

Good essay about pos-355

[Technology](#), [Development](#)



An operating system is a set of programs and instructions written by programmers that are executed to schedule tasks and processes in a computing device. Additionally, it provides an interface between the user and the computer or mobile device. The operating systems in the market vary greatly and are used for different purposes. However, the great difference lies in the source. An operating system can either be closed source or open source.

Closed source operating system

The principle behind the closed source operating system is the inability of the user to access the source code of the operating system. Despite the fact that the user may purchase the system and is given the license to use it, they cannot access the operating system's source code. Additionally, end users are not allowed to see how the system is implemented. Examples of closed source operating systems include Microsoft Windows and Apple OS X operating systems. These operating systems are used mainly in Personal Computers, Servers and even mobile devices.

Open source operating system

The open source operating system allows the end user to access the source code and the implementation of the system. Many open source operating systems licenses allow users to amend and redistribute the system or software. Open source operating systems are currently in use for mobile devices, servers and desktop devices. Majority of the web servers that are currently in use operate on an open source operating system platform. The most common open source operating system is Linux that has been in use

since 2011. With the increase in mobile computing technology open source systems such as Ubuntu Linux, Android systems and Google's chrome have been developed.

The difference between open source and closed source operating systems.

The difference between an open source and closed operating system is the nature of the code. Open source code system is one which the source is visible whereas a closed source system is one whose source code is hidden. The difference is not only in the visibility of the code but also in the development of the systems. Closed operating systems are mainly developed by corporations and the maintenance is done by personnel within the organization. On the other hand, open systems are developed by communities and maintained individually, the visibility of the code allows one to easily identify and fix problems unlike a closed operating system. This could both be advantageous and disadvantageous at the same time. Given the closed nature of closed source systems debugging becomes a challenge to the users and the organization at large. The organization is forced to also budget for debugging.

Another difference is the cost. In a closed source operating system, there are additional costs apart from the operating system costs which include add-ons that the user may require. Open source operating systems have a variety of options; they have many free add-ons that are available under the GNU public license hence less costly compared to the closed source operating systems.

The open source operating systems are user friendly compared to the closed

source systems. The users can easily work as a community and offer each other support and help unlike in the closed source system.

Exploits that allow remote and local access to the system through hacking and other unauthorized access are easily discovered in a closed source system. However, the users have to wait for the organization or company to release a patch which normally takes weeks or even months; in the meantime the users are exposed to this vulnerability. On the other hand the open source operating system allows the community of users to come to the rescue in case of such eventuality. The users can help one another and deploy patches that easily solve the problem.

References

Jason, M. (2004, 09 30). Open source Vs Closed source Systems. Retrieved February 26, 2014, from Security Focus: [http://www. securityfocus. com/columnists/269](http://www.securityfocus.com/columnists/269)