. I
> want to read multiple different anonymous structures into a single
> variable so I can reference each structure using the variable name and
> the array index. Is this possible?
>
> -Dan

Yes

but there is a small risk that it only works with named structures.
It is only guaranted that it works with named structures.

First way

```
IDL> a=create_struct(name='tst','file','', 'bmp',byterr(10,20))
```

```
IDL> help,a,/str
```

```
** Structure TST, 2 tags, length=212, data length=212:
```

```
FILE      STRING  "  
BMP       BYTE    Array[10, 20]
```

```
IDL> s=replicate(a,10)
```

```
IDL> help,s
```

```
S          STRUCT  = -> TST Array[10]
```

second way is to use the structure name

```
IDL> b=[a,{tst}]
```

```
IDL> help,b
```

```
B          STRUCT  = -> TST Array[2]
```

third way

```
IDL> c=[a,a]
```

```
IDL> help,c,/str
```

```
IDL> help,c
```

```
C          STRUCT  = -> TST Array[2]
```

This was the creation.

Accessing:

```
IDL> help,c[0].(0)
<Expression>  STRING  = "

IDL> help,c[0].(1)
<Expression>  BYTE    = Array[10, 20]

IDL> help,c[0].(1)[0,*]
<Expression>  BYTE    = Array[1, 20]

IDL> help,c[0].bmp[0,*]
<Expression>  BYTE    = Array[1, 20]
```

If the sizes or type of your variables are different I suggest to use pointer.

Cheers

Reimar

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Forschungszentrum Juelich
email: R.Bauer@fz-juelich.de
<http://www.fz-juelich.de/icg/icg-i/>

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a IDL library at ForschungsZentrum Juelich
http://www.fz-juelich.de/icg/icg-i/idl_icglib/idl_lib_intro.html
