
Subject: Re: One file for each procedure/function?

Posted by [Paul Van Delst\[1\]](#) on Fri, 19 Apr 2002 14:28:19 GMT

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Pepijn Kenter wrote:

>
> Hi all.
>
> I'm currently writing analyses software (small programs plus routines) for
> an ozon measurement device and I'm new to IDL. A lot of the routines and
> programs have already been written and are ready for me to use. These
> routines have been grouped together in a few .pro files. These files are
> then compiled explicitly (by .compile statements) in the main programs. The
> programs are called from the command line.
>
> I'm under the strong impression that this is not the normal way of working
> and that you should create one file for each function or procedure, which is
> then compiled automatically when it's needed. These files should be put in a
> directory that is included in the !path system variable.
>
> Still, I would like to keep functions that belong to each other grouped
> together; if not in one file, then at least in one directory. So I've
> divided the routines over a few directories and used the expand_path
> function to include these directories in the !path variable.
>
> Is this the best way of working?
> Or are there better ways of ordering your routines (like units in pascal)?
> I want to keep using the command line to start my programs (i.e. I don't
> want to be dependent on .prj files)
>
> I'm not happy with the 'one file for each function' concept but if this is
> the way IDL is designed I think I'd better stick to it, rather than using
> obscure tricks to circumvent it.

In my .bashrc file I have:

```
export IDL_PATH=${IDL_PATH}:+\${HOME}/idl
```

Note the +\\${HOME}/idl

What this does is make everything in \${HOME}/idl, including nested subdirectories, "visible" to IDL when you run it. My \${HOME}/idl directory looks like:

```
lnx:/home/paulv : dir idl
total 148
drwxr-xr-x  4 wd20pd  wd4      4096 Oct  2  2001 AIRS/
drwxr-xr-x  6 wd20pd  wd4      4096 Oct  2  2001 ATOVS/
drwxr-xr-x  3 wd20pd  wd4      4096 Oct  2  2001 Ancillary/
```

drwxr-xr-x	2	wd20pd	wd4	4096	Oct	2	2001	CVS/
drwxr-xr-x	3	wd20pd	wd4	4096	Apr	18	14:04	Constants/
drwxr-xr-x	3	wd20pd	wd4	4096	Oct	2	2001	Date_Time/
drwxr-xr-x	4	wd20pd	wd4	4096	Oct	2	2001	Development/
drwxr-xr-x	3	wd20pd	wd4	4096	Oct	2	2001	Emissivity/
drwxr-xr-x	3	wd20pd	wd4	4096	Oct	2	2001	Error_Handling/
drwxr-xr-x	3	wd20pd	wd4	4096	Oct	2	2001	F90_Documentation/
drwxr-xr-x	3	wd20pd	wd4	4096	Oct	2	2001	GIFTS/
drwxr-xr-x	3	wd20pd	wd4	4096	Oct	2	2001	General/
drwxr-xr-x	4	wd20pd	wd4	4096	Oct	2	2001	Graphics/
drwxr-xr-x	3	wd20pd	wd4	4096	Oct	2	2001	HIS/
drwxr-xr-x	3	wd20pd	wd4	4096	Oct	2	2001	Interpolation/
drwxr-xr-x	3	wd20pd	wd4	4096	Apr	18	12:49	LBLRTM/
drwxr-xr-x	3	wd20pd	wd4	4096	Apr	19	09:10	Meteorology/
drwxr-xr-x	4	wd20pd	wd4	4096	Oct	2	2001	NAST-I/
drwxr-xr-x	3	wd20pd	wd4	4096	Oct	2	2001	NCDF/
drwxr-xr-x	3	wd20pd	wd4	4096	Apr	3	17:04	NCEP_RTM/
drwxr-xr-x	3	wd20pd	wd4	4096	Dec	18	09:34	PDdata/
drwxr-xr-x	4	wd20pd	wd4	4096	Mar	22	19:04	Radiance/
drwxr-xr-x	3	wd20pd	wd4	4096	Feb	4	13:20	Spectral/
drwxr-xr-x	3	wd20pd	wd4	4096	Nov	14	15:06	Swap_Endian/
drwxr-xr-x	5	wd20pd	wd4	4096	Apr	18	14:12	Transmittance/
drwxr-xr-x	3	wd20pd	wd4	4096	Oct	2	2001	UARS/
drwxr-xr-x	2	wd20pd	wd4	4096	Jan	22	15:27	Utility/
drwxr-xr-x	3	wd20pd	wd4	4096	Oct	2	2001	WgtFnGUI/
-rw-r--r--	1	wd20pd	wd4	288	Apr	18	12:44	idl_startup.pro
-rw-r--r--	1	wd20pd	wd4	3349	Jan	30	2001	template.pro
drwxr-xr-x	8	wd20pd	wd4	4096	Oct	2	2001	user_contrib/

where the directory name usually refers to the "CATEGORY" item in the documentation template that comes with IDL. I group my code into the above directories according to their use. Some directories have subdirectories, e.g.:

Inx:/home/paulv/idl : dir ATOVS

total 16

drwxr-xr-x	2	wd20pd	wd4	4096	Oct	2	2001	CVS/
drwxr-xr-x	3	wd20pd	wd4	4096	Oct	2	2001	readers/
drwxr-xr-x	3	wd20pd	wd4	4096	Oct	2	2001	scan_analysis/
drwxr-xr-x	3	wd20pd	wd4	4096	Oct	2	2001	visualisation/

Inx:/home/paulv/idl : dir user_contrib

total 24

drwxr-xr-x	3	wd20pd	wd4	4096	Oct	2	2001	chris_sisko/
drwxr-xr-x	2	wd20pd	wd4	4096	Oct	2	2001	dfanning/
drwxr-xr-x	4	wd20pd	wd4	4096	Oct	2	2001	liam_gumley/
drwxr-xr-x	2	wd20pd	wd4	4096	Oct	2	2001	markwardt/
drwxr-xr-x	2	wd20pd	wd4	4096	Oct	2	2001	martin_schultz/
drwxr-xr-x	2	wd20pd	wd4	4096	Oct	2	2001	mcraig/

I'm sure there's more logical ways to organise stuff, but this works for me.

paulv

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