CP4P Keyboard shortcuts

**Using the keyboard – real programmers don’t use a mouse.**As you start and continue your career in programming, you will be looking for easier and faster ways to work within the GUI. Windows provides many shortcuts that you may find useful on a daily basis. We strongly recommend that you use these shortcuts. You will find that after using them for a short while they will become second nature and you will continue using them more and more.

Most shortcuts in the Windows GUI are based around the Ctrl, Alt, or Windows () key. Of course there is no recognition of a  key within Linux or Mac, however there are similar shortcuts within those OSs.

|  |  |
| --- | --- |
| **Mac key** | **Windows key** |
| Control | Ctrl |
| Option or Command Image result for macos control key symbol | Alt |
| Command Image result for macos control key symbol | Windows  |

See <https://support.microsoft.com/en-us/help/970299/keyboard-mappings-using-a-pc-keyboard-on-a-macintosh> and <https://www.howtogeek.com/188530/a-windows-users-guide-to-mac-os-x-keyboard-shortcuts/>

All of these shortcuts will work within Windows OS utilities and most within applications running under Windows. This cross-app functionality makes them even more useful to know!

There are 30 essential keyboard shortcuts. The most used ones are:

**Ctrl + Z – Undo**. You can undo as often as the application you're using is set to allow. Many applications allow you to set the number of undo levels.

**Ctrl + X – Cut** ( X looks like scissors )

**Ctrl + C – Copy** ( Copy starts with C )

**Ctrl + V – Paste** ( V looks like a glue tip )

 **+ V – clipboard history** (may need to turn on in Windows Settings)

Note these keys are in sequence. Move your left hand’s fingers down from the home row (ASDF) and your fingers will be on Z, X, C and V. Press the Ctrl key with your right hand.

Other shortcuts are:

1. CTRL + F1 – close/open the ribbon
2. Windows Key  + D – show/hide Desktop
3. Windows Key  + I – open Settings
4. Windows Key  + M – minimize all windows
5. Windows Key  + Shift + M – restore windows
6. Windows Key  + L – Lock PC or switch accounts
7. Windows Key  + R – open Run dialog box
8. Windows Key  + V – Clipboard history stack
9. CTRL + Right Arrow - move forward one word
10. CTRL + Left Arrow – move back one word
11. CTRL + Down Arrow – move to next paragraph
12. CTRL + Up Arrow – move to previous paragraph
13. CTRL + Home – move from current location to beginning of document
14. CTRL + End – move from current location to the end of
15. ALT + Shift + up arrow – moves item in table or list up one level
16. ALT + Shift + down arrow – moves item in table or list down one level
17. Hold SHIFT to in combination of above to select text
18. Windows Key  – open/close Start
19. Windows Key  + S – open Search
20. Windows Key  + T – cycle through apps on taskbar
21. Windows Key  + Home – minimizes all but active window, restores all windows on second stroke
22. Windows Key  + Shift + Up Arrow – stretches window top and bottom
23. Windows Key  + Shift + Down Arrow -Restore/minimize active desktop windows vertically, maintaining width

When using File Explorer:

Windows Key  + E – open File Explorer

Del – Delete the current item by sending it to Recycle Bin. The Recycle Bin can be emptied on demand or, when full, it will automatically remove (permanently delete) the oldest items.

Shift-Del – Delete the current item permanently.

File Explorer Search: see [Advanced Query Syntax](https://docs.microsoft.com/en-us/windows/win32/lwef/-search-2x-wds-aqsreference)

Ctrl + F – Find a file. Input any characters and it will do a general search on filenames and contents.

Enter something/anything in the search box and press Enter to get the Search Tools tab.

\*.fileExtension Finds files with a specific file extension, e.g. \*.c

name: CP4P Finds any filenames beginning with CP4P (as opposed to searching for the string “CP4P” in both file names and contents)

size: fileSize Finds files based on file size, e.g. size: >1GB

date: Finds files based on a date

kind: Finds files based on a type

**Moving through text:**You are probably used to using the arrow keys to navigate through a block of text, but there are keys to make it navigation much easier and faster:

Ctrl + 🡨, Ctrl +🡪: move cursor to the beginning of the previous and next words

Ctrl + 🡩, Ctrl + 🡫: move cursor to beginning of previous or next paragraph or text block

Shift + arrow key: Select text

Shift can be combined with Ctrl to select text to words or paragraphs

Ctrl + A: Select all

Windows OS-related:

<https://blogs.technet.microsoft.com/sebastianklenk/2015/05/28/windows-10-keyboard-shortcuts-at-a-glance/>

**Windows Key + TAB** to see all running apps,   
**Alt + TAB** to switch between running apps.

Alt + F4: Close current application

Ctrl + Esc: Open Start menu

Ctrl + Shift + Esc: Open Task Manager

Alt + Underlined Menu Item Letter: Open that menu. Use arrow keys to navigate menus

Windows usage:

You can navigate through the Windows operating system with the following keys:

Arrow keys will navigate through the current window, menu, etc.

Tab will shift focus to the next item. Within a program, the set of items will change – there may be any number of items to cycle through. Shift-Tab will shift focus to the previous item.

What is focus?

Focus is the currently active item. No matter what you're doing with your system at any time, you can only ever be doing one thing at a time. When we write code that executes with a GUI, we will commonly set up a tab index order; this defines which items receive focus in what order, when tab is pressed.

**Terminology:**

**GUI**: Acronym for Graphical User Interface. Sometimes pronounced "gooey". A shorthand that refers the graphical approach to an interface, usually including elements such as menus, icons, mouse/touch interaction, and other visual connections. The modern GUI was refined and defined by researchers at Xerox PARC and appropriated by Apple and then by Microsoft.

**Device**: Generally refers to any hardware attached to a computer. Could include monitor, mouse, keyboard, external hard drive, network card, printer, and so forth.

**Path**: Location of "where you are" in terms of current directory on the hard drive. The user is always in one and only one place.

**Execution**: Running a complied program, uses an *executable* file. If you run a program, technically you are executing it.