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Subject: Re: XSTRETCH and Library Lessons

Posted by [David Fanning](#) on Mon, 24 Apr 2006 13:30:21 GMT

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JD Smith writes:

- > XSTRETCH is pretty fun. I especially like the curve plot for
- > non-linear (but why not draw it for linear as well?). I downloaded
- > the new version, and immediately had problems: the histogram didn't
- > show up for me any longer, as it did in older versions. Just a gray
- > background. The min/max lines showed, and could be interacted with,
- > but no histogram.
- >
- > Surely, I thought to myself, the good Dr. Fanning would not distribute
- > such a mal-configured tool.

Sigh...

- > So I looked into a bit deeper. It turns
- > out, among the bread and butter COYOTE routines like FSC\_COLOR and
- > TVIMAGE, and FSC\_FILESELECT, I had 3-4 copies of each of these on my
- > IDL\_PATH, included directly in other libraries, like PAN, ICG, CM,
- > etc. Presumably you have since updated those files, and a standard
- > load path shadowing issue (aka name space collisions --- the wrong
- > routine of the same name getting called) caused XSTRETCH to break in a
- > most unilluminating way.

This is really starting to be a pain. And not just for people who download the library. It's a pain for me. When I write an application for a client, I ship a snapshot of my library. But I have to save that snapshot somewhere, because if my library evolves, there is a good chance the client code won't work as it did before a year or so down the road. Trying to work with this old code and get your IDL path set up correctly is a problem only truly appreciated by masochists and others of that ilk.

And in my latest offerings (XSTRETCH and TERMINATOR\_MAP) I am moving into a new realm: code that uses not only my libraries, but code from other libraries as well. I've decided NOT to distribute code from other libraries, as you suggest, but I see only nightmares ahead of me. \*Someone\* has to support this stuff, and we are fast approaching the Microsoft moment where we start pointing fingers at everyone else.

And, as you also suggest, some of the problems created by name space collisions are not easily solved. In fact, not even reproducible on my system! VERY hard to solve.

(The standard solution to a non-reproducible problem, as anyone

who has ever called a technical support line knows, is to reinstall \*everything\* and see if this helps. About 90% of the time it does, which ought to tell us something. Incidentally, the other 10% of the problems we can reliably blame on idiotic system administrators.)

> The final solution, if you feel your users are too lazy to sort any of  
> this out, is just to compile a .sav file of your entire library, and  
> distribute that. These don't suffer name space collisions. As long  
> as they are loaded first, their versions of, e.g., TVIMAGE, will trump  
> any others, and since they have to explicitly or implicitly loaded,  
> the true-blue TVIMAGE would continue to load and work as expected in  
> sessions where your tool isn't being used.

Humm. Then we only have to maintain save files for 5e15 different combinations of IDL and the library. I like it!! :-)

> P.S. IDLWAVE can help you identify offenders.

This is a help, but I think RSI should be investing some thought on making it easier for people to maintain their IDL paths. In my experience this is the real problem. Especially in UNIX systems, a great many users have NO idea how to manipulate their IDL paths. And even those who do know can't seem to get it right a surprisingly large percentage of the time.

In one famous case, I had to make a trip to Munich to get my Catalyst Library installed. And even though I worked two doors down from a nice man and extremely competent IDL programmer, it took us nearly two weeks to be working from the same page! Lord knows just \*thinking\* about making a change to this library caused me to sweat! :-)

(I will say that the excellent conversations and companionship on long walks in the country or when fumbling with our prayer beads in the Andechs Monastery more than made up for the disadvantages of IDL library installation, however.)

Cheers,

David

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Coyote's Guide to IDL Programming: <http://www.dfanning.com/>