
Subject: Re: Which like command for IDL?

Posted by [John-David T. Smith](#) on Fri, 05 Jan 2001 15:21:49 GMT

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I hate to be a one tune band, but the best way I have of doing this kind of shadow mapping (finding files defining procedures which shadow each other), is with IDLWAVE. Why is this superior to anything offered internally in IDL?

For one, it doesn't need IDL! It uses it's own notion of IDL builtins, system library files (the ones in !DIR/lib), and the user catalog it scanned. If IDL is running in the shell, it also queries it for all routine info. Since I've scanned into my catalog almost everything on !PATH (IDLWAVE makes it trivial), I can easily see which files define a procedure. I can even do a full shadow scan of the entire system, or all routines in the current buffer, or all routines compiled in the shell.

The most trivial way to see multiple sources, however, is with routine info (which you'll probably be using for other things all the time anyway). For instance, here's the routine info (invoked via [C-c ?] when near a pro/func), for print, which I've unwisely redefined several times:

Usage: PRINT [, Expr1, ..., Exprn]

Keywords: AM_PM DAYS_OF_WEEK FORMAT MONTHS REWRITE STUDIO_NON_FINITE

Sources: - Builtin

- Other [-SB] ~/foo.pro
- Library [C--] ~/idl/scrap/print.pro
- Library [C--] ~/idl/scrap/printf.pro

We see 4 sources, in order of likelihood of usage. Here, the built-in print is always used. You can't override it. Then we have a file foo.pro in a buffer I'm visiting (the B), which has a version of "print" compiled in the shell (S) (will I never learn). Then there's a pair of "Library" files (which just means they're in !PATH), which have been scanned and put into my catalog "C".

What about something you can override? How about one of the !DIR/lib procedures which comes with IDL? Here's an example shadow listing for one of those (notice it's the same as routine info, but without the usage/keyword stuff).

ValidateManagedWidgets

- SystemLib [C--] /usr/local/rsi/idl/lib/xmanager.pro
- Library [C--] ~/idl/scrap/xmanager.pro

So, I've redefined ValidateManagedWidgets somewhere, but ~/idl comes after !DIR/lib on the !PATH, so it won't ever be automatically compiled. How cheeky.

You get the idea. You can also find out interesting things about your path ordering, like:

CW_COLOR_INDEXE()

- Obsolete [C--] /usr/local/rsi/idl/lib/obsolete/pwidget.pro
- SystemLib [C--] /usr/local/rsi/idl/lib/cw_clr_index.pro

I.e. this file defines cw_color_indexe in obsolete, and is on the path before cw_clr_index. Which one gets called depends on which one of these .pro's gets compiled, but if the first is compiled before the second, that's a silent routine shadow... watch out.

Oh by the way, middle clicking on any of the .pro's listed above would take you immediately to the routine definition in the source code, so you can see for yourself with no fuss why you thought you'd override print, for instance.

Good luck,

JD
