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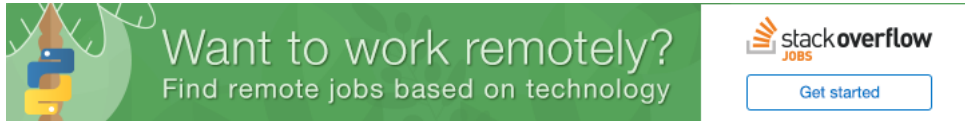
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How do I open a program via the command prompt in Windows 8?



Suppose I have a program named `any_program.exe` and my operating system drive is `C:`. The location of the program is `D:\Any_Folder\any_program.exe`

How do I start/execute that program via command prompt in Windows 8?

I have tried the command line `START any_program.exe`, but it shows me an error that

Windows cannot find 'any_program.exe'. Make sure you typed the name correctly, and then try again.

By the way, it worked perfectly in Windows 7. And, if I type `START notepad.exe` OR `START firefox.exe` (Firefox is not installed in C: drive), it works in Windows 8.

windows command-line

edited Oct 28 '12 at 18:35



Karan

46.7k

13

81

141

asked Oct 28 '12 at 9:14



Ahmadul Hoq

65

1

2

7

This doesn't really have anything to do with Windows 8 in particular, does it? – Joey Oct 28 '12 at 17:37

I guess it does. In windows 7, only the path would have worked. But in windows 8, the path of the program must be in between quotation marks (what I've found out), or it shows error that it could not locate the program (if the path isn't registered in PATH environment variable or in App registry). – Ahmadul Hoq Oct 29 '12 at 11:08

2 @AhmadulHoq Windows 7 does behave in exactly the same way, as far as I know. You probably had the file in one of those places. – Bob Oct 31 '12 at 3:33

6 Answers

There are three basic ways to run a 'command' in the Command Prompt.

- builtins ("internal commands")

These are commands built into `cmd` itself, and do not require an external program invocation. They also do not perform any searching, and will always be executed with the highest priority if matched. You can bypass builtins by wrapping the executable name in quotes: `echo` calls the builtin, but `"echo"` would search following `cmd` rules.

- Direct invocation

This is when you directly specify a program name (without a path). For example, if you run `cmd (cmd.exe)` OR `ipconfig (ipconfig.exe)` at the prompt, you are directly calling the external command. This performs [limited searching](#) implemented entirely within the Command Prompt, in this order:

- The current directory.
- The directories that are listed in the PATH environment variable.

(thanks to [dxiv](#) for the comments)

- Through the `start` command

When you try to execute a file through the `start` command, Command Prompt does not perform any searching. Instead, it passes the file name (and arguments) over to Windows itself (via the `ShellExecuteEx` API call), which must then search for the file's location. There are [several places](#) it searches in the following order:

- Current working directory
- Windows directory
- Windows\System32 directory
- Directories listed in PATH environment variable
- Registry defined App Paths

Note that the Run dialog also uses this search method.

Normally, you can either navigate to the location of the file with `cd /d D:\Any_Folder` (/d means change drive) and just run `any_program.exe`. Alternatively, you can specify the full path `D:\Any_Folder\any_program.exe`.

If you want to start it with `start any_program.exe`, you have a couple of options:

- You can put it in the Windows or System32 directories, or any directory in the PATH environment variable.
- You can add the directory it is located in (`D:\Any_Folder`) to the PATH environment variable, see [this question](#) for details.
- You can add it to the App Paths registry key, as Notepad and Firefox does. App Paths links a file keyword (such as `firefox.exe`) with the full path to the file, unlike the other options that deal with directories. See [here](#) for more information.

edited Mar 20 '17 at 10:16



Community ♦
1

answered Oct 28 '12 at 9:26



Bob
39.3k 18 120 156

- 3 For completeness, it should be noted that running a program at the command prompt directly as `any_program.exe` does not search the App Paths key, while running it as `start any_program.exe` does e.g. on a default Win7 install, entering `wordpad` at the prompt gives a not recognized error, while `start wordpad` successfully launches wordpad (based on its App Paths key). Technical reason is that the linked page refers to `ShellExecuteEx` (which `start` uses) while `CreateProcess` (which direct execution uses) specifically mentions that App Paths is not searched. — [dxiv](#) Nov 30 '15 at 4:08
- 1 Thanks, that was quick for a 3-years late comment :-). The relevant docs-link is msdn.microsoft.com/en-us/library/windows/desktop/ms682425.aspx but I didn't have room to include it in the previous comment. The search logic is listed in #1-6 under `lpCommandLine`. — [dxiv](#) Nov 30 '15 at 4:17
- 1 @dxiv Thanks for the link. I've also edited that in, though it doesn't seem to match my observed behaviour... (try: `set path=` followed by `cmd` can't find it, but `start cmd` works as it still searches paths outside the env var). — [Bob](#) Nov 30 '15 at 4:31
- 1 Thanks for doublechecking. It is indeed the case that `cmd` direct execution doesn't search the windows/system directories by default, and I was wrong to point to the `CreateProcess` docs. Seems that `cmd` has its own logic, per the "Command Search Sequence" section under technet.microsoft.com/en-us/library/... dating back to at least NT times, and most likely forever before. — [dxiv](#) Nov 30 '15 at 7:37
- 1 @dxiv Thanks, updated with the new link. — [Bob](#) Nov 30 '15 at 8:06

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Get started

```
start D:\Any_Folder\any_program.exe
```

or, when path or file contains spaces

```
start "" "D:\Any_Folder\any_program.exe"
```

`start any_program.exe` works only for those programs, who are located in `%PATH%` environment variable, or registered in registry in the key `HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\App Paths` OR its `HKEY_CURRENT_USER` analogue.

edited Oct 28 '12 at 9:24

answered Oct 28 '12 at 9:19



Maximus
16.9k 13 69 99

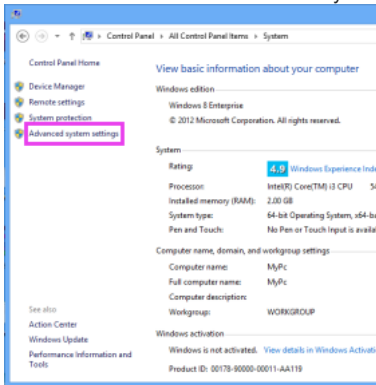
You have two options:

1. Add the program to your `%PATH%` variable
2. Use quotes in your shortcut

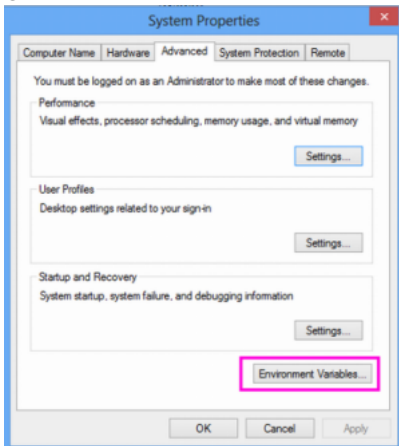
Detail:

Adding `any_program.exe` **to path:**

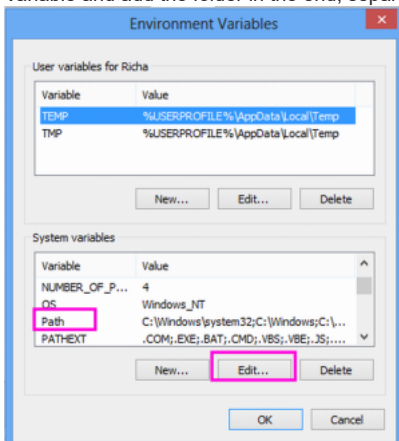
1. Go to "Control Panel" -> "Advanced System Settings"



2. Go to the Advanced tab



3. Click on "Environment Variables" Add the folder in which any_program.exe resides. Edit the PATH Variable and add the folder in the end, separated by a ;



4. You can now use any_program.exe in the run dialog box (Try logging out and back to make sure your path variable changes are used.)

Using complete path

Instead of using `any_program.exe` in the Run dialog, you need to use the complete PATH. So type `D:\Stuff\App\any_program.exe` in the run dialog instead.

edited Oct 28 '12 at 9:43

answered Oct 28 '12 at 9:27



Nemo

946 1 9 24

those screenshots are WAAAY to large. Mind having them at a reasonable size? – [Journeyman Geek](#) ♦ Oct 28 '12 at 9:30

Working on it... – [Nemo](#) Oct 28 '12 at 9:34

Path directories on Windows are delimited by semicolons (;), not colons (:)... – [Bob](#) Oct 28 '12 at 9:39

I had that in my mind, but still mis-typed it. – [Nemo](#) Oct 28 '12 at 9:42

Screenshots taken from [c-sharpcorner.com/UploadFile/6cde20/...](http://c-sharpcorner.com/UploadFile/6cde20/) apparently . The screenshots there are terrible – [Journeyman Geek](#) ♦ Oct 28 '12 at 9:52

1. Open Command Prompt

2. Type the name of the program you want to run. If its on the PATH System variable it will be executed. If not, you'll have to type the full path to the program. For example, to run **D:\Any_Folder\any_program.exe** type **D:\Any_Folder\any_program.exe** on the *Command prompt* and press 

answered Oct 28 '12 at 9:21



[Rakib Ansary](#)

1,867 3 10 31

Haha nice trick! – [Ahmadul Hoq](#) May 1 '13 at 7:41

I am using a yet simple method . . .

Copy the shortcut of the file to C:\users\name and then type the shortcut's name in run dialog box. . . .

answered Apr 30 '13 at 21:53



[prad_](#)

11 1

I guess you have to add the path to the PATH variable in system variables

answered Oct 28 '12 at 9:19



[pratnala](#)

1,526 2 15 37