Hyperiondev

Additional reading

Command Line

WHAT IS THE COMMAND LINE AND WHY DO YOU NEED IT?

The Command Line is a means of interacting with a computer program where the user issues commands to the program in the form of successive lines of text. With the Command Line, you can quickly issue instructions to your computer getting it to do precisely what you want it to do. The Command Line is rarely used by most end users since the advent of the Graphical User Interface (a more visual way of interacting with a computer using items such as windows, icons, menus etc.).

You need to be familiar with the command line to work with version control systems like git. Hence, this task will allow you to acquaint yourself with some of the basics of the Command Line.

FINDING THE COMMAND LINE

In Windows, you can simply click the Start menu and type `cmd` in the search box to locate the Command Line. Alternatively, the Command Line should be one of the options under 'Programs' and you can simply click on the application to open it.

With Mac OS, open the Command Line by opening the terminal. This can be done by opening the Applications folder, navigating to Utilities and then launching Terminal. Alternatively, you can search for "terminal" to find the application to launch.

COMMON WINDOWS COMMANDS

All commands that you will use with the Command Line have three parts: the utility, the flags and the arguments. The utility will always appear first. The other two parts have different rules, depending on which command you are using; you may not have to use any flags or arguments at all. For example, the following frequently used commands can be utilised without flags or arguments:

cd	Displays the name of or changes the current directory.
date	Displays or sets the date.
del	Deletes one or more files.
dir	Displays a list of files and subdirectories in a directory.

exit	Quits the cmd.exe (Command Line) program.
help	Provides help for Windows commands.
mkdir	Creates a directory.
rem	Renames a file or files.
rmdir	Removes a directory.
shutdown	Allows proper local or remote shutdown of a machine.
type	Displays the contents of a text file.
ver	Displays the Windows version.

COMMON MAC OS/UNIX COMMANDS

Notice some of the most commonly used terminal commands below.

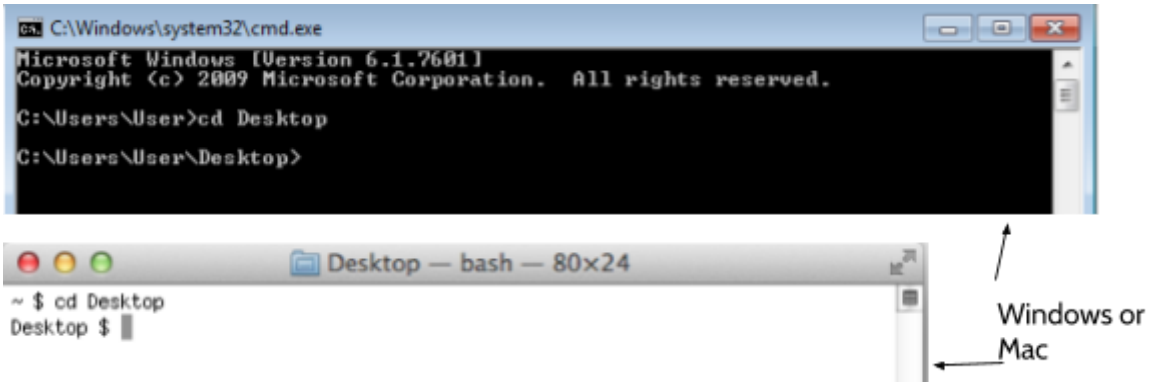
pwd	Print working directory. Displays the directory you are currently in.
cd	Change directory to the path specified.
touch	Creates a new file.
rm	Removes a file or directory.
ls	Displays a list of files and subdirectories in a directory.
q	Quits the terminal.
mkdir	Creates a directory.
mv	Moves/renames a file.
man	Show the help manual for a command.
whatis	Provides a one-line description of what a command does.

As you can see, the Command Line has the built-in `help` (Windows) or `man` (Mac OS/Linux) command. This can be used to view all the commands that are executable. At this point, why not type the `help/man` command into the command line of your computer and hit Enter to find out more about all the commands? To get help on a specific command, you have to type `help` followed by the command in Windows (like so):

OR type **man** followed by the command in Mac OS/Linux.

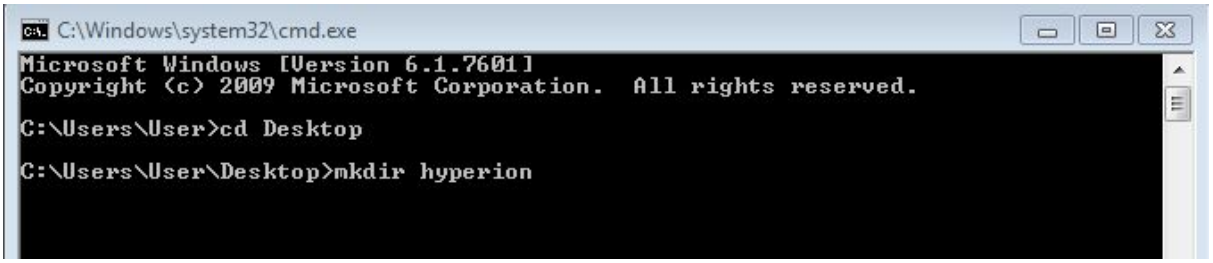
You could also type **whatis** followed by the command in Mac OS/Linux to get help. Compare the output you get with the **whatis** command with the output from the **man** command.

The command (in the images above) will give you the information about the **cd** command. As will be noted by the information provided by the Command Line, the **cd** command is used for navigation. It takes you from one directory to the next. For example, say you want to perform some command on a folder that is on your Desktop, you would have to type **cd** to change directory to your Desktop as shown in the images below.

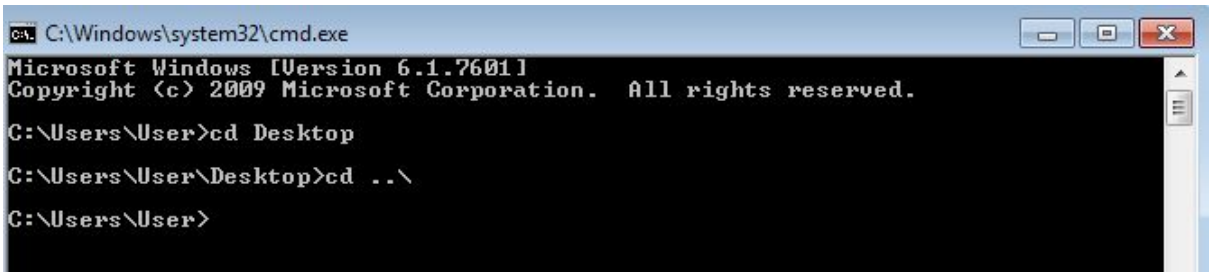


From here, we can now perform operations on the files or folders in our Desktop, since we have navigated into it. But, what if we have forgotten the name of the file or folder that we wanted to operate on? Well, you can simply use the **dir** (Windows) or **ls** (Mac OS/Linux) command to get a result of all the files or folders saved on the Desktop.

But, let's not alter any file or folder on the Desktop; instead let's create a new folder. Do you recall the command to use to make a new folder?



Notice that we have made a new folder on the Desktop called 'hyperion'. It's that simple! So, now that we have done what we wanted to do on our Desktop, how do we get back to where we were i.e. how do we navigate backwards?



To navigate two directories back, we would have to type, cd ..\..\. However, navigating back and forth may seem tedious to do. Wouldn't it be nice if we could figure out a way in which we could open a Command Window in any directory with minimal effort? Fortunately, you can with Windows! Simply hold shift and right-click on a folder or empty space to open a Command Window in that directory.