System software

Article Talk Read Edit View history Tools

From Wikipedia, the free encyclopedia

Q Search Wikipedia

This article is about system software in general. For Apple Inc's old operating system, formerly named "System Software", see Classic Mac OS.



System software is software designed to provide a platform for other software. An example of system software is an operating system (OS) (like macOS, Linux, Android, and Microsoft Windows).^[1]

Application software is software that allows users to do user-oriented tasks such as creating text documents, playing or developing games, creating presentations, listening to music, drawing pictures, or browsing the web. Examples of such software are computational science software, game engines, search engines, industrial automation, and software as a service applications.^[2]

In the late 1940s, application software was custom-written by computer users to fit their specific hardware and requirements. System software was usually supplied by the manufacturer of the computer hardware and was intended to be used by most or all users of that system.

Many operating systems come pre-packaged with basic application software. Such software is not considered system software when it can be uninstalled without affecting the functioning of other software. Examples of such software are games and simple editing tools supplied with Microsoft Windows, or software development toolchains supplied with many Linux distributions.

Some of the grayer areas between system and application software are web browsers integrated deeply into the operating system such as Internet Explorer in some versions of Microsoft Windows, or ChromeOS where the browser functions as the only user interface and the only way to run programs (and other web browser their place). [clarification needed]

Operating systems or system control program [edit]

The operating system (prominent examples being Microsoft Windows, macOS, Linux, and z/OS), allows the parts of a computer to work together by performing tasks like transferring data between memory and disks or rendering output onto a display device. It provides a platform (hardware abstraction layer) to run high-level system software and application software. [citation needed]

A kernel is the core part of the operating system that defines an application programming interface for applications programs (including some system software) and an interface to device drivers.

Device drivers and firmware, including computer BIOS or UEFI, provide basic functionality to operate and control the hardware connected to or built into the computer.

A user interface interacts with a computer.^[3] It can either be a command-line interface (CLI) or, since the 1980s, a graphical user interface (GUI). This is the part of the operating system the user directly interacts with; it is considered an application and not system software.

Utility software or system support programs [edit]

Some organizations use the term systems programmer to describe a job function that is more accurately termed systems administrator. Software tools these employees use are then called system software. This utility software helps to analyze, configure, optimize and maintain the computer, such as virus protection. The term system software can also include software development tools (like a compiler, linker, or debugger).^[4]

See also [edit]

- System programming
- System programming language
- IBM mainframe utility programs

System software of video game consoles

- From Microsoft:
 - Xbox 360 system software
- Xbox One system software
- From Nintendo:
- Wii system software
- Wii U system software
- Nintendo DSi system software
- Nintendo 3DS system software
 Nintendo Switch system software
- From Sony:
 - PlayStation 3 system software
 - PlayStation 4 system software
 - PlayStation Portable system software PlayStation Vita system software

References [edit]

- 1. ^ "Panel: Systems Programming in 2014 and Beyond" 2. Microsoft. Archived from the original 2. on 2014-06-07. Retrieved 4 December 2015.
- 2. ^ Millner, W. W.; Montgomery-Smith, Ann (2022). *Information and Communication Technology for Intermediate GNVQ*. p. 126.
- 3. ^ "Microcomputer Information Technology" ∠. Retrieved 2013-09-22.
- 4. ^ "What is systems software?" 2. Webopedia.com. May 24, 2021 [September 1, 1996]. Retrieved 2022-06-24.

External links [edit]

• Sammet, Jean (October 1971). "Brief Survey of Languages Used for Systems Implementation" ∠. ACM SIGPLAN Notices. 6 (9): 1–19. doi:10.1145/942596.807055 ∂.



 Authority control databases ✓
 [hide]

 National
 Germany ♂ · United States ♂ · France ♂ · BnF data ♂ · Israel ♂
 Other
 Yale LUX ♂

Category: System software

This page was last edited on 28 August 2025, at 12:41 (UTC)

