
Subject: Re: How to add a new tag to N structures
Posted by [wlandsman](#) on Wed, 03 Mar 2010 18:07:20 GMT
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On Mar 3, 11:46 am, nata <bernat.puigdomen...@gmail.com> wrote:

> For some reasons I can define the C tag before so I have to add to
> each struct later. There is a way to do that without creating the new
> struct array and copying each field separately ?

Well, I don't know how to avoid creating a new structure but you can use STRUCT_ASSIGN to copy fields from the old structure to the new one.

```
IDL> str={a: 3l, b: 'v'}  
IDL> str_arr=REPLICATE(str,10)
```

```
IDL> str1={a: 3l, b: 'w',c:0l}  
IDL> str1_arr= REplicate(str,10)
```

```
IDL> struct_assign,temporary(str),str1
```

where I changed the initialization values so one can verify that the "relaxed structure assignment" is working.

--Wayne

Subject: Re: How to add a new tag to N structures
Posted by [penteado](#) on Wed, 03 Mar 2010 18:44:53 GMT
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On Mar 3, 3:07 pm, wlandsman <wlands...@gmail.com> wrote:

> Well, I don't know how to avoid creating a new structure but you can
> use STRUCT_ASSIGN to copy fields from the old structure to the new
> one.

```
>  
> IDL> str={a: 3l, b: 'v'}  
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```
>  
> IDL> struct_assign,temporary(str),str1
```

```
>  
> where I changed the initialization values so one can verify that the  
> "relaxed structure assignment" is working.
```

The only other way I see is to use a pointer array instead. Then you can replace elements by whatever you want. But it is more likely to be a worse solution, since it will not be possible to use fields as arrays.

This reminds me of what I currently find most needed in `create_struct`: an option to give it an array of field names, and an array of pointers to the field contents. That way it would not be necessary to loop over the fields, calling `create_struct` to add one field at a time, defining a bunch of temporary structures that will never be used again. But presumably this will not be necessary in IDL 8, since it will finally have dictionaries.

Subject: Re: How to add a new tag to N structures
Posted by [David Fanning](#) on Wed, 03 Mar 2010 19:02:27 GMT
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pp writes:

> But presumably this will not be necessary in IDL 8,
> since it will finally have dictionaries.

Now I understand why my kids have never opened one:
we must mean different things by the word. What in
the world is a "dictionary" in this context!?

Cheers,

An Oldster

--

David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: <http://www.dfanning.com/>
Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: How to add a new tag to N structures
Posted by [penteado](#) on Wed, 03 Mar 2010 19:37:17 GMT
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On Mar 3, 4:02 pm, David Fanning <n...@dfanning.com> wrote:
> pp writes:
>> But presumably this will not be necessary in IDL 8,

>> since it will finally have dictionaries.
>
> Now I understand why my kids have never opened one:
> we must mean different things by the word. What in
> the world is a "dictionary" in this context!?

I meant associative arrays. I do not know yet how IDL 8 will implement and call them. Python calls them dictionaries, C++'s STL, calls them maps, and Java calls their common interface map (it has a bunch of different implementations, including hashtables, trees, and arrays).

Subject: Re: How to add a new tag to N structures
Posted by [David Fanning](#) on Wed, 03 Mar 2010 19:44:48 GMT
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pp writes:

> I meant associative arrays. I do not know yet how IDL 8 will implement
> and call them. Python calls them dictionaries, C++'s STL, calls them
> maps, and Java calls their common interface map (it has a bunch of
> different implementations, including hashtables, trees, and arrays).

Oh, I think they are going to be called "lists" and "hashes".
I guess I see how that might make things easier for you. :-)

Cheers,

David

--

David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: <http://www.dfanning.com/>
Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: How to add a new tag to N structures
Posted by [R.Bauer](#) on Thu, 04 Mar 2010 12:00:49 GMT
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nata schrieb:

> Hi guys,
>
> I want to add a new TAG to an array of structures. I don't know how to

```

> do that efficiently.
> For example, this is my array:
>
> str={a: 0l, b: ""}
> str_arr=REPLICATE(str,10)
>
> And I can't do things like this:
>
> FOR i=0, 9 DO str_arr[i]=CREATE_STRUCT(str_arr[i],'C',0l)
> or
> str_arr=CREATE_STRUCT(str_arr[i],'C',0l)
>
> This is just an example, my real structs contain a lot of fields.
>
> For some reasons I can define the C tag before so I have to add to
> each struct later. There is a way to do that without creating the new
> struct array and copying each field separately ?
> Thanks,
> nata

```

well you can reform your array of structures to an structure with arrays. then you can add your new tag to that structure. Afterwards reform it back to your array of structures

e.g.

```

str={a: 0l, b: ""}
str_arr=REPLICATE(str,10)

```

```

ref_str = reform_struct(str_arr, /tag_array, 10)
ref_str = create_struct(ref_str, 'c', make_array(10))
help, ref_str, /str
** Structure <2800d48>, 3 tags, length=240, data length=240, refs=1:
  A      LONG   Array[10]
  B      STRING Array[10]
  C      FLOAT  Array[10]

```

```

str = reform_struct(str_arr, /struct_array, 10)
help, str
STR      STRUCT  = -> <Anonymous> Array[10]

```

You get reform_struct from
http://www.fz-juelich.de/icg/icg-1/idl_icglib/idl_source/idl_html/dbase/reform_struct_dbase.pro.html

cheers
Reimar

Subject: Re: How to add a new tag to N structures
Posted by [natha](#) on Thu, 04 Mar 2010 23:01:35 GMT
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Hi guys,

Thank you for all these answers... I used the first method from Wayne
and all it's ok now.

Thank you,
nata
