Try to execute command line codes from c++ linux

Asked 7 years, 11 months ago   Active 2 years, 6 months ago   Viewed 59k times

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I tried the following code, to communicate with the command line from c++ code.

```
#include<iostream>
#include<cv.h>

int main()
{
    system("gnome-terminal");
    system("cd");
}
```

The gnome-terminal command is executing fine. After I close the terminal, when am expecting the cd to execute, however, is not happening. Could you please help me and point out the reason? Thanks. I was expecting the function to make the cmd go down to the home directory , but it did not. am working in linux

I tried it even by removing gnome. simple cd is not working. am I doing something rong>?

If I try ls, it seems to be working fine!

My main aim is to open a new terminal, and execute commands on that new terminal through the present program that opened the new terminal. Could you please tell me how I can achieve this??

c++   linux   command-prompt

edited Jun 5 '18 at 12:56   asked Jan 26 '13 at 0:34

Donald Duck   Lakshmi Narayanan
5,980   14   58   77   **4,289**   13   40   79

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2   What is "cv.h". And you don't (visibly) include the right header for system. You need <cstdlib> (then it is called std::system()) or <stdlib.h> (then it is system). – JoergB Jan 26 '13 at 0:38

am developing the code. this is the starting phase. Thanks for your tipw :). Will correct it. – Lakshmi Narayanan Jan 26 '13 at 0:40

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1   Do you mean you want to change the working directory of the shell from which you execute the C++ program? – aschepler Jan 26 '13 at 0:47

yes. I was trying that. Now I thought am trying to execute commands in the new terminal opened, from the c++ program opened in the different shell! could you help me here? please see the edit. – Lakshmi Narayanan Jan 26 '13 at 0:50

3 Answers

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If you want to run a program and wait for it to finish before executing next line, take a look at this page and example code here: http://www.thegeekstuff.com/2012/03/c-process-control-functions/

But if you want to run gnome-terminal and execute a command in newly created window, do this:

```
system("gnome-terminal -x sh -c 'cd /tmp ; ls -la'");
```

edited Jan 26 '13 at 1:21   answered Jan 26 '13 at 0:39

Vahid Farahmand
2,418   2   12   20

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sorry bro. this is not wat am looking for. am sry if I wasn't clear in my question. pls see the edit. – Lakshmi Narayanan Jan 26 '13 at 0:51

The `system` function is equivalent to doing `fork` , `exec` , and `waitpid` , but easier. (For when you don't want to do any redirects, pipes, etc.) – aschepler Jan 26 '13 at 0:51

should I use escape characters for the quote?? I feel something is slightly missing. – Lakshmi Narayanan Jan 26 '13 at 0:58

Yes, you can use single quota also – Vahid Farahmand Jan 26 '13 at 1:11

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The `system` function creates a shell child process to execute the specified command.

`cd` is a shell command which changes the current working directory of that shell process only.

So the child's `cd` probably works fine, but it has no effect on your C++ program, which is a different process.

Instead, you probably want to look at the Linux system call `chdir` .

answered Jan 26 '13 at 0:38

aschepler
64.2k   8   92   141

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he want to see next command executed after gnome-terminal being terminated, not right after. – Vahid Farahmand Jan 26 '13 at 0:40

Although `chdir` will change the CWD for your process, not its parent (the shell). Sounds like what the OP really wants is a shell script. – Peter Huene Jan 26 '13 at 0:40 ✎

1   If you want to execute something WITHIN the gnome-terminal, you will need to do something different than the code you've just posted. There are multiple ways you could achieve something like what you are asking for - you could generate a shell-script file, and execute that, or you could open a pipe and send commands

1   Even `chdir()` probably wouldn't have the desired effect, as it would only change the working directory for
     the C program, not for the parent shell. Shell function maybe? – duskwuff -inactive- Jan 26 '13 at 0:44

     Yes, chdir() did not work for me. I am a beginner and am not able to understand many of your comments. I
     am really sorry, but ould you please explain wat I can do?? –   Lakshmi Narayanan   Jan 26 '13 at 0:46

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0   Thanks for your help!! This command worked perfectly fine from this link

     https://superuser.com/questions/198015/open-gnome-terminal-programmatically-and-execute-
▼   commands-after-bashrc-was-execu

↺
```
gnome-terminal -x sh -c 'command1; command2; exec bash'
```

and I entered the respective commands in the new window. But to change the working directory
in the shell am working o, I haven't still figured that out.

	edited Mar 20 '17 at 10:18	answered Jan 26 '13 at 1:05
	Community ♦	Lakshmi Narayanan
	1 1	**4,289** 13 40 79

like what I gave in above comment/answer, huh? – Vahid Farahmand Jan 26 '13 at 1:12

yeah. actually, I was seeing another link,and only after I got back, saw ur answer, and thus verified this has
to b the answer. But that link also said about including this exec bash command and other stuff, which was
informatory, thus wanted to highlight here. –   Lakshmi Narayanan   Jan 26 '13 at 1:19

so my answer helped you and my answer is exactly what you are looking for, so you can accept the proper
answer and close the question – Vahid Farahmand Jan 26 '13 at 1:20

Oh, sorry. Was looking for some other code, and I thot I had marked it as the answer. –
   Lakshmi Narayanan   Jan 26 '13 at 1:25