

Windows 1.0

Windows 1.0 is a graphical operating environment for personal computers, developed by Microsoft. Microsoft had worked with Apple Computer to develop applications for Apple's 1984 original Macintosh, the first mass-produced personal computer with a graphical user-interface (GUI) that enabled users to see user-friendly icons on screen. Microsoft released Windows 1.0 on November 6, 1985, as the first version of the Microsoft Windows line. It is a type of software that runs as a graphical, 16-bit multi-tasking shell on top of an existing MS-DOS installation, providing an environment which can run graphical programs designed for Windows, as well as existing MS-DOS software. Microsoft's founder Bill Gates spearheaded the development of Windows 1.0 after he saw a demonstration of a similar software suite, Visi On, at COMDEX in 1982.

Despite positive responses to early presentations and support from a number of hardware- and software-makers, critics received Windows 1.0 poorly, feeling that it did not meet their expectations. In particular, they raised concerns about the lack of resources for new users, and performance issues, especially on systems with lower hardware specifications.

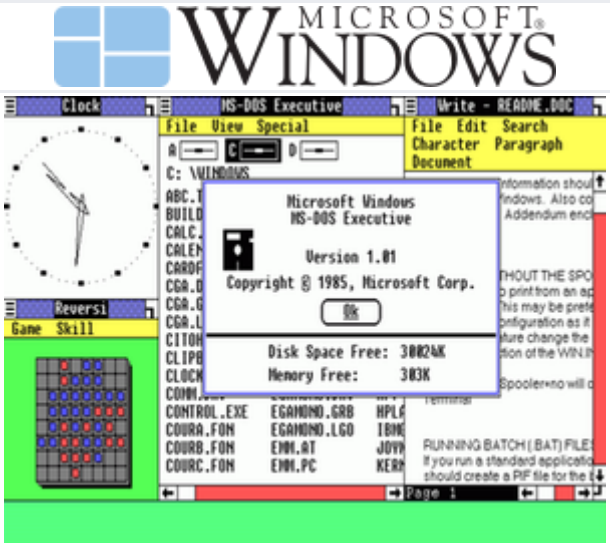
Despite the criticisms, Windows 1.0 proved an important milestone for Microsoft, as it introduced the Microsoft Windows line.^[3]

On December 31, 2001, Microsoft declared Windows 1.0 obsolete and stopped providing support and updates for the system.

Contents
History
Release versions: Windows 1.00–1.04
Succession: Windows 2.0
Features
Reception
See also
References
External links

Windows 1.0

A version of the Microsoft Windows operating system



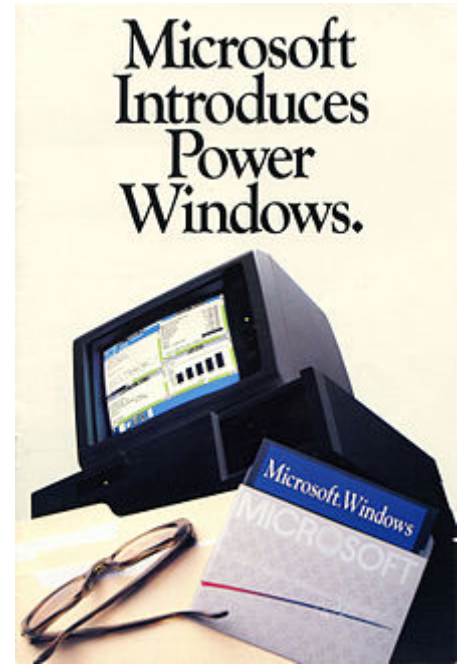
Screenshot of Microsoft Windows 1.01

Developer	Microsoft
Source model	Closed source
Released to manufacturing	November 6, 1985 ^[1]
Latest release	1.04 / April 1987 ^[1]
Available in	English
License	Commercial software
Preceded by	MS-DOS (1981-2000)
Succeeded by	Windows 2.0 (1987)
Support status	
Unsupported as of December 31, 2001 ^[2]	

History

Microsoft began developing a graphical user interface (GUI) in 1981.^[4] The development of Windows began after Microsoft founder Bill Gates saw a demonstration at COMDEX 1982 of VisiCorp's Visi On, a GUI software suite for IBM PC compatible computers.^[5] In 1983 Microsoft learned that Apple's own GUI software—also bit-mapped, and based in part on research from Xerox PARC—was much more advanced; Microsoft decided they needed to differentiate their own offering.^[4] In August 1983, Gates recruited Scott McGregor, one of the key developers behind PARC's original windowing system, to be the developer team lead for Windows 1.0^{[6][7][8]}

Microsoft first presented Windows to the public on November 10, 1983.^[9] Requiring two floppy disk drives and 192 KB of RAM, Microsoft described the software as a device driver for MS-DOS 2.0. By supporting cooperative multitasking in tilled windows when using well-behaved applications that only used DOS system calls, and permitting non-well-behaved applications to run in a full screen, Windows differed from both Visi On and Apple Computer's Lisa by immediately offering many applications. Unlike Visi On, Windows developers did not need to use Unix to develop IBM PC applications; Microsoft planned to encourage other companies, including competitors, to develop programs for Windows by not requiring a Microsoft user interface in their applications.^[10]



A Microsoft Windows 1.0 brochure published in January 1986

Many manufacturers of MS-DOS computers such as Compaq, Zenith, and DEC promised to provide support, as did software companies such as Ashton-Tate and Lotus.^[9] After previewing Windows, BYTE magazine stated in December 1983 that it "seems to offer remarkable openness, reconfigurability, and transportability as well as modest hardware requirements and pricing ... Barring a surprise product introduction from another company, Microsoft Windows will be the first large-scale test of the desktop metaphor in the hands of its intended users".^[10]

From early in Windows' history Gates viewed it as Microsoft's future. He told *InfoWorld* magazine in April 1984 that "Our strategies and energies as a company are totally committed to Windows, in the same way that we're committed to operating-system kernels like MS-DOS and Xenix. We're also saying that only applications that take advantage of Windows will be competitive in the long run."^[11] IBM was notably absent from Microsoft's announcement,^[9] and by late 1984, the press reported a "War of the Windows" between Windows, IBM TopView, and Digital Research's Graphics Environment Manager (GEM).^[12]

Microsoft had promised in November 1983 to ship Windows by April 1984,^[9] but subsequently denied that it had announced a release date, and predicted that Windows would ship by June 1985. During its development and before its windowing system was developed, it was briefly referred to by the codename "Interface Manager".^[13] De-emphasizing multitasking, the company stated that Windows' purpose, unlike that of TopView, was to "turn the computer into a graphics-rich environment" while using less memory.^[12] After Microsoft persuaded IBM that the latter needed a GUI,^[4] in April 1987 the two companies announced the introduction of OS/2 and its graphical OS/2 Presentation Manager, which were supposed to ultimately replace both MS-DOS and Windows.^[14]

Release versions: Windows 1.00–1.04

Windows version 1.00, released on November 6, 1985, was the first public release of Windows.^[15] The first international release, Windows 1.01, was released in November 20, 1985. Windows version 1.02, was released in May 1986. Windows version 1.03, released in August 1986, included enhancements that made it consistent with the international release like drivers for European keyboards and additional screen and printer drivers. Windows version 1.04, released in April 1987, added support for the new IBM PS/2 computers, although no support for PS/2 mice or new VGA graphics modes was provided.^[16] However, on May 27, 1987, an OEM version was released by IBM, which added VGA support, PS/2 mouse support, MCGA support, and support for the 8514/A display driver.^{[17][18]} IBM released this version on three 3.5 inch 720k floppies, and offered it as part of their "Personal Publishing System" and "Collegiate Kit" bundles.^[17]

Microsoft supported Windows 1.0 for 16 years, until December 31, 2001 – the longest out of all versions of Windows.^[2]

Succession: Windows 2.0

In December 1987, Windows 1.0 was succeeded by Windows 2.0.

Features

Windows 1.0 offers limited multitasking of existing MS-DOS programs and concentrates on creating an interaction paradigm (cf. message loop), an execution model and a stable API for native programs for the future. Due to Microsoft's extensive support for backward compatibility, it is not only possible to execute Windows 1.0 binary programs on current versions (albeit only 32-bit) of Windows to a large extent, but also to recompile their source code into an equally functional "modern" application with just limited modifications. Windows 1.0 is often regarded as a "front-end to the MS-DOS operating system", a description which has also been applied to subsequent versions of Windows. Windows 1.0 is an MS-DOS program. Windows 1.0 programs can call MS-DOS functions, and GUI programs are run from .exe files just like MS-DOS programs. However, Windows .exe files had their own "new executable" (NE) file format, which only Windows could process and which, for example, allowed demand-loading of code and data. Applications were supposed to handle memory only through Windows' own memory management system, which implemented a software-based virtual memory scheme allowing for applications larger than available RAM.



Multitasking capabilities of Microsoft Windows 1.01 released in 1985, here shown running the MS-DOS Executive and Calculator programs

Because graphics support in MS-DOS is extremely limited, MS-DOS applications have to go to the bare hardware (or sometimes just to the BIOS) to get work done. Therefore, Windows 1.0 included original device drivers for video cards, a mouse, keyboards, printers and serial communications, and applications were supposed to only invoke APIs built upon these drivers. However, this extended to other APIs such as file system management functions. In this sense, Windows 1.0 was designed to be extended into a full-fledged operating system, rather than being just a graphics environment used by applications. Indeed, Windows 1.0 is a "DOS front-end" and cannot operate without a DOS environment (it uses, for example, the file-handling functions provided by DOS). The level of replacement increases in subsequent versions. The system requirements for Windows 1.01 constituted CGA/HGC/EGA (listed as "Monochrome or color monitor"), MS-DOS 2.0, 256 KB of memory or greater, and two double-sided disk drives or a hard drive.^[1] Beginning with version 1.03, support for Tandy and AT&T graphics modes was added.

Windows 1.0 runs a shell program known as the MS-DOS Executive, which is little more than a mouse-able output of the DIR command that does not support icons and is not Y2K-compliant. Other supplied programs are Calculator, Calendar, Clipboard Viewer, Clock, Notepad, Paint, Reversi, Cardfile, Terminal and Write. Windows 1.0 does not allow overlapping windows. Instead all windows are tiled. Only dialog boxes can appear over other windows, but cannot be minimized.



MS-DOS Executive file manager.

Reception

Windows 1.0 was released to mixed reviews. Most critics considered the platform to have future potential, but that Windows 1.0 had not fulfilled expectations. Many reviews criticized its demanding system requirements, especially noting the poor performance experienced when running multiple applications at once, and that Windows encouraged the use of a mouse for navigation, a relatively new concept at the time.^[5] *The New York Times* compared the performance of Windows on a system with 512 KB of RAM to "pouring molasses in the Arctic", and that its design was inflexible for keyboard users due to its dependency on a mouse-oriented interface. In conclusion, the *Times* felt that the poor performance, lack of dedicated software, uncertain compatibility with DOS programs, and the lack of tutorials for new users made DOS-based software such as Borland Sidekick (which could provide a similar assortment of accessories and multitasking functionality) more desirable for most PC users.^[19]

In retrospect, Windows 1.0 was regarded as a flop by contemporary technology publications, who, however, still acknowledged its overall importance to the history of the Windows line.^{[3][5]} Nathaniel Borenstein (who went on to develop the MIME standards) and his IT team at Carnegie Mellon University were also critical of Windows when it was first presented to them by a group of Microsoft representatives. Underestimating the future impact of the platform, he believed that in comparison to an in-house window manager, "these guys came in with this pathetic and naïve system. We just knew they were never going to accomplish anything."^[20] *The Verge* considered the poor reception towards the release of Windows 8 in 2012 as a parallel to Microsoft's struggles with early versions of Windows. In a similar fashion to Windows 1.0 running atop MS-DOS as a layer, Windows 8 offered a new type of interface and software geared towards an emerging form of human interface device on PCs, in this case, a touchscreen, running atop the legacy Windows shell used by previous versions.^[5]

A mock version of Windows 1.0 was created by Microsoft as an app for Windows 10 as part of a tie-in with the Netflix show, *Stranger Things*, aligned with the release of the show's third season, which takes place during 1985.^[21]

See also

- Comparison of file managers
- DESQview
- OS/2
- System 1 on Macintosh
- TopView

References

- "Windows Version History" (<https://web.archive.org/web/20061107143753/http://support.microsoft.com/kb/32905>). *Support* (4.0 ed.). Microsoft. September 23, 2011. Archived from the original

- (<http://support.microsoft.com/kb/32905>) on November 7, 2006.
2. "Obsolete Products" (<https://web.archive.org/web/20050814234847/http://support.microsoft.com/gp/lifeobsoleteproducts>). *Support*. Microsoft. July 25, 2011. Archived from the original (<http://support.microsoft.com/gp/lifeobsoleteproducts>) on August 14, 2005.
 3. Cooper, Charles (November 20, 2013). "Windows 1.0: The flop that created an empire" (http://news.cnet.com/8301-10805_3-57613051-75/windows-1.0-the-flop-that-created-an-empire/). *CNET*. CBS Interactive.
 4. Alsop, Stewart II (January 18, 1988). "Microsoft Windows: Eclecticism in UI" (http://vintagecomputer.net/cisc367/PC-Letter_19880118.pdf) (PDF). *P.C. Letter*. 4 (2): 6–7.
 5. Hollister, Sean (November 20, 2012). "Revisiting Windows 1.0: how Microsoft's first desktop gracefully failed" (<https://www.theverge.com/2012/11/20/3671922/windows-1-0-microsoft-history-desktop-gracefully-failed>). *The Verge*. Vox Media. Retrieved January 21, 2017.
 6. Wallace, James; Erickson, Jim (June 1, 1993). *Hard Drive: Bill Gates and the Making of the Microsoft Empire*. Harper Business. ISBN 978-0887306297.
 7. Hey, Tony; Pápay, Gyuri (December 8, 2014). *The Computing Universe: A Journey Through a Revolution*. Cambridge University Press. p. 157. ISBN 9781316123225.
 8. Caruso, Denise (May 7, 1984). "An Update on Windows: Developers to get package later this month" (<https://books.google.com/books?id=ti4EAAAAMBAJ&pg=PA52>). *InfoWorld*. Vol. 6 no. 19. p. 52. Retrieved June 20, 2020.
 9. Markoff, John (November 21, 1983). "Microsoft Does Windows" (<https://books.google.com/books?id=uy8EAAAAMBAJ&pg=PA32>). *InfoWorld*. Menlo Park, CA: Popular Computing. 5 (47): 32–36. ISSN 0199-6649 (<https://www.worldcat.org/issn/0199-6649>). "On November 10, in New York, Microsoft announced Windows... Microsoft says it will ship Windows to dealers in April (although a product like Windows is difficult to predict and may take longer), priced between \$100 and \$250,"
 10. Lemmons, Phil (December 1983). "Microsoft Windows" (https://archive.org/stream/byte-magazine-1983-12/1983_12_BYTE_08-12_Easy_Software#page/n49/mode/2up). *BYTE*. p. 48.
 11. Caruso, Denise (April 2, 1984). "Company Strategies Boomerang" (<https://books.google.com/books?id=kC4EAAAAMBAJ&pg=PA80>). *InfoWorld*. pp. 80–83. Retrieved February 10, 2015.
 12. Rosch, Winn L. (December 25, 1984). "The Curtain Rises On The War of the Windows" (<https://books.google.com/books?id=azbgSIPdJawC&pg=PA33>). *PC Magazine*. p. 33. Retrieved October 25, 2013.
 13. Hanson, Rowland. "WINDOWS IS NAMED WINDOWS : BUT WHY?" (<https://thehmccompany.com/windows-is-named-windows-but-why/>).
 14. "A history of Windows" (<https://web.archive.org/web/20121117023025/http://windows.microsoft.com/en-US/windows/history>). *support.microsoft*. Microsoft. 2012. Archived from the original (<http://windows.microsoft.com/en-US/windows/history>) on November 17, 2012. "On November 20, 1985, two years after the initial announcement, Microsoft ships Windows 1.0."
 15. "Windows - Virtual x86" (<http://copy.sh/v86/?profile=windows1>).
 16. "Windows 1" (<http://www.winhistory.de/more/win1.htm>). *Winhistory.de* (in German).
 17. "Version 1 for IBM PS/2" (<https://win1.krn1386.com/versions/oem/104ps2.html>). *win1.krn1386.com*. Retrieved April 12, 2019.
 18. "IBM PS2 OEM Microsoft Windows 1.04 - 720k" (<https://archive.org/details/IBMWindows104720k>). *archive.org*. Retrieved April 12, 2019.
 19. Sandberg-Diment, Erik (February 25, 1986). "Personal Computers; Windows Are Open At Last" (<https://www.nytimes.com/1986/02/25/science/personal-computers-windows-are-open-at-last.html>). *The New York Times*. Retrieved November 11, 2013.
 20. Brodtkin, Jon (2010-11-08). "Windows 1.0 turning 25: First experiences recalled" (<https://web.archive.org/web/20101110190232/http://www.networkworld.com/news/2010/110810-windows-turns-25.html>). *NetworkWorld*. Archived from the original (<http://www.networkworld.com/news/2010/110810-windows-turns-25.html>) on November 10, 2010. Retrieved November 11, 2013.

21. Warren, Tom (July 8, 2019). "Microsoft's new Windows 1.11 app is a Stranger Things trip back to 1985" (<https://www.theverge.com/2019/7/8/20685881/microsoft-windows-1-11-app-stranger-things-3-1985>). *The Verge*. Retrieved July 8, 2019.

External links

- [Demo of Windows 1.04 \(https://uk.youtube.com/watch?v=ltuymzxNUYM\)](https://uk.youtube.com/watch?v=ltuymzxNUYM) running on an original IBM XT, on [YouTube](#)
 - [Windows 1.01 emulator \(https://www.pcjs.org/disks/pcx86/windows/1.01/\)](https://www.pcjs.org/disks/pcx86/windows/1.01/)
-

Retrieved from "https://en.wikipedia.org/w/index.php?title=Windows_1.0&oldid=1032828314"

This page was last edited on 9 July 2021, at 22:42 (UTC).

Text is available under the Creative Commons Attribution-ShareAlike License; additional terms may apply. By using this site, you agree to the Terms of Use and Privacy Policy. Wikipedia® is a registered trademark of the Wikimedia Foundation, Inc., a non-profit organization.