Subject: Re: bidirectional pipe by Spawn on UNIX
Posted by fireman on Mon, 23 Aug 1999 07:00:00 GMT
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Ivo Labbe (ivo@strw.leidenuniv.nl) wrote:
: While writing to an piped shell process from IDL in an unix environment
: goes fine, I seem to be unable to read from it. Type conversion errors
: all over the place. I'm obviously doing something wrong and IDL help is
: not explicit on the subject. What is the preferred way to read the
: output from a spawned piped child process?

Variables read from a bidirectional pipe must be declared with the
correct in advance. Strings must be of the correct length. I have a
Fortran example below (well, it worked 4 years ago, anyway :)

```
pro demo, mult, out, colors

mult = fix(mult)   ; make sure multiplier is integer
in = indgen(10)   ; initialize input array
out = in    ; initialize output array
colors = replicate('0123456789', 7) ; initialize string array

spawn, 'demo', unit = lun  ; open bi-directional pipe
printf, lun, in, mult, out  ; pass variables to pipe
readf,  lun, in, mult, out, colors ; get variables from pipe
free_lun, lun    ; close bi-directional pipe

return
end

C compile using "f77 -o demo demo.f"

 program demo

 implicit none
 integer in(10), mult, out(10), i
 character*10 colors(7)

C
C Read input parameters
C
 read *, in, mult, out

C
C Calculate output array
C
 do 10 i = 1, 10
   out(i) = in(i) * mult
```

```
10 continue

C
C Define character array
C
 colors(1) = 'red'
 colors(2) = 'orange'
 colors(3) = 'yellow'
 colors(4) = 'green'
 colors(5) = 'blue'
 colors(6) = 'indigo'
 colors(7) = 'violet'

C
C Print output parameters
C
 print *, in, mult, out

 do 15 i = 1, 7
   print *, colors(i)
15 continue

 stop
 end


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-- Gwyn F. Fireman
-- General Sciences Corporation / MODIS Characterization Support Team
-- Gwyn.Fireman@gsfc.nasa.gov   301-352-2118
```