Subject: Re: Need help with basic spawn command Posted by yi.selab on Thu, 17 May 2007 08:45:56 GMT

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IDL's spawn procedure can't get the return value from C program. Of course, you can get the result using second argument like this:

```
IDL> spawn, 'basic', result
```

In this case, the result variable is not the return value of main function(C Program) but the output text result of the 'basic' command in Shell(Unix) or Command Prompt(MS Windows)

The 'result' variable is string array, so it can catch multi lines text output.

Anyway, if you want to use spawn procedure, the C program should be modified.

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printf("%d", n);
into your C code.
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> Im running IDL on XP.
 I have this basic C code:
> #include <stdlib.h>
> int main()
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>
>
      int n=5;
      n=n*2;
>
      return n;}
>
 //This file is basic.c
>> From IDL, I just want to call this program and return n.
> In IDL, I can write:
> SPAWN, 'basic'
                                    ; this of course runs the
```

> basic.c program.

>

- > But this doesnt return anythingof course.. ive tried to add another
- > variable after this line such as:
- > SPAWN, 'basic', variable

>

> But windows doesnt like any of this...

>

- > Can anyone help me with this basic application? With spawn in the past
- > ive gotten it to do calculations on a variable and return them, but
- > with no input, im unsure how to get the output.

>

- > Thanks for any help! Ive also boughten the 'from c->dlm->idl' book but
- > it wont be in for a few days.

Subject: Re: Need help with basic spawn command Posted by Allan Whiteford on Thu, 17 May 2007 11:14:57 GMT View Forum Message <> Reply to Message

Note that the return value can be obtained (at least under unix) with the exit_status keyword to spawn.

IDL> spawn, 'basic', exit_status=a IDL> print,a 10

however, it's far more useful to use the printf in your program as Yi suggested to return data back. The exit status is typically used to return whether or not a command executed correctly or not.

Probably best to ignore this message unless you're really sure that you want the return value from the program rather than just its output.

Thanks,

Allan

Yi wrote:

- > IDL's spawn procedure can't get the return value from C program.
- > Of course, you can get the result using second argument like this :
- > IDL> spawn, 'basic', result

>

>

- > In this case, the result variable is not the return value of main
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```
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>>
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>>
       n=n*2;
>>
       return n;}
>>
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>>> From IDL, I just want to call this program and return n.
>> In IDL, I can write:
>> SPAWN, 'basic'
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>> basic.c program.
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>> variable after this line such as:
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>> ive gotten it to do calculations on a variable and return them, but
>> with no input, im unsure how to get the output.
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>>
>> Thanks for any help! Ive also boughten the 'from c->dlm->idl' book but
>> it wont be in for a few days.
>
>
>
```

Subject: Re: Need help with basic spawn command Posted by yp on Thu, 17 May 2007 12:46:04 GMT View Forum Message <> Reply to Message

```
On May 16, 11:34 pm, ryans...@gmail.com wrote:
> Im running IDL on XP.
>
 I have this basic C code:
> #include <stdlib.h>
>
> int main()
> {
>
      int n=5:
>
      n=n*2;
>
      return n;}
>
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>> From IDL, I just want to call this program and return n.
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> SPAWN, 'basic'
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>
> But this doesn't return anything of course.. ive tried to add another
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```

-у

Subject: Re: Need help with basic spawn command Posted by Vince Hradil on Thu, 17 May 2007 14:02:21 GMT View Forum Message <> Reply to Message

```
On May 16, 5:34 pm, ryans...@gmail.com wrote:
> Im running IDL on XP.
> I have this basic C code:
 #include <stdlib.h>
>
> int main()
> {
>
>
      int n=5;
      n=n*2;
>
      return n;}
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> In IDL, I can write:
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>
> But this doesn't return anything of course.. ive tried to add another
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> Can anyone help me with this basic application? With spawn in the past
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> with no input, im unsure how to get the output.
> Thanks for any help! Ive also boughten the 'from c->dlm->idl' book but
> it wont be in for a few days.
```

I think your on the right track by "boughtening" the book, but a quick

and dirty answer: Have you c-program write to stdout, then use spawn.

Good luck!

Subject: Re: Need help with basic spawn command Posted by James Kuyper on Thu, 17 May 2007 15:12:50 GMT View Forum Message <> Reply to Message

```
ryanselk@gmail.com wrote:
> Im running IDL on XP.
>
>
> I have this basic C code:
>
> #include <stdlib.h>
>
> int main()
> {
>
      int n=5:
>
      n=n*2;
>
      return n;
>
> }
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>
>
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> basic.c program.
>
> But this doesn't return anything of course.. ive tried to add another
> variable after this line such as:
> SPAWN, 'basic', variable
'variable' is supposed to contain whatever output your program
```

'variable' is supposed to contain whatever output your program produces - in C terms, it contains whatever was written to stdout. Your program doesn't write anything to stdout, so variable won't contain any information. If you want to retrieve the exit status, what

Subject: Re: Need help with basic spawn command Posted by ryanselk on Thu, 17 May 2007 15:32:38 GMT View Forum Message <> Reply to Message

```
On May 17, 2:45 am, Yi <yi.se...@gmail.com> wrote:
> IDL's spawn procedure can't get the return value from C program.
> Of course, you can get the result using second argument like this:
 IDL> spawn, 'basic', result
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> In this case, the result variable is not the return value of main
> function(C Program)
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>>
       return n;}
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>> //This file is basic.c
```

Thank you so much, I understand now! Your right that it works when adding a printf to the code with the result on the spawn.

I was under the impression that this would not work on windows, only unix, not sure why, but it does.

Subject: Re: Need help with basic spawn command Posted by Trae on Tue, 22 May 2007 12:55:54 GMT View Forum Message <> Reply to Message

Sorry for jumpiing on this thread late.

Why don't you use a combination of make_dll and call_external to have IDL call your C code? I do a lot of number crunching in IDL and write C codes to do much of the tedious but large jobs. These are the procedures I use to get C an IDL to talk to each other.

The learning curve on these procedures is not bad and I've had great success with them. It also sounds easier than what you are trying to do with printf and if you are worried about time, nothing takes longer than reading files. Call_external allows you to pass variables.

Cheers,

-Trae

Cheers,

```
On May 17, 9:32 am, ryans...@gmail.com wrote:
> On May 17, 2:45 am, Yi <yi.se...@gmail.com> wrote:
>
>
>
>> IDL's spawn procedure can't get the return value from C program.
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