

Windows 10 Help on Commands

C:\>HELP CMD

Starts a new instance of the Windows command interpreter

CMD [/A | /U] [/Q] [/D] [/E:ON | /E:OFF] [/F:ON | /F:OFF] [/V:ON | /V:OFF]
[[/S] [/C | /K] string]

/C Carries out the command specified by string and then terminates

/K Carries out the command specified by string but remains

/S Modifies the treatment of string after /C or /K (see below)

/Q Turns echo off

/D Disable execution of AutoRun commands from registry (see below)

/A Causes the output of internal commands to a pipe or file to be ANSI

/U Causes the output of internal commands to a pipe or file to be
Unicode

/T:fg Sets the foreground/background colors (see COLOR /? for more info)

/E:ON Enable command extensions (see below)

/E:OFF Disable command extensions (see below)

/F:ON Enable file and directory name completion characters (see below)

/F:OFF Disable file and directory name completion characters (see below)

/V:ON Enable delayed environment variable expansion using ! as the
delimiter. For example, /V:ON would allow !var! to expand the
variable var at execution time. The var syntax expands variables
at input time, which is quite a different thing when inside of a FOR
loop.

/V:OFF Disable delayed environment expansion.

Note that multiple commands separated by the command separator '&&' are accepted for string if surrounded by quotes. Also, for compatibility reasons, /X is the same as /E:ON, /Y is the same as /E:OFF and /R is the same as /C. Any other switches are ignored.

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used to process quote (") characters:

1. If all of the following conditions are met, then quote characters on the command line are preserved:

- no /S switch
- exactly two quote characters
- no special characters between the two quote characters, where special is one of: &<>()@^|
- there are one or more whitespace characters between the two quote characters
- the string between the two quote characters is the name of an executable file.

2. Otherwise, old behavior is to see if the first character is a quote character and if so, strip the leading character and remove the last quote character on the command line, preserving any text after the last quote character.

If /D was NOT specified on the command line, then when CMD.EXE starts, it looks for the following REG_SZ/REG_EXPAND_SZ registry variables, and if either or both are present, they are executed first.

HKEY_LOCAL_MACHINE\Software\Microsoft\Command Processor\AutoRun

and/or

HKEY_CURRENT_USER\Software\Microsoft\Command Processor\AutoRun

Command Extensions are enabled by default. You may also disable extensions for a particular invocation by using the /E:OFF switch. You can enable or disable extensions for all invocations of CMD.EXE on a machine and/or user logon session by setting either or both of the

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HKEY_LOCAL_MACHINE\Software\Microsoft\Command Processor\EnableExtensions

and/or

HKEY_CURRENT_USER\Software\Microsoft\Command Processor\EnableExtensions

to either 0x1 or 0x0. The user specific setting takes precedence over the machine setting. The command line switches take precedence over the registry settings.

In a batch file, the SETLOCAL ENABLEEXTENSIONS or DISABLEEXTENSIONS arguments takes precedence over the /E:ON or /E:OFF switch. See SETLOCAL /? for details.

The command extensions involve changes and/or additions to the following commands:

DEL or ERASE

COLOR

CD or CHDIR

MD or MKDIR

PROMPT

PUSHD

POPD

SET

SETLOCAL

ENDLOCAL

IF

FOR

CALL

SHIFT

GOTO

START (also includes changes to external command invocation)

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FTYPE

To get specific details, type `commandname /?` to view the specifics.

Delayed environment variable expansion is NOT enabled by default. You can enable or disable delayed environment variable expansion for a particular invocation of `CMD.EXE` with the `/V:ON` or `/V:OFF` switch. You can enable or disable delayed expansion for all invocations of `CMD.EXE` on a machine and/or user logon session by setting either or both of the following `REG_DWORD` values in the registry using `REGEDIT.EXE`:

`HKEY_LOCAL_MACHINE\Software\Microsoft\Command Processor\DelayedExpansion`

and/or

`HKEY_CURRENT_USER\Software\Microsoft\Command Processor\DelayedExpansion`

to either `0x1` or `0x0`. The user specific setting takes precedence over the machine setting. The command line switches take precedence over the registry settings.

In a batch file the `SETLOCAL ENABLEDELAYEDEXPANSION` or `DISABLEDELAYEDEXPANSION` arguments takes precedence over the `/V:ON` or `/V:OFF` switch. See `SETLOCAL /?` for details.

If delayed environment variable expansion is enabled, then the exclamation character can be used to substitute the value of an environment variable at execution time.

You can enable or disable file name completion for a particular invocation of `CMD.EXE` with the `/F:ON` or `/F:OFF` switch. You can enable or disable completion for all invocations of `CMD.EXE` on a machine and/or user logon session by setting either or both of the following `REG_DWORD`

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HKEY_LOCAL_MACHINE\Software\Microsoft\Command Processor\CompletionChar

HKEY_LOCAL_MACHINE\Software\Microsoft\Command Processor\PathCompletionChar

and/or

HKEY_CURRENT_USER\Software\Microsoft\Command Processor\CompletionChar

HKEY_CURRENT_USER\Software\Microsoft\Command Processor\PathCompletionChar

with the hex value of a control character to use for a particular function (e.g. 0x4 is Ctrl-D and 0x6 is Ctrl-F). The user specific settings take precedence over the machine settings. The command line switches take precedence over the registry settings.

If completion is enabled with the /F:ON switch, the two control characters used are Ctrl-D for directory name completion and Ctrl-F for file name completion. To disable a particular completion character in the registry, use the value for space (0x20) as it is not a valid control character.

Completion is invoked when you type either of the two control characters. The completion function takes the path string to the left of the cursor appends a wild card character to it if none is already present and builds up a list of paths that match. It then displays the first matching path. If no paths match, it just beeps and leaves the display alone. Thereafter, repeated pressing of the same control character will cycle through the list of matching paths. Pressing the Shift key with the control character will move through the list backwards. If you edit the line in any way and press the control character again, the saved list of matching paths is discarded and a new one generated. The same occurs if you switch between file and directory name completion. The only difference between the two control characters is the file completion character matches both file and directory names,

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If file completion is used on any of the built in directory commands

(CD, MD or RD) then directory completion is assumed.

The completion code deals correctly with file names that contain spaces or other special characters by placing quotes around the matching path.

Also, if you back up, then invoke completion from within a line, the text to the right of the cursor at the point completion was invoked is discarded.

The special characters that require quotes are:

<space>

&()[]{}^=;!'+,`~

