
Subject: Counting Keyword set in a procedure!

Posted by [Vincent Sarago](#) on Fri, 26 Oct 2012 14:22:11 GMT

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Dear IDLers,

I'm taking the risk of nice comments from David (and others) about the usefulness of such a task...
(But it was just for answering a post on the EXELIS Forum:

<http://www.exelisvis.com/language/fr-FR/UserCommunity/UserForums/forumid/27/postid/13592/scope/posts.aspx>)

The idea is to count the number of keywords set like `n_params()` does for parameters inside a procedure.

Here is my version:

```
;+
; Get the number of keyword set in a procedure.
;
; :Returns: integer
;
; :Examples:
;   PRO procedure_name, param0, KEYWORD1=KEYWORD1, KEYWORD2=KEYWORD2,
;   KEYWORD3=KEYWORD3
;     PRINT, 'PARAM NUMBER: ', n_params()
;     PRINT, 'KEYWORD NUMBER: ', vs_n_keywords()
;   END
;
; IDL> procedure_name, fltarr(100), /KEYWORD1
; IDL Console :
;   PARAM NUMBER: 1
;   KEYWORD NUMBER: 1
;
; :Restrictions:
;   Keywords have to be written properly:
;     KEYWORD1=KEYWORD1
;   not like:
;     KEYWORD1=KEYWORD
;
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;
; :History:
;   1.0 - 25 Oct. 2012 (V.S) - Initial Work
```

```
;
;
;:Version: 1.0
;
;-
```

Function VS_N_KEYWORDS

```
compile_opt idl2, hidden

catch, theerror
if (theerror ne 0) then begin
    catch, /cancel
    ok = dialog_message(!error_state.msg, /error)
    return, -1
endif

ii = 0L

;find routines names and informations
res = n_elements(scope_traceback()) ; number of routine calls that have brought idl execution to
the current point
if res le 2 then return, 0 ;if called in $MAIN$

routine_traceback = (scope_traceback(/structure))[res-2] ;routine we want to analyse is in res-2
position
routine_name = routine_traceback.routine
is_function = routine_traceback.is_function ;tag if function

;extract keywords names from routine info
keywords = (routine_info(routine_name, function = is_function, /PARAMETERS)).kw_args

for num = 0L, n_elements(keywords) - 1L do begin
    if keyword_set((scope_varfetch(keywords[num], level = -1))) then ii++
endfor

return, ii

End ;{VS_N_KEYWORDS}
```

I see several problems but I think it's a good start.

Cheers,

VIncent
