
Subject: Re: changing a datatype in a structure
Posted by [K. Bowman](#) on Thu, 11 May 2006 13:16:05 GMT
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In article <1147306191.957848.151880@q12g2000cwa.googlegroups.com>, mark.macauda@gmail.com wrote:

> Ok, here is my current very frustrating problem. I have ALOT of IDL
> work done the general idea is that I read in binary files that are
> stored in very specific format...blah blah, the details aren't
> important, the important part is that rewriting all of that because of
> the current problem is not a desirable solution. Here's the problem.
> All the info is read in in structures and the data types are dictated
> by the binary files. One is an array of long 32-bit integers. I have
> discovered that I need to do some calculations on this array, that
> require the data type to be something other than integer. Normally I
> would just use the float command and be on my merry way...but for all
> the other programs to work I need the float arrays to be back in the
> handy dandy structures...is there anyway I can easily change that
> datatype?

You cannot change the type of a variable inside a structure, but you can add a new variable to an existing (anonymous) structure.

```
IDL> data = {i : LINDGEN(5)}
IDL> help, data, /str
** Structure <215d270>, 1 tags, length=20, data length=20, refs=1:
  I      LONG   Array[5]
IDL> data = CREATE_STRUCT(data, 'x', FLOAT(data.i))
IDL> help, data, /str
** Structure <215d330>, 2 tags, length=40, data length=40, refs=1:
  I      LONG   Array[5]
  X      FLOAT  Array[5]
IDL> print, data
{      0      1      2      3      4
  0.00000  1.00000  2.00000  3.00000  4.00000
}
```

Ken Bowman
