
Subject: Re: Namespaces (redux)

Posted by [Craig Markwardt](#) on Wed, 25 Sep 2002 15:06:00 GMT

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JD Smith <jdsmith@as.arizona.edu> writes:

- > This brings up an excellent point that probably needs reiterating: the IDL
- > namespace is a rapidly dwindling resource, as libraries grow and
- > disseminate. While in the past most IDL users might have worked primarily
- > with their own routines, with a few bits and pieces of outside code
- > cobbled together from various sources, that era seems to be passing, given
- > the improving quality and availability of large libraries, and the new RSI
- > initiative to facilitate code sharing among IDL users. What can we do to
- > preserve this vanishing resource? A few guidelines come to mind:

JD, I think you are being a bit too alarmist. The IDL namespace is not rapidly dwindling the same way that (pick favorite species) are declining. For a typical 10-character function name, there are about a million billion unique combinations. Of course, if we restrict to English-sounding names, then the unique combinations is less, but still huge.

Still, I agree with several of your points, just at a philosophical level:

- > 2. If not using objects, imitate their namespace parsimony by
- > consistently prepending a class-like prefix to all related routines...
- > e.g. tvRubberBandBoxDisplay.pro, or tvRBandBox_display.

Yes, this is a must, at least for routines in the same file.

- > 4. Make qualifying prefixes descriptive and unique. Using initials
- > as qualifiers is of course an option, but wastes precious filename
- > space on information of little real value. If you do use initials,
- > don't skimp on additional information in the rest of the name.

I'm not sure it's of little real value. For example, from the names REPLICATE and CMREPLICATE, you can probably guess that both do something similar.

Or, the names of functions MPFIT, MPFITFUN, MPFITEXPR, MPFITPEAK, and so on, indicate that they all belong to the same library, obey the same calling conventions, and that is valuable knowledge. [And pays homage to the MINPACK heritage.]

I'm not a huge fan of typing routine names like tvRubberBandBoxUpdatePanelWithMarchingAnts().

- > 5. Look before you leap. An excellent (if increasingly outdated)
- > online-browser for almost all widely distributed libraries of IDL code
- > is available at:

Now here is the crux of the matter. The reason that we have name clashes is that everybody and their brother has written *slightly different* routines to count lines in files, called it the same thing, and published it. However, most people are respectful. If you search the IDL Astronomy library or the U. Washington index for terms like FIT or LEGENDRE, you will find lots of routines, but they are for the most part unique. Rule: If it's an *obvious* name, then attach a *non* obvious prefix or suffix to the name. End of story.

It is notable that in almost every case, the offending entity for these types of namespace clashes is none other than Research Systems Incorporated. We should be preaching to them.

Yours,
Craig

My addition: I attempt to always keep the main routine name unique within the first 8 characters from all other routines I know about.
