

Computers and Types

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Introduction

I must admit, I did have a somewhat difficult time deriving the title of this article – keeping it "short and to the point" was imperative. We will consider each of the applicable terms in turn.

Computer

The term "computer" is simply defined as, "*a programmable usually electronic machine that can store, get back again, and work with data*". Seems straightforward enough.

Computers – Two Components

A computer consists of two components, namely 1) hardware, and 2) software. The term "hardware" is simply defined as "*the equipment used for a particular purpose*", and the term "software", "*the programs and related information used by a computer*". Hardware then is what makes software *useable*, and software is what makes a computer system *functional*.

Types

The term "types" is defined as "*a particular kind, class, or group*". For our purposes here, we will use the term "types" to refer to 1) types of computer hardware, and 2) types of computer hardware. We will now consider each of these *types* in turn.

Types of Computer Hardware

For our purposes here, types of computer hardware will refer to *the two main types of computers* namely, 1) desktops, and 2) laptops. The primary differences between the two types of computers have to deal with *usage*, very simply – *what is the computer hardware being used for?* And this usage can be categorized into two distinct areas, 1) permanent, and 2) portable.

Example 1: Permanent

A desktop computer type is for permanent installations usage – primarily due to the *other* type of hardware that is required, such as a) the system unit, b) the monitor, c) the keyboard, and 4) the mouse. These four components comprise a desktop computer system. As a result, these four components are not easily "movable" – and therefore, are best suited to a permanent installation.

Example 2: Portable

A laptop computer type is, on the other hand, best suited for a more portable environment. All four of the hardware components that make-up a desktop computer system are *integrated* into one unified system.

Therefore, a laptop computer system lends itself more to being "moved around". This being said, it is possible to configure a laptop computer system to function similar to that of a desktop computer system. For example, it is possible to add an external monitor, keyboard, and mouse to a laptop computer system. This may provide the *portability* of a laptop-based system and the *convenience* of a desktop-based system.

Also, it is possible to obtain laptop-based systems that are referred to as "desktop replacements" and as such, have been referred to as "luggables" due entirely to their size and weight.

Types of Computer Software

As with computer hardware, for our purposes here, the types of computer software will refer to *the two main types of software* namely, 1) operating system software, and 2) application software. The primary differences between the two types of software are *in their purpose*, very simply – *what is the computer software designed to do?*

The Operating System Software

As we learnt earlier, software is what makes a computer system *functional* – and in particular, it is this operating system software that does so. Very simply, the operating system software "*sits*" on top of the hardware and acts as the interface between the actual hardware and the application software.

For example, Microsoft Windows XP, Microsoft Windows 7 and Microsoft Windows 10 are all operating system software. For MAC users, the operating system is called "OSX".

The Application Software

As the name suggests, application software permits the end-user – that is *you*, to be able *to apply a particular purpose* to the computer system hardware and the operating system software. Therefore, in a very real way, it is this application software that, at least from an end-user perspective, makes a computer system *truly usable*.

For example, Microsoft Office is a *suite* of software applications that permits the end-user to perform any of the following tasks: write a letter, create a birthday card, and create a financial statement – to name just a few. Other software applications permit the end-user to create movies, play games, send and receive email, surf the Internet, and so on.

Confusing the Types of Computer Software

It is important to be able to *distinguish between operating system software and application software* – especially when both types of software are provided by the same vender – such as Microsoft.

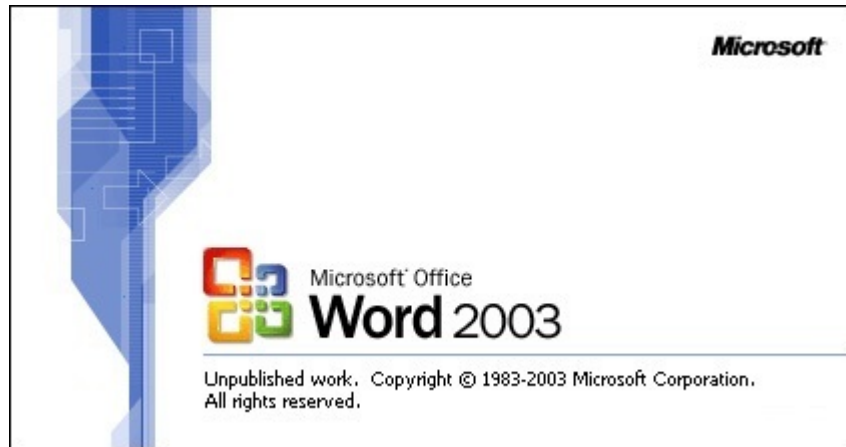
For example it is not at all uncommon to have clients refer to their computer system as having Windows 2007 – when what they are actually referring to is Microsoft Office suite and *not* the Windows operating system software. Therefore, it is possible to have Windows 95 and Office 2003 installed on the same system.

To determine the operating system software presently installed on your system, please refer to the following article: <https://support.microsoft.com/en-us/help/13443/windows-which-operating-system>.

To determine the Microsoft Office Suite software presently installed on your system is somewhat more difficult and therefore, if you consider yourself a novice, it may be preferable to have someone more experienced to obtain this information for you.

This being said, if you just happen to know that you do have Microsoft Office Word and/or Microsoft Office Excel available, then opening either of those applications will display a "splash screen" during the initial launch of the application.

For example, here is the splash screen for Microsoft Office Word 2003, and which is currently installed my Windows 7 computer,



Please keep in mind that there is Windows 10 – which is an operating system and Microsoft Office 2010 – which is application software. Ever though the numerical systems are similar, *both of these softwares are totally different.*



Take Time for Inventory

It is preferable to know what operating system and what application software are presently installed on your computer system. This "inventory acquisition" is particularly helpful if your computer "crashes" and therefore, would require the re-installation of both the operating system software and the application software. Though the service technician may be able to obtain this information for you, it will help in minimizing potential service costs knowing this information beforehand. This is particularly important with regards to "license keys" and/or "serial numbers" that may be required to perform the re-installation of such softwares. Not having this information may result in having to re-purchase such software.

In closing...

I sincerely hope that you will find this information of some practicable use. I thank you for your time and interest to the above.

Sincerely,

Dell Krauchi