Subject: Nested data structures

Posted by wlandsman on Wed, 24 Dec 2014 21:29:09 GMT

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I am trying to build a data structure that will allow me to specify a person by his State, city, street and street. (This is not my actual need, but it is analogous.) Thus I might specify (as metacode)

['Colorado']['Boulder']['Pearl'][9990] = 'John'

I assume this can be done with nested hashes or dictionaries, but I am having difficulty figuring out how to start. I started writing something like

person = [hash('colorado',['boulder','Denver'], hash('Arizona',[Tuscon','Phoenix'])

but I get lost in making the nesting clear. thanks for any help. -- Wayne

Subject: Re: Nested data structures
Posted by Michael Galloy on Thu, 25 Dec 2014 00:11:52 GMT
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On 12/24/14, 2:29 PM, wlandsman wrote:

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> but I get lost in making the nesting clear. thanks for any help. -- Wayne

Is something like this what you are trying to do?

IDL> person = hash('Colorado', hash('Boulder', 1, 'Denver', 2),
'Arizona', hash('Tucson', 3, 'Phoenix', 4))
IDL> (person['Colorado'])['Denver']
2

Mike

--

>

Michael Galloy

www.michaelgalloy.com

Subject: Re: Nested data structures

Modern IDL: A Guide to IDL Programming (http://modernidl.idldev.com)

Research Mathematician Tech-X Corporation

```
Posted by chris torrence@NOSPAM on Thu, 25 Dec 2014 04:49:39 GMT
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On Wednesday, December 24, 2014 5:11:54 PM UTC-7, Mike Galloy wrote:
> On 12/24/14, 2:29 PM, wlandsman wrote:
>> I am trying to build a data structure that will allow me to specify a person by his State, city,
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                                                                  --Wavne
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       2
>
>
> Mike
> Michael Gallov
> www.michaelgalloy.com
> Modern IDL: A Guide to IDL Programming (http://modernidl.idldev.com)
> Research Mathematician
> Tech-X Corporation
```

And to make it even more convenient, you can simply append the subscripts inside the first set of brackets and it will automatically descend into the sub-hashes:

```
IDL> print,person['Colorado', 'Denver']
2
```

Subject: Re: Nested data structures
Posted by wlandsman on Fri, 26 Dec 2014 20:02:12 GMT
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Thanks Mike and Chris for pointing me in the right direction.

I want to build the data structure one step at a time, and it took me a while to figure out how to add new cities, but concatenation works nicely. --Wayne

```
IDL> person['Colorado'] += hash('FtCollins',5)
IDL> person
{
  "Colorado": {
     "Boulder": 1,
     "FtCollins": 5,
     "Denver": 2
  },
  "Arizona": {
     "Tucson": 3,
     "Phoenix": 4
  }
}
On Wednesday, December 24, 2014 7:11:54 PM UTC-5, Mike Galloy wrote:
> On 12/24/14, 2:29 PM, wlandsman wrote:
>> I am trying to build a data structure that will allow me to specify a person by his State, city,
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```

> IDL> person = hash('Colorado', hash('Boulder', 1, 'Denver', 2),

```
> 'Arizona', hash('Tucson', 3, 'Phoenix', 4))
```

- > IDL> (person['Colorado'])['Denver']
- 2 >

- > Mike
- > --
- > Michael Galloy
- > www.michaelgalloy.com
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