Subject: SPAWN error question

Posted by Chip Helms on Mon, 09 Jun 2014 19:34:15 GMT

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Hi all,

So I recently had SPAWN throw an error that I haven't had before, namely:

IDL> spawn, 'wgrib2 -s '+filename+' | awk -F: "{print \$4 \$5}", inv

% SPAWN: Error opening file. File: /usr/tmp/idl_tmp_ZPEOzs

Too many open files

% SPAWN: Error managing child process.

As best I can determine, the error appears to have been caused by me exceeding my disk quota (hence not being allowed to write to files). Clearing up some space and restarting the IDL session seems to have solved the issue (for whatever reason IDL didn't seem to recognize that I could once again write files until I restarted it).

My question is, why does spawn need to write a file? One thought I had was that maybe it was creating a named pipe, but I'm leaning towards that not being the case based on some testing I did. Here's a list of what I've tried and the resulting error messages:

IDL> spawn, 'Is'

% SPAWN: Error managing child process.

Too many open files

IDL> spawn, ['ls'], /noshell

% SPAWN: Error managing child process.

Too many open files

IDL> spawn, 'ls', tmp

% SPAWN: Error opening file. File: /usr/tmp/idl_tmp_SDxSTx

Too many open files

% SPAWN: Error managing child process.

IDL> spawn, ['ls'], tmp, /noshell

% SPAWN: Error opening file. File: /usr/tmp/idl_tmp_mY5lwC

Too many open files

% SPAWN: Error managing child process.

IDL> spawn, 'ls', unit=unit

% SPAWN: Unable to make pipe.

Too many open files

IDL> spawn, ['Is'], /noshell, unit=unit

% SPAWN: Unable to make pipe.

Too many open files

The fact that the error specifically mentions being unable to create a pipe when I tell it to use a bidirectional pipe is why I doubt my initial suspicion that the original error was pipe related. Any insight would be greatly appreciated.

Cheers, Chip

(P.S., for those finding themselves using spawn often, the /noshell option significantly decreases the execution time at the expense of not automatically parsing the command line. Thus 'ls -lht' must be written as ['ls','-lht']. I've had improvements of an order of magnitude in execution time.)

Subject: Re: SPAWN error question
Posted by Craig Markwardt on Thu, 12 Jun 2014 16:39:17 GMT
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On Monday, June 9, 2014 3:34:15 PM UTC-4, Chip Helms wrote:

- > Hi all,
- >
- >

>

- So I recently had SPAWN throw an error that I haven't had before, namely:
- > IDL> spawn, 'wgrib2 -s '+filename+' | awk -F: "{print \$4 \$5}", inv
- >
- > % SPAWN: Error opening file. File: /usr/tmp/idl_tmp_ZPEOzs
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Here is my experience on IDL 7 and IDL 8, both Mac and Linux. For me, IDL doesn't create any temporary files when I run SPAWN. I would say you've got something very interesting going on in your system! Is it possible you have a setting in your .cshrc and/or .login that is saving shell output?

Craig

Subject: Re: SPAWN error question

Posted by MarioIncandenza on Thu, 13 Nov 2014 18:34:32 GMT

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On Thursday, June 12, 2014 9:39:17 AM UTC-7, Craig Markwardt wrote:

- > On Monday, June 9, 2014 3:34:15 PM UTC-4, Chip Helms wrote:
- >> % SPAWN: Error opening file. File: /usr/tmp/idl_tmp_ZPEOzs
- >> Too many open files
- >> % SPAWN: Error managing child process.

I just wanted to echo I have hit this error-- anyone else seen this? IDL> print,!version

{ x86_64 linux unix linux 8.2.1 Aug 20 2012 64 64}

Subject: Re: SPAWN error question

Posted by wlandsman on Thu, 13 Nov 2014 18:51:21 GMT

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On Thursday, November 13, 2014 1:34:35 PM UTC-5, Edward Hyer wrote:

- > On Thursday, June 12, 2014 9:39:17 AM UTC-7, Craig Markwardt wrote:
- >> On Monday, June 9, 2014 3:34:15 PM UTC-4, Chip Helms wrote:
- >>> % SPAWN: Error opening file. File: /usr/tmp/idl_tmp_ZPEOzs
- >>> Too many open files
- >>> % SPAWN: Error managing child process.

>

- > I just wanted to echo I have hit this error-- anyone else seen this?
- > IDL> print,!version
- > { x86_64 linux unix linux 8.2.1 Aug 20 2012 64 64}

I have long experienced a similar error when I have too many file units open (i.e. I forget to include a free_lun in my code and the open units pile up).

Subject: Re: SPAWN error question

Posted by gergopokol on Mon, 16 Mar 2015 15:21:39 GMT

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On Monday, June 9, 2014 at 9:34:15 PM UTC+2, Chip Helms wrote:

- > IDL> spawn, 'wgrib2 -s '+filename+' | awk -F: "{print \$4 \$5}", inv
- > % SPAWN: Error opening file. File: /usr/tmp/idl_tmp_ZPEOzs
- > Too many open files
- > % SPAWN: Error managing child process.

>

This became deterministic in my computer. In my case it was caused by non-existing temp directory. Directory created, problem solved.