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### The Comparison of Windows OS and Linux OS

The comparison of windows os and Linux os has been a ongoing debate of which is better. When comparing today's versions of Linux and windows they both give each other a run for their money.

There is many aspects of comparing both windows and Linux OS. The list has dozens of comparisons that I will limit this comparison to the three here that has been chosen. The few that I will compare will be the security of both OS, there user interface desktop environments, the last comparison will be the applications between Windows and Linux.

The security comparisons of the two operating systems may be difficult to make a fair, apple to apple comparison because of the quantity of window os systems to Linux os along with how tightly windows systems are connected to the Linux systems that are more loosely connected. The market share so far for person pc is outweighed by more windows systems than Linux, but in the supercomputer section Linux seems to be the main choice. The quantities of pc Windows systems make Windows a larger target for malware. Michael Horowitz in the article "Linux vs. Windows" makes a guess that Windows controls 98% of the personal pc market. This large number makes windows more susceptible to malware. Because Windows system are all tightly binary-compatible, a single successful attack can affect a large fraction of them ("cascade failure"); Whereas different Linux distributions are more loosely coupled with source compatibility and different selections of software reduce the chance of a single bug affecting all Linux computers. (Wikipedia). Ultimately, because windows has a larger market share, and its tight connection to other windows based pc's making itself a larger target for malware.

The user interface, desktop environments of both Linux and Windows are both modifiable. But the difference is Windows requires third party applications to make those adjustments. Jack Wallen describes windows environments to be immovable without third party software. His example of windows is that windows ceiling is a ceiling and the floor is the floor. Wallen goes on with Linux being able to take the ceiling and lower it to a place the user wants and the same with the floor, raising it to a level the user desires without third party software. The article "Windows vs. Linux/OSS today, part 2: Linux experts see strong server, weak desktop" by Jan Stafford, writes that a user- and Integration friendlier Linux could kick windows operating system out of the data center all together. The Linux desktop interface is the most flexible environment there is on a computer for those who like more personal control of their PC. If you're the type that likes compatibility, ease of use ,plug n play and require little to no modifications Windows OS would be a preferable choice due to it market saturation and application software availability.

The application software between Linux and Windows OS is very different to the aspect of how well they interact with each other in each environment. Jack Wallen in the article "10 things Linux does better than Windows." writes that Windows plays really well with windows and Linux plays well with everyone. Again Windows makes it very difficult to work with other system without third party software. A great example is the comparison of Windows Offices versions and OpenOffice that is used with Linux. OpenOffice, you can open and save in most any format regardless of release date. With Ms Office attempting to open and save, your limited to small list of formats and really limited to the release dates of Office formats. This is one example of being limited only identical Window OS with the identical application. The only thing that saves MS Windows is their market saturation on PC's.

Ultimately the preference is up to the user. The user has preferences that will weigh the pros and cons of each operating system. Those decisions will be based off of how compatible you want to be between all operating systems. If your use is basic then having a Windows based pc would be the system

to lean on for its market share of having a rough guess of 98%. The decision would fall to the Linux system if you're a user that enjoys more control of the desktop environment. Having the ability to change overall look and function without having to download, add, then adjust software applications to get your system to where you want it to be seems to be a great ability with Linux operating systems.

The overall security issues between Windows and Linux are relative to the percentages of each operating system in use. An example of that percentage would be, if there is a million pc's in the world and using the guess from Horowitz that 98% are Windows and then 2% are Linux and there where a 1% of malware affecting those systems. Then out of 980,000 pc's 19,600 would have been at some point affected by malware. And with Linux, out of 20,000 pc's 200 would have been at some point affected by malware. 200 compared to 19,600 seem like a big difference, but ratios are the same. I like a little more control with my PC. I like that OpenOffice does not have the same limitations of MS Office. I have not used Linux before, but after this research I have found to lean towards a Linux preference. I most likely keep my main system with Windows 7 and then have a separate computer with Linux until I became confident with its abilities before I walked completely away from Windows.

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