

# Unix versus windows essay sample



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Operating systems are the software components of computer systems, which are responsible for the coordination of activities and the sharing of resources of computers. They serve as hosts for applications that are run on the machines. One purpose of operating systems includes handling details of the operation of the hardware. Thus, operating systems are the most important program that runs a computer as they perform basic tasks including input from keyboard, sending output to the screen, keeping files and directories on the disk, and controlling devices such as printers and disk drives.

Two of the most common contemporary operating systems are UNIX and Microsoft Windows. The UNIX operating system lets a number of programmers to access the computer at the same time while sharing its resources. It coordinates the use of the computer's resources, which allows a user, say, to edit a document while another creates graphics all at the same time. More so, UNIX controls the commands from all of the keyboards as well as the data being generated. Thus, the real-time sharing capability of UNIX makes it one of the most powerful operating systems today.

Some of the most popular features of UNIX include multitasking capability, multi-user capability, portability, library of application software, and its own programs. The multitasking capability of UNIX lets a computer do several things simultaneously. It is a major feature the users appreciate as it lessens their time of work. The multi-user capability of UNIX permits multiple users to use the computer. The computer is able to take commands from multiple users including running programs, printing documents, and accessing files all at the same time. UNIX's portability permits the system to move from one

brand of computer to another with minimum changes in codes. It allows upgrades in computers without inputting data over again. New versions of UNIX make upgrades easier for companies that use older versions of the operating system. The programs of UNIX can be classified into two: integral utilities and tools with additional capabilities. The integral utilities are necessary for the operation of the computer while the tools with additional capabilities such as e-mail and typesetting capabilities, are not necessary for the operation of UNIX; however, it provides users additional benefits of the operating system.

On the other hand, Microsoft Windows operating systems were founded as an add-on to the older operating system, MS-DOS. It dominates the personal computer market in the world. The most recent client version of Windows is Windows Vista while the most recent server version is Windows Server 2008.

The major features of Microsoft Windows, specifically its new versions, include improved magnification capabilities, new speech recognition that allows users to interact with their computers through their voices, ease of access center that allows users to see, hear, and use computers, and improved text-to-speech capabilities through Microsoft Narrator.

It is truly difficult to pick the better operating system between UNIX and Microsoft Windows. The choice depends on the needs of the user. The language that a site is programmed in primarily dictates the type of hosting a user needs. In terms of stability, UNIX systems have many factors ahead of Microsoft Windows. Servers that run on UNIX have higher up-time as well as higher availability and reliability compared to servers that run on

Microsoft Windows. UNIX handles high server loads and does not usually require reboots. On the other hand, Microsoft Windows constantly needs rebooting. In terms of performance, both operating systems perform in low-stress conditions. However, servers that are run on UNIX are superior to Microsoft Windows under high load.

In web-hosting, web sites change over time. Web sites usually start small and expand according to the needs of the users or organization running them. Microsoft Windows hosting are more compatible with UNIX-based programming features including MySQL and PHP. On the other hand, a web software that is UNIX-based is not always compatible with Microsoft technologies such as VB and . NET development. Thus, if users need these features, Microsoft Windows is more preferable.

In terms of compatibility, UNIX-based servers can be hosted on a Microsoft Windows server. However, the reverse does not always yield the same result. Thus, in terms of programming, UNIX is a better choice.

Below is a diagram that summarizes the different components and features of UNIX and Microsoft Windows for better comparison:

Features	UNIX	MICROSOFT WINDOWS
MS Front Page 2000, 2002	Yes	Yes
Flash	Yes	Yes

Shock wave	Yes	Yes
Real Audio/Video	Yes	Yes
Cgi-script	Yes	Yes
Perl	Yes	Yes
PHP	Yes	Yes
SSH (Secure Telnet	Yes	Yes
MySQL	Yes	Yes
osCommerce	Yes	Yes
ASP (active server pages)		Yes
MS Access		Yes
MS SQL		Yes
Visual Basic Scripts		Yes
Windows Media		Yes
Components	UNIX	MICROSOFT WINDOWS
Ease of Use		

Reliability

Speed

Functionality

Price

Integration of Microsoft  
solutions

Free Open Source  
Software

## EASE OF USE

In recent years, many have attempted to make hosting as easy as possible through digging deeper into UNIX and Microsoft Windows. At present, no differences exist in terms of which one is easier to use between the two operating systems. Advanced users working in shell environments prefer UNIX while beginners prefer Microsoft Windows.

## RELIABILITY

Although majority of users prefer UNIX over Microsoft Windows in terms of reliability, some users attest that Windows 2000 matches the features of UNIX. Thus, this goes to say that rather than deciding based on reliability, users have the preference to decide based on the features of both operating systems.

## SPEED

Again, no difference exists between UNIX and Microsoft Windows in terms of speed.

## FUNCTIONALITY

The main difference between UNIX and Microsoft Windows in terms of functionality is primarily how the result is achieved. Say, if a user needs a database-driven web site, the user can choose either PHP/MySQL combination run on UNIX or ASP/MS SQL run under Microsoft Windows. For solutions, the trend is for them to be supported in both UNIX and Microsoft Windows.

## PRICE

In terms of price, UNIX holds an edge of Microsoft Windows since most of its software licenses are free and cheaper to maintain compared to Microsoft Windows servers for the same degree of performance and level of reliability. A user may determine that hosting prices do not reflect this; however, a range of hosts will charge users more for Windows hosting. Thus, it is more preferable to use UNIX operating systems due to its cost efficiency, reliability, and greater speed unless specific features such as ASP, Visual Basic, MSSQL Databases are needed.

Based on the comparison and contrast of features, UNIX operating system is preferable to use than Microsoft Windows because it performs faster. More so, it is more stable and more compatible than Windows-based servers.

However, if users need to develop in Visual Basic or .NET, Microsoft Windows is more ideal.

Reference:

Ritchie, C. (2003). *Operating Systems: Incorporating Unix and Windows* .  
London: Thomson Learning.