Subject: IDL and UNIX setenv

Posted by Daniel Peduzzi on Mon, 18 Jun 2001 05:46:06 GMT

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I have an executable (compiled from C) which I'd like to run from within IDL using SPAWN. However, I'd like to refer to the executable without prepending a pathname:

IDL> spawn, "myprog", result

instead of

IDL>spawn,"/usr1/guest/bin/myprog", result

I tried to append the "/usr1/guest/bin/" directory to my UNIX path before starting an IDL session, but the path information doesn't seem to be propagated into IDL.

What else, if anything, can I do to get IDL to find "myprog"?

Dan

Subject: Re: IDL and UNIX setenv Posted by Paul van Delst on Mon, 18 Jun 2001 16:50:31 GMT View Forum Message <> Reply to Message

Daniel Peduzzi wrote:

>

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- > run from within IDL using SPAWN. However, I'd like to refer
- > to the executable without prepending a pathname:

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- > path before starting an IDL session, but the path information
- doesn't seem to be propagated into IDL. >

> What else, if anything, can I do to get IDL to find "myprog"?

I think you might need to add the path to your default .profile/.login/.cshrc/.whatever (which I am assuming you're not doing - I really can't tell from "I tried to append the

/usr1/guest/bin/ directory to my UNIX path before starting an IDL session")

I *think* when you use SPAWN, the subsequent shell in which the SPAWN command argument is executed is *not* the one you started IDL in and therefore has no knowledge of what you may have explicitly defined. The same sort of thing happens in make files in Unix.

paulv

--

Paul van Delst A little learning is a dangerous thing;

CIMSS @ NOAA/NCEP Drink deep, or taste not the Pierian spring; Ph: (301)763-8000 x7274 There shallow draughts intoxicate the brain,

Fax:(301)763-8545 And drinking largely sobers us again.

Alexander Pope.

Subject: Re: IDL and UNIX setenv

Posted by Daniel Peduzzi on Mon, 18 Jun 2001 17:49:30 GMT

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Paul van Delst wrote in message <3B2E3157.F8C80B51@noaa.gov>...

>

- > I think you might need to add the path to your default .profile/.login/.cshrc/.whatever
- > (which I am assuming you're not doing I really can't tell from "I tried to append the
- > /usr1/guest/bin/ directory to my UNIX path before starting an IDL session")

>

That did it! I'm starting IDL through csh, so extending the PATH through cshrc did the trick. (You assumed correctly...I had been extending the path via setenv at the csh prompt.)

- > I *think* when you use SPAWN, the subsequent shell in which the SPAWN command
- > argument is executed is *not* the one you started IDL in and therefore has no
- > knowledge of what you may have explicitly defined. The same sort of thing
- > happens in make files in Unix.

I think you're right...thanks for the tip!

Dan

Subject: Re: IDL and UNIX setenv

Posted by Randall Skelton on Tue, 19 Jun 2001 07:25:49 GMT

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> I think you might need to add the path to your default .profile/.login/.cshrc/.whatever

- > (which I am assuming you're not doing I really can't tell from "I tried to append the
- > /usr1/guest/bin/ directory to my UNIX path before starting an IDL session")

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- > I *think* when you use SPAWN, the subsequent shell in which the SPAWN command argument is
- > executed is *not* the one you started IDL in and therefore has no knowledge of what you
- > may have explicitly defined. The same sort of thing happens in make files in Unix.

Paulv is indeed correct here. Using spawn will start a *new* process (with a unique pid) and therefore it does not interact or have any knowledge of the shell or environment variables you had when you started IDL. You might be able to pass the IDL '!PATH' variable in a string when you use spawn, but you'll need to be careful this concatenated string of path + command doesn't get too long. Modifying your .login/.cshrc to append the required path is the cleanest option by far.

Subject: Re: IDL and UNIX setenv

Posted by nmw on Tue, 19 Jun 2001 08:41:39 GMT

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In article <Pine.LNX.4.21.0106190817360.16998-100000@homer.atm.ox.ac.uk>, Randall Skelton <rhskelto@atm.ox.ac.uk> writes:

- >> I think you might need to add the path to your default .profile/.login/.cshrc/.whatever
- >> (which I am assuming you're not doing I really can't tell from "I tried to append the
- >> /usr1/guest/bin/ directory to my UNIX path before starting an IDL session")

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- >> I *think* when you use SPAWN, the subsequent shell in which the SPAWN command argument is
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>

- > Paulv is indeed correct here. Using spawn will start a *new* process
- > (with a unique pid) and therefore it does not interact or have any
- > knowledge of the shell or environment variables you had when you started
- > IDL.

That's not quite right. When a new process is started it gets the same environment as its parent (that's the purpose of environment variables in contrast to "normal" variables). When you exec another executable with exec() or execl() it will still have the same environment. You can use execvp(), execlp() and pass it a different environment if required.

If the process created exec's a shell which invokes a startup script such as .profile, .cshrc, .login etc which has hardcoded environment settings in it (e.g. path=/adf:/dea) then this will override the environment passed down from the parent.

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