Subject: Re: CONTINUE from function within loop
Posted by Craig Markwardt on Wed, 13 Nov 2013 05:40:34 GMT

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On Wednesday, November 13, 2013 12:19:43 AM UTC-5, Sebastian Luque wrote:
> Hi,
>
>
>
> I read the CATCH and ON_ERROR help pages, but I can't see how to handle the following situation. Say we have a FOR loop where a function is called for each iteration:
>
>
>
> FOR i=0, 10 DO BEGIN
>
>   print, myfun(i)
>
> ENDFOR
>
>
>
> I would like MYFUN to continue with the next iteration if it runs into an error. Naively, this should show what I'm looking for:
>
>
>
> FUNCTION MYFUN, X
>   [BODY]
>   IF [condition] THEN BEGIN
>   message, 'A problem with X', /informational
>   CONTINUE
>   ENDIF
>   [REST IF OK]
>   RETURN, [something]
> END
>
> But, of course, CONTINUE only works within an FOR/ENDFOR block, not this way. How does one accomplish this?

You're right, because CONTINUE only works within the same lexical scope.

You could do this by putting a CATCH within your main loop, which will catch your MESSAGE within MYFUN. That's a little dangerous because it will catch *every* error though.

A better practice is to return a separate status variable MYFUN indicating success or failure, and have the main loop check the variable and decide what to do.

Something like this...

```
function myfun, x, status=status
  status = -1
  ;; Failure case
  if [condition] then return, !values,d_nan
  [ rest of MYFUN ]
  ;; Success case
  status = 1
  return, [something]
end

for i = 0, 10 do begin
  y = myfun(x, status=status)
  if status LT 0 then continue
  print, y
endfor
```

Craig