
Subject: Re: IDL Voodoo Experts Needed
Posted by [Liam E. Gumley](#) on Wed, 23 Feb 2000 08:00:00 GMT
[View Forum Message](#) <> [Reply to Message](#)

David Fanning wrote:

- > I violated the first rule of technical support: Don't
- > take the question literally. Try to figure out what the
- > user wants to *do*.

It happens to me all the time. Someone comes into my office and says "Why doesn't XYZ work in IDL?". I have learned that the first thing to do is disregard XYZ, and ask them "What are you trying to do?".

Cheers,
Liam.

Subject: Re: IDL Voodoo Experts Needed
Posted by [Pavel Romashkin](#) on Wed, 23 Feb 2000 08:00:00 GMT
[View Forum Message](#) <> [Reply to Message](#)

David Fanning wrote:

- > Since I *really* have to work on taxes and other financial
- > matters this morning (snip-snip)

Oh, boy. David, are you sure you want to start on taxes in this kind of shape? We can't afford losing you to the IRS! Maybe, do the taxes tomorrow, just drink beers today?

Cheers,
Pavel

Subject: Re: IDL Voodoo Experts Needed
Posted by [davidf](#) on Wed, 23 Feb 2000 08:00:00 GMT
[View Forum Message](#) <> [Reply to Message](#)

Liam E.Gumley (Liam.Gumley@ssec.wisc.edu) writes:

- > I think you're looking for a multi-dimensional array of structures:
- >
- > IDL> layer = {layer, i:0, e:0.0, p:0.0, rho:0.0}
- > IDL> nlayers = 40
- > IDL> ntimesteps = 100
- > IDL> evolution = replicate(layer, nlayers, ntimesteps)
- > IDL> help, evolution

```
> EVOLUTION    STRUCT  = -> LAYER Array[40, 100]
> IDL> help, evolution[0, 0], /structure
> ** Structure LAYER, 4 tags, length=16:
> I          INT      0
> E          FLOAT    0.000000
> P          FLOAT    0.000000
> RHO       FLOAT    0.000000
>
> Am I missing something?
```

Duh, do you think!? :-(

I violated the first rule of technical support: Don't take the question literally. Try to figure out what the user wants to *do*. And probably for the same reason most technical support people violate it: too little time to do too much stuff on too little sleep.

Thanks, Liam.

Cheers,

David

P.S. Let's just say a second pot of coffee is brewing now.

--

David Fanning, Ph.D.
Fanning Software Consulting
Phone: 970-221-0438 E-Mail: davidf@dfanning.com
Coyote's Guide to IDL Programming: <http://www.dfanning.com/>
Toll-Free IDL Book Orders: 1-888-461-0155

Subject: Re: IDL Voodoo Experts Needed
Posted by [Liam E. Gumley](#) on Wed, 23 Feb 2000 08:00:00 GMT
[View Forum Message](#) <> [Reply to Message](#)

David Fanning wrote:

```
> Alright, here is an example of what I wake up to each
> morning, which might go a long way toward explaining why
> I never get any productive work done. A fellow writes me
> (this inevitably happens) on a topic we discussed just
> a couple of days ago. Namely, he wants to create an
> array of arrays--BUT, the original array is an array
> of structures.
>
> He puts the problem like this:
```

```

>
> Is it possible to create an array of arrays of structures?
> This does not work:
>
> l={layer,i:0,E:0.0,p:0.0,rho:0.0} ;STRUCT DEFINITION
> volume=replicate(l,layernum) ;ARRAY OF STRUCTURES
> evolution=replicate(volume,timesteps) ;ARRAY OF ARRAYS OF STRUCTURES
>
> I tried Craig Markwardt's CMReplicate program and the REBIN/REFORM
> voodoo offered by Liam Gumley and Bill Thompson, but all to no
> effect. All complain about structures.
>
> Since I *really* have to work on taxes and other financial
> matters this morning, and since I notice quite a few more
> willing bodies around here than we used to have, I'm turning
> this one over to the real experts. Any ideas? :-)
```

I think you're looking for a multi-dimensional array of structures:

```

IDL> layer = {layer, i:0, e:0.0, p:0.0, rho:0.0}
IDL> nlayers = 40
IDL> ntimesteps = 100
IDL> evolution = replicate(layer, nlayers, ntimesteps)
IDL> help, evolution
EVOLUTION   STRUCT   = -> LAYER Array[40, 100]
IDL> help, evolution[0, 0], /structure
** Structure LAYER, 4 tags, length=16:
 I          INT          0
 E          FLOAT        0.000000
 P          FLOAT        0.000000
 RHO        FLOAT        0.000000
```

Am I missing something?

Cheers,
Liam.

Space Science and Engineering Center, UW-Madison
<http://cimss.ssec.wisc.edu/~gumley>