

# Command Line Interface (CLI)

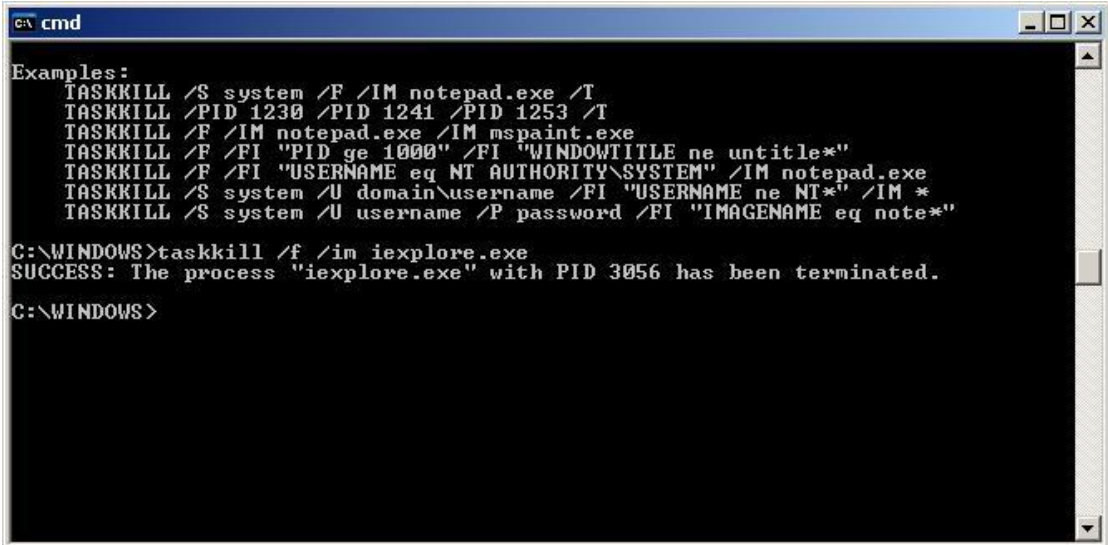
## PROS AND CONS

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## Description

CLI is an interface in which different text commands are written and then these commands are executed by the operating system. It is a text-based interface. CLI is most popular in the 1960s when there was no GUI (graphical user interface) available for computers.

During the early days, there was no mouse available for the operating system and users only interact with the system by typing commands in CLI.



```
cmd
Examples:
TASKKILL /S system /F /IM notepad.exe /T
TASKKILL /PID 1230 /PID 1241 /PID 1253 /T
TASKKILL /F /IM notepad.exe /IM mspaint.exe
TASKKILL /F /FI "PID ge 1000" /FI "WINDOWTITLE ne untitled*"
TASKKILL /F /FI "USERNAME eq NT AUTHORITY\SYSTEM" /IM notepad.exe
TASKKILL /S system /U domain\username /FI "USERNAME ne NT*" /IM *
TASKKILL /S system /U username /P password /FI "IMAGENAME eq note*"

C:\WINDOWS>taskkill /f /im iexplore.exe
SUCCESS: The process "iexplore.exe" with PID 3056 has been terminated.
C:\WINDOWS>
```

## ADVANTAGES

### **Fast performance:**

If you know how to use CLI and you are familiar with different commands, then your work will be completed fast as compared to using GUI. You can perform multiple tasks by entering commands in the CLI.

### **Requires few resources**

Because it deals with only text it does not require a lot of processing which gives you the ability to use the time not wasted in completing the required

task and not in processing the display of an image. As CLI is a text-based interface it can also run well on a low-resolution screen.

### **Autocomplete:**

When you type commands in the CLI then most of the commands are auto complete by clicking on the TAB button on the keyboard.

### **History of commands:**

If you execute commands in CLI then commands are saved in the history. You can use up/down arrows from the keyboard to reuse those commands again.

### **Preferred by experts**

CLI is concise and powerful.

## DISADVANTAGES

### **Difficult to remember:**

It is difficult to remember all the commands used in the CLI. UNIX has more than 100 commands for CLI. Some commands are used with other commands and remembering the sequence of commands is also difficult.

### **Not very intuitive**

The main reason why they are rarely used is because of the complexity of use. Normally a user does not know what to do when he comes across these types of interfaces. The learning process is long and often tedious when compared to graphical user interfaces which are much easier to use.

## Windows GUI



### **Error handling:**

If you write wrong commands by any typo then it may delete any file or move the file to the wrong location. If you accidentally delete any file then it creates a problem for you and maybe that file contains important information.

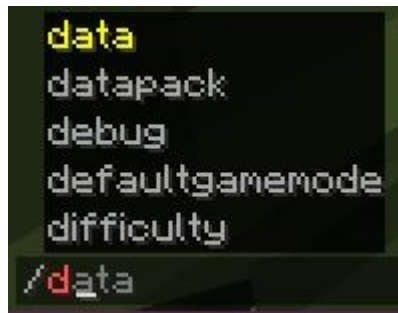
### **Not visually attractive**

Another weakness is that it only allows you to express things through plain text. Which leads us to not being able to view images, videos, work in multimedia editing, etc.

## CONCLUSION

I think it was created that way because the focus is on functionality and not necessarily simplicity when using it.

A way to make it more intuitive is creating a manual with the commands and their description. Another thing is adding a help resource for example:



Here when you write / and first letter it appears a set of options.