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{"status":{"code":"0","msg":"OK","credits":"26","remaining_credits":"19761"},"summary":"An operating system (OS) is system software that manages computer hardware, software resources, and provides common services for computer programs. Time-sharing operating systems schedule tasks for efficient use of the system and may also include accounting software for cost allocation of processor time, mass storage, printing, and other resources. For hardware functions such as input and output and memory allocation, the operating system acts as an intermediary between programs and the computer hardware, although the application code is usually executed directly by the hardware and frequently makes system calls to an OS function or is interrupted by it. Operating systems are found on many devices that contain a computer – from cellular phones and video game consoles to web servers and supercomputers. The dominant desktop operating system is Microsoft Windows with a market share of around 82.74%. [...] A library operating system is one in which the services that a typical operating system provides, such as networking, are provided in the form of libraries and composed with the application and configuration code to construct a unikernel: a specialized, single address space, machine image that can be deployed to cloud or embedded environments. [...] Other operating systems used on IBM S\/360 series mainframes included systems developed by IBM: COS\/360 (Compatibility Operating System), DOS\/360 (Disk Operating System), TSS\/360 (Time Sharing System), TOS\/360 (Tape Operating System), BOS\/360 (Basic Operating System), and ACP (Airline Control Program), as well as a few non-IBM systems: MTS (Michigan Terminal System), MUSIC (Multi-User System for Interactive Computing), and ORVYL (Stanford Timesharing System). [...] He would lead the development of the Windows NT operating system, which

continues to serve as the basis for Microsoft's operating systems line. [...] Yet other operating systems are used almost exclusively in academia, for operating systems education or to do research on operating system concepts. [...] Interrupts are central to operating systems, as they provide an efficient way for the operating system to interact with and react to its environment. [...] While many simpler operating systems support a limited range of options for accessing storage systems, operating systems like UNIX and Linux support a technology known as a virtual file system or VFS. An operating system such as UNIX supports a wide array of storage devices, regardless of their design or file systems, allowing them to be accessed through a common application programming interface (API). [...] Under Windows, each file system is usually limited in application to certain media; for example, CDs must use ISO 9660 or UDF, and as of Windows Vista, NTFS is the only file system which the operating system can be installed on. [...] This became of vital importance to operating system makers, because the TCSEC was used to evaluate, classify and select trusted operating systems being considered for the processing, storage and retrieval of sensitive or classified information. [...] An alternative strategy, and the only sandbox strategy available in systems that do not meet the Popek and Goldberg virtualization requirements, is where the operating system is not running user programs as native code, but instead either emulates a processor or provides a host for a p-code based system such as Java."}