***Short Bytes:****Command Prompt or CMD is a command line interpreter in the Windows family of operating systems created by Microsoft Corporation. In this article, we have tried to curate an A to Z list of Windows CMD Commands. The list includes both internal and external commands applicable to the command prompt.*

In the case of Windows OS, most users are not even remotely concerned about the Command Prompt or cmd.exe. People know that there is some inbuilt software with a black screen which is used to troubleshoot Windows issues sometimes. For instance, when a user has to [repair a corrupt pen drive](http://fossbytes.com/how-to-repair-corrupted-pen-drive-or-sd-card/" \t "_blank). On the other hand, Linux users are very much familiar with the command line utility and it’s a part of their daily computer usage.

CMD is a command line interpreter – a program designed to understand the commands input by a user, from a text file, or any other medium – in Windows NT family. It is the modern version of the COMMAND.COM which was the default shell present in the DOS operating systems and as a command line interpreter in Windows 9x family.

Similar to Linux command line, the Command Prompt in Windows NT – Windows X, 7, 8, 8.1, 10 – is quite efficient. Using various commands, you can ask your Windows OS to perform desired tasks which you normally do by using the GUI.

Also Read: [The Ultimate A To Z List of Linux Commands | Linux Command Line Reference](https://fossbytes.com/a-z-list-linux-command-line-reference/" \t "_blank)

How to open Windows CMD?

You can open the Windows Command Prompt by typing **cmd** in the Start Menu search bar. Alternatively, you can press CTRL+R to open the RUN utility, type **cmd,**and press**Enter**.

Are the Commands Case-Sensitive?

The commands used in the Windows Command Prompt are not case-sensitive, unlike the Linux command line. For example, when you type dir or DIR, it’s the same thing. But individual commands may have various options which can be case-sensitive.

A to Z List of Windows CMD Commands

Here is an A to Z list of Windows CMD commands which will be beneficial to you. Once you get the hang of these commands, you can do most of your work more quickly without using the normal graphical interface.

To display help for the commands:

**command\_name /?**

Press Enter.

For example, to see help for the ping command:

ping /?

*Note: Some of these commands may require relevant service or Windows version to work correctly.*

A – Windows CMD commands

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| --- | --- |
| **A** | **Description** |
| addusers | Used to add and list users in a CSV file |
| admodcmd | Used for bulk modifying contents in an active directory |
| arp | Address Resolution Protocol is used to map IP address to the hardware address |
| assoc | Used to change associations for file extensions |
| associat | One step file association |
| at | Run a command at a specific time |
| atmadm | Display connection info of the ATM adapter |
| attrib | Used to change file attributes |

B – Windows CMD Commands

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| **B** | **Description** |
| bcdboot | Used to create and repair a system partition |
| bcdedit | Used to manage boot configuration data |
| bitsadmin | Used to manage the Background Intelligent Transfer Service |
| bootcfg | Used to edit boot configuration in Windows |
| break | Enable/Disable break capability (CTRL+C) in CMD |

C – Windows CMD Commands

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| **C** | **Description** |
| cacls | Used to change permissions of files |
| call | Used one batch program to call another |
| certreq | Used to request a certificate from a certification authority |
| certutil | Manage Certification Authority files and services |
| cd | Used to change folder (directory) or go to a specific one |
| change | Used to change terminal services |
| chcp | Displays the number of active console code page |
| chdir | Same as cd command |
| chkdsk | Used to check and repair issues in the disk |
| chkntfs | Used to check the NTFS file system |
| choice | Accept user input (via keyboard) to a batch file |
| cipher | Used to encrypt/decrypt files and folder |
| cleanmgr | Used clean temp files and recycle bin automatically |
| clip | Copy result of any command (stdin) to Windows clipboard |
| cls | Clear CMD screen |
| cmd | Used to start a new CMD shell |
| cmdkey | Used to manage stored usernames and passwords |
| cmstp | Used to install or remove a connection manager service profile |
| color | Change the color of the CMD shell using options |
| comp | Compare contents of two files or two sets of files |
| compact | Compress files and folders on an NTFS partition |
| compress | Compress one or more files |
| convert | Convert a FAT partition to NTFS |
| copy | Copy one or more files to another location |
| coreinfo | Show the mapping between logical and physical processors |
| cprofile | Cleans specified profiles of wasted space and disabled user-specific file associations |
| cscmd | Configure offline files on a client computer |
| csvde | Import or Export the data of an active directory |

D – Windows CMD Commands

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| **D** | **Description** |
| date | Used to display the date or change it. |
| defrag | Used to defragment system hard drive. |
| del | Used to delete a file(s). |
| delprof | Used to delete user profile(s). |
| deltree | Used to delete a folder and its sub-folders. |
| devcon | Access the command line device manager utility. |
| dir | Used to display files and folders list. |
| dirquota | Manage File Server Resource Manager quotas. |
| diruse | Used to display disk usage. |
| diskcomp | Compare contents of two floppy disks. |
| diskcopy | Copy data of one floppy disk to another. |
| diskpart | Make changes to partitions of storage, both internal and connected. |
| diskshadow | Access the Disk Shadow Copy Service. |
| diskuse | View used space in folder(s). |
| doskey | Used to edit command line, recall commands, and create macros. |
| driverquery | Display a list of installed device drivers. |
| dsacls | View and edit access control entries for objects in active directory. |
| dsadd | Used to add objects to active directory. |
| dsget | View objects in active directory. |
| dsquery | Find objects in an active directory. |
| dsmod | Used to modify objects in an active directory. |
| dsmove | Rename or move an active directory object. |
| dsrm | Remove objects from an active directory. |
| dsmgmt | Manage Active Directory Lightweight Directory Services |

E – Windows CMD Commands

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| **E** | **Description** |
| echo | Turn command-echoing feature on/off, display a message on the screen. |
| endlocal | End localization environment changes in a batch file. |
| erase | Used to delete on or more file(s). |
| eventcreate | Add custom event to Windows event log (Admin rights required). |
| eventquerry | Display list of events and their properties from event logs. |
| eventtriggers | Display and configure event triggers on local and remote machines. |
| exit | Exit the command line (Quit current batch script). |
| expand | Uncompress one or more .CAB file(s) |
| explorer | Open Windows Explorer. |
| extract | Uncompress one or more Windows cabinet file(s) |

F – Windows CMD Commands

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| **F** | **Description** |
| fc | Used to compare two files. |
| find | Used to search a specified text string in a file. |
| findstr | Used to find string patterns in files. |
| finger | Display information about user(s) on a specified remote computer. |
| flattemp | Used to enable/disable flat temporary folders. |
| For | Run a command in a loop for a file(s) for defined parameter. |
| forfiles | Used for batch processing of selected file(s) |
| format | Used to format a disk. |
| freedisk | Used to check free space on a disk. |
| fsutil | File system utility to manage file and drive properties. |
| ftp | Use FTP service to transfer files from one PC to another. |
| ftype | Display/ Modify file extension type associations. |

G – Windows CMD Commands

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| **G** | **Description** |
| getmac | Used to display the MAC address of your network adapter. |
| goto | Used to direct a batch program to a line identified by a label. |
| gpresult | Display Group Policy Settings and Resultant Set of Policy for a user. |
| gpupdate | Update local and active directory based on group policy settings. |
| graftabl | Turn on the ability to display an extended character in graphics mode. |

H – Windows CMD Commands

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| **H** | **Description** |
| help | Display a list of commands and see online information for them. |
| hostname | Used to display hostname of the computer. |

I – Windows CMD Commands

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| **I** | **Description** |
| icacls | Used to change permissions of files and folders. |
| iexpress | Used to create a self-extracting zip archive. |
| if | Used for conditional processing in batch programs. |
| ifmember | Display the group(s) an active user belongs to. |
| inuse | Replace the files which the OS is currently using (restart required). |
| ipconfig | Display and change Windows IP configuration. |
| ipseccmd | Used to configure IP Security policies. |
| ipxroute | Display and modify routing table information used by IPX protocol. |
| irftp | Used to send files over an infrared link (infrared functionality required). |

L – Windows CMD Commands

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| **L** | **Description** |
| label | Used to change the name of a disk. |
| lodctr | Update registry values with latest performance counters. |
| logman | Used to manage performance monitor logs. |
| logoff | Log a user off. |
| logtime | Add the date, time, and a message to a text file. |
| lpq | Displays print queue status. |
| lpr | Used to send a file to a computer running the Line Printer Daemon service. |

M – Windows CMD Commands

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| **M** | **Description** |
| macfile | Manage files server for Mackintosh. |
| makecab | Used to create .cab files. |
| mapisend | Used to send email from command line. |
| mbsacli | Microsoft Baseline Security Analyser. |
| mem | Used to show memory usage. |
| md | Used to create directories and sub-directories. |
| mkdir | Used to create directories and sub-directories. |
| mklink | Used to create symbolic link to a directory. |
| mmc | Access Microsoft Management Console. |
| mode | Configure COM, LPT, CON system devies. |
| more | Display one screen of output at time. |
| mountvol | Create, list, or delete a volume mount point. |
| move | Used to move files from one folder to another. |
| moveuser | Move user account to a domain or between machines. |
| msg | Used to send a pop-up message to a user. |
| msiexec | Install, modify, consfigure using Windows Installer. |
| msinfo32 | Display system information. |
| mstsc | Create a remote desktop connection. |

N – Windows CMD Commands

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| **N** | **Description** |
| nbstat | Display NetBIOS over TCP/IP information. |
| net | Used to manage network resources and services. |
| netdom | Network Domain Manager utility |
| netsh | Display or modify network configuration |
| netstat | Display active TCP/IP connections. |
| nlsinfo | Used to display locale information |
| nltest | List domain controllers, force remote shutdown, etc. |
| now | Display date and time. |
| nslookup | Check IP address on a Name Server. |
| ntbackup | Backup data to tape using CMD or batch file. |
| ntcmdprompt | Runs cmd.exe instead of command.exe in an MS-DOS application. |
| ntdsutil | Manage Active Directory Domain Services |
| ntrights | Used to edit user account privileges. |
| ntsd | Only for system developers. |
| nvspbind | Used to modify network bindings. |

O – Windows CMD Commands

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| **O** | **Description** |
| openfiles | Queries or displays open files. |

P – Windows CMD Commands

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| **P** | **Description** |
| pagefileconfig | Display and configure Virtual memory settings. |
| path | Set PATH environment variable for executable files. |
| pathping | Latency and Packet loss info for each node in the network path. |
| pause | Used to stop processing of a batch file. |
| pbadmin | Starts Phone Book Administrator |
| pentnt | Detect Floating Point Division error in the Pentium chip. |
| perfmon | Access performance monitor in CMD |
| perms | Display a user\’s ACL permissions for a file. |
| ping | Test network connection to a computer. |
| popd | Go to the latest path/folder stored by PUSHD command |
| portqry | Display TCP and UDP port status. |
| powercfg | Used to configure power settings and know battery health. |
| print | Used to print a text file(s) from CMD. |
| printbrm | For backup/recovery/migration of the print queue. |
| prncnfg | Used to configure/rename a printing device. |
| prndrvr | List/add/delete printer drivers. |
| prnjobs | List/pause/resume/cancel print jobs. |
| prnmngr | List/add/delete printers, display/set default printer. |
| prnport | List/create/delete TCP printer ports, display/change port configuration. |
| prnqctl | Clear printer queue, print a test page. |
| procdump | Monitor system for CPU spikes, generate a crash report during a spike. |
| prompt | Used to change the Prompt in CMD. |
| psexec | Run a CMD process on a remote computer. |
| psfile | Display remotely opened files, close an open file. |
| psinfo | List system information about a local/remote machine. |
| pskill | Kill a process(es) using its name or process ID. |
| pslist | Display process status and info about active processes. |
| psloggedon | See active users on machine. |
| psloglist | Display event log records. |
| pspasswd | Used to change account password. |
| psping | Used to measure network performance. |
| psservice | Display and control services on a machine. |
| psshutdown | Shutdown/restart/logoff/lock a local or remote machine. |
| pssuspend | Used to suspend a process on a local or remote computer. |
| pushd | Change current folder and store previous folder for use by POPD. |

Q – Windows CMD Commands

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| **Q** | **Description** |
| qgrep | Search file(s) for a given string pattern. |
| query process or qprocess | Display information about processes. |

R – Windows CMD Commands

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| **R** | **Description** |
| rasdial | Display Remote Access Service Status. |
| rasphone | Manage RAS connections. |
| rcp | Copy files to a computer running remote shell service. |
| recover | Recover readable data from a defective disk. |
| reg | Display/add/change registry keys and values in Windows registry. |
| regedit | Import/export/delete settings from a .reg text file. |
| regsvr32 | Used to register/unregister a DLL file. |
| regini | Used to change registry permissions. |
| relog | Export performance counters to other formats like TSV, CSV, SQL. |
| rem | Add comments in batch file. |
| ren | Used to rename a file(s). |
| replace | Used to replace a file with another file of same name. |
| reset session | Used to reset a remote desktop session. |
| rexec | Run commands on remote machines running Rexec service. |
| rd | Used to delete a folder(s). |
| rmdir | Used to delete a folder(s). |
| rmtshare | Manage file and printer shares local or remote servers. |
| robocopy | Used to copy files and folders that have changed. |
| route | Display/change the local IP routing table. |
| rsh | Run commands on remote servers running RSH service. |
| rsm | Manage media resources using Removable storage. |
| runas | Run a program as a different user. |
| rundll32 | Used to run a DLL program. |

S – Windows CMD Commands

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| **S** | **Description** |
| sc | Use Service Controller to manage Windows services. |
| schtasks | Schedule command(s) to run at a specific time. |
| secedit | Configure system security. |
| set | Display/set/remove environment variables in CMD. |
| setlocal | Control visibility of environment variables in a batch file. |
| setspn | Manage Service Principal Names for an Active Directory service account. |
| setx | Set Environment Variables permanently. |
| sfc | System File Checker |
| share | List/edit a file share or print on any computer. |
| shellrunas | Used to run a command as a different user. |
| shift | Change the position of the batch parameters in a batch file. |
| shortcut | Create a Windows shortcut. |
| shutdown | Shutdown the computer. |
| sleep | Put computer to sleep for specified number of seconds. |
| slmgr | Software Licensing Management tool for activation and KMS. |
| sort | Used to sort and display a redirected or piped input. |
| start | Start a program, command, or batch file. |
| strings | Find ANSI and UNICODE strings in binary files. |
| subinacl | Display/modify ACEs for file and folder permissions. |
| subst | Associate a path with a drive letter. |
| sysmon | Monitor and log system activity to Windows event log. |
| systeminfo | Display detailed configuration information about the computer. |

T – Windows CMD Commands

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| **T** | **Description** |
| takeown | Used to take the ownership of a file. |
| taskkill | Used to terminate on or more running processes. |
| tasklist | Display a list of running apps and services. |
| tcmsetup | Enable/disable TAPI client. |
| telnet | Communicate with a remote machine using TELNET protocol. |
| tftp | Transfer files to and from a remote machine running TFTP protocol. |
| time | Display/change system time. |
| timeout | Delay a batch file execution for specified seconds. |
| title | Change the text on top of CMD window. |
| touch | Change file timestamps. |
| tracerpt | Process event trace logs and generate trace analysis report. |
| tracert | Trace route to a remote host by sending ICMP request messages. |
| tree | Display a folder structure in the form of a graphical tree. |
| tsdiscon | Terminate a remote desktop connection. |
| tskill | Terminate a running process on a RD Session Host server. |
| tssutdn | Shutdown/reboot a terminal server remotely. |
| type | Show contents of a text file. |
| typeperf | Write performance data to a CMD window or a log file. |
| tzutil | Time Zone Utility. |

U – Windows CMD Commands

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| **U** | **Description** |
| unlodctr | Remove performance counter names and explain text for a service from the registry. |

V – Windows CMD Commands

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| **V** | **Descrption** |
| ver | Show version number of installed OS. |
| verify | Verify whether files are saved correctly on the disk. |
| vol | Show disk volume label and serial number. |
| vssadmin | Show shadow copy backups, installed shadow copy writers and providers. |

W – Windows CMD Commands

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| **W** | **Description** |
| w32tm | Access Windows Time Service Utility |
| waitfor | Used to synchronise events between networked computer(s). |
| wevtutil | Retrieve information about event logs and publishers. |
| where | Find and display file(s) in the current directory. |
| whoami | Display information about the active user. |
| windiff | Compare contents of two files or sets of files. |
| winrm | Windows Remote Management. |
| winrs | Windows Remote Shell. |
| wmic | Windows Management Instrumentation Command. |
| wuauclt | Windows Update Agent to download new update files. |

X – Windows CMD Commands

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| **X** | **Description** |
| xcalcs | Change ACLs for files and folders. |
| xcopy | Copy files or directory trees to another folder. |