

---

Subject: Re: IDL 8.0 compile\_opt changes  
Posted by [wlandsman](#) on Sat, 19 Dec 2009 02:26:17 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

On Dec 18, 4:51 pm, Chris Torrence <gorth...@gmail.com> wrote:

>  
> 1. Change the default to be "compile\_opt idl2", add a new "compile\_opt  
> idl1" to restore the existing behavior, and require users to retrofit  
> existing code.  
>  
> I strongly support this option.

ITTVIS (then RSI) introduced square brackets with V5.0 in 1997. At the time, I wrote a procedure

[http://idlastro.gsfc.nasa.gov/ftp/contrib/landsman/v5/idlv4\\_to\\_v5.pro](http://idlastro.gsfc.nasa.gov/ftp/contrib/landsman/v5/idlv4_to_v5.pro)

to automatically convert procedures using round parentheses for indexing to use square brackets instead. idlv4\_toV5 isn't perfect -- it can get confused by parentheses within strings or matching parentheses not on the same line -- but it took care of 95% of the work, and I was able to convert the entire Astrolib.

From that time, whenever I've modified an astrolib procedure, I also added a compile\_opt idl2 at the beginning. The idea was that while I was testing a procedure for a new modification, I could also test if making the default integer type long introduced any problems. And there was one case where making the change did introduce some subtle problems. This was for some homemade low-level database software in which one parsed a byte stream. What happened was that "a = 0 & readu,1,a" was now reading 4 bytes instead of 2. But this was the only case of a problem, and I haven't had another problem in the past eight years. I would think that 12 years of recommending compile\_opt idl2 is enough for people to adjust.

I should also add as an old (in more than one sense of the word) programmer, I was never really comfortable with IDL objects until I started learning some Python. Seeing the dot notation made me realize that an object is just an IDL structure with functions included ;-) So I agree that adding the dot notation to IDL should certainly help new users. --Wayne