Subject: finding out if program exists (newproc.pro)
Posted by stl on Mon, 27 Jun 1994 11:32:38 GMT
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Hello,

there has been some discusion lately (actually since a while) that it is
difficult to make sure that when you a name a routine, that the name you
picked doesn't already exist.

Well, here at SMA, we have a program, newproc.pro, that helps us out
with this. It takes one parameter, the name of the routine you would
like to create. For example, if you want to create the program
plot_drop.pro, do the following:

 idl>newproc,'plot_drop.pro'

if the file exists, a warning such as the following is displayed:

 Procedure with the same name already exists in /tools/idl/lib/idlmeteo/pro
 Please choose another name

If it doesn't exist, the template.pro program is copied into your
current directory with the file name you requested. Then you can
started editing, or simple exit, and edit the program at your leisure
later. (see Using this,below, for a breif discussion of the template file.)

SHORT comings: until now, this routine doesn't check for routine names
that come with the IDL system. SO if you typed newproc,'min.pro' the
file min.pro will be created (in your current directory) despite the
fact that min is a built in IDL function. So, if someone would like to
add the functionality of checking for IDL system routine, it would be
appreciated.

Using this:
 The following line needs to be changed so that it contains the
 correct path to some header template, called template.pro, you use.
 If you currently use no template, I have included our template.pro
 at the end of this posting.

spawn, ['cp',!DIR+'/lib/idlmeteo/pro/template.pro',proc], /NOSHELL

So make sure you change the above line. Then put this program in
 a directory that is in the IDL_PATH, and place the template.pro
 program at the place you just indicated in the changed line above.

Okay, here is the program: newproc.pro
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ cut here \\\\\\\\\\\\\\\\\\\\\\

```
;
;+
; NAME:
; NEWPROC
;
; PURPOSE:
;     Creating of new procedure. Checks first if a procedure with the
;     same name already exists. If not the template.pro with the default
;     header will be loaded into the editor set by the envrionment
;     variable IMEDITOR (default is vi, if variable is not set).
;
; CATEGORY:
;     Help
;
;
; CALLING SEQUENCE:
;     newproc, 'procname'
;
;
; INPUTS:
;     procname    name of procedure to create
;
;
; OUTPUTS:
;     New procedure
;
; RESTRICTIONS:
;
;
; EXAMPLE:
;     newproc, 'create_table'
;
; SEE ALSO:
;     getpro
;
; MODIFICATION HISTORY:
;  Written by: Thomas.Oettli@sma.ch,    21-Dec-1992
;                 16-May-1994, added current directory to
;                         search path.
;
;-

PRO newproc, proc
```

```
  i=0
  found = -1
  editor = getenv("IMEDITOR")
  cd, CURRENT=here
  path = str_sep(!PATH+':'+here,':')
  if strpos(proc,'.') EQ -1 then proc = proc + ".pro"

  WHILE i LE n_elements(path)-1 AND found EQ -1 DO BEGIN
    cd, path(i)
    OPENR, 99, proc, ERROR = err
    CLOSE, 99
    IF (err EQ 0) THEN BEGIN
     found=1
    ENDIF
   i=i+1
  ENDWHILE

 if found EQ 1 then begin
    print, "Procedure with the same name already exists in ", path(i-1)
    print, "Please choose another name"
    print, " "
 endif else begin
  cd, here
  spawn, ['cp',!DIR+'/lib/idlmeteo/pro/template.pro',proc], /NOSHELL

  if strlen(editor) NE 0 then spawn, [editor,proc], /NOSHELL $
   else spawn, ['vi',proc], /NOSHELL

 endelse

END


\\\\\\\\\\\\\\\\\\\\\\\\\\\\CUT this off \\\\\\\\\\\\\\\\\\\\\\\\\\\\
```

okay, now here is a template.pro, which you will need (or use your own one)

```
\\\\\\\\\\\\\\\\\\\\\\\\\\start of template.pro \\\\\\\\\\\\\\\\\\\\\\\\\
;
;+
; NAME:
; TEMPLATE
;
; PURPOSE:
;     Template header for idlmeteo procedures, follows the standard
```

```
;       IDL rules
;
;
;
; CATEGORY:
;       Help
;
;
;
; CALLING SEQUENCE:
;
;
;
;
; INPUTS:
;
;
;
;
; OPTIONAL INPUTS:
;
;
;
;
; KEYWORD PARAMETERS:
;
;
;
;
; OUTPUTS:
;
;
;
; OPTIONAL OUTPUTS:
;
;
;
;
; COMMON BLOCKS:
;
;
; SIDE EFFECTS:
;
;
; RESTRICTIONS:
;
;
;
;
; PROCEDURE:
;
;
;
;
; EXAMPLE:
;
;
;
; SEE ALSO:
```

```
;
;
; MODIFICATION HISTORY:
;  Written by: Your name here, Date.
;
;
;-


--
Stephen C Strebel              /      SKI TO DIE
strebel@sma.ch                 /        and
Swiss Meteorological Institute, Zuerich  /   LIVE TO TELL ABOUT IT
01 256 93 85                   /    (and pray for snow)
```