

IS IT BAD TO TURN OFF PC USING THE POWER BUTTON OR UNPLUGGING FROM THE SOCKET?

Whether pulling the plug to halt the system or to cause the PC to go off that's shutting down abruptly, has down sides. This in one way or the other rises only after a maximum number of tries. Or should I say for 99 times you would be on the safer side of using your PC over and over again after restart. But eventually on the 100th or so you could lose your Hard Drive. That's not to say that you literally after 99 tries lose your hard drive but it is to say that the down side takes a long time to arise. Better still I will explain the processes in details.

It's essentially the same thing to hit the "reset" button as well as it is very low-level and cannot be trapped by the operating system.

Operating systems have come a long way in handling failure scenarios. When the personal computer first came out all writes were directly to the media, there was little in the way between an application saying that a letter, say "A," needs to be written to a specific address on a floppy drive or hard drive, it just wrote the "A" and then waited for more. So, if the computer lost power, anything that was partially written to the storage was corrupted. This happened quite often, since nearly any crash in those early computers required a power cycle and the "power button" really deprived power instantly from the computer.

These days operating systems not only have "[write buffers](#)" they have [transactional writing](#) for most data. What this means is that the operating system is using temporary storage to store any data that is written. The first place for temporary storage is the memory of the computer. A section of memory is set aside to "pretend" to write the data to disk, but the actual write could come quite a bit later. The program writing the data generally has no idea this is happening.

The second place this is happening is the operating system writes the data to an unused part of the disk, but that data is not "linked" with the file until the write is successful.

This is not a perfect system, obviously, since there is still that moment when the data that was written to temp space gets linked into the file where it was designated to go, but the exposure to failure is much, much lower. The bottom line is that it isn't very likely that pulling the power or hitting the reset button is going to result in massive corruption of your data any more, but since that isn't 100% why do it? If you have the choice, use the "shutdown" in your operating

system, whether that happens in response to clicking a button with your mouse or using the “power button” on your case or laptop

Computers like to be turned off in an orderly manner so to allow some time to properly end processes and to save unfinished processes or writes.

REFERENCES:

https://en.wikipedia.org/wiki/Transaction_processing_system [Source: Wikipedia]

<https://www.quora.com/Is-it-bad-to-turn-off-my-PC-using-the-power-button> [Source : Quora]

<https://goo.gl/LFSGPd> [Source:google.com/books]