Subject: Re: SPAWN background command without nohup?

Posted by dg86 on Mon, 30 Jun 2014 12:06:48 GMT

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On Monday, June 30, 2014 7:17:02 AM UTC-4, alx wrote:
> On Monday, June 30, 2014 12:03:04 PM UTC+2, David Grier wrote:
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>> On Monday, June 30, 2014 5:34:13 AM UTC-4, alx wrote:
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>>> On Saturday, June 28, 2014 5:27:48 PM UTC+2, David Grier wrote:
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> Dear Folks,
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>>>> Using SPAWN to start a background process on unix-like systems
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>>>> can leave the process running even after the IDL process terminates.
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>>>> I'd like to arrange things so that the child process is killed when IDL exits.
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>>>> Here's a schematic example:
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>>>> IDL> spawn, 'myprocess &', pid=pid
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>>>> IDL> print, pid
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>>>> IDL> exit
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>>>> $ ps | grep 62417
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>>>> grier   62417 0.0 0.1 2473856 12320 ?? S   10:41AM 0:00.02 myprocess
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>>>> This is similar to running a shell command with nohup:
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>>>> $ nohup myprocess &
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>>>> $ exit
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>>>> Is there a way to make IDL spawn a child process that terminates when
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>>>> the parent IDL session terminates?
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>>>> All the best,
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>>>> David
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>>> You might try to keep your spawned process synchronized with the parent IDL session :
maybe by using the UNIT keyword ?
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>>> Just a guess, I have no experience with unix.
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>>> alx.
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>> Thanks for thinking about this.
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>> Using the UNIT keyword is indeed useful for shutting down the child process from the parent
IDL session. It doesn't help, however, if the user exits IDL without actively shutting down the
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>> child process.
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>> I'm looking for a way to spawn a child process that runs in the background and cleanly quits when
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>> the parent IDL session ends.
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>> All the best,
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>> David
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>> I'm looking for a way to spawn a child process that runs in the background and cleanly quits when
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> Maybe by using some shared object ? A semaphore or a global memory region. But you would have to modify your child process accordingly.
>
> alx.

This is a good suggestion. Unfortunately, I'm SPAWNing a precompiled executable: mencoder from the mplayer distribution.

This issue comes up for me because IDL does not invoke the CleanUp method on objects when it exits. I _could_ write a replacement for EXIT that cleans up objects, but that still would leave open
the possibility that the user could invoke the normal exit command and leave orphaned child processes running. Unfortunately, IDL does not have anything equivalent to the IDL_STARTUP mechanism for handling housekeeping during shutdown.

I'm targeting unix-like systems, but would be interested in Windows solutions as well.

All the best,

David