Operating systems

Technology, Information Technology

Operating Systems The two sections that important for this discussion are the Linux I/O and Windows I/O. The Linux I/O service mainly offers the tools used for program profiling and monitoring the performance of the computer CPU. Disk scheduling in Linux allows the execution of many program processes at the same time. The Linux Page Cache aids in fast data access and transmission. This is because during an I/O operation, such as disk read information, the operating system kernel checks for data in the page cache to facilitate fast reading of the data.

The advancements in the Linux I/O services is the optimization of disk scheduling through the use of multilevel queues and priority scheduling to enable the execution of many program processes. Setting these commands provides an end user with the robust set of tools to manage file operation and process execution within an operating system. The Linux I/O services will change society a great deal since the optimization of disk scheduling and page cache services are essential for quick program execution, therefore saving time. It is also important for performing read/write services on a computer hard disk (memory) through satisfying fast mapping of data (Bovet, Daniel & Marco 599).

The Windows I/O concept offers subjects that describe the applications that control the input and output services that assist in data access from and data writing to the computer hard disk (memory). One basic I/O facility utilized by window operating system is the Asynchronous and Synchronous I/O, which both offer necessary operations for facilitating communication and fast processing of information within a system. In a synchronous I/O operation, programs are placed on a wait state while in an asynchronous I/O

operation; program or process execution request can be interrupted to enable the execution of another program (Russinovich, Mark, David & Alex Ch. 7).

The advancements made in the basic windows I/O operations include the optimization of processing efficiency. This mechanism majorly entails the processing of large data or information within the shortest time possible without having to interrupt other prior made I/O requests made by a system user. Uninterrupted program execution ensures there is no loss of data or delay of displaying outputs during the I/O operations.

Work Cited

Bovet, Daniel P, and Marco Cesati. Understanding the Linux Kernel. Sebastopol: OReilly Media, Inc, 2007. Internet resource.

Russinovich, Mark E, David A. Solomon, and Alex Ionescu. Windows® Internals. New York: OReilly Media, Inc, 2009. Print.