Subject: Re: compilation strangeness

Posted by penteado on Fri, 13 Jul 2012 00:21:52 GMT

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On Jul 12, 9:03 pm, Stewart Allen <scral...@gmail.com> wrote:

- > calcstats = stats(rim,sim,arrival=1,tol=(run_no ge 7?0.01:1))
- >
- > % Syntax error.
- > At: /home/data/BH/timeseries.pro, Line 41
- > % 1 Compilation error(s) in module TS.
- > IDL> .compile stats
- > % Compiled module: STATS.
- > IDL> .compile timeseries
- > % Compiled module: TIMESERIES.

>

> As you can see, I'm forced to explicitly compile stats, even though I'm fairly sure IDL ought to find it and automatically compile it with timeseries.

>

> Can anyone explain what's going on? And what am I doing wrong?

When that call to stats is first encountered, if stats was not previously compiled, IDL is assuming it is not a function, it is an array indexed with parentheses. In array indices there cannot be an equal sign, which is the syntax error. If you compile stats, then IDL knows there is a function called stats, and interprets that line as a function call.

If you only use square brackets for array indexing inside the code for timeseries (as you should), you can solve that by adding

compile opt strictarr

(or "compile_opt idl2", which also changes the default integer to 32 bit)

to the beginning of the timeseries procedure. This will make only square brackets allowed for array indexing, so parentheses will always mean function calls.

Subject: Re: compilation strangeness

Posted by Stewart Allen on Fri, 13 Jul 2012 19:54:53 GMT

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Ah, I've been using compile_opt IDL2 on all new code for a while now, but this code was written quick and on the fly and I omitted it... Adding it fixes the issue.

Lesson learned: compile_opt IDL2 is ALWAYS a good idea.

```
Stewart
On Thursday, 12 July 2012 17:03:06 UTC-7, Stewart Allen wrote:
> Hi,
>
> I am experiencing a strange compilation bug that I can't explain.
> I have a procedure 'timeseries' (inside timeseries.pro) that calls a function
'stats' (inside stats.pro). Both files are in my IDL path (although different directories).
However, IDL doesn't automatically find and compile stats when I try to compile timeseries:
>
> IDL> print,file which('stats.pro')
> % Compiled module: FILE_WHICH.
> /home/scrallen/idl_scripts/sim_code/stats.pro
> IDL> .compile timeseries
>
    calcstats = stats(rim,sim,arrival=1,tol=(run no ge 7?0.01:1))
>
>
> % Syntax error.
  At: /home/data/BH/timeseries.pro, Line 41
> % 1 Compilation error(s) in module TS.
> IDL> .compile stats
> % Compiled module: STATS.
> IDL> .compile timeseries
> % Compiled module: TIMESERIES.
> As you can see, I'm forced to explicitly compile stats, even though I'm fairly sure IDL
ought to find it and automatically compile it with timeseries.
> Can anyone explain what's going on? And what am I doing wrong?
>
> Cheers,
```

> Stewart

Thanks.