
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

Subject: Re: Nested data structures

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:

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

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

> 2

>

> Mike

> --

> Michael Galloy

> 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

Happy Holidays,
Chris

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:

```
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```

```
> 'Arizona', hash('Tucson', 3, 'Phoenix', 4))
> IDL> (person['Colorado'])['Denver']
>      2
>
> Mike
> --
> Michael Galloy
> www.michaelgalloy.com
> Modern IDL: A Guide to IDL Programming (http://modernidl.idldev.com)
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```
